ALDERHOLT MEADOWS, ALDERHOLT

Transport Assessment

October 2022

Dudsbury Homes (Southern) Ltd

MIXED USE DEVELOPMENT
ALDERHOLT MEADOWS
ALDERHOLT

TRANSPORT ASSESSMENT

CONTROLLED DOCUMENT

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MIXED USE DEVELOPMENT
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TRANSPORT ASSESSMENT

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1. INTRODUCTION

1.1 This Transport Assessment (TA) has been prepared by Paul Basham Associates on behalf of Dudsbury Homes (Southern) Ltd to support a planning application for a sustainable mixed-use development on Land at Alderholt, Fordingbridge, known as Alderholt Meadows. The development comprises circa 1,700 dwellings with a wide variety of local facilities and amenities to benefit both existing and future residents including a large village square and 2ha of formal employment land.

1.2 The application site is located to the south of Alderholt. The site is identified within Figure 1 whilst the illustrative site masterplan and red line boundary plan are included at Appendix A and Appendix B respectively.

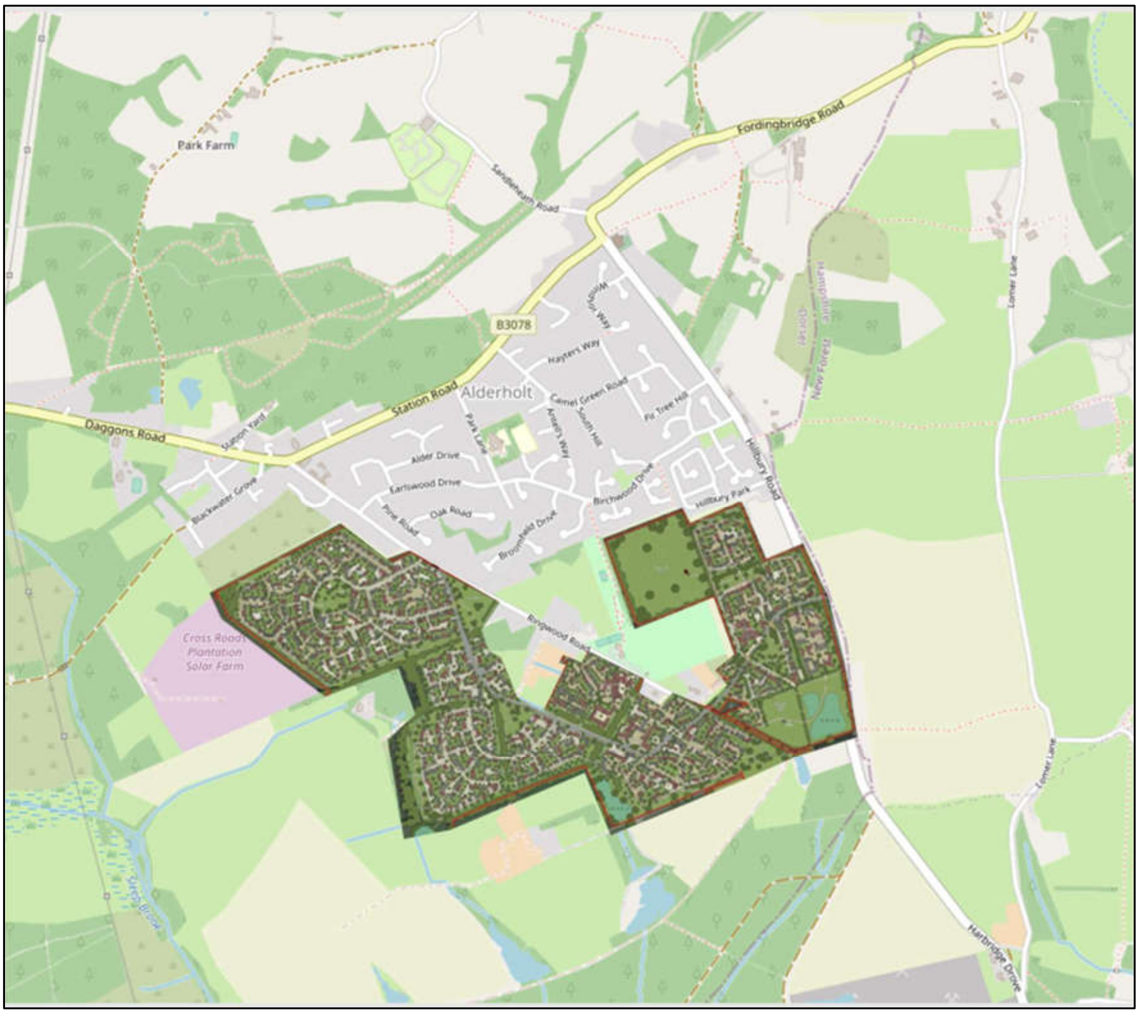


Figure 1: Site Location Plan

Site Planning History

1.3 The proposed development site has a recent relevant planning history. Prior to the restructuring of local government, the site was considered suitable for a minimum of 1, 000 dwellings within the (at the time) emerging East Dorset Local Plan. Further details are provided in the following policy section.

1.4 Following creation of the unitary Dorset Council (DC), the site was submitted to a 2019 Call for Sites. The SHLAA reference for the site is LA/ALDE007, and the council's conclusion is that it is *"a developable site which would need to be comprehensively developed through a masterplan,"* with a potential yield of 900 units. In relation to transport matters, the assessment states, *"provision for new facilities or provide developer contributions to enhance provision locally. Important to provide greater self-containment reducing the need to travel to other towns/villages for services."* This has informed the nature of the present application.

1.5 DC's Local Plan January 2021 Options Consultation included an option for significant strategic growth to "*deliver a much-enhanced settlement,"* with new facilities to meet every day needs and employment opportunities to create a self-contained settlement and reduce the need for car-based trips. As noted in the consultation document, this would *"deliver a sustainable pattern of growth,"* provided that high frequency public transport was provided.

Liaison with Planning Authorities

1.6 The site is located on the eastern edge of Dorset, within the former administrative area of East Dorset District Council, which was abolished in 2019 when the unitary Dorset Council was created. The border with Hampshire lies to the east of Alderholt, beyond which the relevant authorities are New Forest District Council (NFDC) and Hampshire County Council (HCC). Pre-application engagement has been held primarily with DC through several rounds of formal and informal consultation. Further engagement with HCC has also taken place given their responsibility for the road network within Hampshire.

1.7 Engagement with DC has been two-fold; firstly with the Highways Policy team in respect of the possible inclusion of the site within the Local Plan and strategic considerations, and more recently Highways Development Control with regards to scoping of the matters to be addressed within the planning application itself.

1.8 Discussions with Highways Policy centred on the likely implications for transport behaviours for existing and future residents arising from the mix and scale of facilities proposed as part of the development. As a result of these discussions a methodology for calculating the net trip generation arising from the proposed development was agreed and is referred to in more detail later within this TA. This methodology was set out in Paul Basham Associates' Trip Internalisation Report (TIR).

1.9 Discussions with DC Transport Development Control centred on the scope of assessment required as part of the planning application. As part of this engagement, the following aspects were agreed:

- Provision of Transport Assessment (TA), Travel Plan (TP), Walking cycling and horse-riding assessment and review (WCHAR), and Environmental Statement (ES) chapter
- Trip generation (as per TIR)
- Trip distribution
- Modelling scenarios
- Junctions to be modelled

1.10 A copy of the Pre-Application Scoping Note issued to Transport Development Control (including the previous TIR) and Dorset Council's response is included at Appendix C.

1.11 Finally, discussions have been held with National Highways (formerly Highways England) over the impact of the proposed development on the operation of the A31 to the south and specifically the junction between of the A31 and Verwood Road (B3081).

Scope of TA

1.12 This Transport Assessment (TA) examines the transport and highway issues relating to the proposed development. It considers the expected travel demand in light of the various facilities and amenities that would be provided alongside the proposed housing. The report therefore considers the safety, capacity and sustainability implications of development in line with local and national planning guidance.

1.13 This TA is structured as follows:

- Chapter 2: Transport Policy – This chapter considered the development in the context of relevant national and local transport policies;
- Chapter 3: Existing Conditions – This chapter details the current transport conditions within Alderholt prior to the implementation of the development;
- Chapter 4: Proposed Development – This chapter provides a description of the development proposals, points of pedestrian, cycle and vehicular access, as well as detailing the associated facilities and land uses which will accompany the development;
- Chapter 5: Development Accessibility – This chapter will review the improved sustainability and accessibility of the development and existing Alderholt settlement following the implementation of the development proposals;
- Chapter 6: Trip Generation, Distribution and Assignment – This chapter details the proposed trip generation (both in terms of vehicles and sustainable transport means) as well as vehicular distribution and assignment.

- Chapter 7: Dorset Council S-Paramics Review – This chapter examines the S-Paramics micro-simulation modelling work undertaken by Dorset Council which was used to inform the ongoing Dorset Council Local Plan review;
- Chapter 8: Highway Impact Scope and Methodology – this chapter sets out the scope of assessment, and accompanying methodology;
- Chapter 9: Highway Capacity Analysis – This chapter examines the capacity of the junctions which form the scope of assessment and details any mitigation being proposed as and when appropriate;
- Chapter 10: Link Analysis – This chapter examines the impact of the proposed development on the highway links which surround the site;
- Chapter 11: Conclusions – This chapter sets out the overall approach and any off-site works associated with pedestrian/cycle activity to deliver a self-contained sustainable and accessible settlement; and
- Chapter 12: Summary.

2. TRANSPORT PLANNING POLICY

National Planning Policy Framework (NPPF)

2.1 The NPPF (July 2021) acts as the central guidance for development planning and replaces national planning policy guidance including Planning Policy Guidance 13 (PPG13): Transport. The following NPPF paragraphs are relevant to this Transport Assessment (TA):

Planning policies and decisions should recognise that sites to meet local business and community needs in rural areas may have to be found adjacent to or beyond existing settlements, and in locations that are not well served by public transport. In these circumstances it will be important to ensure that development is sensitive to its surroundings, does not have an unacceptable impact on local roads and exploits any opportunities to make a location more sustainable (for example by improving the scope for access on foot, by cycling or by public transport). The use of previously developed land, and sites that are physically well-related to existing settlements, should be encouraged where suitable opportunities exist. (NPPF Para. 85)
Transport issues should be considered from the earliest stages of plan-making and development proposals, so that: *a) The potential impacts of development on transport networks can be addressed;* *b) Opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;* *c) Opportunities to promote walking, cycling and public transport use are identified and pursued;* *d) The environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and* *e) Patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.* (NPPF Para.104)
Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making. (NPPF Para. 105)

2.2 This Transport Assessment (TA) and the accompanying Travel Plan (TP) accord with these principles. The NPPF also cites the following points as key considerations with regards to transport and development planning to which this proposal's highway approach adheres:

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. (NPPF Para. 111)
All development 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. (NPPF Para. 113)

Planning Practice Guidance

2.3 The Government's Planning Practice Guidance to the NPPF was launched as a web-based resource by DCLG in March 2014. Guidance on Transport Assessments fall within the category 'Travel Plans, Transport Assessments and Statements'.

2.4 This category contains three sections with a total of 15 paragraphs:

- Overarching Principles on Travel Plans, Transport Assessments and Statements (Paragraphs 001-008)
- Travel Plans (Paragraphs 009-012)
- Transport Assessments and Statements (Paragraphs 013-015)

2.5 Paragraph 002 of the guidance states that Travel Plans, Transport Assessments and Statements are all ways of assessing and mitigating the negative transport impacts of development in order to promote sustainable development. They are required for all developments which generate significant amounts of movements.

2.6 Paragraph 006 of the guidance considers that Travel Plans, Transport Assessments and Statements can positively contribute to:

- encouraging sustainable travel;
- lessening traffic generation and its detrimental impacts;
- reducing carbon emissions and climate impacts;
- creating accessible, connected, inclusive communities;
- improving health outcomes and quality of life;
- improving road safety; and
- reducing the need for new development to increase existing road capacity or provide new roads.

2.7 The information which should be included in a Transport Assessment is set in Paragraph 015 in Section 3 of the guidance as follows:

- information about the Proposed Development, site layout, (particularly proposed transport access and layout across all modes of transport)
- information about neighbouring uses, amenity and character, existing functional classification of the nearby road network;
- data about existing public transport provision, including provision/ frequency of services and proposed public transport changes;
- a qualitative and quantitative description of the travel characteristics of the Proposed Development, including movements across all modes of transport that would result from the development and in the vicinity of the site;
- an assessment of trips from all directly relevant committed development in the area (i.e. development that there is a reasonable degree of certainty will proceed within the next three years);
- data about current traffic flows on links and at junctions (including by different modes of transport and the volume and type of vehicles) within the study area and identification of critical links and junctions on the highways network;
- an analysis of the injury accident records on the public highway in the vicinity of the site access for the most recent three-year period, or five-year period if the proposed site has been identified as within a high accident area;
- an assessment of the likely associated environmental impacts of transport related to the development, particularly in relation to proximity to environmentally sensitive areas (such as air quality management areas or noise sensitive areas);
- measures to improve the accessibility of the location (such as provision/ enhancement of nearby footpath and cycle path linkages) where these are necessary to make the development acceptable in planning terms;
- a description of parking facilities in the area and the parking strategy of the development;
- ways of encouraging environmental sustainability by reducing the need to travel; and
- measures to mitigate the residual impacts of development (such as improvements to the public transport network, introducing walking and cycling facilities, physical improvements to existing roads.

2.8 Paragraph 015 considers that assessments should normally be based on normal flow usage conditions (e.g. non-school holiday periods, typical weather conditions). Traffic flow projections should be based on local traffic forecasts such as TEMPRO, with the timeframe for the assessment being agreed with the local authority, except when development has an impact on the national transport network, for which the assessment period will be set out in the relevant Government policy.

DfT Circular 02/2013 'The Strategic Road Network and the Delivery of Sustainable Development'

2.9 National Highways (formerly Highways England and the Highways Agency) is responsible for implementing the Government's development control policy concerning Trunk Roads on behalf of the Secretary of State for Transport. The policy is outlined in DfT Circular 02/2013 'The Strategic Road Network and the Delivery of Sustainable Development' which was published in September 2013 and is currently ongoing a review process,

2.10 DfT Circular 02/2013 provides policy that aligns to the NPPF, promotes development and economic growth, and devolves decisions for determination at the local level wherever it is appropriate.

2.11 Some of the key policy issues of DfT Circular 02/2013 are that it:

- places more emphasis on Highways England's role as a delivery partner to growth and as a development enabler; the role that the SRN can play in enabling economic growth; and the removal of protectionist and/or negative statements that may be seen to block development;
- removes the expectation that the traffic impact on the SRN as a result of development should be mitigated so as to be no worse off after the 10 year review period;
- allows any capacity within the network to be used after traffic demand has been managed down through the implementation of travel plans and other appropriate measures;
- provides that where proposals would take a road or junction over capacity after impact reduction measures, mitigation will only be required to the extent that capacity is adequate at time of opening, thus removing the requirement to cater for future background growth; and
- eases restrictions on new access/junctions on motorways to enable delivery of strategic growth where this is identified as appropriate using a sequential approach during Local Plan formation.

2.12 Paragraphs 7 to 11 of DfT Circular 02/2013 deal with Policy Aims and Application, which highlights the key role the strategic road network has in supporting economic growth. Paragraph 9 states that:

"Development proposals are likely to be acceptable if they can be accommodated within the existing capacity of a section (link or junction) of the strategic road network, or they do not increase demand for use of a section that is already operating over-capacity levels…"

2.13 Paragraph 9 goes on to say that this position would take into account any travel plan, traffic management and/or capacity enhancement measures that may be agreed. In line with NPPF policy, Paragraph 9 concludes that:

"development should only be prevented or refused on transport grounds where the residual cumulative impacts of a development are severe."

2.14 Paragraphs 12 to 20 deal with Plan Making, highlighting the preparation and delivery of Local Plans provides an opportunity to identify and support a pattern of development that minimises trip generation and encourages the use of sustainable modes of transport. Capacity enhancements should be identified at the Local Plan stage.

2.15 Paragraphs 25 to 27 deal with the assessment of development impact. Paragraph 25 requires the overall forecast demand, defined by footnote 7 as the existing flow plus traffic likely to be generated by development already committed, plus traffic likely to be generated by the development under consideration, less any reduction arising from any travel plan or demand management measures that are being proposed, should be compared to the ability of existing network to accommodate traffic over the review period.

2.16 Paragraph 34 deals with capacity enhancements. It states

"Where insufficient capacity exists, to provide for overall forecast demand at the time of opening, the impact of the development will be mitigated to ensure that at that time, the strategic road network is able to accommodate existing and development generated traffic".

2.17 The paragraph goes on to state:

"Any associated mitigation works should be appropriate to the overall connectivity and capacity of any affected part of the strategic road network".

Highways England: The strategic road network – Planning for the future

2.18 National Highways (formerly Highways England) is responsible for operating, maintaining and improving the strategic road network in England, including the A31. The document 'The strategic road network – Planning for the future', published in September 2015, describes the approach that National Highways takes to engaging in the planning system and the issues considered in relation to draft planning documents and planning applications. Paragraph 3 explains that the document is written in the light of the NPPF and of DfT Circular 02/2013.

2.19 Paragraph 29 states that the primary function of the strategic road network (SRN) is to facilitate the safe and efficient movements of goods and people. Paragraph 31 explains that National Highways' approach to planning is shaped by commitments to supporting environmental and social aims, including reducing car use and supporting sustainable transport options, and supporting biodiversity and climate change mitigation. Paragraph 35 states that National Highways' advice to local planning authorities will be to refuse or place conditions on developments only where the residual cumulative impacts on the capacity of the SRN are still assessed to be severe with mitigation in place, for example if the safe operation of the SRN would be significantly eroded. Paragraph 37 says that transport assessments should be carried out in accordance with government guidance and in agreement with National Highways through pre-application and scoping.

2.20 Planning applications and development management are discussed in paragraphs 84 to 120. Paragraph 101 states:

"Assessments should be carried out for:

- *The development and construction phase; and*
- *The opening year, assuming full build out and occupation, and*
- *Either a date ten years after the date of registration of the associated planning application or the end of the Local Plan period (whichever is the greater).*

The assessment at opening will be used for the determination of impact mitigation needs, whilst the latter is necessary to determine the risk which will transfer to us."

2.21 Paragraph 103 explains that the development promoters are expected to put forward initiatives that reduce the traffic impact of proposals by supporting sustainable development and accessible sites. Paragraph 104 comments that the implementation of a travel plan is an effective means of managing the impact of development on the road network and reducing the need for major infrastructure. Paragraph 104 goes on to comment that retaining some network capacity within the SRN facilitates the provision for further developments. Paragraph 107 points out that quite often travel plan measures alone are insufficient, and in such instances National Highways with work with local authorities to determine whether more direct demand management measures could assist.

2.22 Paragraphs 108 to 116 discuss capacity enhancement. This will not be sought where the overall forecast demand can be accommodated by the existing infrastructure in the opening year. Any measures proposed must be sufficient to accommodate or offset the impact of development on the SRN and its surroundings, and a road safety audit and non-motorised user assessment will be required before planning permission is granted. The measures will normally be delivered by means of a funding agreement between the developer and National Highways.

Emerging Dorset Local Plan

2.23 Since the creation of two unitary authorities within Dorset in April 2019, a new Dorset Local Plan is being produced. A regulation 18 Issues and Options consultation document was published in January 2021. Since then, little progress has been made and at August 2022 Dorset Council announced they would be delaying plan making and that adoption of the Dorset Local Plan is now forecast for 2025 at the earliest. The regulation 18 consultation document carries very little, if any, weight at all.

2.24 The Regulation 18 document specifically refers to the rural nature of the former East Dorset District, stating there is a…

"high reliance on car travel which presents barriers to sustainable development, education and employment opportunities, alongside access to healthcare and other services. The former East Dorset District has the highest number of workers that commute by car or van in England and Wales at 79.5%. Many of Dorset's rural areas are relatively inaccessible with social isolation and loneliness significant issues for many in rural Dorset."

2.25 The Regulation 18 document sets out options for development within the Authority. The document identifies Alderholt as a 'Tier 3' settlement and within Volume 2 states that Alderholt presents an…

"opportunity for a level of development that could alter significantly the way the settlement functions. There are a number of issues that would need to be addressed to enable this growth including the ability of the road network to accommodate the increased traffic as well as the need to create a more self-contained settlement. To achieve this significant growth in employment, retail, community facilities, highway improvements and schooling would need to be provided alongside housing.

2.26 It sets outs two options, with the first forming a smaller scale of development, around 300 dwellings, whilst the second option represents a strategic growth which results in these transformational changes to Alderholt which help to overcome the current inaccessibility of some rural settlements within East Dorset.

2.27 Draft policy ALD1 is proposed in relation to the smaller development, noting that..

"that this area could be developed either as a stand-alone development, or as part of the significant expansion of the settlement"

2.28 The proposed development which forms the subject of this TA seeks to implement Option 2 to create a self-sustainable settlement with the addition of new employment areas and local facilities as well as improvements to public transport and off-site active travel infrastructure whilst also providing much needed housing.

Bournemouth, Poole and Dorset Local Transport Plan 2011 to 2026

2.29 Prior to the formation of the two unitary authorities the Bournemouth, Poole and Dorset Local Transport Plan 3 was produced to cover the period 2011-2026. It sets out its vision for transport within Dorset over the period with a vision to create a transport network which…

"assists in the development of a strong low carbon economy, maximises the opportunities for sustainable transport and respects and protects the area's unique environmental assets."

2.30 Specifically the vision is to:

- *a greater choice of realistic alternatives to the car;*
- *people being able to make informed travel decisions, creating sustainable travel patterns;*
- *people walking or cycling for shorter distance trips out of preference, in attractive and safe environments;*
- *easy to use, affordable and convenient public transport;*
- *more efficient use of the car where it is the only practical choice;*
- *a well maintained, managed and resilient transport network – allowing people and goods to reliably get to where they need to go and keeping traffic flowing more freely;*
- *sustainable use of natural resources, supported by the latest technologies, which respects and enhances our unique environment."*

2.31 In order to achieve the vision and subsequent general goals of the LTP there are 7 key approaches which are set out below:

- *1. Reducing the need to travel;*
- *2. Managing and maintaining the existing network more efficiently;*
- *3. Active travel and 'greener' travel choices;*
- *4. Public transport alternatives to the car;*
- *5. Car parking measures;*
- *6. Travel safety measures;*
- *7. Strategic infrastructure improvements*

East Dorset Local Plan Options

2.32 Prior to the reformation of Dorset authorities into two unitary authorities, East Dorset was consulting on a Draft Local Plan Options paper within which Alderholt was identified as an area for potential significant growth of both housing, infrastructure, facilities and employment. Specifically, under Draft Policy 5.28 the site currently proposed as part of this planning application was identified for housing development to provide a minimum of 1,000 dwellings.

2.33 This draft policy identified several key considerations in relation to the proposals, including provision of new education and health facilities, whilst also providing retail and other facilities within a Market Square arrangement to contribute towards the wider Alderholt area.

2.34 The proposed development has been considered with the above in mind to provide the above facilities and opportunities in the most supportive and beneficial ways possible.

Alderholt Paramics

2.35 To support the work associated with both the current ongoing Dorset Local Plan review and the previous East Dorset Local Plan Options document, micro-simulation modelling for a range of development quantum scenarios was undertaken utilising modelling software S-Paramics. This modelling was undertaken for 3 main scenarios of development at the development site. These scenarios comprised 500, 1,000 and 2,500 dwellings. The modelling work was subsequently updated to reflect an intermediary scenario of 1750 which more accurately reflected the likely proposals.

2.36 This work has been used to help determine the scope of assessment and is reviewed in more detail within Section 8 of this TA.

Hampshire LTP4 (Draft)

2.37 At the time of writing, Hampshire County Council are currently consulting on their draft version of their Local Transport Plan 4 (LTP4) which sets out its vision for future transport and travel infrastructure. The LTP4 follows extensive work undertaken and primarily seeks to provide policies and mechanisms with which sustainable travel can be improved, dependency on car travel reduced and national priorities to decarbonise the transport system achieved.

2.38 The LTP4 has two key guiding principles:

- Guiding Principle 1: Significantly reduce dependency on the private car
- Guiding Principle 2: Provide a transport system, that promotes high quality, prosperous places and puts people first

2.39 The LTP4 goes on to set out nine core draft policies to help achieve these principles of which the following are relevant to the proposals:

- C1: Putting people and places at the heart of our decisions
- C3: Transport Strategies and schemes to be developed in accordance with consideration of all users
- C4: Place climate change at the heart of decision making.
- C5: Support local living and reduce demands on transport
- C6: Encourage sustainable travel behaviour

2.40 LTP4 also introduces a number of frameworks, including the Road User Utility Framework, which prioritises who to consider when development transport schemes. This hierarchy is as follows:

- 1. Opportunities to reduce travel demand and the need to travel
- 2. Vulnerable users, including people with disabilities or long-term mobilities related health issues
- 3. People who walk
- 4. People who cycle and ride
- 5. People who use public transport
- 6. Delivery of foods
- 7. Other motor vehicles

2.41 The above illustrates that HCC's priority is to reduce the need to travel and travel locally, as well as sustainable travel in the form of walking and cycling, rather than meeting the demands of the motor vehicles through provision of additional capacity.

3. EXISTING CONDITIONS

3.1 The present transport and accessibility conditions within Alderholt are set out within the following section. This details the existing situation and therefore does not include any of the proposed improvements to accessibility, public transport and local facilities which would be provided by the development. These are covered in subsequent sections.

Local Highway Network

3.2 The site is located north and south of Ringwood Road and west of Hillbury Road. The local highway network is shown in **Figure 2** below.

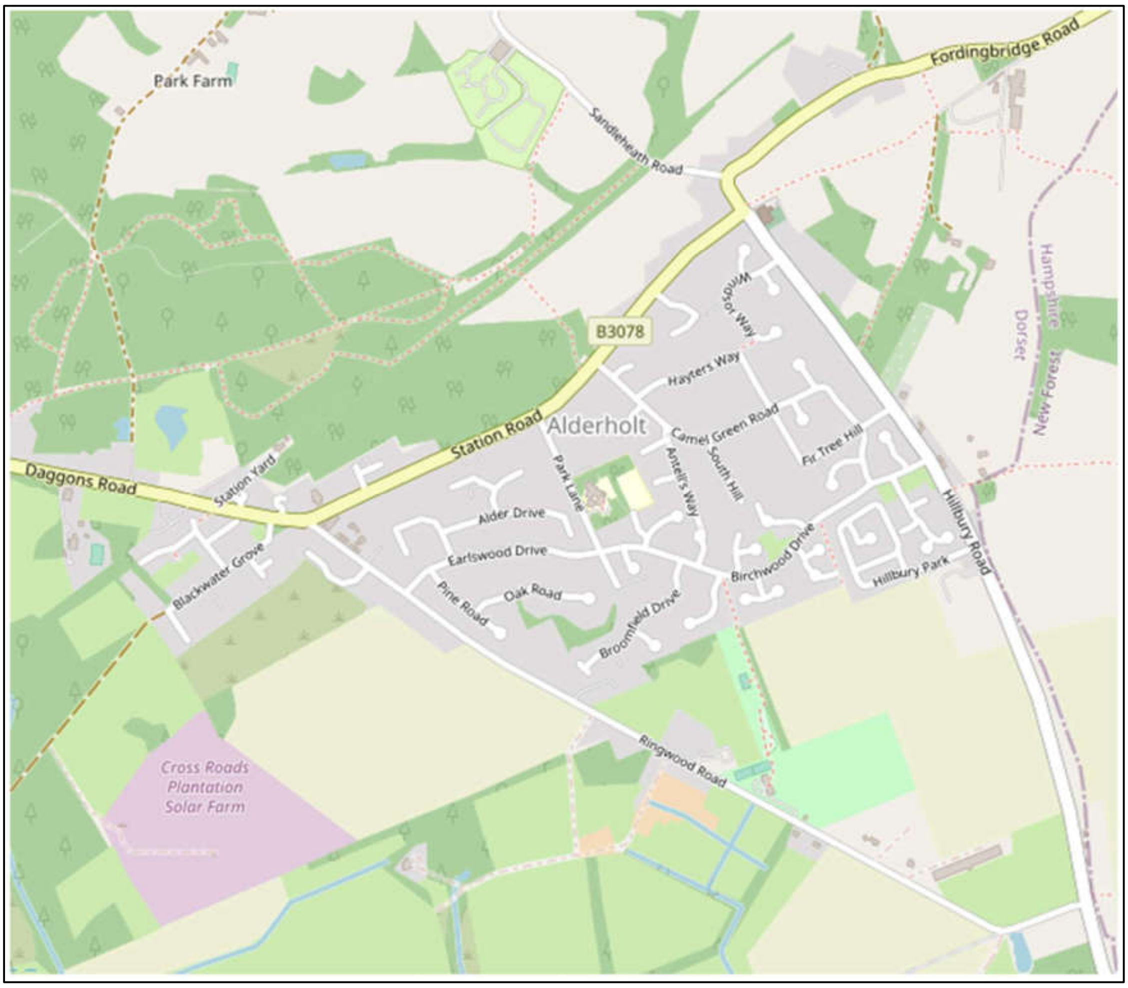


Figure 2: Context Plan

Ringwood Road

3.3 Ringwood Road routes on a north-west to south-east alignment between Station Road to the north and Hillbury Road to the south. It currently forms the southern boundary of the existing settlement and is utilised by traffic routing between the south and western areas of Alderholt.

3.4 Ringwood Road can be categorised into approximately two sections of varying characteristics. From Station Road to the easternmost properties on the southern side, the speed limit is 30mph and is suburban in nature, with footways and street lighting present. At its northern end, Ringwood Road meets Station Road at a priority junction. Ringwood Road splits to provide separate access/egress points for vehicle travelling to/from the west and east.

3.5 Further east, Ringwood Road is more rural in nature, measures c. 5-6m in width, is subject to a 40mph speed limit, is not street-lit, and does not have formalised kerbs and footways. It provides direct access to a number of residential properties, Alderholt Recreation Ground, Foxhill Farm and Warren Park Farm campsites and a consented residential development of 45 dwellings (REF: 3/16/1446/OUT). Ringwood Road then joins Hillbury Road in the form of a simple priority junction to the south east.

Hillbury Road

3.6 Hillbury road itself routes on a north-south alignment and provides connections from Alderholt towards Ringwood and the A31 approximately 8km to the south.

3.7 Hillbury Road can also be broadly categorised into two sections. From the edge of the settlement northwards, the speed limit is 40mph, reducing to 30mph just before Windsor Way. Within the settlement, Hillbury Road provides access to a number of residential side roads and direct access to residential properties. A footway is provided on the western side of the carriageway and further north, occasional street lighting is provided. At its northern end, Hillbury Road meets Station Road (B3078) at a priority junction.

3.8 South of the existing settlement edge, Hillbury Road is fairly rural in nature. It measures approximately 6m in width, is subject to the national speed limit, is not street lit and does not provide footways, instead soft verges and hedgerows abut the carriageway.

Station Road (B3078)

3.9 Station Road forms part of the B3078 which locally routes between Cranborne to the west and Fordingbridge to the east. Within Alderholt it approximately represents the northern settlement boundary, connecting to both Ringwood Road and Hillbury Road and serving residential properties directly as well as via residential side roads. It measures approximately 6m in width, is subject to a 30mph speed limit, is street lit, and has footways along both sides of the carriageway for the majority of its length.

3.10 Travelling east, Station Road turns to the left adjacent to the junction with Hillbury Road. Approximately 75m to the north, Station Road turns right adjacent to a junction with Sandleheath Road.

Fordingbridge Road (B3078)

3.11 To the east, the B3078 becomes Fordingbridge Road. Fordingbridge Road is a local distributor road which routes between Alderholt and Fordingbridge. It is subject to a 30mph speed limit changing to the national speed limit to the east of Alderholt and is relatively rural in nature, with soft verges and no formalised kerbs. The width of the carriageway varies, particularly where it curves in either direction.

3.12 In Fordingbridge, the B3078 becomes Provost Street and meets High Street/Shaftesbury Street at a priority junction. High Street leads through a mini-roundabout towards the A338. Parts of the road network in Fordingbridge are geometrically constrained given the historic nature of the settlement.

Daggons Road / Cranborne Road (B3078)

3.13 To the west of Alderholt, the B3078 leads towards Cranborne and becomes Daggons Road, which then becomes Cranborne Road. The speed limit is 40mph along Daggons Road, raising to the national speed limit on Cranborne Road. It is rural in nature, and the width of the carriageway varies, particularly where it curves in either direction.

3.14 In Cranborne, the B3078 continues southwards at a priority junction, providing a route towards Wimborne Minster and Verwood.

Batterley Drove

3.15 Batterley Drove meets the B3078 via a priority junction and provides an alternative route to Verwood, providing onward connections beyond towards Wimborne. Batterley Drove is of reasonable width given its rural nature. It is typically subject to a 60mph speed limit and has no footways alongside.

Walking and Cycling

Pedestrian Infrastructure

3.16 Within the settlement, pedestrian infrastructure is relatively good, with 1.5-2m footways generally provided on most roads and some intermittent street lighting. As might be expected, outside of the settlement on the more rural parts of the local roads, there are no dedicated footways.

3.17 Along Ringwood Road, within the settlement, there are footways on one or both sides of carriageway which are occasionally lit and typically measure between 1.5-2m in width.

3.18 To the north, Station Road benefits from footways generally on both sides of the carriageway, that are lit and typically 1.5-2m in width. These footways continue for the length of Station Road within Alderholt and connect into other footways adjacent to residential roads throughout Alderholt. To the east the northern footway terminates on the approach to Pressey's Corner, with the southern footway continuing south onto Hillbury Road.

3.19 Within the existing settlement area, the footway along Hillbury Road accompanies the western carriageway edge and is street lit, typically with widths of 1.5m. It is often separated from the carriageway by a grass verge and continues up to the Hillbury Park access, at which point the footway terminates.

3.20 Other pedestrian connections of note within the settlement include a footpath between Birchwood Drive and Ringwood Road, and another between Birchwood Drive and the red line boundary, parallel to Saxon Way.

3.21 In addition, there are a number of Public Rights of Way which are relevant to the proposed development. The PRoWs within the vicinity of Alderholt are shown in **Figure 3** below, with the key routes relevant to the proposed site detailed below.

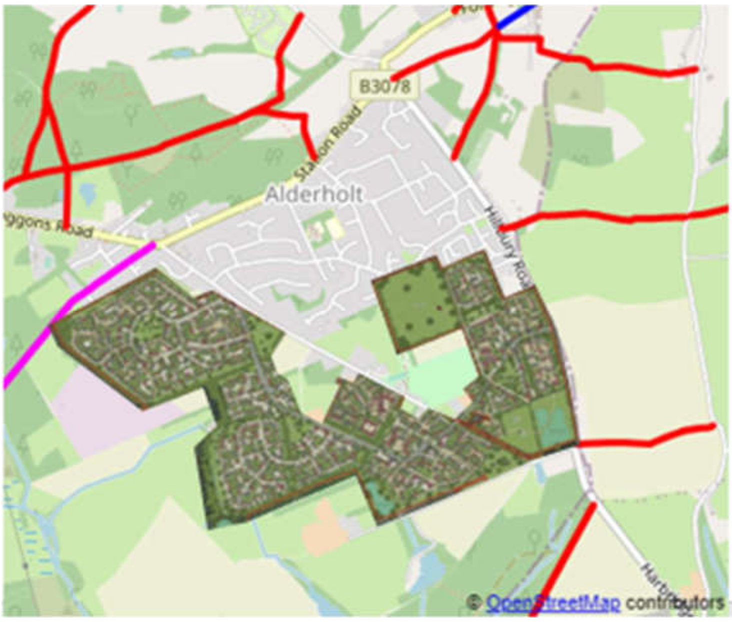
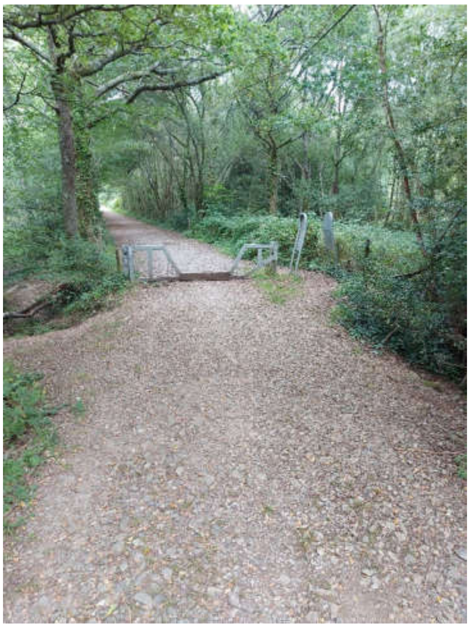
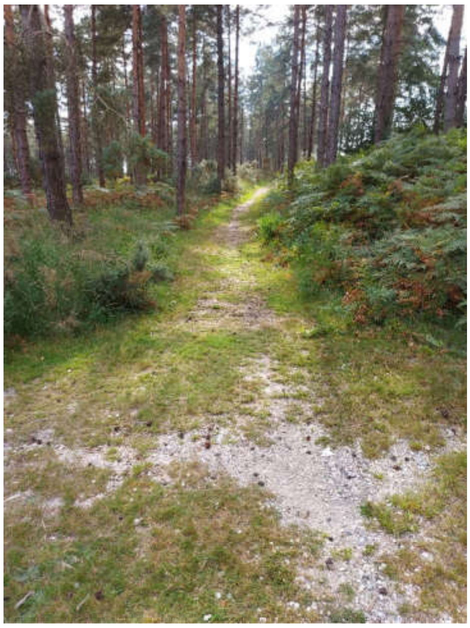


Figure 3: Public Rights of Way (PRoW)

3.22 Firstly, to the west of the site lies bridleway: E34/10 (shown in pink above) which routes between Blackwater Grove to the north of the site and Verwood via Cranborne Common. This route provides a direct route between Alderholt and Verwood (approximately 4km to the south west) for pedestrians and cyclists to utilise. In addition, surrounding this bridleway are a series of forestry tracks which have an aggregate surface. The proposed development will seek to make connections to these routes to ensure the opportunity to walk and in particular, cycle to Verwood is an attractive possibility.

3.23 The condition of both this bridleway and the aforementioned forestry tracks are shown in **Photographs 1 - 4** below.


Photograph 1: Bridleway E34/10


Photograph 2: Bridleway E34/10


Photograph 3: Forestry Tracks


Photograph 4: Forestry Tracks

3.24 In addition to the bridleway, there two particularly relevant Public Footpaths (090 2/1, and 090 3/1) which route east between Hillbury Road and Midgham Lane to the east of the site (shown in red in Figure 3 above). These connect into a further array of footpaths which lead towards Fordingbridge, and are considered reasonable routes for recreational use to Fordingbridge which is located c. 2.5km to the north east.

3.25 The condition of these Public Footpaths is shown in **Photographs 5-8** below.

Photograph 5: Footpath 090 2/1 Access

Photograph 6: Footpath 090 2/1 Across Field

Photograph 7: Footpath 090 3/1 Access

Photograph 8: Footpath 090 3/1 Across Field

3.26 South of Alderholt, there is a public footpath that runs along the eastern edge of Ringwood Forest. This leads south towards Verwood, and there is a further network of routes including the Avon Valley Path connecting to Ringwood.

3.27 In addition to the above PRoW there is also a paved footway connection between Ringwood Road and Birchwood Drive via the Alderholt Recreation Ground. This footway is lit and provides a direct connection between the core of the existing Alderholt settlement and school, towards the new proposed development and facilities. The condition of this link is shown below in **Photographs 9 and 10**.

Photograph 9: Footway at Recreation Ground

Photograph 10: Footway at Recreation Ground

Cycling Facilities

3.28 With the exception of the bridleway and forestry tracks, there is no dedicated cycle infrastructure present within the vicinity of Alderholt and any cycling therefore takes place on carriageway. Ringwood Road, Hillbury Road and Station Road are classified as C, D and B roads respectively which means they may be suitable for on carriageway cycling. It is important to note that the Alderholt development will improve cycling infrastructure not only for new but also existing village residents through the provision of low design speed (20mph) roads, shared footways, traffic calming and improved cycle infrastructure.

Public Transport

3.29 Currently the local area is served by bus service number 97. It is funded by Alderholt, Knowlton and Cranborne Parish Councils and the timetable can be seen in **Table 1** below. It currently routes along Station Road, Ringwood Road and Hillbury Road, utilising Earlswood Drive to connect between Ringwood Road and Hillbury Road.

Service	Bus Stop Location	Operator	Route	Approximate Frequency		
				Tuesday, Wednesday, Friday	Saturday	Sunday
97	Alderholt (Charing Cross)	Community Transport Services	Ringwood - Fordingbridge	Every 2 hours between 09:34 & 13:42	No Service	No Service

Table 1: Summary of Local Bus Services

3.30 **Table 1** highlights that the current public transport provision is very limited with only one bus service available which operates at a low frequency, therefore illustrating that most residents are reliant on private car ownership to access daily needs and facilities.

Local Facilities

3.31 A summary of the existing local facilities in the vicinity of the site which may form key desire lines to/from the site are identified in **Table 2** below, with the approximate distance to such facilities identified and measured from the approximate centre of the site (using existing walking routes). Given the scale of the proposed development, distances will vary depending on the origin point within the site.

Local Facilities	Approximate Distance
Alderholt Recreation Ground	300m
St James CE First School & Nursery	500m
Convenience Store (Co-op Alderholt)	900m
Post Office	900m
Alderholt Village Hall	1km
Public House (The Churchill Arms)	1.2m
Vets (Alderholt Veterinary Surgery)	1.3km
Fordingbridge Town Centre	4.3km
Dentist Surgery (mydentist Fordingbridge)	4.5km
Doctors Surgery (Fordingbridge Surgery)	4.5km
Pharmacy	4.5km
Cranborne Middle School	7.9km
Queen Elizabeth's School (Secondary School)	24km

Table 2: Summary of Local Facilities

3.32 As can be seen from **Table 2** above, the current facilities within Alderholt are limited, with the majority of everyday facilities being located outside Alderholt within neighbouring Fordingbridge, Cranborne and Wimborne. Residents therefore have to travel outside of the settlement to meet the majority of daily needs and therefore rely heavily on private car usage given the lack of public transport currently available within Alderholt.

Safety

3.33 An analysis of the historic personal injury accidents on the public highway within the vicinity of the site has been undertaken in accordance with the Planning Practice Guidance. The study area for this analysis is shown below in **Figure 4**. This information has been reviewed utilising the CrashMap database for the five-year period from 1/1/17 to 31/12/21. Incidents are categorised by severity, into slight, serious or severe incidents. Across the study area there were a total of 46 incidents, of which 31 were slight, 14 serious and 1 fatal. Further detail has been obtained for any 'Serious' or 'Fatal' incidents with the reports attached at **Appendix D**.

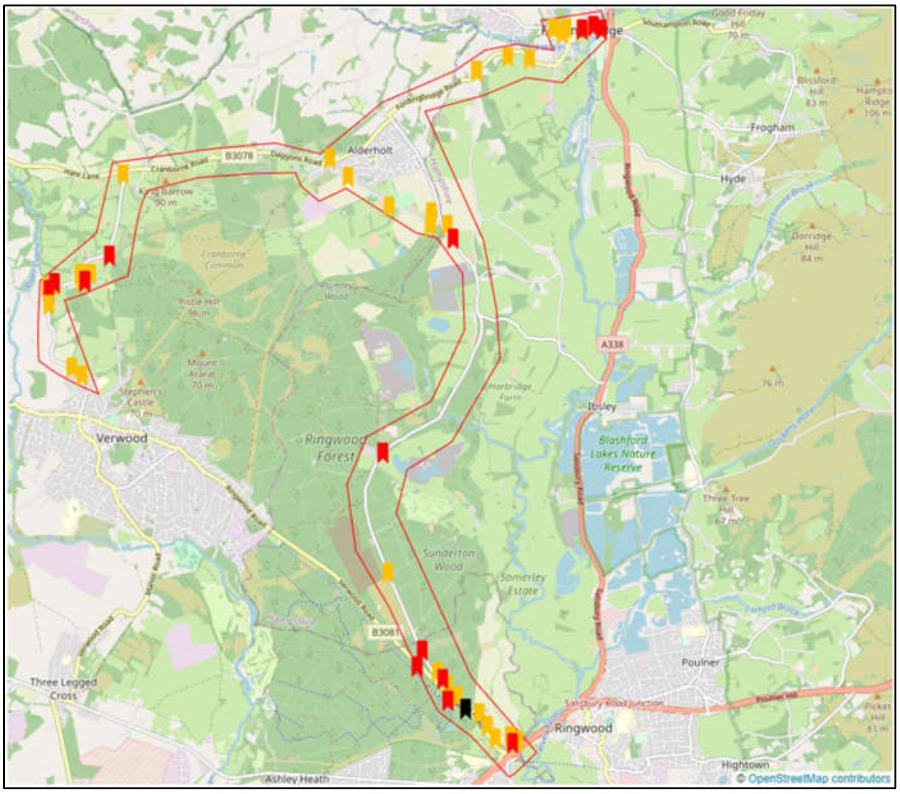


Figure 4: PIA Data Study Area

3.34 Across the study area there are clusters of incidents as well as isolated cases. The isolated instances have not been reviewed in further detail as the absence of a recurrence pattern suggests those particular incidents were caused by unique factors rather than particular safety issues with the nature of the road network. The analysis below therefore focuses on locations where incidents are clustered.

Ringwood Road/Hillbury Road Junction

3.35 At or near the existing junction between Ringwood Road and Hillbury Road a total of four collisions have occurred which resulted in four slight casualties and one serious casualty. The locations of these collisions is shown in **Figure 5** below. The accidents all occurred in differing locations, suggesting no specific highway safety issue.

Figure 5: Ringwood Road / Hillbury Road Collisions

3.36 The serious collision occurred when a car collided with a pedestrian who was standing in the carriageway on Harbridge Drove. Given this occurred at 1800 in February, it is likely this occurred in the dark. This appears to be an isolated event, suggesting that there is no inherent highway safety issue. The pedestrian routes in the area have been reviewed as part of the WCHAR.

B3081 (Fordingbridge High Street)

3.37 Along Fordingbridge High Street to the A338, eight collisions have occurred, comprising five slight and three serious collisions. These primarily occurred along the High Street and Bridge Street, and the location of these collisions is shown below in **Figure 6**.

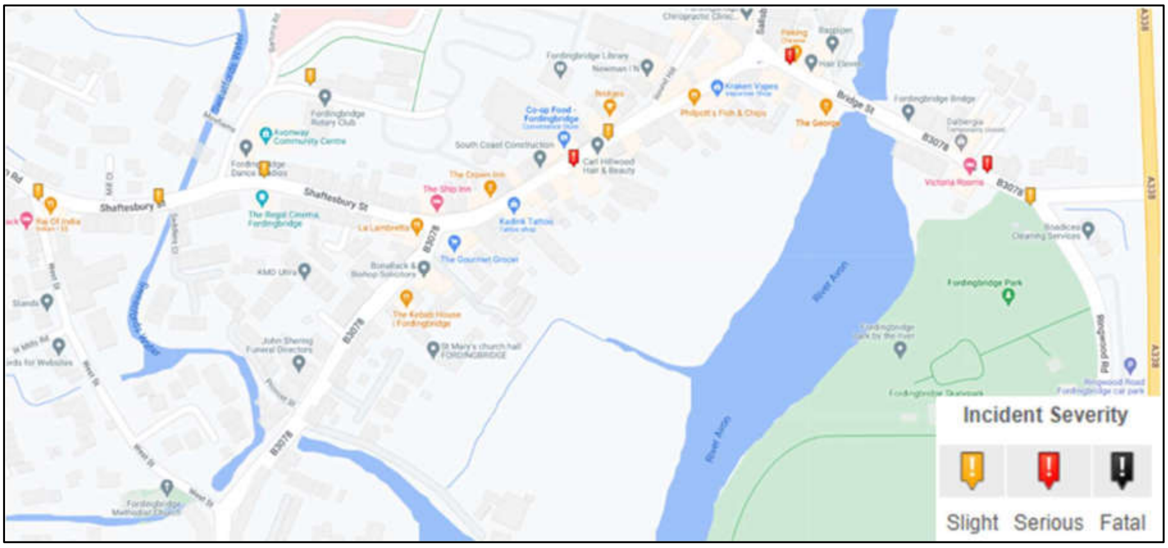


Figure 6: Fordingbridge High Street Collision Cluster

3.38 Of the three serious collisions which occurred in this section of the study area, one involved a pedestrian. This collision was on Bridge Street and occurred when a pedestrian crossed Bridge Street using the signalised crossing from the off-side of the vehicle and so the driver likely failed to see the pedestrian.

3.39 The remaining two serious collisions involved cyclists. The first at the mini-roundabout occurred with no other vehicle present, and the second on High Street when a cyclist changed lane and collided with a car.

3.40 Although any collision is regrettable, the information does not suggest inherent flaws with the design of the road network, rather a result of road user behaviour.

<u>Alderholt Road/Verwood Road Junction</u>

3.41 At the junction of Alderholt Road and Verwood Road, nine collisions occurred at or close to the junction. Of these nine collisions, one was a fatal collision, four were classified as serious and four as slight. The specific location of these collisions is shown in more detail within Figure 7 below, whilst the serious and fatal collisions have been reviewed in detail below.

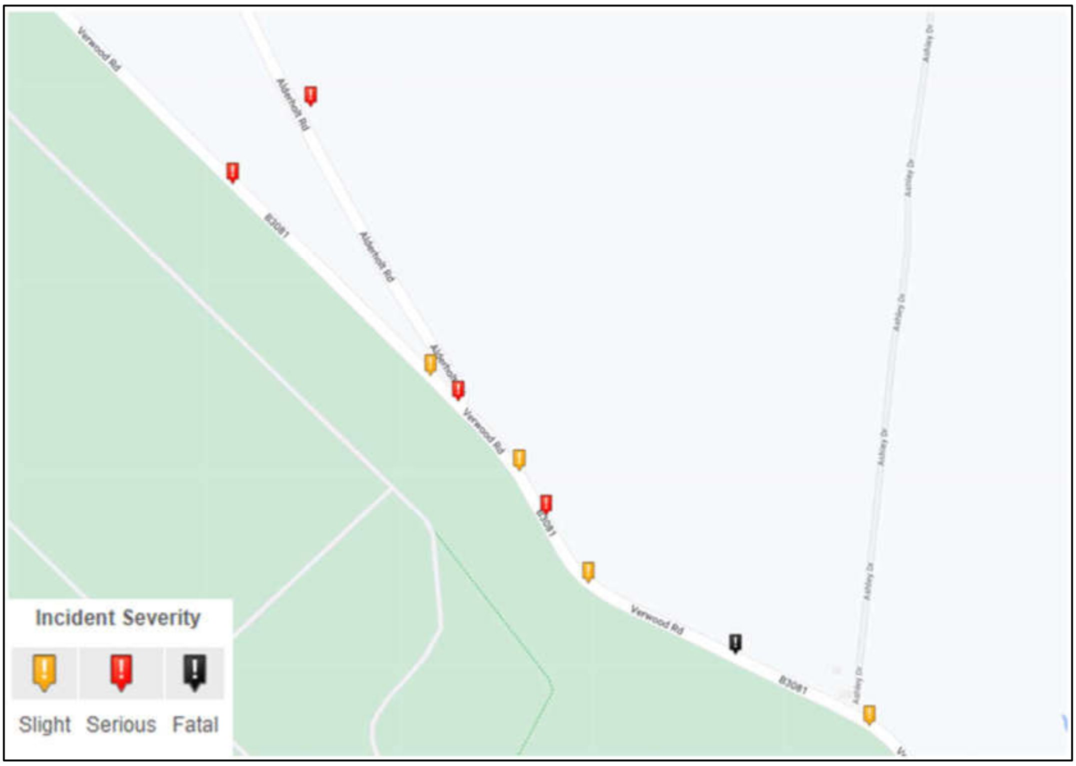


Figure 7: Alderholt Road / Verwood Road Collision Cluster

3.42 At this location there was a fatal collision, which occurred when a tree fell onto a vehicle during a period of stormy and windy weather. Although tragic, this fatality did not occur as a result of a particular road safety issue rather accidental death, as ruled by the coroner's report in the aftermath of the incident.

3.43 Of the four serious collisions that occurred, one occurred specifically at the junction between Alderholt Road and Verwood Road. This occurred when a car and HGV collided with each other, with the car driver sustaining serious injuries.

3.44 Two of the remaining three collisions occurred on Verwood Road away from the junction with Alderholt Road. The first of these occurred south east of the junction with Alderholt Road. This occurred at approximately 2am on a Sunday and involved a single vehicle. No information is known on the cause of the incident, although given just a single vehicle was involved, this is not suggestive of an inherent issue with the design of the road.

3.45 The second serious incident on Verwood Road occurred north of the junction with Alderholt Road, in darkness. This involved two vehicles and resulted in one serious casualty. At the time of writing, only the provisional data is available.

3.46 The remaining serious collision in this cluster occurred along Alderholt Road prior to its junction with Verwood Road and involved a car colliding with a tree with the driver of the vehicle sustaining serious injuries.

3.47 Although the collision record at this location identifies a notably high number of incidents, the majority of these collisions appear to be either a result of driver behaviour or freak accident. Furthermore, few collisions occur at the junction between Verwood Road and Alderholt Road. Therefore, it is considered that there is no existing road safety issue in this location that would be impacted following the implementation of the proposed development.

<u>A31 On-Slip/Verwood Road Junction</u>

3.48 A further cluster of collisions occurred at the junction between the A31 eastbound on-slip and Verwood Road. At this point four collisions occurred which resulted in one serious casualty and nine slight casualties. The location of these collisions is shown in Figure 8 below.

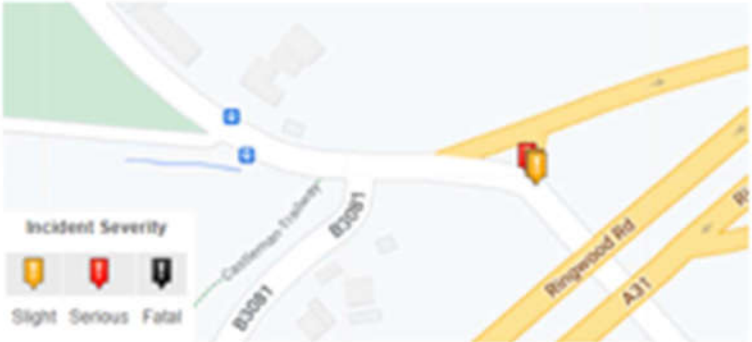


Figure 8: Verwood Road/A31 On-Slip Collisions

3.49 The serious injury occurred when a vehicle which was waiting to turn right onto the on-bound slip road pulled out in front of an oncoming vehicle resulting in a head on collision, with the driver of one of the vehicles sustaining serious injuries.

3.50 This and the other slight collisions all occurred in a similar manner. This suggests a potential safety issue with the design of the junction. This will be considered as part of the off-site highway works explored subsequently.

Batterley Drove

3.51 Along Batterley Drove on its approach to Verwood nine collisions occurred specifically at the bends in the centre of this link. Of these nine collisions, four were classified as serious and five as slight. The specific location of these collisions is shown in more detail within Figure 9 below.

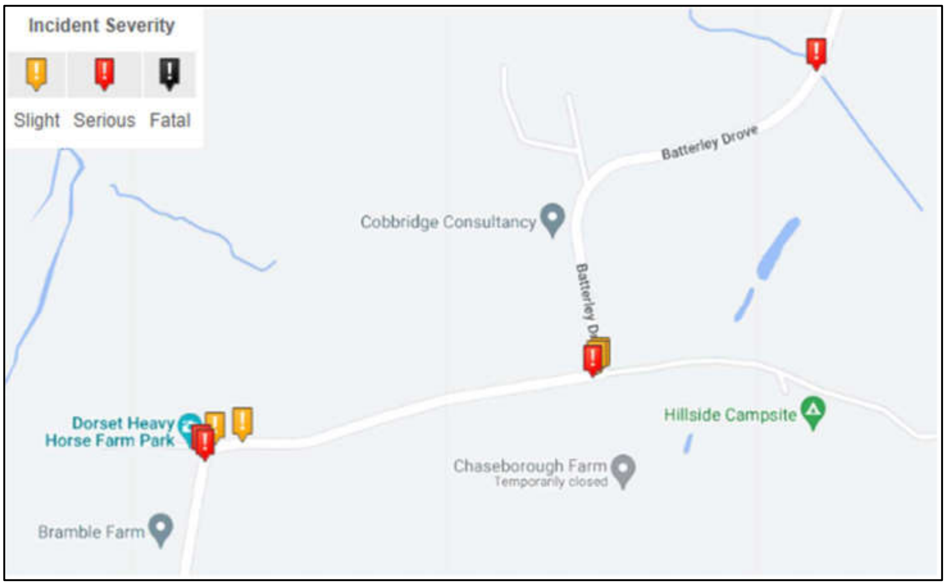


Figure 9: Batterley Drove Collision Cluster

3.52 These collisions resulted in a total of 7 serious casualties and 5 slight injuries and all involved vehicles, with no pedestrians or cyclists involved in the collisions.

3.53 Of the four serious collisions which occurred, two were in the vicinity of the access to the Heavy Horse Farm. The first occurred when a motorcyclist on the left hand bend entered the ditch and lost control of their bike and suffered serious injuries, but no other vehicle was involved. The second in this location occurred when a car on the left hand bend collided with a tree and the driver suffered serious injuries, whilst the passenger suffered slight injuries. The nature of these incidents suggest vehicles were travelling too fast for the conditions. The two slight incidents in this location also involved a single vehicle each. Given the existing presence of 'slow' road markings reflective bollards and chevron signage, it is considered that the incidents are primarily a result of driver error.

3.54 One of the other serious collisions occurred to the east of the Heavy Horse Farm when a car collided with a tree and the driver suffered serious injuries, whilst the passenger suffered slight injuries. No other vehicles were involved, again suggesting driver error. The final serious collision within this cluster occurred slightly to the north and occurred when two oncoming cars collided head on around a bend, with both drivers suffering serious injuries. Given the road width is sufficient for two cars to pass, this suggests driver error was a contributory factor.

3.55 The above cluster of collisions suggests that there is no inherent flaw in the design of the road network, rather that vehicles occasionally travel too fast for the conditions.

<u>Summary</u>

3.56 The above analysis has identified that although accidents have occurred, these are primarily a result of driver error. One location has been identified that there may be an inherent safety issue, which will be considered as part of the off-site highway works. In general, the road safety record does not suggest that the road network is unsuitable for accommodating additional vehicles.

Summary

3.57 Although Alderholt is a relatively permeable settlement, with a series of footpaths, footways and bridleways providing connections within Alderholt and further afield towards neighbouring settlements; there is no frequent public transport services and limited local facilities within the settlement. Therefore, at present the majority of everyday needs are met by car travel to neighbouring settlements.

4. PROPOSED DEVELOPMENT

Introduction

4.1 The development proposals have been carefully designed to not only deliver additional housing, but also to improve existing and provide additional facilities within the settlement to reduce the need for both existing and future residents to travel outside of Alderholt to meet daily needs. The location of the additional facilities has been carefully considered to maximise the attractiveness of walking and cycling for existing and future residents. The scheme has also been designed to incorporate a new bus route, providing a feasible alternative to use of the private car for longer distance journeys.

Proposed Development

4.2 The facilities that will be delivered by the development (either directly or via contribution) include:

- 1700 dwellings (including a small provision of sheltered housing and care home);
- 2 ha employment land (business park/start up style units). This 2ha is based on total land space, therefore for the purposes of this assessment a value of 1ha GFA has been used.
- An expansion to the existing first school; restructured as a Primary School and becoming part of a two tier education system linked with Burgate secondary school in Fordingbridge (rather than the current three tier link to Cranborne and Wimborne);
- New square/town centre totalling c. 4,200 sqm with shops, café, new convenience supermarket and pub;
- New 21st century healthcare facility;
- New recreation space and potential LTA outdoor tennis centre;
- New Library;
- Digital Infrastructure – fibre to front door;
- New improved bus service; and
- New pedestrian & cycle infrastructure;

4.3 The above range of facilities will enable residents to reduce their travel needs and therefore transform Alderholt from a settlement currently lacking facilities to one which benefits from a wide range of amenities within a 15 minute walk of most properties within the settlement.

4.4 An indicative concept masterplan has been prepared by SW-Architects to support the planning application which identifies the key principles of the proposed development including the principal roads through the site, residential areas, commercial areas, leisure area, areas of green space and pedestrian and cycle routes through the site. The masterplan is attached as **Appendix A** for reference.

Vehicular Access

Hillbury Road – Roundabout

4.5 The primary new access point will be located on Hillbury Road and will take the form of a new roundabout, which has been designed to accommodate the proposed level and type of traffic anticipated, whilst also ensuring that the design is sympathetic to its surroundings and is not overly engineered. The proposed access design is shown in Appendix E, including vehicle tracking and visibility analysis.

4.6 The access will take the form of a four-arm roundabout, with Hillbury Road forming the northern and southern arms, the new development spine road forming the western arm and an existing farm access forming the eastern arm. The three main arms all have deflection and widening on the approach to ensure sufficient capacity and manoeuvrability of large vehicles, whilst ensuring some residual capacity is retained for future growth within the area. Capacity analysis of the roundabout is provided in Chapter 9.

4.7 The site access is currently located within a 40mph speed limit, however as part of this junction work the intention is to extend the 30mph speed limit south along Hillbury Road to include the access roundabout.

4.8 This junction design has been subject to a Road Safety Audit, the response to which is included within Appendix F. The Road Safety Audit provided a number of comments in relation to surfacing, lighting, advanced warning signage and drainage which are all noted and will be addressed and provided as appropriate at the detailed design stage.

4.9 The RSA also raised the matter of ensuring forward visibility is maintained and this is accepted and will be dealt with at detailed design through either dedication of land to highways or through a restrictive covenant. Further comments were made in relation to the horizontal alignment of the southbound approach transition, the low angle of entry on a number of arms being just below 20°, and that the entry path radius for the western arm should not exceed 100m. The above comments are noted and minor revisions to the roundabout and arm alignment have been made to satisfy the above comments. These revisions are included upon the drawing attached at Appendix E.

Ringwood Road – Priority Junction

4.10 The other point of vehicular access to the development would be provided via Ringwood Road, which would be diverted southwards to become the main spine road of the development. The existing alignment would form the minor arm of a priority junction. Due to the proposed alignment of the internal spine road an additional connection would be provided to assist vehicles turning right from the spine road into the existing Ringwood Road, and vice versa. This junction design is shown within Appendix G, including vehicle tracking and visibility analysis.

4.11 This junction design has also been subject to a Road Safety Audit, the response to which is also included within Appendix F. The Road Safety Audit provided a number of comments in relation to surfacing and drainage which will be addressed at the detailed design stage. The RSA raised the matter of inadequate deflection for vehicles routing west-east, that visibility and intervisibility within the junction be maintained free from vegetation, that the provision of a 2m footway may impact carriageway widths and vehicles ability to pass on the new minor arm of Ringwood Road, and that prior warning signage is provided on approach to the pedestrian crossing build out on the new minor arm of Ringwood Road. These comments have been addressed through the latest design attached at Appendix G.

4.12 This revised design now incorporates greater deflection of the minor arm joining Ringwood Road. Furthermore, advanced warning signage of the pedestrian build out and associated lighting is now proposed, however specific details will be provided as part of the detailed design stage. The issue with intervisibility is noted and will be dealt with at detailed design either through dedication as highway land or a covenant restricting use to accord with visibility requirements. Finally, regarding widths of Ringwood Road and passing ability, the new Ringwood Road width is proposed to be maintained at 4.8m, with a 2m footway included along the northern edge. This is considered appropriate for two vehicles to be able to pass. It is pertinent to note that the specific approach to pedestrian activity and vehicle interaction and traffic calming has not yet been confirmed with a number of options open for discussion with Dorset Highways through the application period (as detailed below).

Internal Spine Road

4.13 Although not forming part of the present application, the concept of the new internal spine road has been developed to safeguard sufficient space for a 6.5m wide carriageway and adjoining footway/cycleway provision. At this stage, although it is not submitted in detail, the masterplan provides opportunities for spine road deflection to assist in limiting vehicle speeds.

Ringwood Road

4.14 The spine road is proposed to cross the existing alignment of Ringwood Road further to the east, as shown on the masterplan. The existing alignment of Ringwood Road would become a no through road, preventing vehicles from traversing its length, instead using the new spine road. This would maintain vehicle access to existing Ringwood Road properties, but otherwise reduce traffic volume to make the existing carriageway a more attractive route for pedestrians and cyclists, akin to a 'quietway' given its adjacency to the Recreation Ground, Sports Club and proposed facilities. Turning heads would be provided on Ringwood Road, either side of the new spine road. The preliminary design for this is shown within Appendix H.

4.15 To reflect the different nature of Ringwood Road, a reduction in speed limit is proposed. Details of the treatment for Ringwood Road, including possible traffic calming features to maximise the attractiveness of the route for pedestrians and cyclists will be discussed with the highway authority and examples are provided below.

Pedestrian and Cyclist Access

4.16 A number of points of pedestrian/cyclist access are proposed across the development. These are shown in Figure 10 and further detailed below.

Figure 10: Proposed Site Connectivity (Source: SW-Arch)

Hillbury Road footway provision

4.17 At present there is a footway along the western side of Hillbury Road as far as Hillbury Park. As part of the development proposals a new footway will be provided along the western edge of Hillbury Road continuing south from Hillbury Park. Between the development and Hillbury Park there is highway verge which would allow for a 2m footway to be provided. This footway is shown in Appendix I. This will improve permeability for pedestrians.

Existing link from Birchwood Drive

4.18 To the north of the site there is currently an undefined footpath which routes from Birchwood Drive to the northern boundary of the site to the rear of Saxon Way. As the site is in private ownership, the footpath terminates at the site boundary. As part of the development proposals this connection will be opened as a pedestrian route to connect into 'Alderholt Park', a newly formed area of parkland proposed as part of the development.

Link to recreation ground

4.19 At present there is a footpath which routes through the recreation ground, immediately to the west of the newly created Alderholt Park. As part of the development pedestrian and cycle connections across Alderholt Park will be provided. This will enable permeability between the eastern section of the site and the centre of Alderholt.

Footway provision along Ringwood Road up to the vehicular access

4.20 As part of the proposed amendments to Ringwood Road, a 2m footway is proposed on the northern side of the carriageway Ringwood Road, between the existing provision and the footway connection from Broomfield Drive to Ringwood Road. At this point a traffic calming scheme is proposed which will shorten the distance for pedestrians to cross over Ringwood Road and provide a connection into the site. This footway provision is shown at **Appendix J.**

4.21 In addition, a pedestrian crossing of Ringwood Road is proposed between the new footway on the northern side and the footway/cycleway abutting the southern side of the spine road. Details of this are shown within **Appendix G**.

Ringwood Road

4.22 A number of options to change the nature of Ringwood Road have considered, two of which are shown illustratively within **Appendix K**.

4.23 One option involves the continuation of the newly proposed footway along Ringwood Road. This 2m footway would continue up to the point at which the spine road crosses Ringwood Road, where the footway will connect into the footway/cycleway accompanying the spine road. As part of these works the existing Ringwood Road carriageway would be reduced to 4.8m in width in order to reduce traffic speeds and enable on carriageway cycling, whilst still ensuring that two vehicles can still pass.

4.24 The second option is that Ringwood Road is reduced in width to approximately 3m width, with 4.8m passing places provided intermittently along its length. This would allow existing carriageway to be repurposed as verge and vegetation as appropriate. This reduction in width will result in the character of Ringwood Road becoming more rural and traffic speeds being reduced substantially as a result. This will create a 'quiet lane' which will mean vehicle speeds will be low and a shared surface created to accommodate pedestrians and cyclists on carriageway.

4.25 These are just two examples of treatments to promote active travel along Ringwood Road, whilst maintaining access to the residents and businesses along Ringwood Road. This will be discussed in more detail with Dorset Council as the application progresses, along with the details of pedestrian & cyclist connections through to the proposed market square.

Offsite connections and Improvements

B3078 Station Road

4.26 Station Road currently measures approximately 6m in width and has c. 1.5m footways on both sides of the carriageway. It is one of the more heavily trafficked roads within Alderholt due to its connection between Verwood/Cranborne and Fordingbridge.

4.27 On this basis a review was undertaken to determine whether improvements could be made for cycling provision. Reduction in road width to accommodate a dedicated cycle facility was discounted on the basis of the impact on traffic flow and character of the road.

4.28 Therefore, it is proposed that an appropriate measure would be to provide advisory cycle lanes along both sides of the carriageway and that the centre line be removed. This will enable cyclists to have allocated road space and the removal of the centreline should help to slow traffic along what is a relatively wide, straight stretch of road. These advisory cycle lanes are proposed between the Churchill Arms to Down Lodge Close on the approach to Pressey's Corner.

4.29 It is proposed that these works are delivered through either financial contribution secured through a S106 or a S278 agreement.

Ringwood Road

4.30 In addition to the advisory cycle lanes provided along Station Road, it is considered appropriate to provide similar facilities along Ringwood Road up to the new spine road. At this point cyclists will have the option of either the new 3m shared footway/cycleway, or continuing to use the downgraded section of Ringwood Road, as detailed above. It is proposed that these works are delivered through either financial contribution secured through a S106 or a S278 agreement.

Connections to Migham Lane

4.31 There are a number of PRoW route between Hillbury Road and Migham Lane further to the east. These PRoW currently comprise footpaths, however there is the potential to improve these footpaths to make them accessible to cyclists. This would provide an alternative to the use of Fordingbridge Road, instead utilising Migham Lane and Ashford Road, to reach the western end of Fordingbridge. The viability of improving/providing such links will be explored with the view that a contribution could be secured to delivering improvements in this area.

4.32 Given Migham Lane and Ashford Road are both lightly trafficked narrow roads, this would create a safer alternative route for cyclists to Fordingbridge that is no longer in length than the use of Fordingbridge Road. This would help to encourage cycling and therefore offer more of a modal choice than reliance solely on the private car.

Connections into forestry trails to the south

4.33 To the south of the site lies Cranborne Common which, as detailed above, has a number of forestry trails and a bridleway which lead toward Verwood. As part of the proposed development connections will be made between the proposed development and these existing trails. In doing so this will open up alternative routes for pedestrians/dog walkers, and cyclists to utilise, therefore encouraging sustainable travel for either travelling or leisure purposes.

Public Transport Improvements

4.34 The current bus service in Alderholt is sub-standard and does not well serve the existing population of Alderholt. Therefore, as part of the proposed development financial contributions will be provided to deliver a high frequency, reliable bus service. Discussions have taken place with a local operator to establish the feasibility of such a service.

4.35 The operator stated a desire to operate a future bus link through Alderholt and considered this to be viable following the introduction of the proposed development. The operator suggested that an hourly bus in each direction between Cranborne, Alderholt, Fordingbridge and Ringwood would be feasible. Within the locality of Alderholt this would route through existing Alderholt settlement as well as the proposed development parcels and as such the new spine road has been designed to a width of 6.5m.

4.36 The masterplan also includes opportunities through the site to allow buses to stop within a reasonable walking distance of residential development and for the bus to travel close to the variety of land uses on site including the market square and employment areas.

4.37 An indicative timetable has been drawn up by the operator between the hours of approximately 0700-1900, with journey times to Fordingbridge and Ringwood being approximately 15 and 30 minutes respectively. On this basis, this bus service would provide a significantly improved bus service compared to the existing, and make travelling via public transport a feasible choice of mode. This would not only benefit future residents but also existing, reducing the settlement' reliance on car travel. The indicative bus timetable is shown in **Figure 11** below for information.

Timetable

Monday to Friday

Cranborne, Square	0700	–	0900	1000	1100	1200	1300	1400	1530	1600	–	1800
Cripplestyle, Chapel	0706	–	0906	1006	1106	1206	1306	1406	1536	1606	–	1806
Alderholt, Ringwood Road	0709	0748	0909	1009	1109	1209	1309	1409	1539	1609	1719	1809
Alderholt, Earlswood Drive	0711	0750	0911	1011	1111	1211	1311	1411	1541	1611	1721	1811
Alderholt, Gilbert Close	0713	0752	0913	1013	1113	1213	1313	1413	1543	1613	1723	1813
Alderholt, Windsor Wau	0715	0755	0915	1015	1115	1215	1315	1415	1545	1615	1725	1815
Fordingbridge	0727	0808	0927	1027	1127	1227	1327	1427	1557	1627	1727	1827
Burgate School	|	0812	|	|	|	|	|	|	|	|	|	|
	|	|	|	|	|	|	|	|	|	|	|	|
Fordingbridge, Salisbury Street	0730	0830	0930	1030	1130	1230	1330	1430	1600	1630	1730	1830
Ibsley, Church	0737	0837	0937	1037	1137	1237	1337	1437	1607	1637	1737	1837
Ringwood, Meeting House Lane	0747	0847	0947	1047	1147	1247	1347	1447	1617	1647	1747	1847
Ringwood, Meeting House Lane	0810	0910	1010	1110	1210	1310	1410	1510	1640	1710	–	–
Ibsley, Church	0820	0920	1020	1120	1220	1320	1420	1520	1650	1720	–	–
Fordingbridge, Salisbury Street	0827	0927	1027	1127	1227	1327	1427	1527	1657	1727	–	–
Burgate School	|	|	|	|	|	|	1430	|	|	|	–	–
	|	|	|	|	|	|	1455	|	|	|	–	–
fordingbridge	0830	0930	1030	1130	1230	1330	1505	1530	1700	1730	–	–
Alderholt, Windsor Wau	0842	0942	1042	1142	1242	1342	1517	1542	1712	1742	–	–
Alderholt, Gilbert Close	0844	0944	1044	1144	1244	1344	1519	1544	1714	1744	–	–
Alderholt, Earlswood Drive	0846	0946	1046	1146	1246	1346	1521	1546	1716	1746	–	–
Alderholt, Ringwood Road	0848	0948	1048	1148	1248	1348	1522	1548	1718	1748	–	–
Cripplestyle, Chapel	0851	0951	1051	1151	1251	1351	–	1551	–	1751	–	–
Cranborne, Square	0857	0957	1057	1157	1257	1357	–	1557	–	1757	–	–

Saturdays

Cranborne, Square	0700	0900	1100	1300	1500	1700	1900	–
Cripplestyle, Chapel	0706	0906	1106	1306	1506	1706	1906	–
Alderholt, Ringwood Road	0709	0909	1109	1309	1509	1709	1909	–
Alderholt, Earlswood Drive	0711	0911	1111	1311	1511	1711	1911	–
Alderholt, Gilbert Close	0713	0913	1113	1313	1513	1713	1913	–
Alderholt, Windsor Wau	0715	0915	1115	1315	1515	1715	1915	–
Fordingbridge	0727	0927	1127	1327	1527	1727	1927	–
Burgate School	|	|	|	|	|	|	|	–
	|	|	|	|	|	|	|	–
Fordingbridge, Salisbury Street	0730	0930	1130	1330	1530	1730	1930	–
Ibsley, Church	0737	0937	1137	1337	1537	1737	1937	–
Ringwood, Meeting House Lane	0747	0947	1147	1347	1547	1747	1947	–
Ringwood, Meeting House Lane	0810	1010	1210	1410	1610	1810	–	–
Ibsley, Church	0820	1020	1220	1420	1620	1820	–	–
Fordingbridge, Salisbury Street	0827	1027	1227	1427	1627	1827	–	–
Burgate School	|	|	|	|	|	|	–	–
	|	|	|	|	|	|	–	–
fordingbridge	0830	1030	1230	1430	1630	1830	–	–
Alderholt, Windsor Wau	0842	1042	1242	1442	1642	1842	–	–
Alderholt, Gilbert Close	0844	1044	1244	1444	1644	1844	–	–
Alderholt, Earlswood Drive	0846	1046	1246	1446	1646	1846	–	–
Alderholt, Ringwood Road	0848	1048	1248	1448	1648	1848	–	–
Cripplestyle, Chapel	0851	1051	1251	1451	1651	1851	–	–
Cranborne, Square	0857	1057	1257	1457	1657	1857	–	–

Figure 11: Proposed Indicative Bus Timetable

4.38 Projections made by the operator suggest that this bus service would require funding over the course of the first 5 years (dependent on build programme) but that after 5 years the bus service would be self-sufficient and would be able to operate without any top up funding from the development. Financial contributions would be secured through the S106 agreement associated with any planning consent.

Parking Strategy

4.39 Appropriate car and cycle parking will be provided on site in accordance with the relevant standards at the time of any reserved matters application. Having said this, the masterplan has been designed to ensure that there is sufficient space to accommodate likely demand.

4.40 The development will also deliver an extensive car club and electric vehicle charging strategy. All dwellings would be provided with electric vehicle charging infrastructure in accordance with the requirements of local policy and/or building regulations.

4.41 The development will seek to secure a dedicated on-site car club to assist those who only occasionally require use of a vehicle. This will likely form part of a wider transport/connectivity hub within the market square or employment areas. Other elements of this hub may include e-bike or e-scooter rental provision, and cycle maintenance hubs to enable ongoing maintenance needs to be met. Details of such initiatives will be provided at the appropriate reserved matters stage, and/or be secured by way of planning condition.

5. DEVELOPMENT ACCESSIBILITY

Introduction

5.1 The NPPF requires development to be sustainable, with emphasis placed on limiting the need to travel, and offering a genuine choice of transport modes. Local policy such as Dorset Council's LTP3 and Hampshire County Council's LTP4 also state that developments should seek to try and minimise the need to travel by ensuring daily needs are available within close proximity, reducing the need to travel by car.

5.2 The proposed development has been designed with this in mind, aspiring to ensure Alderholt is a "15 minute neighbourhood." By making sure that the whole settlement is within an approximate 15 minute walk (**Figure 12**) of the proposed facilities, walking or cycling to them should be feasible options for the majority of the population.

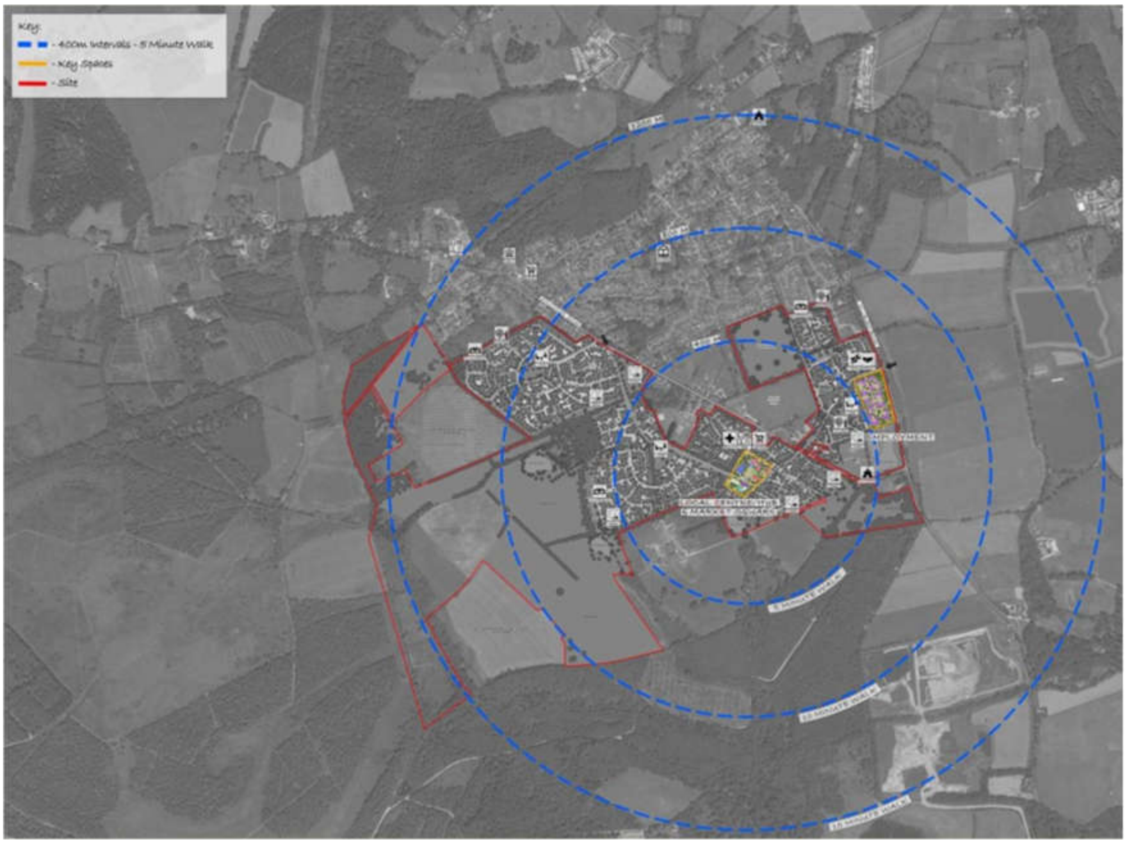


Figure 12: 15 Minute Walking distance (Source: SW-Arch)

5.3 Following the implementation of the proposed development, facilities and improvements to connectivity and permeability, walking and cycling within Alderholt will become more attractive. In combination, these aspects of the development will result in existing and future residents having a genuine choice of modes to access facilities meeting many daily needs within the settlement, rather than having to travel a further distance outside of Alderholt by car as is currently the case.

5.4 Specifically, the new facilities at the employment areas and the market square, will be within walking and cycling distance of the entirety of Alderholt. As well as the increased attractiveness of sustainable travel within Alderholt, there will be better connections to destinations such as Fordingbridge and Ringwood via the improved, higher frequency bus service facilitated by the new development.

5.5 As a result, the vision is for everyday facilities to become available in Alderholt, that existing and future residents will be able to walk or cycle to, and that for those facilities not available in Alderholt, residents will be able to catch a regular bus service to access such facilities within neighbouring Fordingbridge and Ringwood. Therefore, the accessibility and sustainability of Alderholt would be transformed become more sustainable as a result.

5.6 The amenities and facilities provided by the development are primarily in two locations; the market square, as shown in **Figure 13**, below, and the employment areas shown in **Figure 14**.

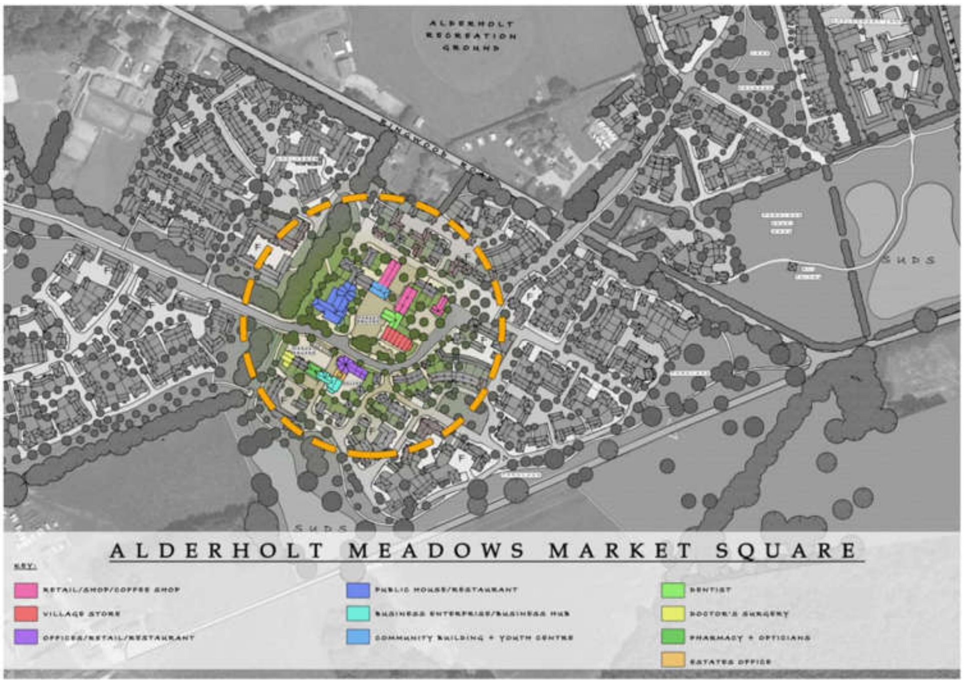


Figure 13: Proposed Market Square Facilities (Source: SWA-Arch)

Figure 14: Proposed Employment Area (Source: SWA-Arch)

Market Square

5.7 A range of facilities will be provided within the market square area for use by existing and future residents on a daily basis. These include a village store, a pub and restaurant, a café, a community building and youth centre, a library and 7 other retail units, the details of which are to be confirmed, depending on demand. In addition, the development will deliver a new GP surgery, dentist, pharmacy and opticians. Therefore, residents' day to day needs, including health care will be well catered for within the settlement, reducing the need to travel to nearby towns.

Employment

5.8 The development would provide 2ha of employment land adjacent to Hillbury Road. This is intended to provide space for offices/light industrial uses, rather than heavy industrial processes which could generate large vehicle movements. This is in addition to the new job opportunities created through the provision of retail and other facilities.

5.9 The inclusion of such facilities within the scheme will reduce the need for residents to travel outside of the settlement for employment. Furthermore, residents will be within walking/cycling distance, rather than having to travel by car. The employment area is adjacent to the new footway proposed on Hillbury Road, and a bus stop will be provided nearby to ensure that employees / visitors travelling from outside of Alderholt have the option to do so sustainably.

Recreation

5.10 An LTA approved tennis facility and new parkland will be provided to the northern edge of the development, adjacent to the existing recreation ground. In addition, SANG land will provide additional areas of formalised greenspace and connections beyond into the forestry trails and Cranborne Common. LEAPs, orchards and allotments are also shown on the proposed masterplan.

Education

5.11 The proposed development will provide financial contributions to improve and expand the First School within Alderholt. It is understood that this would result in the current three-tier education system being superseded by a new two-tier system, with the First School in Alderholt being expanded to cater for all primary ages. As a result, all primary school aged children within Alderholt will have the option of attending school within the settlement, rather than needing to travel to Cranborne Middle School as at present.

5.12 In addition, a formal link will be provided between Alderholt Primary School (as it will be) to the Burgate School in Fordingbridge. This will replace the existing link in Wimborne and result in children being at schools more local to their residence, reducing the length of journeys. Students travelling to/from the Burgate School will be able to travel by bus, either by the school provided service on normal school days or by the new public bus route. This will help reduce the reliance on car travel and enable a greater level of independence for the secondary school aged pupils living in Alderholt.

Summary

5.13 The development would provide facilities for existing and future residents to have a transformational effect on the need for residents to travel outside of Alderholt to meet their daily needs. This would afford the opportunity to travel sustainably rather than being solely reliant on use of the private car, greatly increasing the sustainability of Alderholt as a settlement. For those journeys that do need to occur outside Alderholt, the provision of a new bus service and improved cycling connections off-site towards Verwood and Fordingbridge will also help reduce reliance on car travel.

6. TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT

6.1 The following section sets out the principles of vehicle trip generation, assignment and distribution for the development. The assessment of the impact upon the local road network follows in a subsequent chapter.

6.2 Of the proposed uses, the primary vehicle trip generators will be the 1700 dwellings and the 2ha of employment land. Trip rates for the other uses have not been calculated on the basis that they will primarily be used by existing/future residents of Alderholt, and therefore attract very limited vehicle trips from outside of the settlement. Furthermore, given the siting of these facilities, they will be within walking / cycling distance of the whole settlement.

6.3 The principles of the assessment have been agreed with Dorset Council during pre-application discussions. The pre-app scoping note which contains further detail is attached as Appendix C but a summary is provided below.

Trip Generation

6.4 The provision of multiple facilities alongside the residential dwellings will not only reduce the need for future residents to travel outside of Alderholt, but also the existing residents. In combination with the provision of a significantly improved bus service, the reliance on use of the private car will reduce.

6.5 On this basis it is considered that not only will the proposed development result in reduced vehicle trips from the new houses that would otherwise be the case but will also result in reduced vehicle trips already on the highway network. For example, residents will no longer have to drive to neighbouring settlements to access shops, cafes and medical facilities. In the AM peak specifically, children would no longer need to be driven to Cranborne Middle School, rather utilising the expanded Alderholt Primary School. Additional employment opportunities within the settlement could also mean that residents no longer need to travel externally for employment.

6.6 A detailed review of the likely vehicular trip generation has been undertaken, as set out within Appendix L. This involved analysis of the current trip journey purposes made by Alderholt residents with regards to education, employment, and retail/recreational needs. Adjustments were then made to trips for each purpose in the AM and PM peak periods for both existing and future residents, reflecting the provision of additional facilities within Alderholt.

6.7 This methodology and proposed reductions have been discussed and agreed with Dorset Council, and as such are considered to be an acceptable basis to calculate the net trip generation of the development.

6.8 The resulting vehicular trip generation for the proposed development is therefore set out in **Table 4** below. It should be noted that this is based on a figure of 1750 dwellings for robustness.

Unit Type	AM Peak (0800-0900)		PM Peak (1700- 1800)	
	Arrivals	Departures	Arrivals	Departures
Proposed Residential	58	559	605	230
Employment	188	36	41	176
Sub-Total	246	595	646	406
Existing Residential trips removed	-123	-209	-114	-54
Net Total	**123**	**387**	**533**	**350**
	510		**884**	

Table 4: Vehicular Trip Generation

6.9 As can be seen from **Table 4** above, the proposed development at Alderholt is expected to give rise to a net additional 510 vehicle trips in the AM peak and 884 in the PM peak.

Multi Modal

6.10 In addition to the above vehicular trip generation, the development will give rise to a number of trips undertaken by other modes, both internal and external to Alderholt. The forecast multi modal trip generation is set out below in **Table 5**. The assumptions underpinning these figures are explained below. It is pertinent to note that these comprise person trips generated by the development and make no allowance for increased pedestrian/cycling trips within Alderholt for existing Alderholt residents.

Unit Type	AM Peak (0800-0900)						PM Peak (1700- 1800)					
	Driver	Passenger	Bus	Walk	Cycle	Total	Driver	Passenger	Bus	Walk	Cycle	Total
Internal	0	0	21	791	203	1016	0	0	29	516	136	682
External	842	82	252	0	31	1198	1052	120	49	0	37	1248
Total	842	82	273	791	234	2214	1052	120	78	516	174	1930
	38%	4%	12%	36%	11%	100%	55%	6%	4%	27%	9%	100%

Table 5: Multi-Modal Trip Generation for Proposed Development

6.11 Of the external journeys, the majority are anticipated to be undertaken by car, with a limited number of trips undertaken by walking or cycling. During the AM period a significant proportion of trips will be via bus, as a result of the new connection to Burgate School. The figures above make no allowance for increased bus patronage following the implementation of the public bus service and instead utilises existing 2011 census data modal share. Therefore, in practice the number of bus users is likely to increase at the expense of car driver trips.

6.12 For internal trips it is assumed that, given the arrangement of the development and that all facilities will be within a 15 minute walk of the entirety of Alderholt, there will be no car drivers (and therefore no passengers) unless linked with a trip that will eventually be originating or terminating outside of Alderholt. The remaining modal share is apportioned between walking, cycling and bus, with bus users expected to be minimal for journeys within Alderholt, and the majority being pedestrian trips.

6.13 The resulting overall modal share for all trips as a result of the development is that 38% of trips will be undertaken by car in the AM and 55% in the PM, which demonstrates a significant reduction in car reliance compared to the East Dorset 01 MSOA Journey to Work average of 88%. This demonstrates how much less reliable on the car Alderholt is anticipated to be following the development.

6.14 In terms of car passengers, these will total 4% and 6% in the AM and PM periods respectively, whilst bus users will total a minimum of 12% and 4%. The remaining percentage of trips will be undertaken by walking and cycling, with journeys undertaken by foot equating to 36% and 27% in the AM and PM periods respectively and cyclists accounting for 11% and 9% respectively. The pattern of travel within Alderholt is anticipated to change and become self-sufficient following the implementation of the development.

6.15 The above modal share will be reinforced through measures set out within the Travel Plan which accompanies this TA.

Trip Distribution

6.16 The distribution of vehicular trips has been based on Census 2011 Journey to Work data and is set out within **Appendix M**. This distribution has been agreed with Dorset Council as part of the pre-app engagement process. In summary it assumes the following distribution of trips externally to Alderholt:

- B3078 Fordingbridge Road – 19%
- Sandleheath Road – 19%
- Harbridge Drove – 35%
- A31 West – 21%

- A31 East – 14%
- B3078 Daggans Road – 34%
- Batterley Drove – 26%
- B3078 Castle Street – 8%

Link			
B3078 Hillbury Road North	Sandleheath Road	31%	12%
	Fordingbridge Road		19%
Harbridge Drove	A31 East	35%	14%
	A31 West		21%
B3078 Daggons Road West	Batterley Drove	34%	26%
	B3078 Castle Street		f8%
Total			100%

Table 6: Trip Distribution

Trip Assignment

6.17 Utilising this trip distribution information, applied to the vehicular trip generation set out in **Table 6** above, the trip assignment per link is summarised in **Table 7** below, whilst the spreadsheet model depicting the assignment of development traffic is included as part of **Appendix N**.

Link		AM Peak (0800-0900)		PM Peak (1700-1800)	
B3078 Hillbury Road North	Sandleheath Road	158	61	274	106
	Fordingbridge Road		97		168
Harbridge Drove	A31 East	179	71	309	124
	A31 West		107		186
B3078 Daggons Road West	Batterley Drove	173	133	301	230
	B3078 Castle Street		41		71

Table 7: Trip Assignment

6.18 The development impact is distributed fairly evenly across the highway network. The impact of this additional vehicular traffic is examined in more detail in the following chapters.

7. STRATEGIC MODELLING

7.1 In 2019, Dorset Council undertook traffic modelling of the Alderholt area to test the cumulative impact of development on the road network. A calibrated and validated traffic model of the area was created using Paramics Discovery software.

7.2 The reports detailing the modelling are included at **Appendix O**. The main model covers Alderholt, with sub-models of Cranborne, central Fordingbridge and White Mill Bridge. The models include assessment of links within each modelled area. For a forecast year of 2033, various scenarios were tested, including notional developments of 500 dwellings, 1000 dwellings and 2500 dwellings. This modelling was later updated by request of the applicant to reflect an additional scenario of 1750 dwellings.

7.3 The modelling undertaken utilised 2011 census journey to work data to inform the distribution which therefore follows a similar distribution as per that agreed for use within this TA. However, the trip rates utilised within the S-Paramics are higher than used within the present assessment, because it did not allow for reductions to the trip rate for either new dwellings or existing residential areas, arising from the provision of additional facilities. As a result of the variation in trip rates, it is considered that the 1000 dwelling scenario is most relevant to the present proposals. The outcomes of the modelling analysis are set out below.

7.4 In general, the models show that the most sensitive areas of the road network are Provost Street in Fordingbridge, Pressey's Corner in Alderholt and Ringwood Road / Hillbury Road / Harbridge Drove junction. This has partly informed the scope of individual junction modelling undertaken as part of this Transport Assessment.

7.5 Within the 1,000 dwelling scenario the modelling identified minor queuing across the network. Specific locations where the model identified queuing include the Hillbury Road/Ringwood Road site access junction which had been coded within the model as a simple priority junction. However, a roundabout is now proposed in this location, which provides sufficient capacity for the anticipated traffic volume, as explored in a subsequent chapter.

7.6 The remaining queuing was primarily found at the Provost Street priority working arrangement, Provost Street / High Street junction and at Pressey's Corner. This is explored further in subsequent chapters. The 1,750 dwelling scenario identified similar impacts, but given the greater scale of development, the impact was greater.

7.7 The Paramics modelling has been used to partly inform the scope of junctions to be individually modelled, and to quantify impact upon junction capacity. The S-Paramics modelling did not cover the Verwood Road/A31 junction, but this has also been modelled. The geographical scope of the modelling assessment has been agreed with Dorset Council.

7.8 The Paramics modelling identified the Provost Street link as experiencing issues, which is also considered below. However, the Paramics modelling did not include all of the links between the modelled extent of Alderholt, Cranborne, Fordingbridge and White Mill Bridge. For this reason, the following assessment also considers the geometries of the links not covered by the Paramics modelling, to identify any particular pinch points at which mitigation may be required.

8. HIGHWAY IMPACT METHODOLOGY

8.1 In order to quantify existing traffic flows on the highway network, Paul Basham Associates commissioned independent traffic surveys on 18-11-21 – 24-11-21. The surveys were as follows:

- Automatic Traffic Count (ATC) on Hillbury Road
- Manual Classified Counts (MCC) and Queue Length Surveys (QLS) at:
  - Hillbury Road/Ringwood Road Priority Junction
  - Ringwood Road/Station Road Priority Junction
  - Hillbury Road/Station Road Junction
  - Provost Street/High Street Priority Junction
- Automatic Number Plate Recognition (ANPR) surveys at:
  - Hillbury Road (South of Alderholt)
  - Station Road (West of Alderholt)
  - Fordingbridge Road (East of Alderholt)
  - Sandleheath Road (North of Alderholt)

8.2 In addition, traffic surveys undertaken in 2018 at the A31 / Verwood Road junction have been utilised.

Assessment Scenarios

8.3 Table 8 describes each of the scenarios which have been assessed within the TA, for both the typical AM (0800-0900) and PM (1700-1800) weekday periods. These modelling scenarios were agreed with Dorset Council during the pre-application scoping process and include a 500 dwelling sensitivity scenario which utilised the trip rates derived for the Snails Lane planning application, which were also used by Dorset Council in some of their early feasibility works for assessment of strategic development in Alderholt (and do not allow for any internalisation or discounting of trips).

Scenario	Scenario Details
1	2021 Base Year
2	2027 Forecast Year
3	2027 Forecast Year with Proposed Development (500 Dwellings Sensitivity Test)
4	2033 Forecast Year
5	2033 Forecast Year with Proposed Development

Table 8: Assessment Scenarios

Traffic Growth and Committed Development

8.4 To take into account traffic growth associated with committed development in future year scenarios, NTEM adjusted growth factors have been obtained from TEMPro 7.2.

8.5 The TEMPro program is based on the National Trip End Model and takes into account changes in car ownership and local planning forecasts regarding housing and employment. This forecast has been based on 'All Roads' for the 'East Dorset 001' MSOA (for the local road network) and 'Trunk' for the 'East Dorset 004' MSOA (for the A31 junction). The resulting growth factors are set out in Table 9. These growth factors were agreed with Dorset Council during the pre-application scoping work.

Growth Period	Time Period	TEMPRO Growth Factor	
		All Roads	Trunk
2018 to 2021	Weekday AM Peak	-	1.0516
	Weekday PM Peak	-	1.0499
2021 to 2027	Weekday AM Peak	1.0261	1.0544
	Weekday PM Peak	1.0240	1.0547
2021 to 2033	Weekday AM Peak	1.0529	1.1067
	Weekday PM Peak	1.0494	1.1082

Table 9: TEMPro Growth Factors

8.6 The application of TEMPro growth factors accounts for housing growth in the area. Manual inclusion of committed developments' traffic would therefore result in an element of double counting. Committed development sites located in Fordingbridge include land west of the A338 Salisbury Road at Burgate for 350 dwellings (Strategic Site 18). The merits of including this committed development within the assessment have been considered. Given it is located adjacent to the A338, with new junctions coming forward as part of the development, it is considered that the vast majority of traffic associated with that scheme would utilise the A338. This committed development has therefore not been manually added to the flows, and in any case should be covered by the application of the TEMPro growth factor. This position was agreed with Dorset Council during the pre-app consultation.

Traffic Flow Diagrams

8.7 For ease of reference, traffic flow diagrams are attached in Appendix N. The diagrams show baseline traffic flows from the traffic surveys; applies the TEMPro factors to predict traffic flows in future forecast years; and finally includes the development traffic using the methodology outlined previously.

Highway Capacity Analysis

8.8 In order to assess the traffic impact on the local road network, detailed capacity analysis of the following junctions has been undertaken. The assessment junctions are shown on **Figure 15** below.

1. Proposed Site Access Roundabout on Hillbury Road
2. Station Road / Ringwood Road
3. Hillbury Road / Station Road
4. Provost Street / Shaftesbury Street / High Street
5. Verwood Road/A31 Eastbound

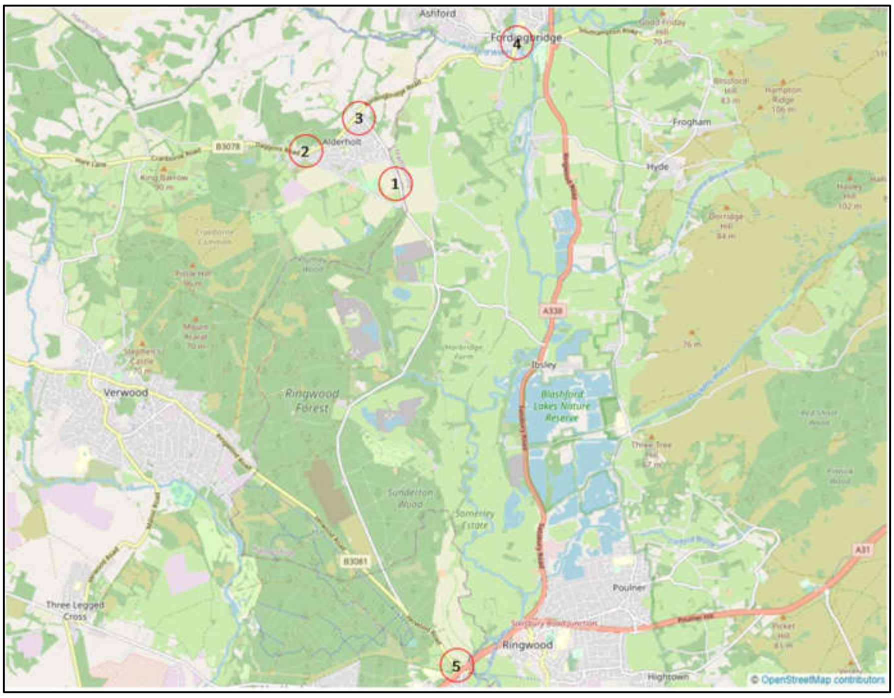


Figure 15: Junctions Assessed

8.9 This scope has been informed by Dorset Council's strategic modelling assessment of Alderholt as reviewed in **Section 7** above. The scope of junction assessment was also agreed with Dorset Council during the pre-application scoping stage.

8.10 DC's response queried whether the new access junction formed by the existing alignment of Ringwood Road and the new spine road should be modelled. It is considered that traffic routing to/from the dwellings, campsite and the recreation ground along Ringwood Road is relatively low in the peak periods. Furthermore, the anticipated vehicle trips along this part of the spine road are only 313 in the worst-case PM peak period, as detailed within the spreadsheet model flows in **Appendix N**. It is considered that capacity issues are highly unlikely to materialise at this junction and modelling is not therefore necessary.

Junction Modelling Software

8.11 In order to quantify the impact of additional traffic on junction performance, industry standard software has been used, namely Junctions 9 and LinSig. Junctions 9 is the industry standard software package for assessing roundabout and priority junctions, and provides a Ratio of Flow to Capacity (RFC) value, which identifies what proportion of each arm's total capacity is currently being utilised. RFC values exceeding 0.85 signify the point at which the capacity of the arm is being approached, and the potential to improve capacity could be explored, whilst RFC values of 1.0 or greater represent a junction operating above capacity. Junctions 9 software also provides values for junction delay (in seconds) and queue length in Passenger Car Units (PCUs).

8.12 LinSig software is the industry standard method for assessing the capacity of signalised junctions. LinSig provides a Degree of Saturation (DoS) value, which identifies the percentage of the junction's total capacity that is in use. DoS values exceeding 90% indicate that the junction is close to operating over capacity, and junction improvements or changes to the signal timings should be considered, whilst DoS values of 100% or greater indicate that the junction is operating over capacity, and not all queuing vehicles will be able to clear the junction within one signal cycle. LinSig software also outputs vehicle delay and queue values to provide indicative details on the operational performance of the junction.

8.13 The baseline junction models have been validated against the recorded queue lengths. The results of the junction capacity assessments are summarised for each junction in the Section 9 below.

Link Analysis

8.14 As identified within the strategic modelling, the Provost Street link in Fordingbridge was forecast to experience congestion issues. The impact on this link has therefore been considered in greater detail, as part of the Provost Street / Shaftesbury Street / High Street Junction. In addition, those links that were not covered by the strategic modelling have been assessed in terms of their suitability to accommodate the forecast traffic volumes. These links comprise:

- Harbridge Drove
- B3078 Daggons Road
- Batterley Drove
- B3078 Fordingbridge Road

9. HIGHWAY IMPACT - JUNCTIONS

9.1 This section sets out the results of the highway capacity analysis following the methodology set out in previous chapters.

Proposed Site Access Roundabout on Hillbury Road

9.2 Capacity analysis of the proposed site access junction onto Hillbury road has been undertaken using Junctions 9. The geometry for the analysis is based on the proposed design included within **Appendix E**.

9.3 **Table 10** sets out the summary results for the proposed site access in the 2027 Forecast and 2033 Forecast scenarios with development in the AM and PM peak hour periods, whilst the full outputs are included at **Appendix P**. For information the arms of the junction are as follows:

- Arm A – Hillbury Road (South)
- Arm B – Proposed Site Spine Road (West)
- Arm C – Hillbury Road (North)
- Arm D – Farm Access (East)

		AM			PM		
		Max Q	Delay (s)	RFC	Max Q	Delay (s)	RFC
3. 2027 Forecast + Proposed Development	Arm A	0.1	2.93	0.11	0.3	3.41	0.20
	Arm B	0.4	4.73	0.29	0.2	3.95	0.14
	Arm C	0.2	3.04	0.14	0.2	3.00	0.17
	Arm D	0.0	0.00	0.00	0.0	0.00	0.00
5. 2033 Forecast + Proposed Development	Arm A	0.2	3.12	0.14	0.4	4.06	0.31
	Arm B	0.5	5.15	0.35	0.5	5.11	0.33
	Arm C	0.2	3.34	0.19	0.3	3.34	0.22
	Arm D	0.0	0.00	0.00	0.0	0.00	0.00

Table 10: Proposed Site Access Junction Modelling Results

9.4 The analysis shows that the proposed site access would operate well within capacity in all scenarios, with minimal queueing and delays. The access design is therefore considered suitable to serve the proposed development.

Station Road / Ringwood Road

9.5 Capacity analysis of the Station Road / Ringwood Road junction has been undertaken utilising Junctions 9. The geometry for the analysis has been measured from OS mapping. It has been modelled as a simple T-junction for ease and robustness, not taking into account the eastern part of the junction.

9.6 **Table 11** sets out the summary Junctions 9 results for the Station Road / Ringwood Road junction in the 2021 Base, 2027 Forecast and 2033 Forecast scenarios with and without development in the AM and PM peak hour periods, whilst the full outputs are included at **Appendix Q**. For information the arms of the junction are as follows:

- Arm A – Station Road (East)
- Arm B – Ringwood Road (South)
- Arm C – Daggons Road (West)

		AM			PM		
		Max Q	Delay (s)	RFC	Max Q	Delay (s)	RFC
1. 2021 Baseline	Stream B-C	0.2	7.42	0.14	0.1	7.17	0.13
	Stream B-A	0.1	11.11	0.10	0.1	10.72	0.07
	Stream C-AB	0.2	6.86	0.13	0.1	6.59	0.07
2. 2027 Forecast	Stream B-C	0.2	7.49	0.14	0.1	7.22	0.13
	Stream B-A	0.1	11.22	0.10	0.1	10.79	0.07
	Stream C-AB	0.2	6.90	0.14	0.1	6.60	0.08
3. 2027 Forecast + Proposed Development	Stream B-C	0.2	7.83	0.15	0.2	7.38	0.13
	Stream B-A	0.1	12.01	0.11	0.1	11.40	0.08
	Stream C-AB	0.2	7.11	0.14	0.1	6.64	0.08
4. 2033 Forecast	Stream B-C	0.2	7.55	0.15	0.2	7.25	0.13
	Stream B-A	0.1	11.33	0.11	0.1	10.87	0.07
	Stream C-AB	0.2	6.93	0.14	0.1	6.63	0.08
5. 2033 Forecast + Proposed Development	Stream B-C	0.5	10.27	0.33	0.3	8.82	0.23
	Stream B-A	0.3	14.32	0.24	0.2	14.70	0.16
	Stream C-AB	0.1	6.81	0.11	0.5	8.54	0.31

Table 11: Station Road / Ringwood Road Modelling Results

9.7 The analysis shows that the junction is forecast to operate well within capacity in all scenarios, with negligible queueing and delays of less than 15 seconds, for vehicles leaving Ringwood Road. It is therefore considered that the impact on the operation of this junction is acceptable.

Hillbury Road / Station Road

9.8 Capacity analysis of Hillbury Road /Station Road has been undertaken utilising Junctions 9. The geometry for the analysis has been measured from OS mapping.

9.9 **Table 12** sets out the summary Junctions 9 results in the 2021 Base, 2027 Forecast and 2033 Forecast scenarios with and without development in the AM and PM peak hour periods, whilst the full outputs are included at **Appendix R**. For information the arms of the junction are as follows:

- Arm A – Fordingbridge Road
- Arm B – Hillbury Road
- Arm C – Station Road

		AM			PM		
		Max Q	Delay (s)	RFC	Max Q	Delay (s)	RFC
1. 2021 Baseline	Stream B-C	0.1	9.16	0.05	0.1	8.49	0.06
	Stream B-A	0.5	13.53	0.34	0.2	11.04	0.16
	Stream C-AB	0.0	7.33	0.05	0.1	8.03	0.05
2. 2027 Forecast	Stream B-C	0.1	9.27	0.06	0.1	8.53	0.06
	Stream B-A	0.5	13.83	0.35	0.2	11.18	0.16
	Stream C-AB	0.1	7.35	0.05	0.1	8.08	0.05
3. 2027 Forecast + Proposed Development	Stream B-C	0.4	14.58	0.30	0.2	9.40	0.15
	Stream B-A	1.4	23.45	0.58	0.4	13.79	0.28
	Stream C-AB	0.1	7.66	0.11	0.3	9.72	0.23
4. 2033 Forecast	Stream B-C	0.1	9.37	0.06	0.1	8.64	0.06
	Stream B-A	0.5	14.15	0.36	0.2	11.33	0.17
	Stream C-AB	0.1	7.37	0.05	0.1	8.12	0.06
5. 2033 Forecast + Proposed Development	Stream B-C	0.4	17.27	0.28	0.5	14.51	0.32
	Stream B-A	1.9	30.04	0.66	1.0	22.90	0.51
	Stream C-AB	0.2	7.95	0.18	0.4	10.39	0.25

Table 12: Hillbury Road / Station Road Modelling Results

9.10 The analysis shows that the junction is operating well within capacity during the future forecast with development scenarios, with maximum RFCs of 0.66 and 0.51 experienced in the AM and PM peak periods respectively. Although vehicles leaving Hillbury Road would experience minor delay, queueing is minimal and it is therefore considered that the impact on the operation of the junction is acceptable.

Provost Street / Shaftesbury Street / High Street

9.11 Capacity analysis of the Provost Street / Shaftesbury Street / High Street junction has been undertaken utilising Junctions 9. The geometry for the analysis has been measures from detailed OS mapping supplemented by aerial imagery.

9.12 **Table 13** sets out the summary results for Provost Street junction in the 2021 Base, 2027 Forecast and 2033 Forecast scenarios with and without development in the AM and PM peak hour periods, whilst the full outputs are included at **Appendix S**. For information the arms of the junction are as follows:

- Arm A – B3078 (High Street)
- Arm B – Provost Street
- Arm C – Shaftesbury Street

		AM			PM		
		Max Q	Delay (s)	RFC	Max Q	Delay (s)	RFC
1. 2021 Baseline	Stream B-AC	4.8	88.37	0.87	0.7	21.82	0.42
	Stream C-AB	0.1	8.45	0.10	0.2	22.66	0.14
2. 2027 Forecast	Stream B-AC	6.1	106.93	0.91	0.8	9.23	0.44
	Stream C-AB	0.1	8.49	0.10	0.2	31.02	0.14
3. 2027 Forecast + Proposed Development	Stream B-AC	24.7	329.73	1.16	1.2	9.47	0.56
	Stream C-AB	0.1	8.57	0.10	0.2	31.02	0.15
4. 2033 Forecast	Stream B-AC	7.8	132.72	0.95	0.8	9.47	0.46
	Stream C-AB	0.1	8.55	0.11	0.2	24.04	0.15
5. 2033 Forecast + Proposed Development	Stream B-AC	53.0	733.54	1.41	4.8	9.33	0.87
	Stream C-AB	0.1	8.66	0.11	0.2	9.98	0.16

Table 13: Provost Street Modelling Results

9.13 For an undetermined reason, the baseline model was originally under forecasting the expected queues at the junction, in comparison to the recorded queue lengths. Therefore, a stream intercept adjustment was applied to ensure the model was representative of observed queues. This adjustment value has been applied across all scenarios, including for the mitigation scheme and therefore the assessment is considered robust and consistent.

9.14 The analysis shows that although the junction would operate above capacity with the addition of development traffic. The greatest queues and delays are experienced by drivers wishing to turn right from Provost Street. It should be noted that junction capacity models produce exponentially greater queues and delays once RFC > 1, and the above are not to be taken as literal forecasts of queueing and delays. Nevertheless, mitigation works have been designed to mitigate the impact of the proposed development.

Mitigation Scheme

9.15 As a result, mitigation works have been designed which ensures that the junction operates better than the 2033 Forecast, and therefore mitigates the impact of the proposals. This mitigation comprises the widening of the junction at the give way line to provide space for two lanes of traffic at the give way line. This has a small impact upon the area of public realm to the east. The proposed mitigation is shown in Appendix T, whilst the revised modelling results which taken into account this mitigation is shown in Table 14 below with the outputs also included within Appendix S.

		AM			PM		
		Max Q	Delay (s)	RFC	Max Q	Delay (s)	RFC
5. 2033 Forecast + Proposed Development	Stream B-C	0.3	13.54	0.25	0.2	11.22	0.17
	Stream B-A	7.1	124.24	0.93	1.2	32.96	0.55
	Stream C-AB	0.1	8.66	0.11	0.2	9.98	0.16

Table 14: Provost Street (With Mitigation) Modelling Results

9.16 As can be seen from Table 14 above, the proposed works mitigate the impact of the development, reducing queues and delays on the Provost Street arm below those that are forecast for 2033 without the development. The junction design would operate within theoretical capacity and it is therefore considered that with the mitigation works, the impact of the development on the operation of the junction is limited.

9.17 In addition, as mentioned above, the mitigation modelling results retains the same capacity adjustment as the baseline models to ensure the assessment is comparable and robust. However the mitigation works may negate the need for the manual adjustment to the model, in which case the junction would operate more efficiently than the above forecast.

9.18 However, bearing in mind the congestion on the Provost Street link identified by the strategic modelling, an alternative mitigation scheme has also been considered, in the form of a potential one-way system for West Street and Provost Street.

9.19 For example, West Street could become north bound only, and Provost Street south bound only. This would help address a number of matters, including the limited visibility for vehicles leaving Provost Street and remove vehicle conflict along Provost Street. It is recognised that the introduction of such a system would have a redistributive effect upon existing movements, however given the short lengths involved, it would not result in significantly longer journeys for any road users. It may also allow improved pedestrian / cyclist facilities to be delivered.

9.20 Exploratory analysis suggests that both West Street / Station Road and Shaftesbury Street / High Street / Provost Street junctions could provide sufficient capacity in this arrangement. Subject to detailed design considerations, this appears a feasible option to improve traffic flow within this location and would help alleviate congestion arising from the current priority working system over the bridge along Provost Street.

9.21 It is proposed that a financial contribution is provided so that the highway authority can either provide the junction improvements as shown or implement a one-way system. As such, it is considered that the development's impact would be sufficiently mitigated.

Verwood Road/A31 Eastbound

9.22 Capacity analysis of the Verwood Road/A31 Eastbound junction has been undertaken utilising Junctions 9. The geometry for the analysis has been measured from detailed OS mapping supplemented by Aerial Imagery.

9.23 **Table 15** sets out the summary results for the junction in the 2021 Base, 2027 Forecast and 2033 Forecast scenarios with and without development in the AM and PM peak hour periods, whilst the full outputs are included at **Appendix U**. For information the arms of the junction are as follows:

- Arm A – Verwood Road (East)
- Arm B – B3081/A31 Offslip (South)
- Arm C – Verwood Road (North West)
- Arm D – A31 On-Slip (Eastbound)

		AM			PM		
		Max Q	Delay (s)	RFC	Max Q	Delay (s)	RFC
1. 2021 Baseline	Stream B-C	1.8	21.33	0.65	64.9	565.97	1.38
	Stream B-AD	0.5	42.88	0.36	10.5	655.89	1.29
	Stream A-BCD	13.1	62.32	0.91	31.0	126.41	1.01
	Stream D-ABC	0.0	0.00	0.00	0.0	0.0	0.0
	Stream C-ABD	0.0	7.67	0.02	0.0	0.0	0.0
2. 2027 Forecast	Stream B-C	2.1	24.66	0.69	83.8	719.08	1.48
	Stream B-AD	0.6	52.05	0.41	12.9	804.80	1.40
	Stream A-BCD	19.4	98.23	0.96	40.2	163.17	1.05
	Stream D-ABC	0.0	0.00	0.00	0.0	0.00	0.0
	Stream C-ABD	0.0	7.68	0.02	0.0	0.00	0.0
3. 2027 Forecast + Proposed Development	Stream B-C	3.0	34.38	0.77	141.3	1264.50	1.76
	Stream B-AD	1.0	80.66	0.53	19.2	1354.35	1.67
	Stream A-BCD	30.7	161.40	1.04	54.5	215.88	1.11
	Stream D-ABC	0.0	0.00	0.00	0.0	0.00	0.00
	Stream C-ABD	0.0	7.76	0.02	0.0	0.00	0.00
4. 2033 Forecast	Stream B-C	2.6	30.78	0.74	132.1	1278.91	1.78
	Stream B-AD	0.9	68.88	0.50	20.0	1364.12	1.70
	Stream A-BCD	27.3	141.88	1.02	73.1	302.25	1.18
	Stream D-ABC	0.0	0.00	0.00	0.0	0.00	0.00
	Stream C-ABD	0.0	7.76	0.02	0.0	0.00	0.00
5. 2033 Forecast + Proposed Development	Stream B-C	8.5	84.73	0.97	299.9	3246.06	2.51
	Stream B-AD	2.9	221.11	0.92	35.9	3349.75	2.44
	Stream A-BCD	55.8	289.96	1.16	106.7	445.43	1.28
	Stream D-ABC	0.0	0.00	0.00	0.0	0.00	0.00
	Stream C-ABD	0.0	8.06	0.02	0.0	0.00	0.00

Table 15: Verwood Road/A31 Eastbound Off-Slips Modelling Results

9.24 The analysis shows that the junction is operating significantly above capacity in the 2021 baseline scenario, which is worsened by additional background growth and the proposed development traffic. The nature of the modelling software is such that when junction models are over capacity, additional flow has a falsely disproportionate impact on queues and delays, which increase exponentially. Whilst these will undoubtedly increase in future scenarios, the above forecasts of queues and delays should not therefore be read as accurate forecasts of the situation "on the ground."

9.25 However, it is clear that physical works are required to mitigate the impact of the additional development traffic. This also provides an opportunity to address the existing safety issue identified for those turning right from Verwood Road onto the A31 eastbound.

9.26 Given the balance of flows and safety issue, it is considered the most appropriate mitigation is to signalise the junction. This would enable green time to be apportioned according to the balance of flows and reduce the accident risk by creating gaps in the eastbound traffic for right turners onto the A31.

9.27 On this basis a mitigation scheme has been designed and is shown within Appendix V. This mitigation scheme involves the signalisation of the junction, with two lanes at the A31 off slip to accommodate any right turners (or straight over movements as requested by National Highways during a round of pre-application engagement). A right turn refuge has also been provided on Verwood Road for those turning right onto the A31, to separate these from any westbound movements. It has currently been modelled on the basis of a 120 second cycle time but there may be scope to further optimise this as necessary.

9.28 The mitigation has been modelled utilising software LinSig, and the subsequent results are summarised in Table 16 below, whilst a copy of the full outputs is included at Appendix W.

		AM			PM		
		Max Q	Delay (s)	DoS	Max Q	Delay (s)	DoS
5. 2033 Forecast + Proposed Development	Verwood Road East (Left Ahead)	7.9	14.0	38.3%	13.9	32.4	86.6%
	B3081/A31 Offslip (Right Left)	12.2	51.2	72.4%	15.0	41.5	90.0%
	Verwood Road West (Ahead Right)	33.2	14.3	89.3%	21.0	8.7	79.8%

Table 16: Verwood Road/A31 Eastbound Off-Slips (With Mitigation) Modelling Results

9.29 As can be seen from Table 16 above, the proposed mitigation results in the junction operating within capacity, post mitigation. As a result of signalisation, queueing is significantly reduced on the B3081/A31 off slip, but increases to a lesser extent on Verwood Road. This queuing totals a maximum of 33.2 PCUs in the AM peak along the Verwood Road western arm and is a result of briefly stopping the west to east flow to allow green time for right turners out of the B3081.

9.30 On the eastern arm queues in the AM can be accommodated prior to the right turn refuge. In the PM the max queue will extend to c. 14 PCU lengths and so extend beyond the right turn refuge. However vehicles wanting to turn right total 5 per cycle and so as worst case would be added to the rear of the queue. This would effectively result in worst case queues totalling c. 19 PCUs, just short of Hurn Lane.

9.31 Regarding the B3081/A31 Off-Slip arm, it is pertinent to note that the baseline traffic flows identify some movements between the A31 off-slip and the A31 On-Slip. The origin of these trips is unknown and could be associated with trips from Folly Farm Lane or could be associated with rat runners attempting to avoid traffic along the A31 mainline. The introduction of signals would be likely to discourage such movements, however to ensure the modelling presented is robust, straight on movements have been included within the model.

9.32 In any case, the maximum queueing on the B3081/A31 off slip would be a maximum of 15 PCUs, which would not interfere with the operation of the mainline A31. This is a significant improvement over the future forecast performance of the junction even without the development, with queues of 73 vehicles, which would stretch back to the mainline A31. Furthermore, this is an improvement compared to the 2021 baseline, where queues of 64 vehicles were modelled on the B3081/A321 off-slip.

9.33 Given the junction is over capacity, it is anticipated that the mitigation works would be implemented sooner than 2033. The modelling results above for 2033 are shown as a worst case, and the 2027 results are improved given the lower amount of traffic forecast at that time. In light of the above, it is considered that the development impact is not only mitigated by the scheme, but improves existing performance and therefore the residual impact should be acceptable. The junction also provides a betterment in the form of the right turn refuge for vehicles turning onto the A31 on-slip and therefore helps to address an existing safety issue.

Summary and Conclusions

9.34 The above demonstrates that the residual cumulative impact of the proposed development on junctions across the network is not severe. Where necessary, physical works are proposed to mitigate the impact of the development. This is specifically at Provost Street / Shaftesbury Street / High Street, and Verwood Road / A31. There is no reason from a junction capacity perspective that the proposed development should not be viewed anything other than favourably by the relevant highway authorities.

10. HIGHWAY IMPACT - LINKS

10.1 In addition to the above junction capacity modelling, it is pertinent to note that the proposed development will result in increased vehicle numbers on links between Alderholt and the surrounding area. Although some links were included in Dorset Council's strategic modelling, others were not. These links are typically rural in nature and therefore they have been assessed to ensure that they are able to support passing vehicles, with mitigation measures and improvements identified as necessary.

10.2 This analysis comprises two components:

- Firstly, the character of the road, the typical width and alignment of the road has been appraised, with any notable features identified; and
- Secondly, swept path analysis has been undertaken of the key links where widths are restricted to determine whether any mitigation is required to assist passing vehicles.

10.3 According to Manual for Streets, in general terms, 4.1m width is sufficient for two cars to pass, 4.8m is sufficient for a car to pass a large vehicle, and 5.5m is sufficient for two vehicles to pass. Analysis of the road widths and swept path analysis is based on OS MasterMap Topography Layer, which has a relative accuracy of +/- 1.1m at the 99% confidence level. This is supplemented by a combination of observations from site visits, photographs and street view.

10.4 As set out within Section 7 above the trip distribution of the proposed development results in vehicular trips routing in broadly three directions, split approximately a third in each direction before trips dissipate over the network. In addition to Provost Street, which was considered in the previous section, the links analysed are:

- Harbridge Drove
- B3078 Daggons Road
- Batterley Drove
- B3078 Fordingbridge Road

10.5 Average Annual Daily Traffic (AADT) forecasts have been calculated to support this link analysis and has also been utilised within the Environmental Statement. This has been calculated using an AM+PM peak to AADT conversion factor derived from traffic surveys completed in the area.

South – Harbridge Drove

10.6 To the south along Hillbury Road/Harbridge Drove/Alderholt Road/Verwood Road, the Average Annual Daily Traffic (AADT) in the 2033 Forecast scenario totals c. 3,500. Following the implementation of the development the AADT would increase by c. 3000 and will therefore result in a total of 6,500.

10.7 The road is of a reasonable width, typically measuring approximately 5.5m, and is reasonably straight, with the occasional bend in places. For the majority of the link the widths shown on the OS mapping mean that the road is generally suitable for two large vehicles to pass.

10.8 Vehicle tracking has been undertaken which shows that two large vehicles can pass for the majority of the length of the road. This is shown on drawing 132.0001.013 as included at Appendix X Most additional traffic arising from the development will be cars, which can therefore also pass along the length of the road. Free flowing conditions should therefore remain with the addition of development traffic.

10.9 In some areas, the OS mapping suggests two large vehicles are unable to pass each other. In these locations, indicative highway widening has been shown on the drawing, informed by highway boundary mapping which provides comfort that widening can take place within public highway should it be considered necessary.

10.10 There appear to be some discrepancies between the OS mapping and the situation 'on the ground.' For example, some parts of the carriageway are identified as 4.3m in width by the OS mapping, but appear to be c. 5m wide based on on-site observation. It is therefore proposed that the necessity for the proposed widening is reviewed at a later stage, through a topographical survey. It is suggested that this is secured through planning condition.

10.11 As a result, following the completion of such work, it is considered there will be no areas on the B3078 between Alderholt and Batterley Drove that would not be able to accommodate two buses to pass (given the route will form part of the new bus route between Cranborne, Alderholt and Ringwood). The geometries of the link should not generally constrain the free flow of traffic, even with additional development flow given the majority of additional vehicles would be cars.

West - B3078 Daggons Road

10.12 To the west of Alderholt the B3078 Daggons Road routes towards Cranborne and approximately halfway between Alderholt and Cranborne, Batterley Drove meets the B3078 and provides a connection to Verwood.

B3078 – Alderholt to Batterley Drove

10.13 Within the 2033 Forecast, the AADT is c. 4,800 which is predicted to increase by c. 2850 with the development, meaning a future total of c. 7,650 vehicles per day. For the section of the B3078 between Alderholt and Batterley Drove, the carriageway is rural but maintains a reasonable width. Along this stretch of the link the carriageway typically measures around 5.5m in width, with variations due to verge and vegetation encroachment. For the most part, it has a delineated centreline. To ensure that traffic flow along the link can be free-flowing, swept path analysis has also been undertaken to alleviate any concerns over difficulty of vehicles passing.

10.14 This swept path analysis is shown in Appendix Y, which shows there are several areas in which two buses could not pass. A review of potential widening works which could be implemented has been undertaken as shown on the drawing included at Appendix Y.

10.15 As above, the need for the widening will be confirmed at a later stage once a topographical survey has been complete. If the topographical survey shows that widening is necessary, it will be delivered within the public highway.

10.16 As a result, following the completion of such work, it is considered there will be no areas on the B3078 between Alderholt and Batterley Drove that would not be able to accommodate two buses to pass (given the route will form part of the new bus route between Cranborne, Alderholt and Ringwood). The geometries of the link should not generally constrain the free flow of traffic, even with additional development flow given the majority of additional vehicles would be cars.

B3078 – Batterley Drove to Cranborne

10.17 With the development in place, the section of the B3078 between Batterley Drove and Cranborne would experience an increase of c. 700 vehicles taking the overall AADT to c.3,400. The road is rural and often narrows, from c. 5m to c. 3.5m in places. As a result, although there are passing places, vehicles have to give way at particular points along the link.

10.18 Swept path analysis has been undertaken for this stretch of the link to identify any areas of potential difficulty for two large vehicles to pass and subsequently review whether any mitigation work is necessary. This is shown within Appendix Z. This swept path analysis shows that for the majority of the eastern half of this link the road is passable and that there are no issues with two large vehicles passing.

10.19 However, there are some locations where two large vehicles cannot pass, according to OS mapping. Widening works within the public highway are shown on the drawing included at Appendix Z. It is proposed that the necessity for the proposed widening is reviewed at a later stage, through a topographical survey. It is suggested that this is secured through planning condition.

10.20 On the approach to Cranborne there are a greater number of narrowing and pinch points along the road network. There are also a number of existing passing places in locations which ensures that there is always forward visibility to ensure that two vehicles do not meet at the middle of a pinch point, and therefore ensures vehicles can pass. As above, indicative areas of widening have been identified along this stretch of carriageway. In this instance it may be that a balance is struck between the use of acceptable passing places with appropriate visibility and road widening as necessary, noting the relatively lower traffic volume.

10.21 Assuming the 3,400 flow is spread across 18 hours, there will be an average of approx. 190 movements per hour (noting that the profile is not flat across the day). This equates to just over 3 vehicle movements every minute, or 1 vehicle every 20 seconds. Assuming these are equally split in direction, this is an average of 1 vehicle in each direction every 40 seconds. Given the availability of passing places, distances between them and forward visibility available, combined with future widening, it is considered that the additional traffic will not result in a significant deterioration of the performance of the link. Depending on the drivers' destination, an alternative route is also available via Batterley Drove.

<u>Batterley Drove - Verwood</u>

10.22 Along Batterley drove between the B3078 and Verwood the carriageway is of reasonable width (approximately 5.5m) and has delineated centre line carriageway markings which combine to make the route a more suitable and preferably route for higher traffic volume than that of the route between Batterley Drove and Cranborne. Furthermore the onward route between Verwood and the B3078 to the west of Verwood is also of higher quality and equates to a similar distance to that of the route via Cranborne. This is reflected in the existing road signage at the junction.

10.23 In the central part of Batterley Drove there is a series of 'S' bends in the carriageway, at which point there is a history of collisions. As part of the review of personal injury accident data undertaken within Section 3 of this TA, it was determined that the majority of these were as a result of driver error, likely travelling too fast for the conditions.

10.24 Upon further review, there is suitable width around these bends and there are warning bollards on the bends with slow road markings present. It is considered additional signage in this location would help to enhance the safety of this route. This is proposed in the form of additional signage comprising warning signage on the approach and chevron signage on the bends. Details of the proposed signage is shown for information in Figure 16 below. It is proposed this is delivered through contributions secured through a S106 agreement.

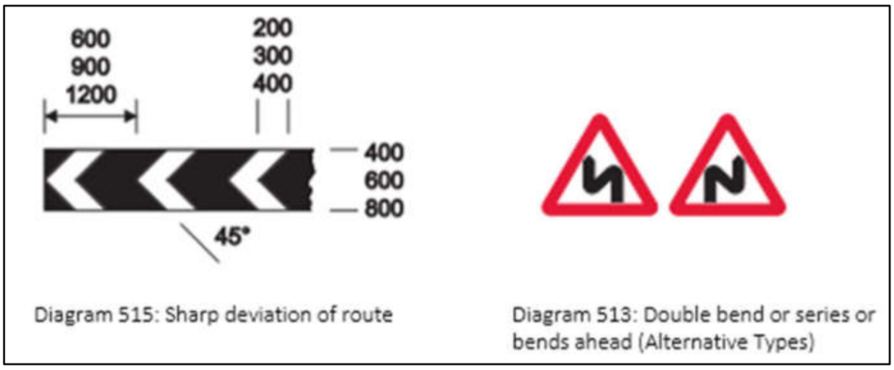


Figure 16: Proposed Warning Signage

10.25 Batterley Drove is forecast in 2033 to have an AADT of c. 2650, which would increase to 4,800 AADT in the 2033 Forecast plus development scenario. Given the characteristics of the road, the geometries are not considered to constrain the free-flow of traffic. Although the accident history is considered to be a result of drivers travelling too fast for the conditions, additional signage can be delivered to help mitigate the risk.

East – B3078 – Fordingbridge Road

10.26 For the section of the B3078 between Alderholt and Fordingbridge to the east, the carriageway is rural but maintains a reasonable width for the majority of the route. Along this stretch of the link the carriageway typically measures around 5.5m in width, albeit varying due to verge and vegetation encroachment, and typically has delineated centreline carriageway markings. There is a pinch point approximately halfway along this link where the carriageway reduces in width. This has been reviewed in more detail below.

10.27 AADT on Fordingbridge Road is forecast to be 6,700 in 2033, which is predicted to increase by c. 1,600 as a result of the development. This will result in a future total of daily traffic along this link of c. 8,300 vehicles per day.

10.28 Swept path analysis of this link has also been undertaken to alleviate any concerns over difficulty of vehicles passing and to ensure that the development traffic will not significantly adversely affect the operation of the link. This swept path analysis is shown in Appendix AA.

10.29 The swept path analysis shows there are several areas in which two buses could not pass, in addition to the pinch point at the centre of the link (which is addressed below). In these locations, indicative highway widening has been shown on the drawing, informed by highway boundary mapping which provides comfort that widening can take place within public highway. As with the other links, it is proposed to undertake a topographical survey at a later stage to determine whether widening is necessary in each location, secured through condition.

10.30 Two buses could not pass at the pinch point to the centre of the link, which according to OS mapping narrows to a width of approximately 4.8m over a length of c. 180m, with an absolute minimum width of 4.2m. At this point there is generally good visibility to see oncoming vehicles and sufficient width for two cars to pass. In the situation where an oncoming car meets a bus in the opposite direction, they are typically unable to pass each other. It is considered that although this is typical of rural links there is the potential to manage the flow of vehicles in this location through the introduction of priority give way markings with advance signage. Priority would be given to vehicles travelling uphill, i.e. westbound. This is shown in drawing 132.0001.014 included at Appendix AB. The design would be finalised upon undertaking of a Topographical Survey as part of the detailed technical work following planning consent.

10.31 In addition there is one further point where two buses are unable to pass, and this is at the 90 degree bend on the approach to Fordingbridge. At this location the available highway width is restricted due to retaining walls adjacent to the footways which flank the carriageway. However, some carriageway widening is proposed at this location (as shown on drawing 132.0001.015 included at Appendix AC) which eases the movement of two large vehicles past one another (noting that two cars can pass in the current circumstances). It is not possible to provide sufficient width for two large vehicles to pass at all points through the bend, whilst maintaining pedestrian facilities. However, given that this represents a short stretch of the route, and that two large vehicles are relatively unlikely to regularly meet at this location, it is considered more important to maintain suitable pedestrian footway. At this point there is sufficient forward visibility for vehicles to see other oncoming vehicles and advance warning signage will be provided accordingly. The detailed design will be finalised upon the undertaking of a Topographical Survey at a later stage.

10.32 As a result, following the completion of such future work, it is considered there will be no areas on the B3078 between Alderholt and Fordingbridge that would not be able to accommodate two buses to pass (given the route will form part of the new bus route between Cranborne, Alderholt and Ringwood) with the exception of the pinch point to the centre which will be managed through priority working arrangement. The geometries of the link should not generally constrain the free flow of traffic, even with additional development flow given the majority of additional vehicles would be cars.

11. SUMMARY AND CONCLUSIONS

11.1 This Transport Assessment (TA) has been prepared by Paul Basham Associates on behalf of Dudsbury Homes (Southern) Ltd in support of a sustainable mixed use development at Alderholt Meadows.

11.2 The proposed development comprises a wide range of local amenities, employment land and educational improvements which have a transformational impact upon Alderholt as a settlement.

11.3 The Proposed Development has been assessed in accordance with the requirements of the National Planning Policy Framework (NPPF). The assessment has been carried out based on Planning Practice Guidance to the NPPF and in the light of the responses received from the Highway Authorities at the scoping stage.

11.4 It is proposed that vehicular access to the Proposed Development will be taken from Hillbury Road to the north of the existing Ringwood Road/Hillbury Road junction. This will be in the form of a roundabout which will retain the farm access to the east. Access is also provided via Ringwood Road, whereby the existing Ringwood Road alignment will be split to form a new priority junction with Ringwood Road south forming the minor arm of the priority between Ringwood Road north and the new internal spine road.

11.5 To provide access to the Proposed Development for pedestrians and cyclists, new footways are provided along Hillbury Road and Ringwood Road, whilst Ringwood Road itself is to be severed by the internal spine road and its character altered to offer an attractive route for active travel. Cyclists will be encouraged to cycle on carriageway given the village is typically lightly trafficked, and improvements along Station Road which is the busiest local road will be made in the form of advisory cycle lanes. Further improvements are proposed as a result of the development by improving existing connections across the site's northern boundary, with the existing grass connection being opened up onto Birchwood Drive, whilst connections will be made into the existing footway through the recreation ground.

11.6 The traffic impact of the proposed development has been assessed by way of detailed capacity analysis of the following junctions:

1. Proposed Site Access Junction onto Hillbury Road
2. Station Road / Ringwood Road Junction
3. Pressey's Corner Junction
4. Provost Street Junction
5. Verwood Road/A31 Eastbound Off-Slips

11.7 The analysis has shown that the Site Access, Station Road/Ringwood Road junction and the Pressey's Corner junction would operate within capacity in the 2033 Forecast with development scenario. The analysis has shown that the Provost Street Junction in Fordingbridge would be operating over capacity in the 2033 Forecast with development scenario, and therefore highway capacity improvements have been designed and are proposed which would mitigate the impact of the proposed development. The analysis also shows that the A31 Off-Slip/Verwood Road Junction will operate over capacity in the 2033 Forecast before the addition of the development traffic and that subsequently the development traffic worsens performance at this junction. Mitigation has been designed involving the signalisation of this junction which will provide capacity improvements at this junction to bring the junction back under capacity and therefore exceed the requirement to mitigate the development's impact, instead providing an overall betterment to the junction.

11.8 In addition to the junction capacity analysis, the road links have been assessed to establish areas requiring improvement to enable two way traffic flow. This analysis was undertaken for the following links:

- Harbridge Drove between Alderholt and the A31;
- B3078 between Alderholt and Cranborne;
- Batterley Drove between the B3078 and Verwood; and
- B3078 between Alderholt and Fordingbridge.

11.9 Areas have been identified where widening would be delivered within the public highway to facilitate two way traffic flow, particularly for large vehicles. Plans of the proposed widening have been prepared, based on OS mapping. It is proposed that a review be undertaken at detailed design stage on the basis of a topographical survey, given the potential for inaccuracies in the OS mapping. It is suggested this is secured through planning condition. A priority working arrangement is also proposed for one part of Fordingbridge Road.

11.10 In addition, Batterley Drove will be provided with additional signage at the 'S' bends in the middle of the link, therefore the opportunity has been taken to provide advisory warning signage in the form of chevrons and warning signs to ensure vehicles are aware of the change in alignment on approach.

11.11 As per the aim of the development the proposals will give rise to an increase in travel demand by all main modes of travel. To accommodate this additional demand, a range of measures have been identified as follows:

- Internal site layout designed to facilitate walking and cycling providing direct links to existing and proposed routes linking the existing and new areas of Alderholt;

- Creation of new off-site footways and cycling infrastructure within Alderholt to encourage walking and cycling within the village along key corridors and towards new facilities and existing school.
- An appropriate financial contribution (level to be agreed) would be made towards improvements required at the Provost Street and A31 Off-Slip/Verwood Road junctions in line with the mitigation set out within the TA.
- Signage will be provided to improve way finding along and use of Batterley Drove.
- A 'Travel Plan' would be implemented to encourage walking, cycling and public transport use, to reduce the traffic generation of the Proposed Development and ensure the modal splits identified within the TA are achieved.
- Potential transport impacts during the construction phase would be managed through a Construction Management Plan or similar document.

11.12 It is considered that with the implementation of the above measures, which would be secured either by planning conditions or by funding/contributions under the provisions of a S106 Agreement, the additional travel demand from the proposed development would be adequately accommodated on the local transport network.

11.13 In transport terms, the Proposed Development is consistent with both Dorset Council's, and neighbouring Hampshire County Council's Local Transport Plans in that it reduces the need for residents, both existing and new, to travel by providing everyday facilities that are accessible by active travel and therefore reduces the reliance on car travel. It also accords with the previous East Dorset Local Plan (policy 5.28) and current Draft Dorset Local Plan, in that it seeks to deliver on draft policy ALD1 to provide a large strategic level development in Alderholt as proposed within both of these documents.

11.14 Overall, the TA has addressed the transport impacts of the proposed development. It has demonstrated that the site will reduce the need to travel by existing and future residents, opportunities for sustainable transport modes have been maximised, safe and suitable access can be achieved, and improvements can be undertaken within the transport network that cost effectively limits the significant impacts of the development in accordance with the NPPF.

Appendix A

Scott Worsfold Associates
RIBA Chartered Architects

NOTES

CONCEPT DRAWING - SUBJECT TO DETAIL DESIGN

	DESCRIPTION	DATE	AUTHOR	CHK'D
P1	INITIAL ISSUE	11.05.2022	SWA	-
P2	UPDATED SHELTERED	10.06.2022	SWA	-
P3	RED LINE UPDATED IN LINE WITH CLIENT'S COMMENTS DATED 14TH JUNE.	17.06.2022	MP	-
P4	SANG UPDATED. AMENDED PER CLIENT COMMENTS	23.06.2022	AT	-
P5	AMENDMENTS IN LINE WITH CLIENT COMMENT	27.06.2022	AT	-
P6	MASTERPLAN UPDATED BASED ON CAD LAYOUT '22-1126 SL01 - INDICATIVE SITE LAYOUT REV P6'	27.10.2022	AT	MP

ACRONYM KEY
SANG - Suitable Alternative Natural Greenspace
SUDS - Sustainable Urban Drainage System
LEAP - Local Equipped Area for Play
LAP - Local Area for Play

Indicative Masterplan

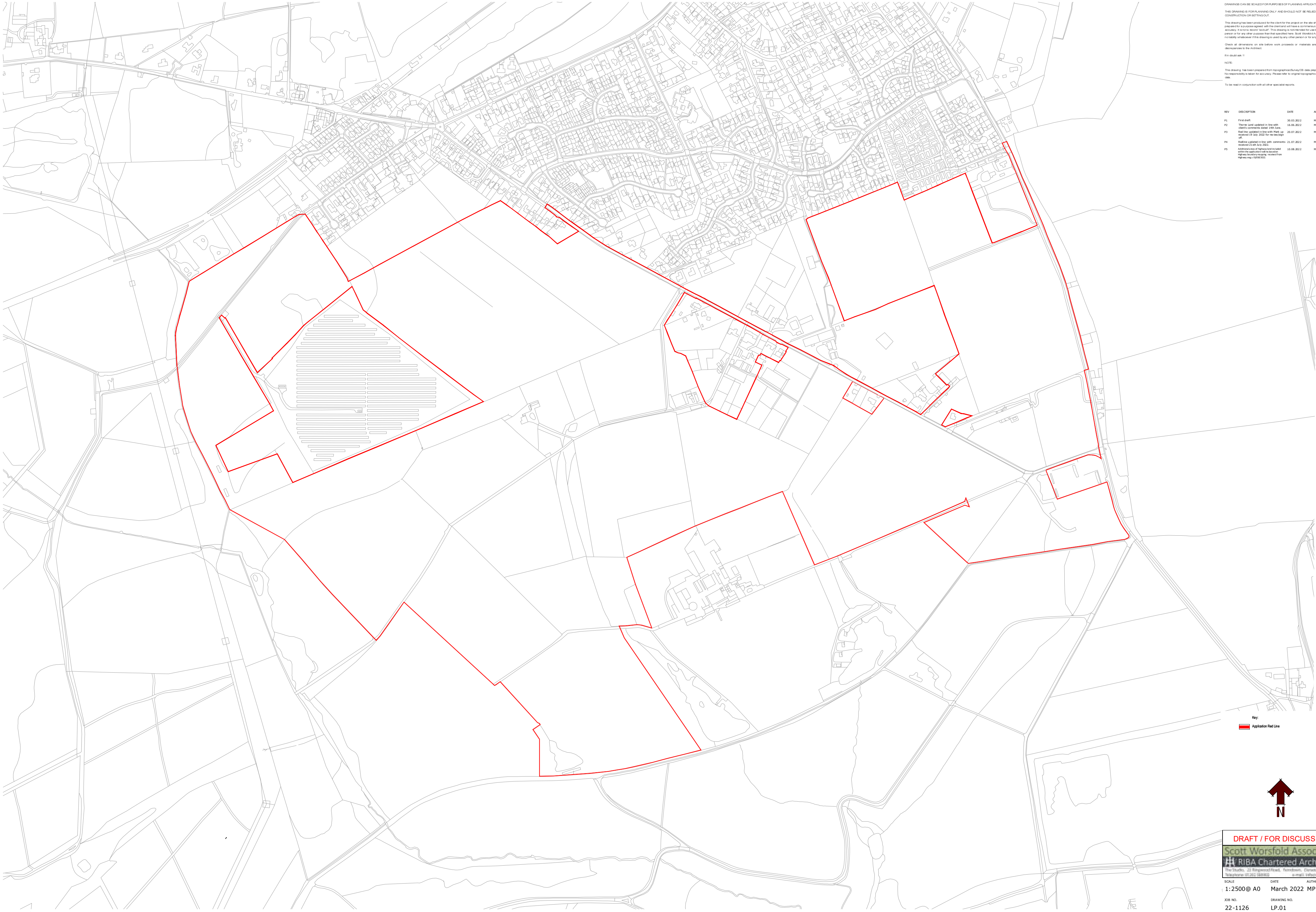
Alderholt Meadows, Dorset

SCALE	DATE	AUTHOR	CHK'D
1:2000 @ A0	April 2022	ALL	GW

JOB NO.	DRAWING NO.	REV
22-1126	MP.01	P6

Appendix B

A0



NOTES

DRAWINGS CAN BE SCALED FOR PURPOSES OF PLANNING APPLICATION ONLY.

THIS DRAWING IS FOR PLANNING ONLY AND SHOULD NOT BE RELIED UPON FOR CONSTRUCTION OR SETTING OUT.

This drawing has been produced for the client for the project on the site shown. It was prepared for a purpose agreed with the client and will have a commensurate degree of accuracy. It is not a record "as built". This drawing is not intended for use by any other person or for any other purpose than that specified here. Scott Worsfold Associates accept no liability whatsoever if this drawing is used by any other person or for any other purpose.

Check all dimensions on site before work proceeds or materials are ordered, report discrepancies to the Architect.

If in doubt ask !!

NOTE:

This drawing has been prepared from topographical/Survey/OS data prepared by others. No responsibility is taken for accuracy. Please refer to original topographical/survey/OS data.

To be read in conjunction with all other specialist reports.

REV	DESCRIPTION	DATE	AUTHOR	CHK'D
P1	First draft	30.03.2022	MP	-
P2	Thorne Land updated in line with client's comments dated 14th June.	16.06.2022	MP	-
P3	Red line updated in line with Mark up received 19 July 2022 for review/sign off.	20.07.2022	MP	-
P4	Redline updated in line with comments received 21sth July 2022.	21.07.2022	MP	-
P5	Additional areas of highway land included within the application redline.based on Highway boundary mapping received from Highway eng.s 01/08/2022.	10.08.2022	MP	-

DRAFT / FOR DISCUSSION

Scott Worsfold Associates
RIBA Chartered Architects

SCALE	DATE	AUTHOR	CHK'D
1:2500@ A0	March 2022	MP	GW

JOB NO.	DRAWING NO.	REV
22-1126	LP.01	P5

File Location
W:\GW ARCH\01 PROJECTS\22-1126 - Alderholt, IL\Drawings\GW Arch\02 Stage D Design Development\01 DWG\22-1126 LP01 Rev P5 - Location Plan.dwg

Location Plan
Alderholt Meadows, Dorset

Appendix C

Tom Peters

From: Steve Savage <steve.savage@dorsetcouncil.gov.uk>
Sent: 17 June 2022 11:17
To: Tom Peters
Cc: Helen Jackson; Clare Marshall
Subject: RE: 132.0001 - Alderholt

Follow Up Flag: Follow up
Flag Status: Completed

Hi Tom

Thank you for forwarding me your Pre-Application Scoping Note (Ref 132.0001/PSN/1) for consideration and comment. I have addressed the various points that you are seeking acceptance of below. It is noted that it is your client's intention to submit an Outline planning application with all matters reserved except access.

The identified reports and scope of the assessment are acceptable and appropriate to the Highway Authority.

Stage 1 Road Safety Audits (RSA) will be required for the two proposed accesses into the development site. It is presumed that as access is not a reserved matter, details of the pedestrian access points along the site's northern boundary will form part of the submission.

With regard to your Trip Internalisation Report (May 2022), my Transport Planning colleagues have responded as follows:

"At a meeting held on the 28 February 2022 with officers from the Dorset Council Transport Planning and representatives from transport consultants Paul Basham Associates (minutes and actions in Appendix B of the Pre-App Scoping Note), we discussed the methodology and assumptions used in the TIR. The outcome of the meeting was for some minor amendments to be made to the assumptions. The updated TIR has taken these adjustments into account and I can confirm that we agree in principle to the methodology used in the report. However, we have not commented on any other scoping for Transport Assessment work required in advance of a planning submission, the outputs of any transport work or the adherence (or otherwise) to current planning policy, other than maintaining our position of concern regarding the accessibility of Alderholt for significant housing development."

The trip distribution that was previously agreed in earlier discussions about the site still remains valid.

I am unaware of any Committed Development sites that need to be accounted for but would advise that you clarify this particular matter with the Planning Authority. I agree with your conclusion regarding the developments identified within New Forest District Council's Local Plan.

Allowing for the collection date of some of the survey data, it is agreed that TEMPRO should be used to factor up the baseline traffic surveys to the respective forecast years. The TA should confirm where the ATCs where located, where the junction counts took place, etc.

I can confirm that the suggested modelling scenarios are appropriate and that the sensitivity assessment is welcomed.

The suggested junctions to be modelled are accepted. Is there a reason why the new connection (change in priority with the spine road and northern arm of Ringwood Road) to the northwest hasn't been mentioned?

You mention parking and the detail will be dealt with at Reserved Matters stages. The TA should refer to the Authority's parking guidance and associated calculator - https://www.dorsetcouncil.gov.uk/w/car-and-cycle-parking-standards?p_l_back_url=%2Fsearch%3Fq%3Dcar%2Bparking%2Bguidance.

The TA should also mention EV charging and how the details of this will be provided at the Reserved Matters stages.

There are a few other items that I presume you will include within your TA:

- An up-to-date accident analysis for the locality.
- Traffic impact of site construction works.
- Development phasing (where applicable)

I must also add that this advice is given without prejudice to the formal consideration of any subsequent planning applications, which will be subject to public consultation and be ultimately decided by the Planning Authority.

All the best

Steve

Steve Savage
Transport Development Liaison Manager
Highways
Dorset Council

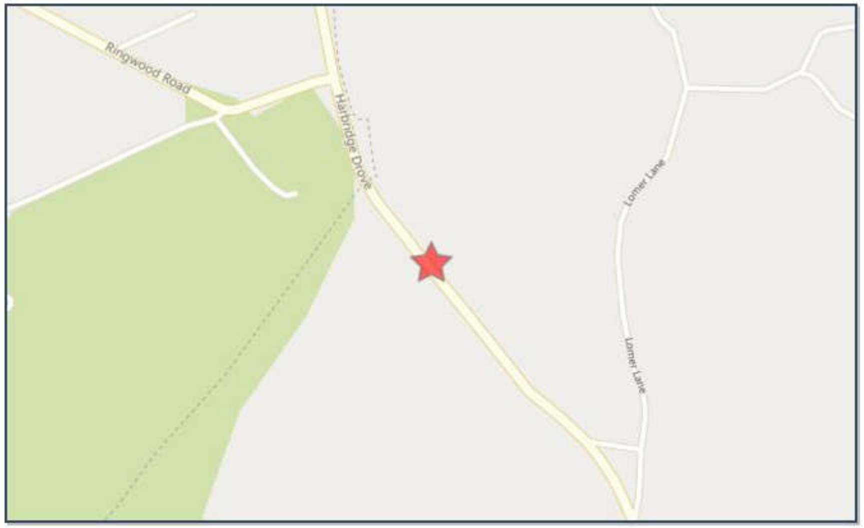
01305 224157
dorsetcouncil.gov.uk

Appendix D

crashmap.co.uk

Validated Data

Crash Date:	Saturday, February 04, 2017	**Time of Crash:**	6:00:00 PM	**Crash Reference:**	**2017440045325**
Highest Injury Severity:	Serious	**Road Number:**	U0	**Number of Casualties:**	1
Highway Authority:	Hampshire			**Number of Vehicles:**	1
Local Authority:	New Forest District			**OS Grid Reference:**	413076 111494
Weather Description:	Other				
Road Surface Description:	Wet or Damp				
Speed Limit:	60				
Light Conditions:	Darkness: street lights present but unlit				
Carriageway Hazards:	Any animal in carriageway (except ridden horse)				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	8	Female	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Pedestrian	Male	46 - 55	In carriageway, not crossing	In carriageway, stationary - not crossing (standing or playing)

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Validated Data

Crash Date:	Tuesday, September 12, 2017	**Time of Crash:**	9:56:00 AM	**Crash Reference:**	**2017551701470**
Highest Injury Severity:	Serious	**Road Number:**	U0	**Number of Casualties:**	1
Highway Authority:	Dorset			**Number of Vehicles:**	1
Local Authority:	East Dorset District			**OS Grid Reference:**	407941 110875
Weather Description:	Fine without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	60				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				

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Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Motorcycle over 50cc and up to 125cc	10	Male	36 - 45	Vehicle proceeding normally along the carriageway, on a left hand bend	Offside	Unknown	None	Entered ditch

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Driver or rider	Male	36 - 45	Unknown or other	Unknown or other

Validated Data

Crash Date:	Monday, September 11, 2017	**Time of Crash:**	9:54:00 PM	**Crash Reference:**	**2017551701494**
Highest Injury Severity:	Serious	**Road Number:**	U0	**Number of Casualties:**	2
Highway Authority:	Dorset			**Number of Vehicles:**	1
Local Authority:	East Dorset District			**OS Grid Reference:**	407946 110869
Weather Description:	Raining without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	60				
Light Conditions:	Darkness: no street lighting				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				

Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	6	Female	16 - 20	Vehicle proceeding normally along the carriageway, on a left hand bend	Front	Unknown	None	Tree

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Driver or rider	Female	16 - 20	Unknown or other	Unknown or other
1	2	Slight	Vehicle or pillion passenger	Female	16 - 20	Unknown or other	Unknown or other

crashmap.co.uk

Validated Data

Crash Date:	Tuesday, February 06, 2018	**Time of Crash:**	8:37:00 AM	**Crash Reference:**	**2018551800186**
Highest Injury Severity:	Serious	**Road Number:**	U0	**Number of Casualties:**	2
Highway Authority:	Dorset			**Number of Vehicles:**	2
Local Authority:	East Dorset District			**OS Grid Reference:**	408701 111352
Weather Description:	Fine without high winds				
Road Surface Description:	Frost or Ice				
Speed Limit:	60				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				

Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	6	Female	21 - 25	Vehicle proceeding normally along the carriageway, on a left hand bend	Front	Commuting to/from work	None	None
2	Car (excluding private hire)	15	Male	46 - 55	Vehicle proceeding normally along the carriageway, on a right hand bend	Front	Unknown	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Driver or rider	Female	21 - 25	Unknown or other	Unknown or other
2	2	Serious	Driver or rider	Male	46 - 55	Unknown or other	Unknown or other

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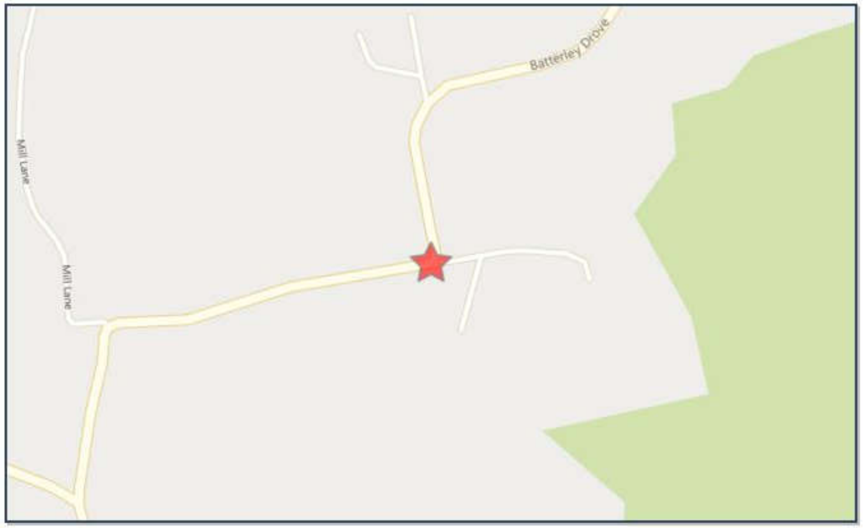
Validated Data

Crash Date:	Friday, November 30, 2018	**Time of Crash:**	4:45:00 PM	**Crash Reference:**	**2018551801486**
Highest Injury Severity:	Serious	**Road Number:**	U0	**Number of Casualties:**	2
Highway Authority:	Dorset			**Number of Vehicles:**	1
Local Authority:	East Dorset District			**OS Grid Reference:**	408425 110974
Weather Description:	Raining without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	60				
Light Conditions:	Darkness: no street lighting				
Carriageway Hazards:	None				
Junction Detail:	Using private drive or entrance				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



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Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	8	Female	Over 75	Vehicle proceeding normally along the carriageway, on a right hand bend	Front	Unknown	None	Tree

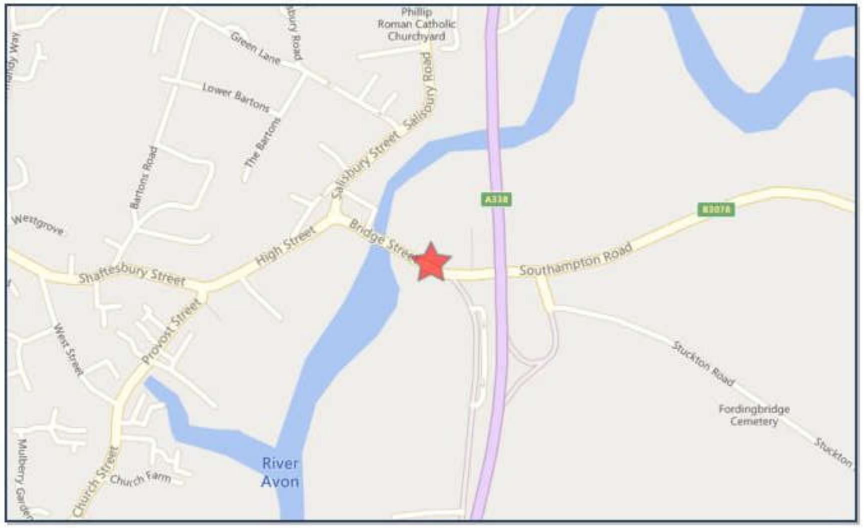
Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Driver or rider	Female	Over 75	Unknown or other	Unknown or other
1	2	Slight	Vehicle or pillion passenger	Female	66 - 75	Unknown or other	Unknown or other

crashmap.co.uk

Validated Data

Crash Date:	Thursday, April 11, 2019	**Time of Crash:**	1:40:00 PM	**Crash Reference:**	**2019440125349**
Highest Injury Severity:	Serious	**Road Number:**	B3078	**Number of Casualties:**	1
Highway Authority:	Hampshire			**Number of Vehicles:**	1
Local Authority:	New Forest District			**OS Grid Reference:**	415006 114178
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	Pelican, puffin, toucan or similar non-junction pedestrian light crossing				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



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Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	15	Female	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Offside	Commuting to/from work	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Pedestrian	Female	26 - 35	In carriageway, crossing on pedestrian crossing facility	Crossing from driver's offside

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Validated Data

Crash Date:	Thursday, April 04, 2019	**Time of Crash:**	3:48:00 PM	**Crash Reference:**	**2019551900347**
Highest Injury Severity:	Serious	**Road Number:**	B3081	**Number of Casualties:**	1
Highway Authority:	Dorset			**Number of Vehicles:**	2
Local Authority:	East Dorset District			**OS Grid Reference:**	412950 105813
Weather Description:	Raining without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	50				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				

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Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	18	Male	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	None	None
2	Good vehicles of unknown weight	-1	Male	56 - 65	Vehicle proceeding normally along the carriageway, not on a bend	Offside	Journey as part of work	None	None

Casualties

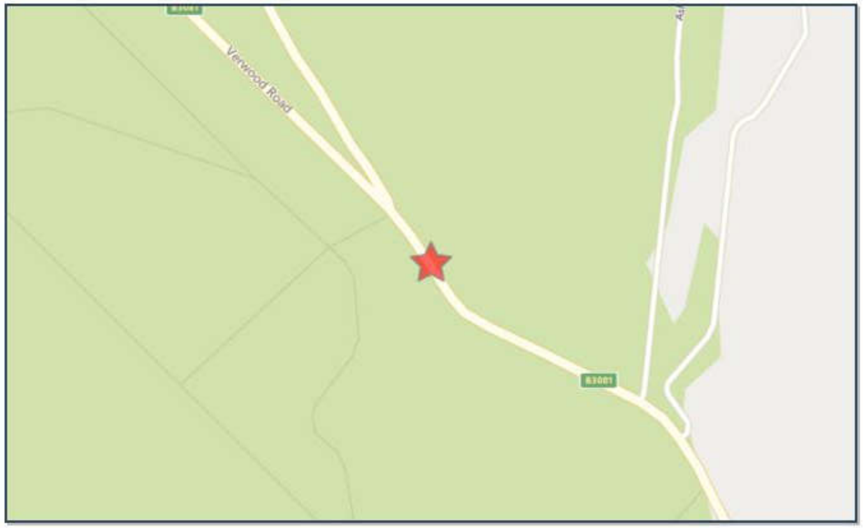
Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Driver or rider	Male	26 - 35	Unknown or other	Unknown or other

crashmap.co.uk

Validated Data

Crash Date: Sunday, August 18, 2019 **Time of Crash:** 1:53:00 AM **Crash Reference:** **2019551900808**

Highest Injury Severity:	Serious	**Road Number:**	B3081	**Number of Casualties:**	2
Highway Authority:	Dorset			**Number of Vehicles:**	1
Local Authority:	East Dorset District			**OS Grid Reference:**	413039 105699
Weather Description:	Raining without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	40				
Light Conditions:	Darkness: no street lighting				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



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Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	17	Female	21 - 25	Vehicle proceeding normally along the carriageway, not on a bend	Nearside	Unknown	None	None

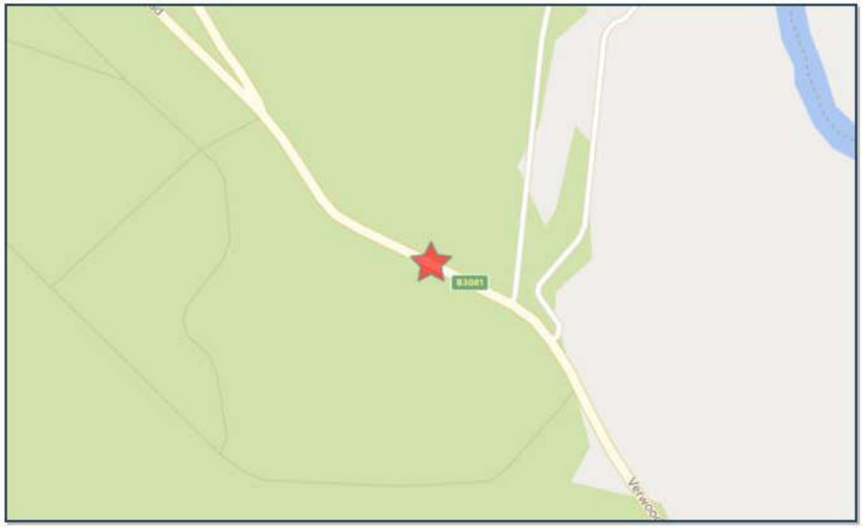
Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Driver or rider	Female	21 - 25	Unknown or other	Unknown or other
1	2	Serious	Vehicle or pillion passenger	Female	16 - 20	Unknown or other	Unknown or other

crashmap.co.uk

Validated Data

Crash Date:	Saturday, November 02, 2019	**Time of Crash:**	8:40:00 AM	**Crash Reference:**	**2019551901083**
Highest Injury Severity:	Fatal	**Road Number:**	B3081	**Number of Casualties:**	1
Highway Authority:	Dorset			**Number of Vehicles:**	1
Local Authority:	East Dorset District			**OS Grid Reference:**	413229 105559
Weather Description:	Raining with high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	40				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	3	Female	66 - 75	Vehicle proceeding normally along the carriageway, not on a bend	Offside	Unknown	None	None

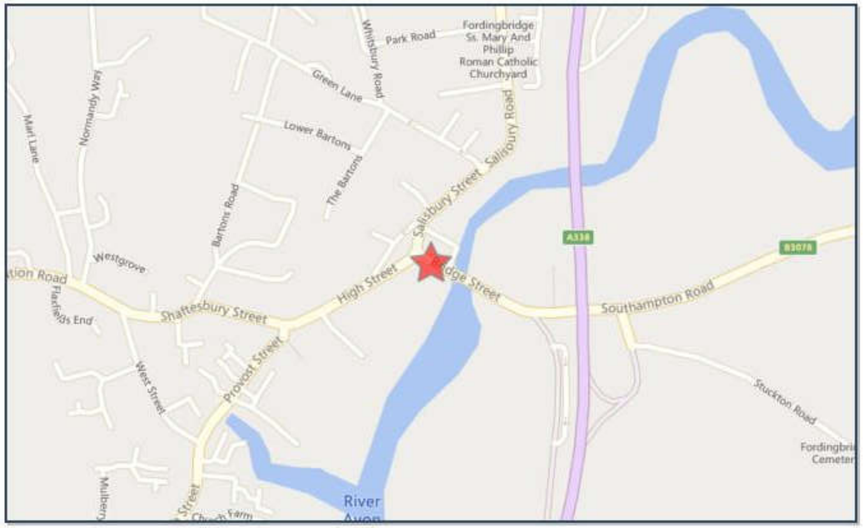
Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Fatal	Driver or rider	Female	66 - 75	Unknown or other	Unknown or other

crashmap.co.uk

Validated Data

Crash Date:	Thursday, April 09, 2020	**Time of Crash:**	1:23:00 PM	**Crash Reference:**	**2020440126618**
Highest Injury Severity:	Serious	**Road Number:**	B3078	**Number of Casualties:**	1
Highway Authority:	Hampshire			**Number of Vehicles:**	1
Local Authority:	New Forest District			**OS Grid Reference:**	414886 114243
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Mini roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Pedal cycle	-1	Male	36 - 45	Vehicle proceeding normally along the carriageway, not on a bend	Offside	Unknown	None	None

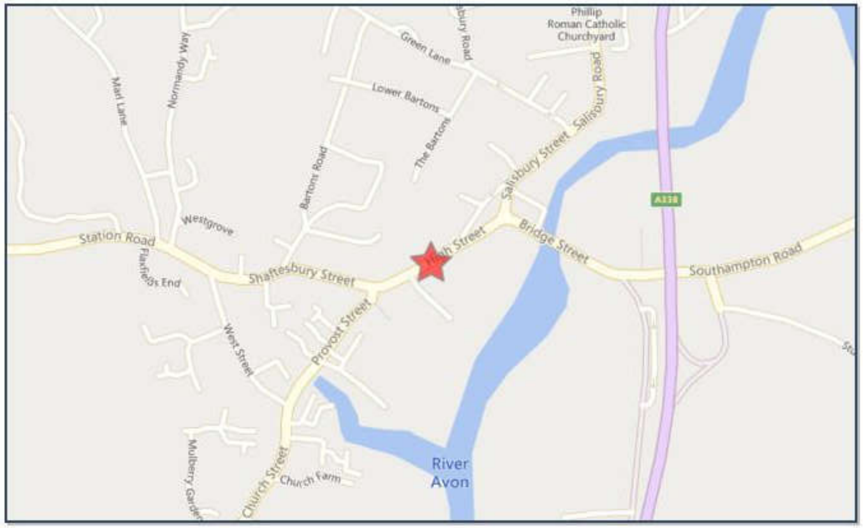
Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Driver or rider	Male	36 - 45	Unknown or other	Unknown or other

Validated Data

Crash Date: Sunday, September 27, 2020 **Time of Crash:** 4:04:00 PM **Crash Reference:** **2020440375288**

Highest Injury Severity:	Serious	**Road Number:**	B3078	**Number of Casualties:**	1
Highway Authority:	Hampshire			**Number of Vehicles:**	2
Local Authority:	New Forest District			**OS Grid Reference:**	414755 114181
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Pedal cycle	-1	Male	16 - 20	Vehicle is changing lane to the right (including slip road)	Front	Unknown	None	Wall or fence
2	Car (excluding private hire)	4	Female	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Nearside	Unknown	None	None

Casualties

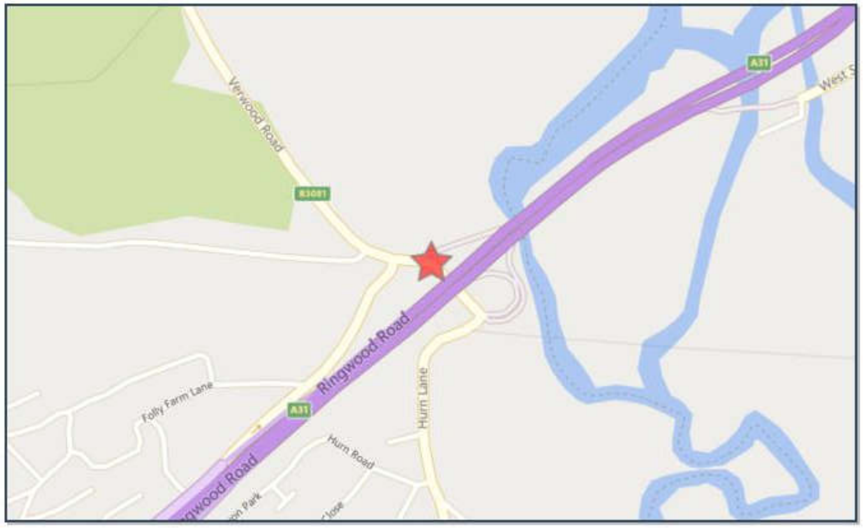
Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Driver or rider	Male	16 - 20	Unknown or other	Unknown or other

crashmap.co.uk

Validated Data

Crash Date: Saturday, February 29, 2020 **Time of Crash:** 10:44:00 AM **Crash Reference:** **2020552000290**

Highest Injury Severity:	Serious	**Road Number:**	B3081	**Number of Casualties:**	1
Highway Authority:	Dorset			**Number of Vehicles:**	2
Local Authority:	East Dorset District			**OS Grid Reference:**	413822 104973
Weather Description:	Fine with high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	40				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Slip Road				
Junction Control:	Give way or uncontrolled				



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Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	14	Female	26 - 35	Vehicle is in the act of turning right	Front	Unknown	None	None
2	Car (excluding private hire)	9	Male	66 - 75	Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Driver or rider	Female	26 - 35	Unknown or other	Unknown or other

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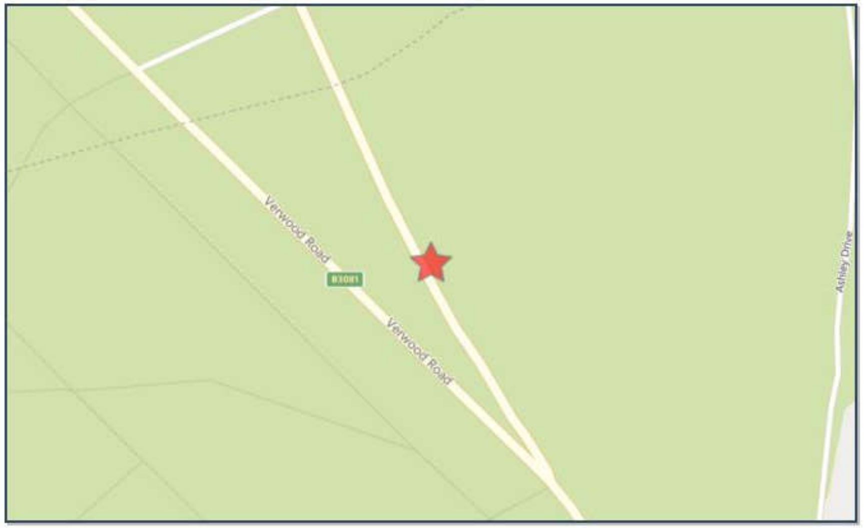
Validated Data

Crash Date:	Sunday, April 05, 2020	**Time of Crash:**	8:20:00 PM	**Crash Reference:**	**2020552000397**
Highest Injury Severity:	Serious	**Road Number:**	B3081	**Number of Casualties:**	1
Highway Authority:	Dorset			**Number of Vehicles:**	1
Local Authority:	East Dorset District			**OS Grid Reference:**	412801 106107
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	60				
Light Conditions:	Darkness: no street lighting				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



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Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	6	Male	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Front	Commuting to/from work	None	Tree

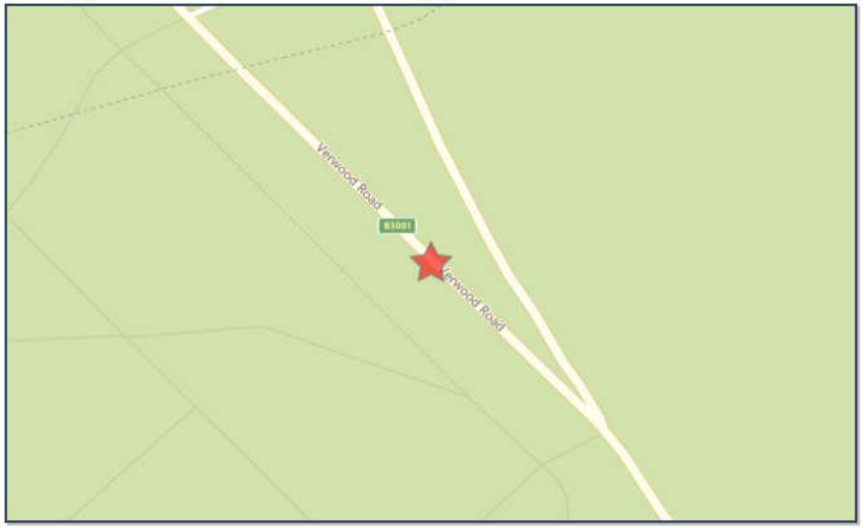
Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Driver or rider	Male	26 - 35	Unknown or other	Unknown or other

crashmap.co.uk

Provisional Data does not include vehicle and casualty records

Crash Date:	Monday, March 29, 2021	**Time of Crash:**	8:34:00 PM	**Crash Reference:**	**2021552100301**
Highest Injury Severity:	Serious	**Road Number:**	B3081	**Number of Casualties:**	1
Highway Authority:				**Number of Vehicles:**	2
Local Authority:				**OS Grid Reference:**	412723 106029
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	50				
Light Conditions:	Darkness: no street lighting				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



Provisional Data does not include vehicle and casualty records

Appendix E

GENERAL NOTES

1. THIS DRAWING IS INTENDED TO BE VIEWED IN COMBINATION WITH ALL RELEVANT ARCHITECTS, ENGINEERS, SERVICES AND SPECIALIST DRAWINGS AND SPECIFICATION.
2. ANY VARIATIONS OR DISCREPANCIES BETWEEN THESE DRAWINGS IN TERMS OF DIMENSIONS OR DETAILS SHOULD BE DRAWN TO THE ATTENTION OF THE ARCHITECT AND/OR THE ENGINEER FOR CLARIFICATION.
3. PAUL BASHAM ASSOCIATES ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF BACKGROUND INFORMATION PRODUCED BY THIRD PARTIES – THIS MUST BE TREATED AS INDICATIVE ONLY.
4. ALL DIMENSIONS AND LEVELS ARE IN METRES. DO NOT SCALE THIS DRAWING, PRINT, PLOT OR DISK.
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6. THIS DRAWING IS BASED ON OS MAPPING AND THEREFORE THE ACCURACY WILL NEED TO BE CONFIRMED THROUGH A TOPO AT THE RELEVANT STAGE.
7. DETAILS OF INTERNAL RESIDENTIAL ACCESS CONNECTIONS ARE NOT YET FINALISED AND SO WILL BE INCLUDED AS THE SCHEME PROGRESSES THROUGH RESERVED MATTERS STAGES.
8. DETAILS OF TRAFFIC CALMING AND PROPOSED FOOTWAY ALONG RINGWOOD ROAD IS INDICATIVE AND SUBJECT TO DISCUSSIONS WITH DORSET COUNCIL HIGHWAYS OFFICERS.

KEY:

EXTENT OF PUBLIC HIGHWAY (BASED ON INFORMATION PROVIDED BY DORSET COUNCIL)

NORTH

Rev	Description	Date	By	Chkd
B	MINOR AMMENDMENTS FOLLOWING RSA	27.10.22	TP	HC
A	MINOR AMMENDMENTS	08.08.22	TP	JR

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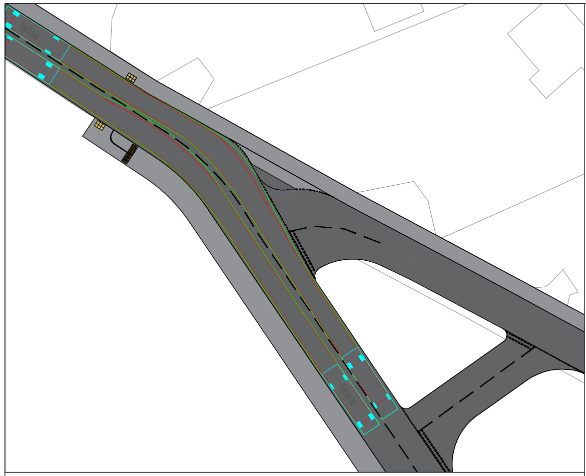
Client
Intelligent Land

Project Name
ALDERHOLT MEADOWS
ALDERHOLT

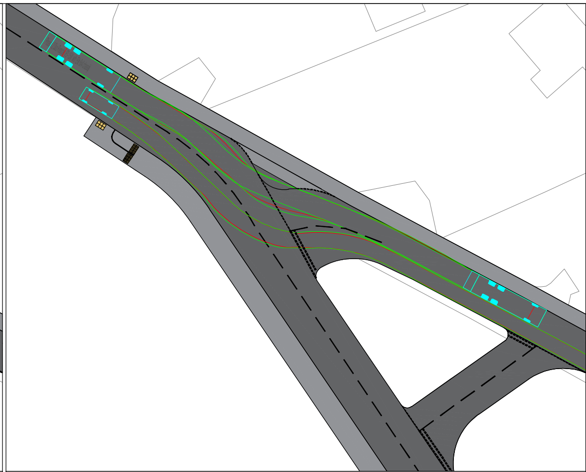
Title
RINGWOOD ROAD
SITE ACCESS ARRANGEMENTS

Project Phase
PRELIMINARY

Checked By	Checked Date	Drawn By	Drawn Date
JR	27.07.22	TP	27.07.22
Client Drawing No.		Scale	
		1:500	(AT A2 SIZE)
PBA Drawing No.			Revision
132.0001.002			B



SINGLE DECKER BUS PASSING



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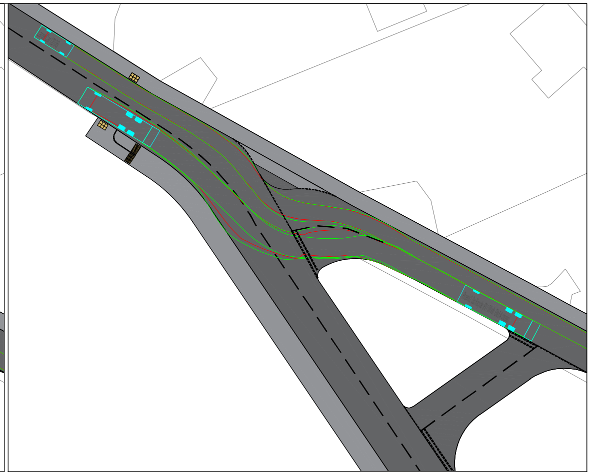

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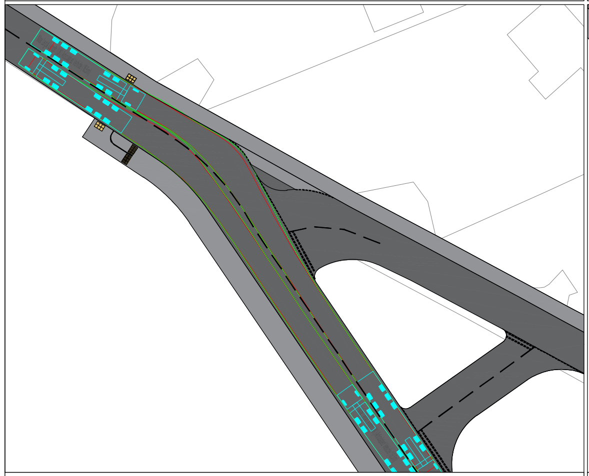
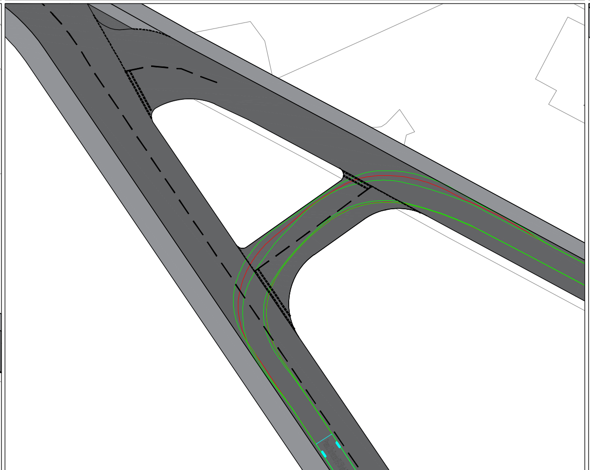


ARTICULATED HGV PASSING



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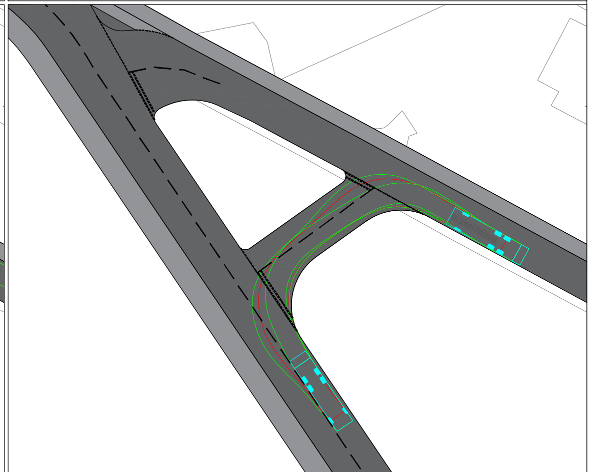

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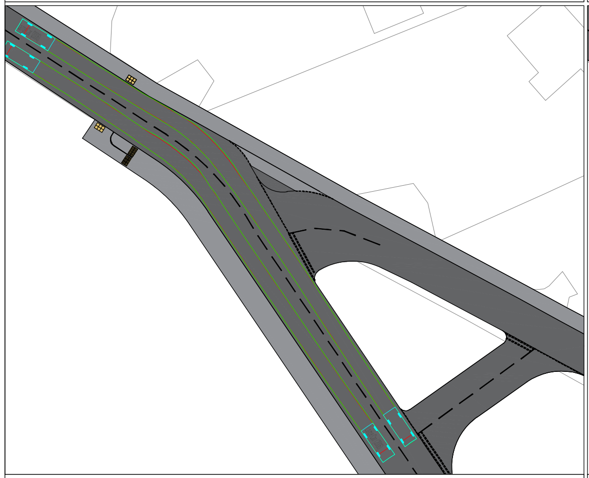
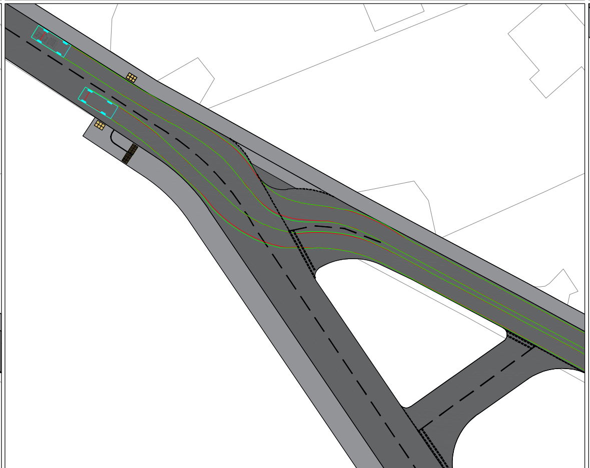
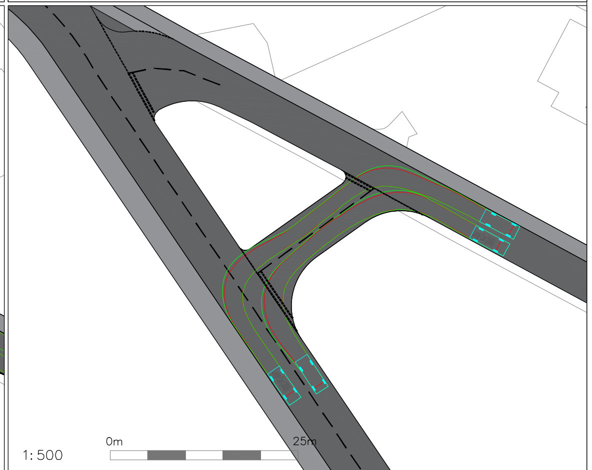


TWO CARS PASSING



LARGE CAR NORTH: IN AND OUT PASSING



LARGE CAR SOUTH: IN AND OUT PASSING

GENERAL NOTES

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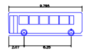
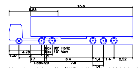
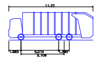
VEHICLE PROFILE



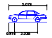
Single Deck Bus	
Overall Length	9.795m
Overall Width	2.500m
Overall Body Height	3.070m
Min Body Ground Clearance	0.306m
Track Width	2.322m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	10.111m



Max Legal Length (UK) Articulated Vehicle (16.5m)	
Overall Length	16.500m
Overall Width	2.550m
Overall Body Height	3.681m
Min Body Ground Clearance	0.411m
Max Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	6.530m



Phoenix 2 Duo Recycler (P2-15W with Elite 6x4 chassis)	
Overall Length	11.220m
Overall Width	2.530m
Overall Body Height	3.756m
Min Body Ground Clearance	0.309m
Track Width	2.530m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	11.550m



Large Car (2006)	
Overall Length	5.079m
Overall Width	1.872m
Overall Body Height	1.525m
Min Body Ground Clearance	0.310m
Max Track Width	1.831m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.900m

NORTH

Rev	Description	Date	By	Chkd
A	REVISED ALIGNMENT	27.10.22	TP	HC

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01329 711000
info@paulbashamassociates.com www.paulbashamassociates.com

Client
Intelligent Land

Project Name
ALDERHOLT MEADOWS
ALDERHOLT

Title
RINGWOOD ROAD
SITE ACCESS SWEPT PATH ANALYSIS

Project Phase
PRELIMINARY

Checked By	Checked Date	Drawn By	Drawn Date
JR	19.08.22	TP	19.08.22

Client Drawing No.

Scale
1:500 (AT A2 SIZE)

PBA Drawing No.
132.0001.003

Revision
A

Appendix F

M & S Traffic

Road Safety Audit Stage 1

Alderholt Meadows

Alderholt

Dorset

Date: 30th August 2022

Report produced for: Paul Basham Associates

Report produced by: M & S Traffic

Registered Office: 32 Hamelin Road, Gillingham, Kent ME7 3EX   Registered in Cardiff No:06730905

DOCUMENT CONTROL SHEET

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Project Title	Alderholt Meadows, Alderholt
Report Title	Road Safety Audit Stage 1
Revision	
Status	Final

Record of Issue

Document Ref PBA/22/132.0001/BS	Prepared by: (Name)	Checked by: (Name)	Approved by (Signature)	Date Approved
Revision	Bryan Shawyer	Martin Morris	[redacted]	30th August 2022
Designers Response				
Authority Response				

Distribution

Organisation	Contact	Copies
Paul Basham Associates	Tom Peters	-
Paul Basham Associates	James Rand	-

CONTENTS

1 INTRODUCTION

1.1 This report describes a Stage 1 Road Safety Audit carried out on Section 278 works associated with a mixed-use development of 1700 dwellings, circa 2 hectares of employment area and a range of local facilities presented within a Market Square, known as Alderholt Meadows, Alderholt, as detailed below:

- A new junction will be created with Ringwood Road and the internal spine road, hence the creation of the secondary access point. This will become the revised Ringwood Road, with the existing Ringwood Road south becoming a no through route to avoid rat running.
- Ringwood Road is currently subject to a 40mph speed limit in this area, however this will be reduced to a 30mph as part of the application.
- A four-armed roundabout is proposed on Hillbury Road. Hillbury Road is currently subject to a 40mph speed limit in this area; however, the 30mph speed limit will be extended south to include the new roundabout junction and it's approaches, as well as the internal spine road as part of the application.

The Audit was requested by the design organisation, Paul Basham Associates, Suite 4, Hitching Court, Blacklands Way, Abingdon Business Park, Abingdon, OX14 1RG, on behalf of Dorset County Council, as the Overseeing Organisation.

1.2 The Audit Team membership was as follows:

Bryan Shawyer B.Eng. (Hons), MSc, MCIHT, MSoRSA – Audit Team Leader
Highways England Approved RSA Certificate of Competency

Martin Morris, PGD, MCIHT, MSoRSA – Audit Team Member
Highways England Approved RSA Certificate of Competency

1.3 The audit was undertaken following the principles of GG 119, The Design Manual for Roads and Bridges. The documents available at the time the report was compiled are detailed in Appendix A.

1.4 The Audit took place at the Gillingham offices of M&S Traffic in August 2022 and comprised an examination of the documents provided as listed in Appendix A. A joint visit to the site of the proposed scheme on the 24th August 2022 between 15:00 and 16:00. Weather conditions at the time were fine and the road surfaces was dry. Traffic flows were low and free flow speeds were low. There were low pedestrians flows and low cycle movements were observed during the site visit.

1.5 The report has been compiled, only with regards to the safety implications for road users of the layout presented in the supplied drawings. It has not been examined or verified for compliance with any other standards or criteria. This safety audit does not perform any "Technical Check" function on these proposals. It is assumed that the Project Sponsor is satisfied that such a "Technical Check" has been successfully completed prior to requesting this safety audit.

1.6 The auditors have not been informed of any Departures from Standard. In terms of a collision history at either junction there is no existing collision history. In terms of trip generation, the site is proposed to generate the following number of trips. This has been agreed with Dorset Council these flows, split across the two accesses and for the varying future scenarios are demonstrated below.

Unit Type	AM Peak (0800-0900)		PM Peak (1700- 1800)	
	Ringwood Road	Hillbury Road Rbt	Ringwood Road	Hillbury Road Rbt
2033 Forecast	117	319	92	290
Development Flows	94	415	220	665
2033 Forecast + Dev	211	734	312	955

1.7 All comments and recommendations are referenced to the detailed drawings and the locations have been detailed relating to the plans supplied with the audit brief, Appendix B.

2 SAFETY ISSUES RAISED AT PREVIOUS AUDITS

2.1 No previous safety audits were submitted for assessment.

3 ITEMS RAISED AT THE STAGE 1 AUDIT – RINGWOOD ROAD

3.1 General

3.1.1 **PROBLEM**

Location: Proposed buildout.

Summary: Ponding could lead to loss of control collisions.

A buildout is proposed on the southeastern side of the carriageway; however, this could lead to ponding on the northeastern side of the buildout. Ponding could lead to loss of control collisions, particularly in wet or icy conditions.

RECOMMENDATION

It is recommended the carriageway profile should be checked or that suitable drainage should be provided.

3.1.2 **PROBLEM**

Location: Proposed footway / cycleway link.

Summary: Insufficient construction details could lead to overshoot at junctions or cyclist loss of control collisions.

No construction details for the proposed footway / cycleway link were provided. Surfacing with an insufficient Polished Stone Value (PSV) could lead to overshoot at junctions or cyclist loss of control collisions in the event of sudden braking manoeuvres.

RECOMMENDATION

It is recommended that the PSV of the footway / cycleway link surface material should be a minimum of 55PSV.

3.1.3 **PROBLEM**

Location: Proposed scheme.

Summary: Ponding of surface water could lead to loss of control collisions.

Footways and associated kerbing are proposed; however, no details have been provided regarding the proposed carriageway drainage. Inadequate drainage provision could cause possible ponding, which could lead to loss of control collisions.

RECOMMENDATION

It is recommended that drainage details and carriageway profiles should be such that surface water is shed to an appropriate surface water system, where details should be supplied for assessment.

3.2 Local Alignment

3.2.1 PROBLEM

Location: Eastern section of Ringwood Road.

Summary: Lack of available carriageway width and lack of passing bays could lead to side-swipe collisions, or vehicle to pedestrian collisions.

The dimension of eastern section of the eastern section of Ringwood Road has not been supplied for assessment, where a 2.0m footway on the northern side of the carriageway is proposed. There is concern that an insufficient carriageway width could lead to side-swipe collisions, or footway over-run and possible vehicle to pedestrian collisions.

RECOMMENDATION

It is recommended that passing movements of vehicles on the affected length of eastern section of Ringwood Road should be provided for assessment.

3.3 Junctions

3.3.1 PROBLEM

Location: Development access road junction with Ringwood Road.

Summary: Insufficient deflection could lead to high approach speeds into the eastern section of Ringwood Road that could increase the risk of side impact collisions or head on collisions at the priority working system.

Where the new access road from the development merges with Ringwood Road there is no deflection for the west to east movement. This could lead to high approach speeds into the eastern section of Ringwood Road that could increase the risk of side impact collisions at the following junction or head on collisions at the priority working system.

RECOMMENDATION

It is recommended that some deflection or traffic calming measure should be employed at the junction.

3.3.2 **PROBLEM**

Location: Proposed junction with Ringwood Road.

Summary: Insufficient information on visibility at access could lead to side impact collisions.

No details relating to the visibility splays at the access have been provided for assessment. There are existing hedgerows, where restricted visibility could lead to side impact collisions.

RECOMMENDATION

It is recommended that visibility splays should be checked fur suitability and if necessary that the hedgerows should be cut back and periodically maintained to retain visibility.

3.4 Non-Motorised User Provision

3.4.1 **PROBLEM**

Location. Proposed pedestrian crossing to the northwestern of the junction on Ringwood Road.

Summary: Restricted visibility could lead to vehicle to pedestrian collisions.

The pedestrian / traffic intervisibility visibility splays at the crossing points are obstructed by vegetation. Restricted intervisibility could lead to vehicle to pedestrian collisions.

RECOMMENDATION

It is recommended that the vegetation should be cut back and periodically maintained to retain visibility.

3.4.2 **PROBLEM**

Location. Proposed pedestrian crossing on the northeastern side of the carriageway at the proposed buildout on Ringwood Road.

Summary: Restricted visibility could lead to vehicle to pedestrian collisions.

The pedestrian / traffic intervisibility visibility splay at the crossing point on the northeastern side of the carriageway is obstructed by vegetation. Restricted intervisibility could lead to vehicle to pedestrian collisions.

RECOMMENDATION

It is recommended that the vegetation should be cut back and periodically maintained to retain visibility.

3.5 Road Signs, Carriageway Markings and Lighting

3.5.1 PROBLEM

Location: Proposed buildout.

Summary: Insufficient warning of buildout could lead to loss of control collisions.

A buildout is proposed on the southeastern side of the carriageway; however, no indication of the buildout has been provided to traffic on the High Street. Inappropriate warning of the buildout could lead to loss of control collisions.

RECOMMENDATION

It is recommended that reflective bollards should be installed on the buildout.

4 ITEMS RAISED AT THE STAGE 1 AUDIT – HILLBURY ROAD

4.1 General

4.1.1 PROBLEM

Location: Approaches to the proposed roundabout.

Summary: Inappropriate surfacing could lead to overshot collisions or rear end shunt collisions.

The proposals do not include the introduction of anti-skid surfacing or detail the Polished Stone Value (PSV) to be used on the approaches to the roundabout. Surfacing with an insufficient PSV could lead to overshoot or rear end shunt collisions. Further, vehicles approaching the roundabout may be straddling two different surface types and may experience differential braking, which under sudden severe braking conditions could lead to loss of control collisions.

RECOMMENDATION

It is recommended high friction surfacing or surfacing with a high PSV should be provided on all the approaches to the roundabout.

4.1.2 PROBLEM

Location: Proposed roundabout.

Summary: Surface water on carriageway could lead to loss of control collisions.

Kerblines are proposed to be altered, where no details of the drainage proposal or carriageway profiles have been provided for assessment. Low or flat areas may cause ponding of surface water. This could be detrimental to road safety and could lead to loss of control accidents.

RECOMMENDATION

It is recommended drainage details and vertical profiles should be provided at Safety Audit Stage 2.

4.2 Local Alignment

4.2.1 PROBLEM

Location: Approaches to proposed roundabout.

Summary: Lack of forward visibility could lead to rear end shunt collisions or side impact collisions.

Stopping Sight Distances (SSDs) were provided for assessment; however, these all in part, pass over non-highway land. Restricted visibility could lead to side impact collisions or rear end shunts.

RECOMMENDATION

It is recommended that the SSDs should be within highway ownership or that a suitable covenant should be in place.

4.2.2 PROBLEM

Location: Southbound approach to the proposed roundabout.

Summary: Sudden transition could lead to failure to stop collisions, side impact collisions or loss of control collisions.

The roundabout is offset, where the alignment changes suddenly on the southbound approach to the roundabout. This could lead to kerb clips and potential loss of control collisions. Additionally, northbound vehicles may straddle the centre line, where there is no margin for error, which could lead to head on collisions or side-swipe collisions.

RECOMMENDATION

It is recommended that southbound approach to the roundabout should be smoothed.

4.3 Junctions

4.3.1 PROBLEM

Location: Proposed roundabout – western arm.

Summary: Insufficient information on entry path curvature may lead to loss of control collisions.

No detail on the entry path curvature was provided for assessment for the western arm, where the entry path governs the speed through the roundabout. If the entry path is too relaxed, this can lead to high entry speeds and conflict with circulating traffic. If the curvature is too sharp, then research has shown that there is a rise in single vehicle accidents resulting from loss of control on the approach to the roundabout.

RECOMMENDATION

It is recommended that the entry path curvature should not exceed 100m.

4.3.2 **PROBLEM**

Location: Proposed roundabout.

Summary: Low angle of entry may increase the risk of side impact collisions.

The angle of entry was provided for assessment, where for three of the arms, the angle of entry was less than twenty degrees. Low angles of entry could force drivers to look over their shoulders or use their mirrors to merge with circulating traffic, increasing the risk of side impact collisions.

RECOMMENDATION

It is recommended that the angle of entry should lie between 20º and 60º.

4.4 Non-Motorised User Provision

4.4.1 No comment.

4.5 Road Signs, Carriageway Markings and Lighting

4.5.1 **PROBLEM**

Location: North and southbound approaches to the proposed roundabout.

Summary: Sudden transition could lead to failure to stop collisions, side impact collisions or loss of control collisions.

The roundabout is offset and the horizontal alignment changes suddenly on the north and southbound approaches to the roundabout. There is concern that any 'Sharp deviation' and 'vehicular traffic must proceed in the direction indicated by the arrow' signage will not be seen from a sufficient distance from the roundabout. This could lead to confusion and late decision making on the approaches to the roundabout and higher approach speeds, which could lead to failure to stop collisions, side impact collisions or loss of control collisions.

RECOMMENDATION

It is recommended that additional 'Sharp deviation' signs to diagram 515 should be installed on these approaches.

4.5.2 **PROBLEM**

Location: North and southbound approaches to the proposed roundabout.

Summary: Offset roundabout could lead to loss of control collisions or side impact collisions during the hours of darkness.

The roundabout is offset to the west on of the north / south alignment and during the hours of darkness traffic may misinterpret the alignment to indicate a priority junction, which could lead to loss of control collisions or side impact collisions.

RECOMMENDATION

It is recommended that 'Roundabout Ahead' signs to diagram 510 should be provided on both sides of the carriageway and that advanced directional signs should be installed showing the offset roundabout. It is also recommended that any advanced directional signs should be passive.

5 ISSUES IDENTIFIED DURING THE AUDIT THAT ARE OUTSIDE THE TERMS OF REFERENCE

5.1 Any issues that the Audit Team wish to bring to the attention of the Client Organisation, which are not covered by the road safety implications of this audit have been included in the following section. These issues could include maintenance items, operational issues, or poor existing provision. It should be understood however, that in raising these issues, the Audit Team do not warrant that a full review of the existing highway environment has been undertaken beyond the scope of the audit.

5.2 The Audit Team had no issues to raise within this section.

6 AUDITOR TEAM STATEMENT

6.1 We certify that this audit has been carried out following the principles of GG 119.

Audit Team Leader

Bryan Shawyer
BEng (Hons), MSc, MCIHT, MSoRSA
Highways England Approved RSA Certificate of Competency
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Gillingham
Kent ME7 3EX

Signed: [redacted]

Date: 30/08/2022

Audit Team Member

Martin Morris
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32 Hamelin Road
Gillingham
Kent ME7 3EX

Signed: [redacted]

Date: 30/08/2022

APPENDIX A

List of drawings and documentation submitted for auditing:

Drawing Number	Title
020.5766-0100	Engineering Layout
132.0001.002 A	Ringwood Road, Site Access Arrangements
132.0001.003	Ringwood Road, Site Access Swept Path Analysis
132.0001.005 B	Hillbury Road, Site Access Arrangements
132.0001.006	Hillbury Road, Site Access Swept Path Analysis

Supporting Documentation:

- Road Safety Audit Brief (ref: 132.0001.RSAB/1), Paul Basham Associates.
- ARCADY 9 - Roundabout Module, Site Access Hillbury Road Roundabout, August 2022.
- Indicative Master Plan, Scott Worsfold Associates.
- Covering emails, Paul Basham Associates.

APPENDIX B

Plan attached showing the locations of the problems identified as part of this audit (location numbers refer to paragraph numbers in the report).

APPENDIX C: Road Safety Audit Decision Log.

Auditors: Bryan Shawyer (Team Leader) and Martin Morris (Team Member).

Scheme: Alderholt Meadows, Alderholt

Date Audit Completed 30th August 2022.

This response is to a Stage 1 Road Safety Audit to the design standard detailed within GG 119 of Volume 5, Section 2, Part 2, of the Design Manual for Roads and Bridges, as detailed by the Highways Agency.

RSA Problem	**RSA Recommendation**	**Design Organisation response)**	**Overseeing Organisation response**	**Agreed RSA action**
3.1.1 **Location**: Proposed buildout. **Summary:** Ponding could lead to loss of control collisions. A buildout is proposed on the southeastern side of the carriageway; however, this could lead to ponding on the northeastern side of the buildout. Ponding could lead to loss of control collisions, particularly in wet or icy conditions.	It is recommended the carriageway profile should be checked or that suitable drainage should be provided.	Agreed, to be dealt with at Detailed Design.		
3.1.2 **Location**: Proposed footway / cycleway link. **Summary:** Insufficient construction details could lead to overshoot at junctions or cyclist loss of	It is recommended that the PSV of the footway / cycleway link surface material should be a minimum of 55PSV.	Agreed, to be dealt with at Detailed Design.		

control collisions. No construction details for the proposed footway / cycleway link were provided. Surfacing with an insufficient Polished Stone Value (PSV) could lead to overshoot at junctions or cyclist loss of control collisions in the event of sudden braking manoeuvres.				
3.1.3 **Location**: Proposed scheme. **Summary:** Ponding of surface water could lead to loss of control collisions. Footways and associated kerbing are proposed; however, no details have been provided regarding the proposed carriageway drainage. Inadequate drainage provision could cause possible ponding, which could lead to loss of control collisions.	It is recommended that drainage details and carriageway profiles should be such that surface water is shed to an appropriate surface water system, where details should be supplied for assessment.	Agreed, to be dealt with at Detailed Design.		
3.2.1 **Location**: Eastern section of Ringwood Road. **Summary:** Lack of available carriageway width and lack of passing bays could lead to side-	It is recommended that passing movements of vehicles on the affected length of eastern section of Ringwood Road should be provided for	The Eastern section of Ringwood Road measures 4.8m which is sufficient for a large vehicle (HGV/caravan) and a car to pass. This is considered appropriate given the low volume of trips along this section of carriageway. The far eastern section of Ringwood Road is		

swipe collisions, or vehicle to pedestrian collisions. The dimension of eastern section of the eastern section of Ringwood Road has not been supplied for assessment, where a 2.0m footway on the northern side of the carriageway is proposed. There is concern that an insufficient carriageway width could lead to side-swipe collisions, or footway over-run and possible vehicle to pedestrian collisions.	assessment.	yet to be finalised and is subject to DC's comments.		
3.3.1 **Location:** Development access road junction with Ringwood Road. **Summary:** Insufficient deflection could lead to high approach speeds into the eastern section of Ringwood Road that could increase the risk of side impact collisions or head on collisions at the priority working system. Where the new access road from the development merges with Ringwood Road there is no deflection for the west to east movement. This could lead to high approach speeds into the eastern	It is recommended that some deflection or traffic calming measure should be employed at the junction.	Agreed, the alignment of the junction has been revised to create deflection for vehicles routing east-west. An over runnable area has also been provided to aid this manoeuvre for larger vehicles and caravans etc.		

section of Ringwood Road that could increase the risk of side impact collisions at the following junction or head on collisions at the priority working system.				
3.3.2 **Location:** Proposed junction with Ringwood Road. **Summary:** Insufficient information on visibility at access could lead to side impact collisions. No details relating to the visibility splays at the access have been provided for assessment. There are existing hedgerows, where restricted visibility could lead to side impact collisions.	It is recommended that visibility splays should be checked for suitability and if necessary that the hedgerows should be cut back and periodically maintained to retain visibility.	Agreed. Hedgerows and vegetation will be maintained within the visibility splays to be between 0.6m-2.0m in height.		
3.4.1 **Location**. Proposed pedestrian crossing to the northwestern of the junction on Ringwood Road. **Summary:** Restricted visibility could lead to vehicle to pedestrian collisions. The pedestrian / traffic intervisibility visibility splays at the crossing points are	It is recommended that the vegetation should be cut back and periodically maintained to retain visibility.	Agreed. Vegetation will be maintained within the visibility splays to be between 0.6m-2.0m in height.		

obstructed by vegetation. Restricted intervisibility could lead to vehicle to pedestrian collisions.				
3.4.2 **Location**. Proposed pedestrian crossing on the northeastern side of the carriageway at the proposed buildout on Ringwood Road. **Summary:** Restricted visibility could lead to vehicle to pedestrian collisions. The pedestrian / traffic intervisibility visibility splay at the crossing point on the northeastern side of the carriageway is obstructed by vegetation. Restricted intervisibility could lead to vehicle to pedestrian collisions.	It is recommended that the vegetation should be cut back and periodically maintained to retain visibility.	Agreed. Vegetation will be maintained within the visibility splays to be between 0.6m-2.0m in height.		
3.5.1 **Location**: Proposed buildout. **Summary:** Insufficient warning of buildout could lead to loss of control collisions. A buildout is proposed on the southeastern side of the carriageway; however, no indication of the	It is recommended that reflective bollards should be installed on the buildout.	Agreed. Reflective bollards have been added to the drawing and are shown indicatively, with detail of their location and specification to be included at Detailed Design		

buildout has been provided to traffic on the High Street. Inappropriate warning of the buildout could lead to loss of control collisions.				
4.1.1 **Location:** Approaches to the proposed roundabout. **Summary:** Inappropriate surfacing could lead to overshot collisions or rear end shunt collisions. The proposals do not include the introduction of anti-skid surfacing or detail the Polished Stone Value (PSV) to be used on the approaches to the roundabout. Surfacing with an insufficient PSV could lead to overshoot or rear end shunt collisions. Further, vehicles approaching the roundabout may be straddling two different surface types and may experience differential braking, which under sudden severe braking conditions could lead to loss of control collisions.	It is recommended high friction surfacing or surfacing with a high PSV should be provided on all the approaches to the roundabout.	Agreed, to be dealt with at Detailed Design.		
4.1.2 **Location**: Proposed roundabout.	It is recommended drainage details and vertical profiles should	Agreed, to be dealt with at Detailed Design and information provided at Stage 2 RSA.		

Summary: Surface water on carriageway could lead to loss of control collisions. Kerblines are proposed to be altered, where no details of the drainage proposal or carriageway profiles have been provided for assessment. Low or flat areas may cause ponding of surface water. This could be detrimental to road safety and could lead to loss of control accidents.	be provided at Safety Audit Stage 2.			
4.2.1 **Location**: Approaches to proposed roundabout. **Summary:** Lack of forward visibility could lead to rear end shunt collisions or side impact collisions. Stopping Sight Distances (SSDs) were provided for assessment; however, these all in part, pass over non-highway land. Restricted visibility could lead to side impact collisions or rear end shunts.	It is recommended that the SSDs should be within highway ownership or that a suitable covenant should be in place.	Agreed, SSDs will be either restricted through a covenant or dedicated as highway land as part of the S38 process.		
4.2.2 **Location:** Southbound approach to the proposed roundabout.	It is recommended that southbound approach to the roundabout should be smoothed.	Agreed. We have revised the northern arm of the roundabout to provide a smoother approach without detrimentally impacting the requisite deflection upon approach.		

Summary: Sudden transition could lead to failure to stop collisions, side impact collisions or loss of control collisions. The roundabout is offset, where the alignment changes suddenly on the southbound approach to the roundabout. This could lead to kerb clips and potential loss of control collisions. Additionally, northbound vehicles may straddle the centre line, where there is no margin for error, which could lead to head on collisions or side-swipe collisions.				
4.3.1 **Location**: Proposed roundabout – western arm. **Summary:** Insufficient information on entry path curvature may lead to loss of control collisions. No detail on the entry path curvature was provided for assessment for the western arm, where the entry path governs the speed through the roundabout. If the entry path is too relaxed, this can lead to high entry speeds and conflict with	It is recommended that the entry path curvature should not exceed 100m.	The entry path of the western arm of the roundabout measures c. 83m ad is therefore considered acceptable. This dimension has been added to the drawing for completeness.		

circulating traffic. If the curvature is too sharp, then research has shown that there is a rise in single vehicle accidents resulting from loss of control on the approach to the roundabout.				
4.3.2 **Location**: Proposed roundabout. **Summary:** Low angle of entry may increase the risk of side impact collisions. The angle of entry was provided for assessment, where for three of the arms, the angle of entry was less than twenty degrees. Low angles of entry could force drivers to look over their shoulders or use their mirrors to merge with circulating traffic, increasing the risk of side impact collisions.	It is recommended that the angle of entry should lie between 20^{o} and 60^{o}.	Agreed. The approach arms and angle of entry have been revised to ensure a minimum 20^{o} is achieved		
4.5.1 **Location:** North and southbound approaches to the proposed roundabout. **Summary:** Sudden transition could lead to failure to stop collisions, side impact collisions or loss of control collisions.	It is recommended that additional ‘Sharp deviation’ signs to diagram 515 should be installed on these approaches.	Agreed. To be dealt with at Detailed Design.		

The roundabout is offset and the horizontal alignment changes suddenly on the north and southbound approaches to the roundabout. There is concern that any ‘Sharp deviation’ and ‘vehicular traffic must proceed in the direction indicated by the arrow’ signage will not be seen from a sufficient distance from the roundabout. This could lead to confusion and late decision making on the approaches to the roundabout and higher approach speeds, which could lead to failure to stop collisions, side impact collisions or loss of control collisions				
4.5.2 **Location:** North and southbound approaches to the proposed roundabout. **Summary:** Offset roundabout could lead to loss of control collisions or side impact collisions during the hours of darkness. The roundabout is offset to the west on of the north / south alignment	It is recommended that ‘Roundabout Ahead’ signs to diagram 510 should be provided on both sides of the carriageway and that advanced directional signs should be installed showing the offset roundabout. It is also recommended that any advanced directional signs should be passive.	Agreed. To be dealt with at Detailed Design.		

and during the hours of darkness traffic may misinterpret the alignment to indicate a priority junction, which could lead to loss of control collisions or side impact collisions				

APPENDIX D: DESIGN ORGANISATION STATEMENT

PROJECT NAME: Stage 1 Alderholt Meadows, Alderholt	
On behalf of the Design Organisation I certify that: **1) The actions identified in response to the problems raised in this RSA have been discussed and agreed with the Overseeing Organisation**	
Name	Tom Peters
Signed	[redacted]
Position	Principal Transport Planner
Organisation	**Paul Basham Associates Ltd**
Date	October 2022

APPENDIX E: OVERSEEING ORGANISATION STATEMENT

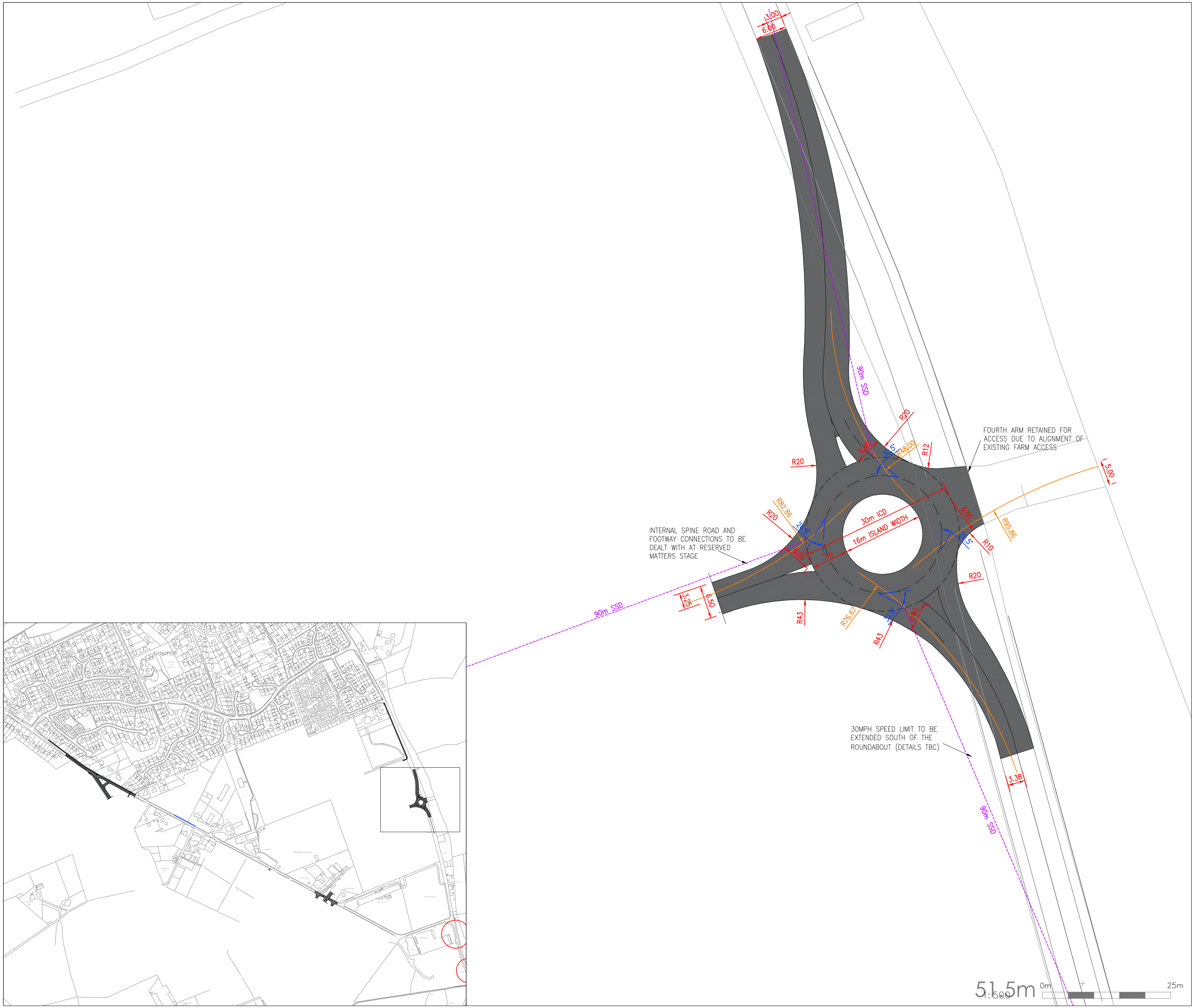
PROJECT NAME: Stage 1 Alderholt Meadows, Alderholt

On behalf of the Overseeing Organisation I certify that:

1) **The actions identified in response to the problems raised in this RSA have been discussed and agreed with the Design Organisation; and**
2) **The agreed RSA actions will be progressed.**

Name	
Signed	
Position	
Organisation	
Date	

Appendix G



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NORTH

Rev	Description	Date	By	Chkd
C	MINOR AMENDMENTS FOLLOWING RSA	27.10.22	TP	HC
B	GEOMETRIES ADDED	22.08.22	CJL	JR
A	ROUNDABOUT REALIGNED	29.07.22	TP	JR

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Client: Intelligent Land

Project Name: ALDERHOLT MEADOWS ALDERHOLT

Title: HILLBURY ROAD SITE ACCESS ARRANGEMENTS

Project Phase: PRELIMINARY

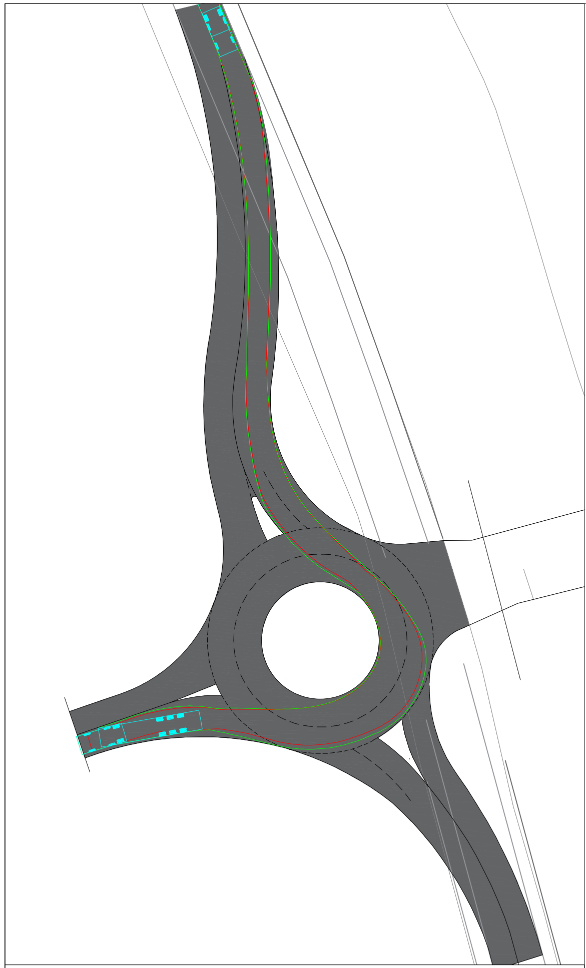
Checked By	Checked Date	Drawn By	Drawn Date
JR	27.07.22	TP	27.07.22

Client Drawing No.:

Scale: 1:500 (AT A2 SIZE)

PBA Drawing No.: 132.0001.005

Revision: C



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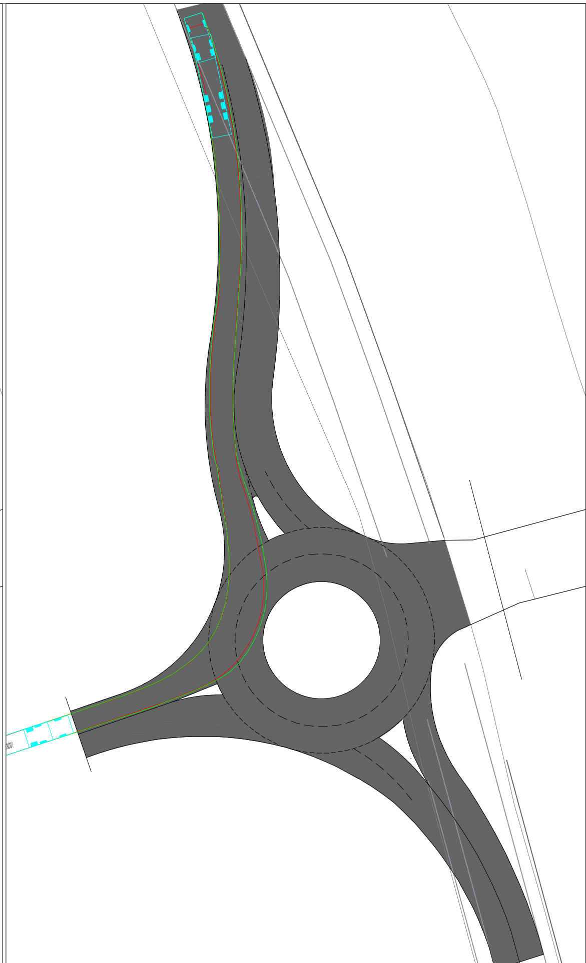
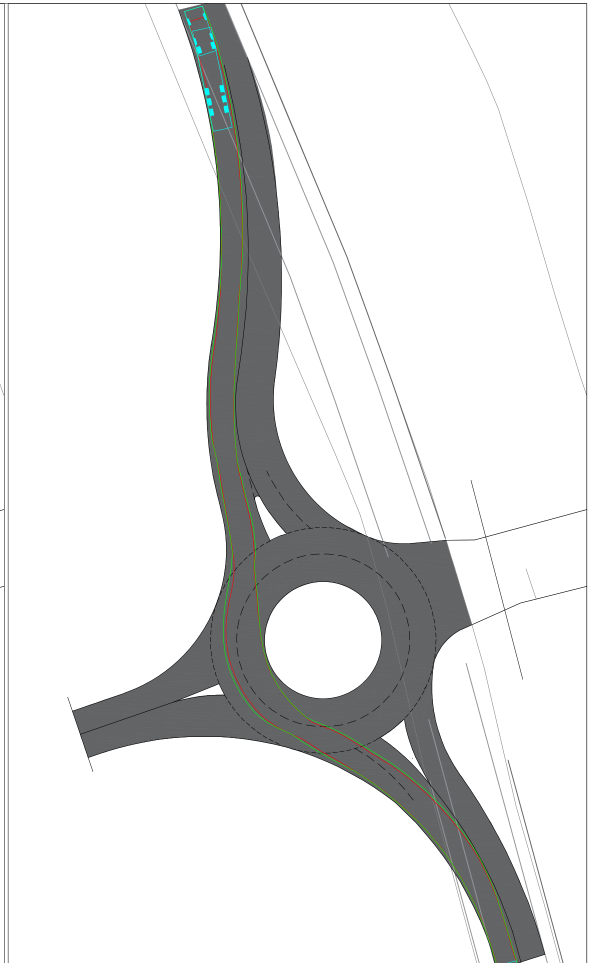
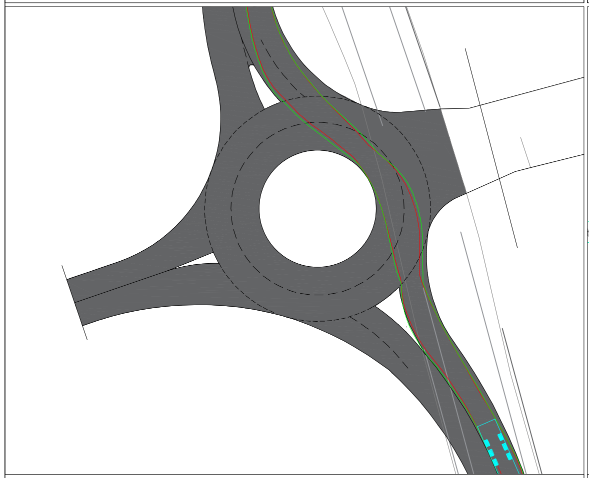


ARTICULATED HGV LEFT OUT



ARTICULATED HGV SOUTH STRAIGHT



ARTICULATED HGV NORTH STRAIGHT

ARTICULATED HGV RIGHT OUT

ARTICULATED HGV LEFT IN

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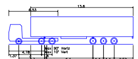
VEHICLE PROFILE



Max Legal Length (UK) Articulated Vehicle (16.5m)	
Overall Length	16.500m
Overall Width	2.550m
Overall Body Height	3.681m
Min Body Ground Clearance	0.411m
Max Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	6.530m

NORTH

Rev	Description	Date	By	Chkd
-	-	--.--.--	--	--

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Client: Intelligent Land

Project Name: ALDERHOLT MEADOWS ALDERHOLT

Title: HILLBURY ROAD SITE ACCESS SWEPT PATH ANALYSIS

Project Phase: PRELIMINARY

Checked By	Checked Date	Drawn By	Drawn Date
JR	19.08.22	TP	19.08.22

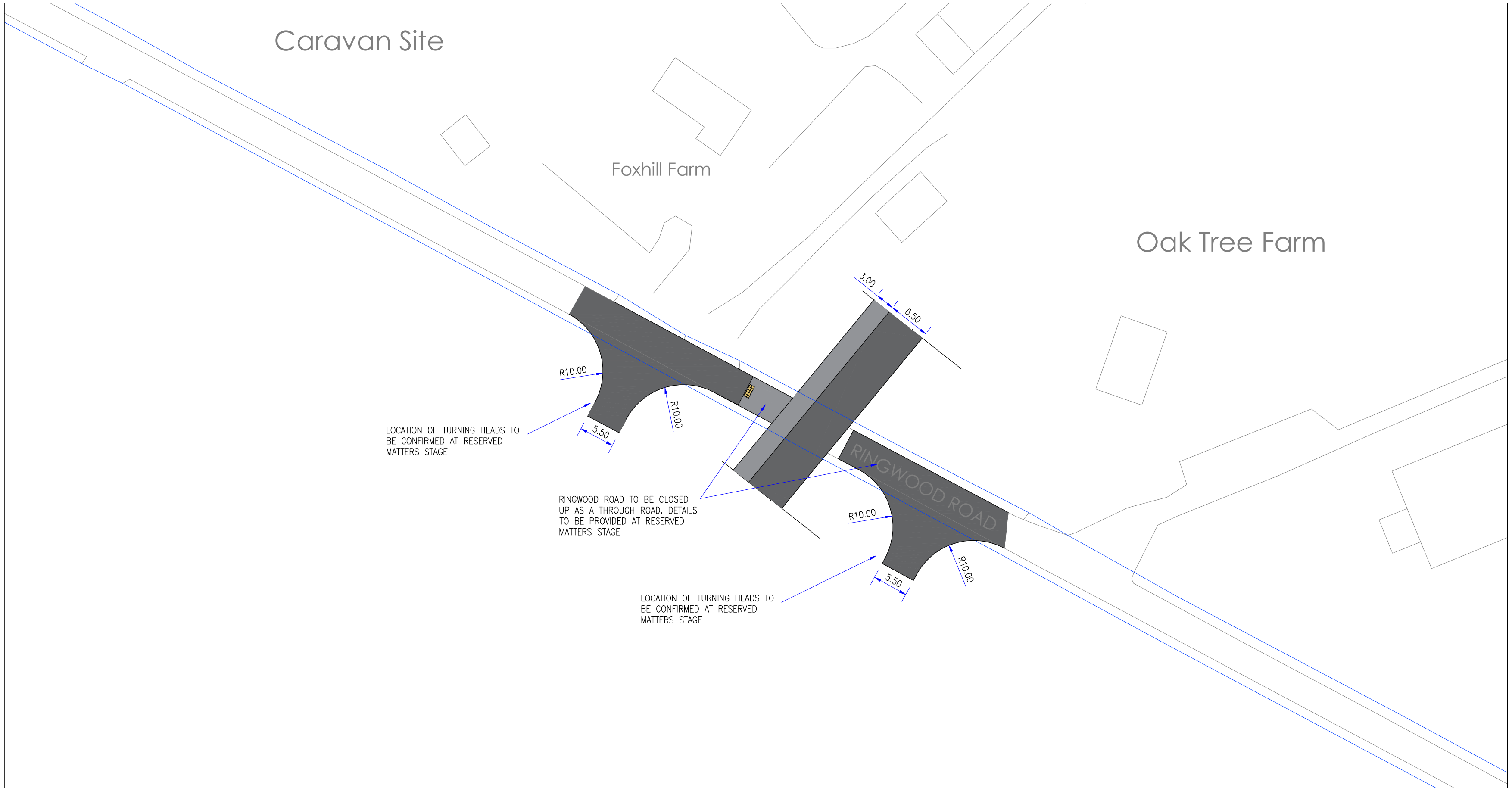
Client Drawing No.:

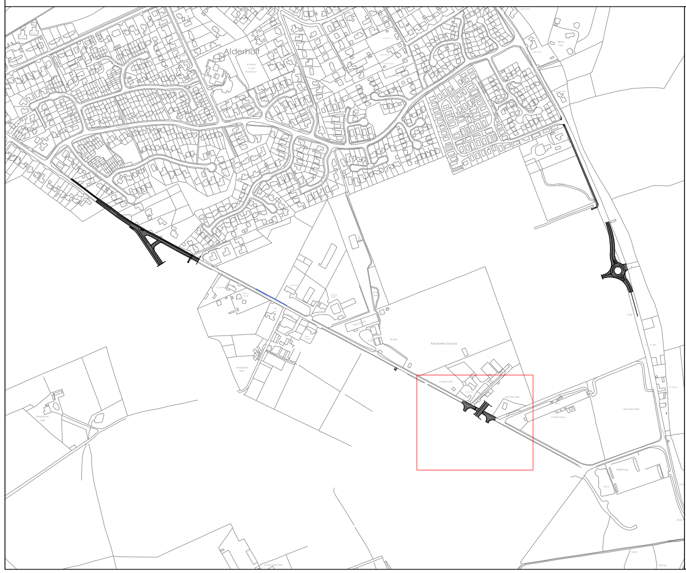
Scale: 1:500 (AT A2 SIZE)

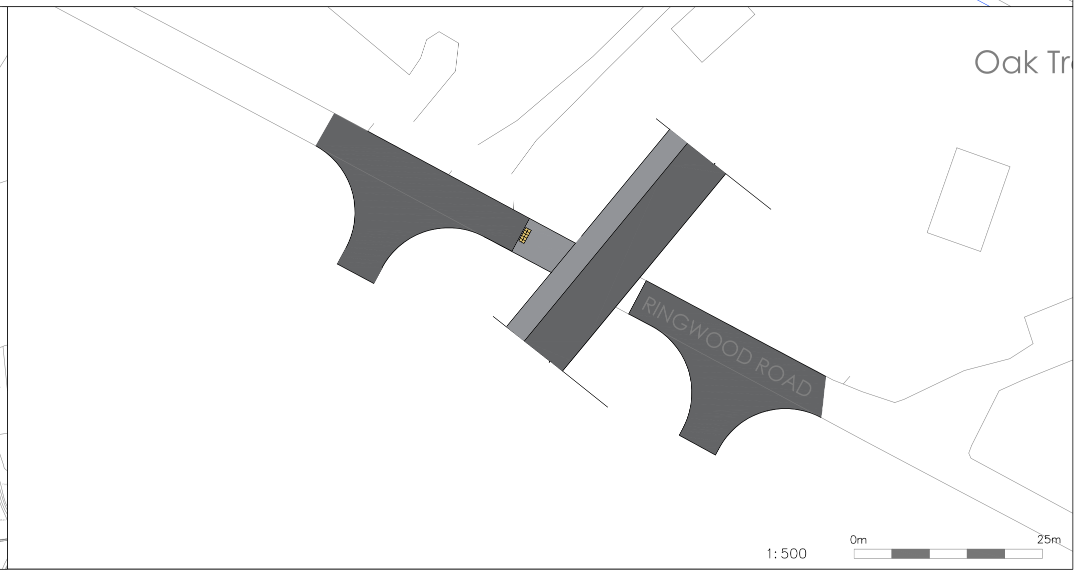
PBA Drawing No.: 132.0001.006

Revision: -

Appendix H







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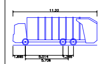
KEY

HIGHWAY BOUNDARY MAPPING
(BASED ON MAPPING PROVIDED BY DORSET COUNCIL)

VEHICLE PROFILE



Phoenix 2 Duo Recycler (P2–15W with Elite 6x4 chassis)

Overall Length	11.220m
Overall Width	2.530m
Overall Body Height	3.756m
Min Body Ground Clearance	0.309m
Track Width	2.530m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	11.550m

NORTH

Rev	Description	Date	By	Chkd
-	-	--.--.--	--	--

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Client: Intelligent Land

Project Name: LAND AT ALDERHOLT FORDINGBRIDGE

Title: RINGWOOD ROAD PROPOSED SPINE ROAD CROSSING

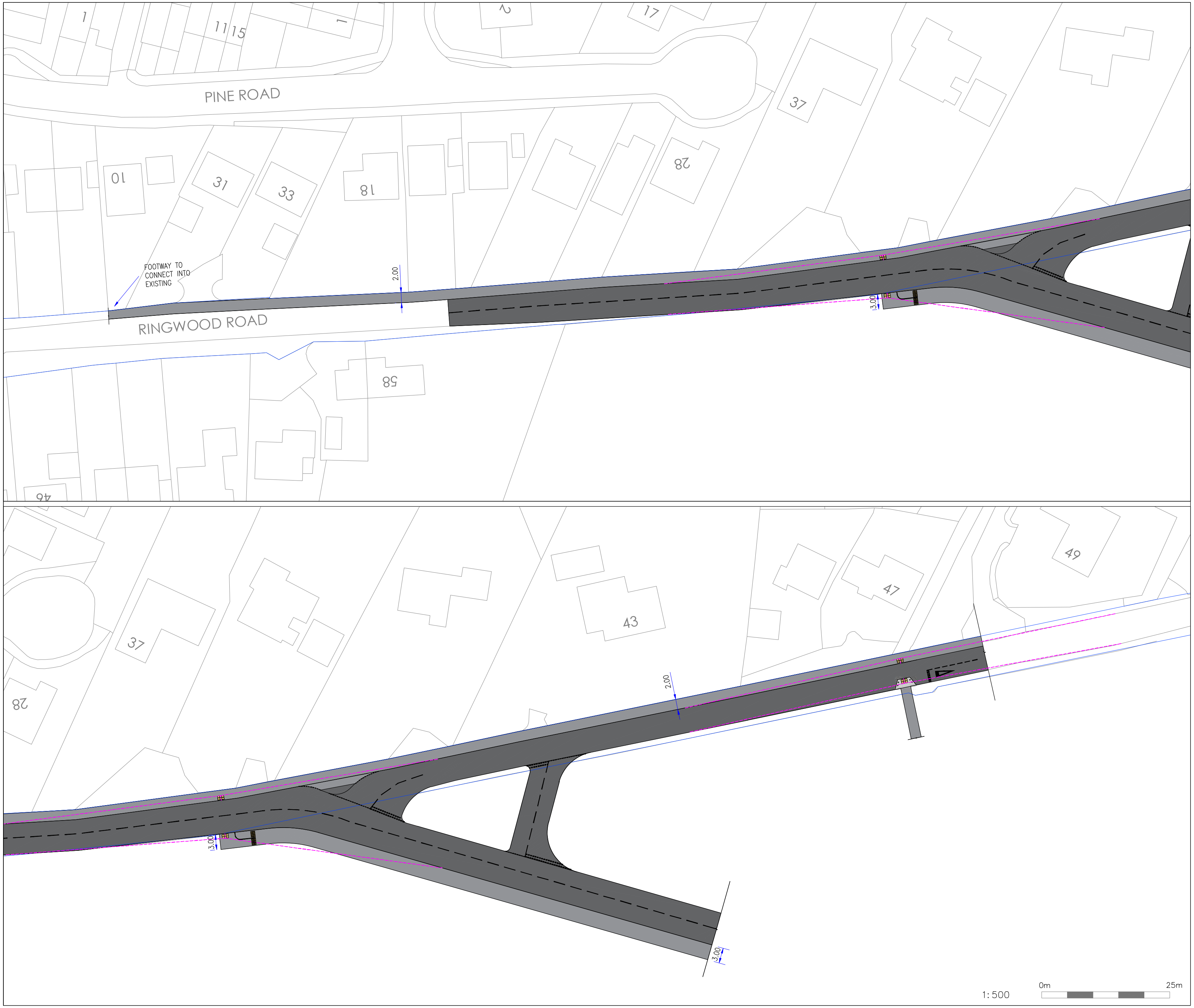
Project Phase: PRELIMINARY

Checked By	Checked Date	Drawn By	Drawn Date
JR	27.10.22	TP	27.10.22

Client Drawing No.	Scale	
	1:500	(AT A2 SIZE)

PBA Drawing No.	Revision
132.0001.008	-

Appendix I



GENERAL NOTES

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7. DETAILS OF TRAFFIC CALMING AND PROPOSED FOOTWAY ALONG RINGWOOD ROAD IS INDICATIVE AND SUBJECT TO DISCUSSIONS WITH DORSET COUNCIL HIGHWAYS OFFICERS.

KEY:

EXTENT OF PUBLIC HIGHWAY (BASED ON INFORMATION PROVIDED BY DORSET COUNCIL)

1M X 43M PEDESTRIAN VISIBILITY SPLAY

NORTH

Rev	Description	Date	By	Chkd
-	-	--.--.--	--	--

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Client
Intelligent Land

Project Name
ALDERHOLT MEADOWS
ALDERHOLT

Title
RINGWOOD ROAD
PROPOSED FOOTWAY IMPROVEMENTS

Project Phase
PRELIMINARY

Checked By	Checked Date	Drawn By	Drawn Date
28.10.22	HC	TP	27.10.22

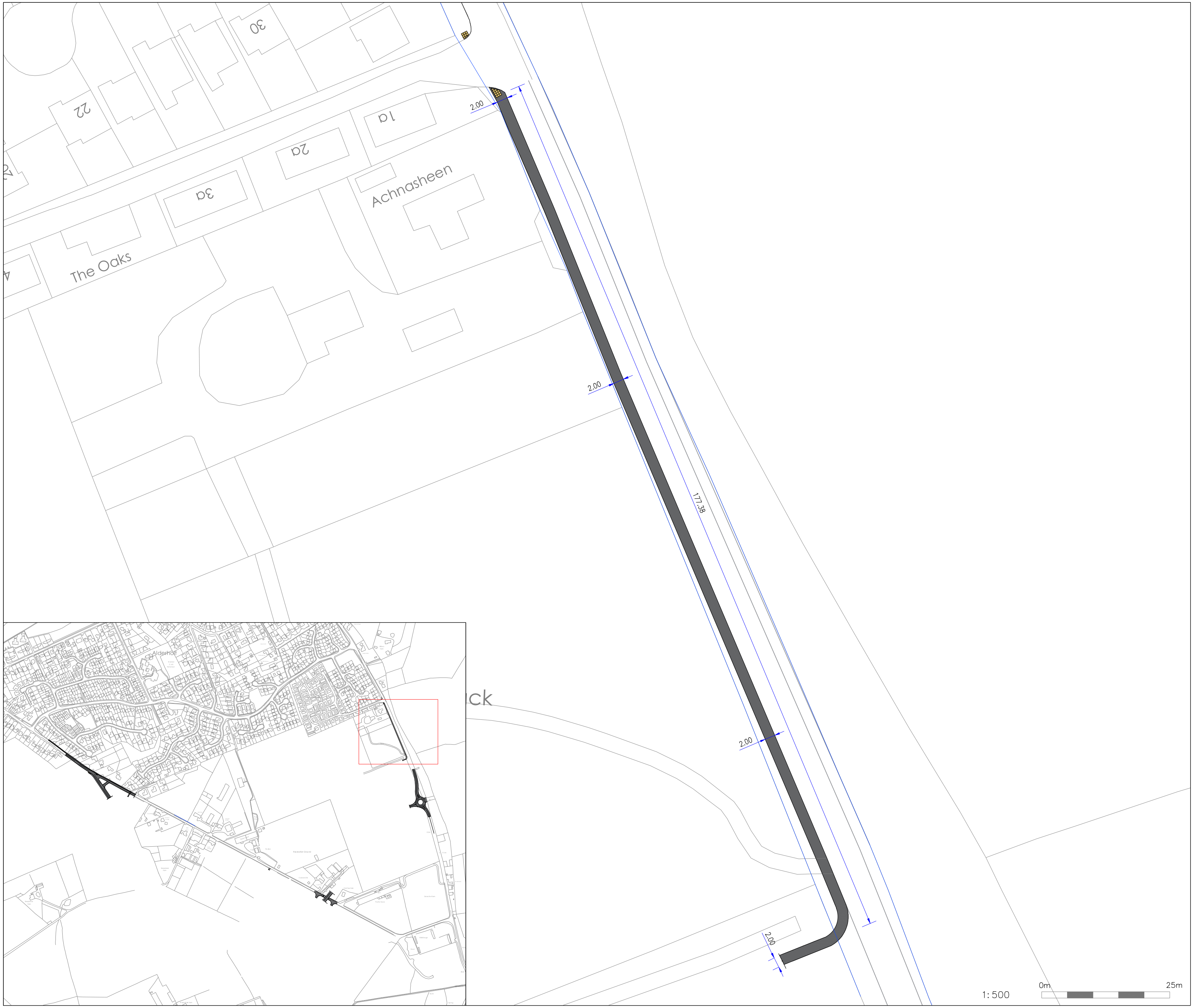
Client Drawing No.

Scale
1:500 (AT A2 SIZE)

PBA Drawing No.
132.0001.0004

Revision
-

Appendix J



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KEY

HIGHWAY BOUNDARY MAPPING
(BASED ON MAPPING PROVIDED BY DORSET COUNCIL)

NORTH

Rev	Description	Date	By	Chkd
A	MINOR REVISIONS	28.10.22	TP	HC

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Project Name
LAND AT ALDERHOLT
FORDINGBRIDGE

Title
HILLBURY ROAD
PROPOSED FOOTWAY

Project Phase
PRELIMINARY

Checked By	Checked Date	Drawn By	Drawn Date
JR	27.07.22	TP	26.08.22

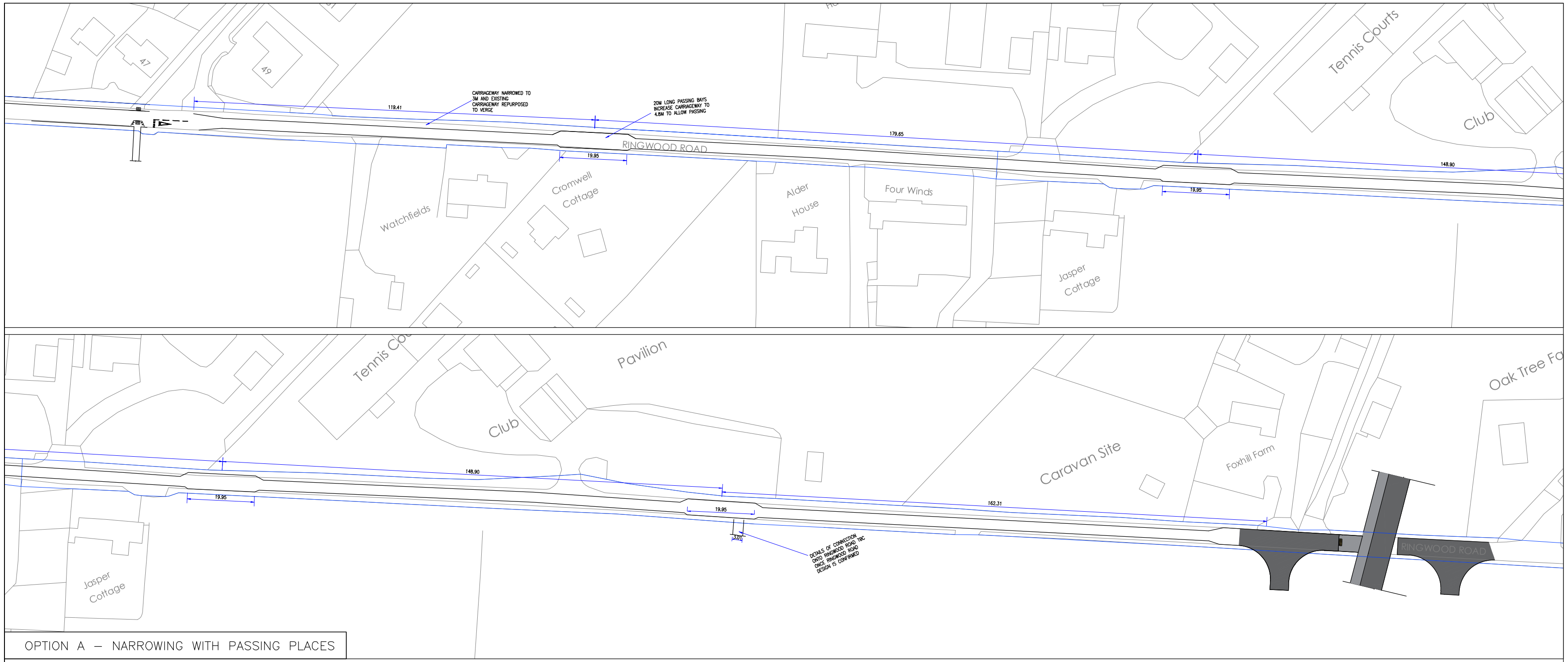
Client Drawing No.

Scale
1:500 (AT A2 SIZE)

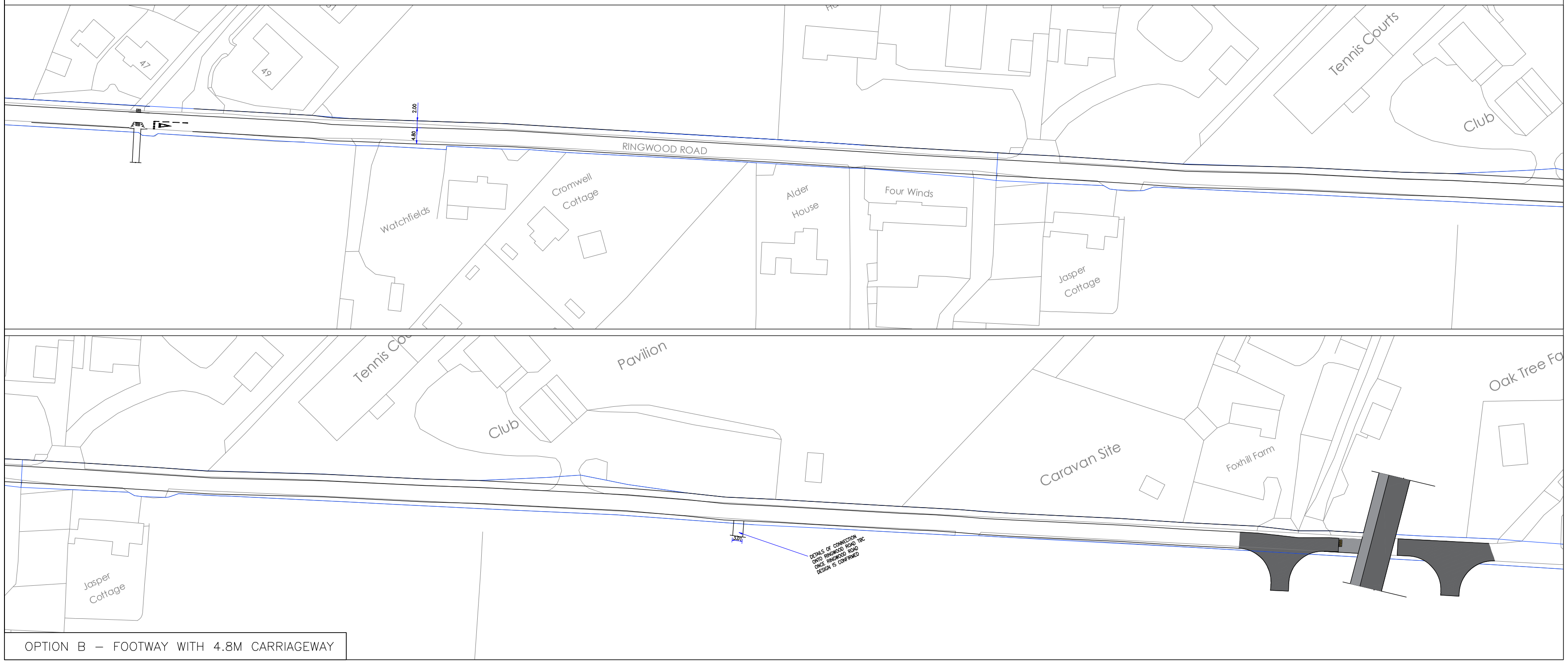
PBA Drawing No.
132.0001.007

Revision
A

Appendix K



OPTION A – NARROWING WITH PASSING PLACES



OPTION B – FOOTWAY WITH 4.8M CARRIAGEWAY

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KEY:

EXTENT OF PUBLIC HIGHWAY (BASED ON INFORMATION PROVIDED BY DORSET COUNCIL)

NORTH

Rev	Description	Date	By	Chkd
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Client: Intelligent Land

Project Name: ALDERHOLT MEADOWS ALDERHOLT

Title: RINGWOOD ROAD POTENTIAL ACTIVE TRAVEL OPTIONS

Project Phase: PRELIMINARY

Checked By	Checked Date	Drawn By	Drawn Date
JR	27.10.22	TP	27.10.22

Client Drawing No.:

Scale: 1:1000 (AT A2 SIZE)

PBA Drawing No.: 132.0001.009

Revision: -

Appendix L

SOUTH ALDERHOLT STRATEGIC SITES, ALDERHOLT

TRIP INTERNALISATION REPORT

May 2022

Intelligent Land Ltd

RESIDENTIAL DEVELOPMENT
SOUTH ALDERHOLT STRATEGIC SITES
ALDERHOLT

TRIP INTERNALISATION REPORT

CONTROLLED DOCUMENT

Document No:	132.0001/TIR/4		
Status: Original		*Copy No:*	
	Name	*Signature*	*Date*
Prepared by:	T Peters	[redacted]	October 2021
Checked by:	J Rand	[redacted]	October 2021
Approved by:	P Basham	[redacted]	October 2021

Revision Record

Rev.	*Date*	*By*	*Summary of Changes*	*Chkd*	*Aprvd*
2-3	Nov 21	TP	Client comment	JR	JR
4	May 22	TP	Comments from Dorset Council	SN	SN

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RESIDENTIAL DEVELOPMENT
SOUTH ALDERHOLT STRATEGIC SITES
ALDERHOLT

TRIP INTERNALISATION REPORT

Contents

Tables

Appendices

1. EXECUTIVE SUMMARY

1.1 The proposed development in Alderholt will comprise an estimated 1750 dwellings alongside substantial local facilities and improvements including new employment land, expansion and restructuring of the primary school, GP Surgery, local centre with a wide range of amenities, sports facilities amongst others as well as a number of key footway links into the existing Alderholt settlement. The result will be the creation of a self-contained and accessible settlement with good pedestrian permeability between the existing and new development, thus improving the existing situation whereby residents have to rely on outward commuting for work, education and daily amenities.

1.2 This report is based on a potential development comprising 1750 dwellings, as this corresponds with work undertaken to date by the client and DC through capacity modelling. However, this will be revised through the ongoing masterplanning process. At the time of writing, the approximate figure is anticipated to be 1700 dwellings.

1.3 As a result of these new wide ranging facilities the proposed residential trip generation needs to be applied differently, with it acknowledged that a proportion of trips will be contained within the development and Alderholt in general. In addition the existing residents of Alderholt will benefit from these trips and as such a proportion of the existing trips out of Alderholt will also be reduced and be retained within the development/Alderholt.

1.4 The methodology of applying the above logic comprised identifying five trip purpose categories, employment, education, retail, leisure, social, and applying the trips accordingly based on National Trip End Model proportions for the wider Alderholt area. These proportions have then been manually reduced as appropriate based on 2011 census data, comparable case studies, and professional judgement.

1.5 The relevant deductions made broadly comprise 21% reductions for employment trip purposes, 90% for primary school, 0% for secondary school and 75% for retail trips, 50% for leisure trips and 10% for social trips.

1.6 Following the above reductions, the proposed development results in vehicular trips external to the site and Alderholt totalling 246 arrivals and 596 departures in the AM peak hour period (08:00-09:00) and 647 arrivals and 405 departures in the PM peak hour period (17:00-18:00). However the deduction in existing Alderholt based vehicular trips totals a reduction of 123 arrivals and 209 departures in the AM peak hour period (08:00-09:00) and 114 arrivals and 54 departures in the PM peak hour period (17:00-18:00). Therefore, deducting the reduced existing Alderholt based trips from the proposed external development trips results in a net impact of +510 vehicular trips in the AM peak period and +884 in the PM peak period.

1.7 Of these additional trips it is pertinent to note that they will be assigned across the three entry routes into/out of Alderholt, therefore the resulting impact upon any one link will be reduced further and the associated impacts should have minimal impact upon the existing highway network.

1.8 The proposed extension to Alderholt and provision of a wide range of services and facilities will result in a reduced need for existing Alderholt residents to travel outside of the settlement. This benefit would not be realised by other potential residential allocations on wholly greenfield sites elsewhere. The resultant trip generation is reduced by c. 20-40%. The mixed use strategic regeneration and growth of Alderholt therefore provides additional sustainability benefits over and above greenfield sites elsewhere, minimising the impact on the highway network.

PART A – INTRODUCTION AND DETAILS OF PROPOSALS

2. INTRODUCTION

2.1 This Trip Internalisation Report (TIR) has been produced by Paul Basham Associates on behalf of Intelligent Land Ltd in support of a proposed strategic mixed use development along the south western edge of Alderholt, Dorset.

2.2 The proposals include a number of different land uses, including residential, employment, retail and a larger redeveloped primary school. The indicative site masterplan is included at Appendix A. This range and combination of land uses is such that a proportion of trips generated by the development will remain within the site through means such as residents working within the new employment areas, travelling to the shops, school and many other facilities discussed in subsequent paragraphs. Furthermore, a proportion of existing trips undertaken by current Alderholt residents will be affected by the development proposals. This arises primarily because of the additional amenities and facilities that the mixed use development will bring to Alderholt, such that existing residents no longer have to travel further afield access such existing facilities in nearby settlements such as Fordingbridge.

2.3 It is therefore considered both reasonable and justified to apply reductions to forecast traffic flows to reflect a) the internalisation within the site of vehicle trips associated with the new residential dwellings and b) the altered travel patterns of existing Alderholt residents. This TIR seeks to make those adjustments to the trip rates and reductions to existing traffic flows, utilising robust justification for reductions where appropriate.

3. LAND USES AND QUANTUM OF DEVELOPMENT

3.1 As mentioned above, there are a number of land uses being promoted as part of the scheme. The intention is to provide non-residential uses and facilities for both existing Alderholt residents, and residents of the new scheme. The provision of additional facilities within Alderholt will mean that existing residents no longer have to travel elsewhere for core daily uses, reducing the length and number of existing trips, whilst ensuring that the majority of future residents' needs are met within the community and reduce the need to travel outward to other destinations.

3.2 The facilities being proposed being proposed as part of the future strategic development are flexible but currently comprise:

- 1750 dwellings;
- 2 ha employment land (business park/start up style units). This 2ha is based on total land space, therefore for the purposes of this assessment a value of 1ha GFA has been used.
- An expansion to the existing first school with it being restructured as a Primary School and becoming part of a two tier education system joined with Burgate senior school in Fordingbridge rather than the current three tier link to Cranborne and Wimborne. ;
- New square/town centre totalling c. 4,200 sqm with shops, café, new supermarket and pub;
- New 21st century healthcare facility;
- New leisure space and LTA tennis centre;
- New Library;
- Digital Infrastructure – fibre to front door;
- Community garden;
- 13km cycleways connecting the settlement to the forest and replacing the need for car journeys; and
- Net biodiversity gain – creating an environment that you want to stay in.

3.3 The above range of facilities will enable residents to reduce their travel needs and therefore transform the accessibility of Alderholt from a settlement currently lacking facilities to one which benefits from a wide range of amenities within a 15 minute walk of most properties.

PART B – INTERNALISATION OF PROPOSED DEVELOPMENT TRIPS

4. PERSON TRIP RATES FOR PROPOSED DEVELOPMENT IN ALDERHOLT

RESIDENTIAL DEVELOPMENT

4.1 In order to determine the number of trips the residential aspect of the development will produce, a multi-modal trip rate assessment has been undertaken using the following parameters:

- 'Residential' – 'Houses Privately Owned' use class;
- Sites in England (Excluding Greater London) & Wales;
- 100-2000 dwellings;
- Weekday Surveys only;
- 'Edge of Town' locations only.

4.2 The TRICS outputs are demonstrated in **Table 1** with the full outputs attached as **Appendix B.**

Unit Type	AM Peak (0800-0900)		PM Peak (1700- 1800)		12 Hour (0700-1900)
	Arrivals	Departures	Arrivals	Departures	
Trips Rate per dwelling	0.227	0.853	0.646	0.278	8.074
1750 dwellings	397	1493	1131	487	14130
Total	1890		1617		

Table 1: Residential Trip Generation (Total People)

EMPLOYMENT TRIP RATES

4.3 In order to determine the number of trips the employment aspect of the development will produce, a multi-modal trip rate assessment has been undertaken using the following parameters:

- 'Employment' – 'Business Parks' use class;
- Sites in England (Excluding Greater London) & Wales;
- 2500-15000 sqm GFA;
- Weekday Surveys only;
- 'Edge of Town' and 'Neighbourhood Centre' locations only.

4.4 The TRICS outputs are demonstrated in **Table 2** with the full outputs attached as **Appendix C.**

Unit Type	AM Peak (0800-0900)		PM Peak (1700- 1800)		12 Hour (0700-1900)
	Arrivals	Departures	Arrivals	Departures	
Trips Rate per 100 sqm	2.721	0.519	0.588	2.542	25.640
1ha GFA	272	52	59	254	2564
Total	324		313		

Table 2: Employment Trip Generation (Total People)

4.5 The above trip generation identifies trips that will be generated by the proposed residential and employment development. However it only identifies total trips by total people. It does not include for any internalisation as a result of trips being made between land uses within the proposed development, and it does not define what proportion of trips are made by differing modes.

4.6 It is also pertinent to note that these trip rates were derived from surveys undertaken prior to the Covid-19 pandemic and that commuting behaviour has changed dramatically since, due to both necessity and the emergence of Microsoft Teams & Zoom etc. These trips can be considered overly robust compared to likely future trip rates once the pandemic has settled, therefore the scope for applying any potential reduction to these trips will be considered and is done so within Section 12.

4.7 Trip rates for the larger first/primary school and mixed local centre uses have not been calculated because they are assumed to be facilities for either the future (and current) residents of Alderholt and as all future residents will be situated within 1.2km it is determined that trips will likely be made internally by foot/cycle. They will therefore not have an impact upon the general highway network and so have not been considered.

5. PROPOSED DEVELOPMENT TRIP JOURNEY PURPOSES

INTRODUCTION

5.1 Having calculated person trip rates for the proposed land uses, the next requirement is to determine what proportion of trips within the Alderholt area are for specific purposes.

5.2 For the purposes of this assessment four trip purpose groups have been identified as follows:

- Employment – journeys to/from places of work
- Education – journeys to/from places of education. These will form a combination of primary and secondary education trips and will be assessed accordingly.
- Retail/Personal Business – journeys to/from places of retail/shopping and personal business
- Leisure – journeys to/from places of leisure and recreation
- Social – journeys to/from friends, family, day trips and holiday destinations assumed to be longer distance journeys

TRIP PURPOSES FOR RESIDENTIAL TRIPS:

5.3 The National Trip End Model has been interrogated for the East Dorset 001 MSOA which covers the extent of Alderholt. This area has been interrogated to determine the resulting trip purposes for the AM and PM peak periods.

5.4 The resulting trip purpose proportions are summarised below in Table 3 whilst the raw data and detail provided within Appendix D.

Journey Purpose	AM Peak (08:00-09:00)	PM Peak (17:00-18:00)
Employment	36%	35%
Education	46%	14%
Retail/Personal Business	13%	21%
Leisure	3%	13%
Social	3%	17%
Total	100%	100%

Table 3: Residential Trip Purpose Proportions

5.5 The above trip purposes include for trips both departing and moving within Alderholt, with the possibility of trips being made from a residential area within Alderholt to employment or school setting, as well as external trips. Therefore assumptions have been made to reflect how these proportions vary across arrivals and departures.

AM Journey Purpose Assumptions:

5.6 The following assumptions have been made in determining % arrivals and departures per journey purpose.

- Employment – It is assumed that the majority of employment trips will be departing the housing area to go to work, with the only exceptions being shift workers who are returning home in the morning. Therefore AM arrivals for employment has been set to an arbitrary 1% with the remaining set as departures.
- Education – It is assumed that these education related trips will consist of primary aged children, and secondary aged children. Those within the primary ages will be escorted to school and therefore parents will leave with their children and return without them in the AM period. Therefore for every 1 primary school child there will be 2 departures and 1 arrival based on a parent and child departing and a parent returning home having dropped the child off. This has therefore been reflected in the arrivals and departures. For secondary age children it is assumed that these will typically be unsupervised trips and therefore all trips will be departures in the AM peak. In order to determine the split between primary and secondary trips it is considered that the split between primary ages and secondary ages is 50/50. Therefore, when considering the additional two trips per pupil in primary trips (for the accompanying adult leaving and returning) primary trips comprise 75% of trips and secondary trips comprise 25%.
- Retail/Personal Business– These trip purposes are associated with retail and personal business and therefore could encompass a broad range of trips. Therefore they are assumed to typically be two-way in nature, given the absence of any justification to suggest otherwise, and so these trips have been split evenly across the arrivals and departures.
- Leisure – These trip purposes are associated with leisure and recreation and therefore could encompass a broad range of trips. Therefore they are assumed to typically be two-way in nature, given the absence of any justification to suggest otherwise, and so these trips have been split evenly across the arrivals and departures.
- Social – These trips are associated with the undertaking of visiting friends and family as well as longer day trips and departing for holidays and therefore the typical duration of the activity is assumed to be over the course of several hours. As a result, during the AM peak it is assumed that these will predominantly comprise departures given that few trips are likely to be returning from such activities at this stage in the morning. An arbitrary 1% has been retained for arrivals to allow for these small number of trips, the remaining 99% have been assumed to be departures.

PM Journey Purpose Assumptions:

5.7 The following assumptions have been made in determining % arrivals and departures per journey purpose.

- Employment – It is assumed that in the evening the majority of employment trips will be returning to the residential areas from work, with the only exceptions being shift workers who are leaving for night shifts. Therefore PM departures for employment has been set to an arbitrary 1% with the remaining set as arrivals.
- Education – In the PM there are few numbers of education related trips due to the timings of a typical school day. Of the trips being made it is assumed that these will typically comprise trips being made from school and returning home, and that these trips are made for non-typical after school activities. Therefore all PM education trips have been assigned to arrivals to the residential area and departures have been set to 0.
- Retail/Personal Business– These trip purposes are associated with both retail and personal business trips and are assumed to typically be two-way in nature. Given the absence of any justification to suggest otherwise, these trips have been split evenly across the arrivals and departures.
- Leisure – These trip purposes encompass leisure and recreation. These trips are assumed to typically be two-way in nature and journeys undertaken at this time could comprise departing for or arriving back from an act of leisure. Given the absence of any justification to suggest otherwise, these trips have been split evenly across the arrivals and departures.
- Social – These trips are associated with the undertaking of visiting friends and family as well as longer day trips and departing for holidays. Given that trips made at this time could comprise those returning from a day out or equally those on their way out in the evening, combined with the absence of any justification to suggest otherwise, these trips have been split evenly across the arrivals and departures.

TWO-WAY TRIP PURPOSES

5.8 Based on the assumptions and adjustments made above, the following two way journey purposes percentages used within the assessment for the residential trips have been summarised within Table 4 below.

Journey Purpose	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	Arrivals	Departures	Arrivals	Departures
Employment	2%	44%	47%	1%
Education (Primary)	58%	29%	10%	0%
Education (Secondary)	0%	14%	10%	0%
Retail/Personal Business	33%	8%	14%	41%
Leisure	7%	2%	9%	25%
Social	0%	4%	12%	33%
Total	100%	100%	100%	100%

Table 4: Residential Trip Purpose Proportions – Two Way

5.9 The above trip proportions have been derived by proportioning the journey purpose into the relevant arrival/departure split, see **Appendix D** for information on calculations.

5.10 The application of the above trip purposes by arrivals and departures has been applied to the proposed trip generation of the residential development and is summarised in **Table 5** below.

Journey Purpose	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	Arrivals	Departures	Arrivals	Departures
Employment	7	657	526	7
Education (Primary)	232	424	108	0
Education (Secondary)	0	212	108	0
Retail/Personal Business	129	118	161	199
Leisure	28	25	96	120
Social	1	57	130	161
Total	397	1493	1131	487

Table 5: Residential Trip Purpose Proportions – Two Way Trips

6. INTERNALISATION

6.1 Having determined the resulting trip generation per land use per purpose it is now important to determine the level of internalisation that the varying land uses will contribute.

6.2 Due to the scale and range of land uses associated with the proposed development a proportion of trips generated by the proposed development will remain internal to the scheme. The principles of the proposed development are to promote internalisation and provide facilities for existing residents to be able to rely upon rather than a continuation of the existing scenario whereby existing Alderholt residents are required to travel to alternative towns for almost all basic daily needs.

RESIDENTIAL HOUSING

Employment Trips

6.3 In order to determine an appropriate level of internalisation between the residential dwellings and proposed employment land four case study locations have been reviewed to determine the level of internalisation experienced. These four settlements are located within the south and comprise:

- New Alresford;
- Wincanton; and
- East Andover.

6.4 These sites have been selected because their location and characteristics are broadly comparable to that of what Alderholt may look like in the future following development. They are all situated within small towns, sited fairly rurally and are also located within reasonable proximity to an A Road, and therefore are likely to have a high proportion of residents commuting out for employment.

6.5 In order to determine the level of internalisation that these settlements currently experience 2011 Census data has been interrogated to determine the percentage of residents living in the relevant area and what proportion work within the same area and what proportion work elsewhere. The methodology and data associated with this assessment has been reproduced within **Appendix E**. The subsequent internalisation factors have been summarised within **Table 6** below.

Unit Type	Internal	External
New Alresford	21%	79%
Wincanton	29%	71%
East Andover	14%	86%
Average	21%	79%

Table 6: Case Study Sites – Employment internalisation Proportions

6.6 Based on the above it has been determined that a figure of 21% will be used as the percentage of employment trips which will remain internal to the proposed development. Therefore, the resulting trip generation has been summarised in **Table 7**.

Unit Type	AM Peak (0800-0900)		PM Peak (1700- 1800)	
	Arrivals	Departures	Arrivals	Departures
Internal	2	138	111	1
External	6	519	416	5
Total	7	657	527	7

Table 7: Employment Internalisation Trips

Education Trips

6.7 In order to determine the split between primary and secondary education, 2011 Census data was reviewed to determine the population in each of these age ranges for the East Dorset 001 MSOA. Unfortunately, due to the categorising of age groups within the data (such as 10-14 being grouped within one age group) it has not been possible to accurately determine a split. Therefore to ensure simplicity, it is assumed that the split between primary and secondary age children is 50/50.

6.8 As part of the proposed development the existing primary school will be expanded and restructured into a two tier system with the intention of serving both the existing residents and residents associated with the proposed residential development. On this basis it is assumed that 90% of trips associated with the primary school will be internal to Alderholt, with 10% factored in to account for potential individual choice to attend other schools. Trips from the proposed and existing Alderholt settlement to the newly formed primary school are assumed to be undertaken on foot/cycle given the school is located within 1.2km of the entirety of Alderholt and a series of high quality connections will be provided between the school site and the proposed development. Any trips undertaken by car are assumed to already being undertaken by car (potentially as part of linked trips to places of employment etc) and so will remain on the network following the proposed development. Therefore for simplicity purposes these trips have not been quantified and calculated as part of the assessment as they are not assumed to be newly generated trips.

6.9 It is acknowledged that, due to the absence of a secondary school within Alderholt, and the informal agreement from The Burgate School in Fordingbridge that there will be space to accommodate future population growth within Alderholt within their school, all secondary education trips will be external to the proposed development, with the vast majority attending the Burgate School (again with a small proportion factored in for those who choose to attend another school).

6.10 The resulting split of trips is summarised in **Table 8** below.

Unit Type	AM Peak (0800-0900)		PM Peak (1700- 1800)	
	Arrivals	Departures	Arrivals	Departures
Primary – Internal	209	381	97	0
Primary – External	23	42	11	0
Secondary – Internal	0	0	0	0
Secondary – External	0	212	108	0
Total Education	215	636	216	0

Table 8: Education Internalisation Trips

Retail/Personal Business

6.11 For the Retail/Personal Business trips generated by the residential housing at Alderholt, in order to determine an appropriate split of internalisation a number of assumptions were made on the nature of the trip.

6.12 The proposed development is providing a wide range of future facilities and including c. 4,200sqm of local centre GFA within which a range of retail opportunities as well as daily shopping amenities to cater for needs such as convenience food stores and pharmacy needs, amongst others. As a result of this enhanced accessibility, combined with the fact that these trips are occurring within the peak periods and therefore likely to be errand based trips rather than leisure shopping days, it is assumed that 75% of the trips will be internal and 25% of trips will be external. This is on the basis that although there will be substantial provision for shopping and errand trips there will still be the need and desire from residents to travel outwards towards neighbouring Fordingbridge and Verwood to meet their requirements.

6.13 The resulting trip generation split across internalised and external trips is shown within **Table 9**.

Unit Type	AM Peak (0800-0900)		PM Peak (1700- 1800)	
	Arrivals	Departures	Arrivals	Departures
Internal	97	88	120	149
External	32	29	40	50
Total	129	118	161	199

Table 9: Retail Internalisation Trips

Leisure/Recreation

6.14 For the Leisure/Recreation trips generated by the residential housing at Alderholt, in order to determine an appropriate split of internalisation a number of assumptions were made on the nature of the trip.

6.15 The proposed development is providing a wide range of future recreation and leisure facilities including several acres of parkland, a WTA led tennis association and a wide range of new footway/cycleway links through open space and connecting into the adjacent countryside, as well as cafes and a pub within the local centre space. Therefore, as a result of this enhanced access to facilities and recreation activities it has been agreed with Dorset Council that an assumed 50% of the peak trips will remain within the development/Alderholt, whilst the remaining 50% will route externally with it acknowledged that activity specific recreation trips will result in outward trips to the appropriate location.

6.16 The resulting trip generation split across internalised and external trips is shown within **Table 10**.

Unit Type	AM Peak (0800-0900)		PM Peak (1700- 1800)	
	Arrivals	Departures	Arrivals	Departures
Internal	14	13	48	60
External	14	13	48	60
Total	28	25	96	120

Table 10: Leisure Internalisation Trips

Social

6.17 For the Social trips generated by the residential housing at Alderholt, in order to determine an appropriate split of internalisation a number of assumptions were made on the nature of the trip.

6.18 The proposed development will result in additional social meeting spaces, in the form of the café, pub and park space, whilst it will also result in a larger population within Alderholt, therefore a proportion of friendly relationships will be within Alderholt itself rather than further afield. However it is acknowledged that this will constitute a small proportion of trips. Therefore the majority of these trips are assumed to be external with only 10% of trips being retained as internal to the development.

6.19 The resulting trip generation split across internalised and external trips is shown within **Table 11**.

Unit Type	AM Peak (0800-0900)		PM Peak (1700- 1800)	
	Arrivals	Departures	Arrivals	Departures
Internal	0	6	13	16
External	1	51	117	145
Total	1	57	130	161

Table 11: Social Internalisation Trips

Total Trip Internalisation for Residential Trips

6.20 Based on the information and methodology set out in the sections above the following trip generation in terms of total person trips and subsequent internalisation has been determined and is summarised within **Table 12**.

Unit Type	AM Peak (0800-0900)		PM Peak (1700- 1800)	
	Arrivals	Departures	Arrivals	Departures
Internal				
Employment	2	138	111	1
Primary Education	209	381	97	0
Secondary Education	0	0	0	0
Retail	97	88	120	149
Leisure	14	13	48	60
Social	0	6	13	16
External				
Employment	6	519	416	5
Primary Education	23	42	11	0
Secondary Education	0	212	108	0
Retail	32	29	40	50
Leisure	14	13	48	60
Social	1	51	117	145
Total				
Employment	7	657	527	7
Primary Education	232	424	108	0
Secondary Education	0	212	108	0
Retail	129	118	161	199
Leisure	28	25	96	120
Social	1	57	130	161

Table 12: Total Proposed Development Residential Internalisation Trips

EMPLOYMENT TRIPS

6.21 For trips generated by the proposed employment land the same approach has been taken for the split between external and internal trips for those heading to/from the proposed residential development. Therefore it is assumed that 21% of the trips generated by the employment land will be internal to the proposed development, whilst the remaining trips will be external trips. The breakdown of these trips is therefore shown in Table 13.

Unit Type	AM Peak (0800-0900)		PM Peak (1700- 1800)	
	Arrivals	Departures	Arrivals	Departures
Internal	57	11	12	53
External	215	41	46	201
Total	272	52	59	254

Table 13: Employment (Business Park) Internalisation Trips

6.22 It is pertinent to note that the number of employment trips internal to the proposed development varies depending on the land use. The employment internal trips are lower as they form one part of the greater employment, with residential journeys also being made to the local centre, retail stores and other small areas of employment. Therefore, this discrepancy is considered acceptable.

6.23 As part of the viability assessments undertaken by Intelligent Land it was identified that the proposed development would give rise to in excess of 2035 jobs as a result of the proposed facilities and employment in the area, and therefore the associated reductions identified above seem to fit well within that and are therefore considered accurate and robust.

7. MODE SHARE

MODAL SPLIT

7.1 The trip generation detailed in **Tables 12 & 13** above is based on total person trips. These trips then need to be assigned to a mode, be it walking, cycling, public transport or private vehicle, although it is noted that the trip generation detailed above is for external trips outside Alderholt and therefore walking has been assumed as 0% for the moment. It should be noted that as part of future work, the footpath connections between Alderholt and Fordingbridge, located only 2.5km away, will be explored and therefore there may be justification for increasing this walking percentage to reflect these improvements and the likelihood of residents walking to their destination in the future.

7.2 For the residential – employment/retail/leisure/other trips this modal split has been obtained by interrogating the 2011 Census Journey to Work data to determine the current modal split for the East Dorset 001 MSOA which covers Alderholt. Similar data has also been interrogated for Fordingbridge on the basis that Alderholt's current characteristics are not representative of what Alderholt will be like in terms of accessibility once the proposed development has been implemented, instead it will be more akin to the scale and characteristics of Fordingbridge. The resulting modal split is summarised below in **Table 14,** whilst the raw data is provided within **Appendix F**.

MSOA	Public Transport	Walking	Cycling	Vehicle Driver	Vehicle Passenger	Total
East Dorset 001 (Alderholt)	3%	0%	2%	91%	4%	100%
New Forest 001 (Fordingbridge)	4%	0%	3%	85%	5%	100%
Hybrid	4%	0%	3%	88%	5%	100%

Table 14: 2011 Census Journey to Work Modal Split

7.3 Based on the above, a hybrid modal split has been used incorporating both the Alderholt and Fordingbridge data. This is considered acceptable on the basis that vehicular trips still make up 88% of the total trips, a value that is considered robust.

7.4 As can be seen, the revised modal split following the implementation of the proposed development results in a slight increase in walking transport modes, and a slight decrease in single occupancy car driving. Applying this modal split to the person trips generated and identified in the sections above across all the proposed development land uses results in the following vehicular trip generation, as summarised in **Table 15**.

Unit Type	AM Peak (0800-0900)		PM Peak (1700- 1800)	
	Arrivals	Departures	Arrivals	Departures
Residential				
Employment	5	456	366	5
Retail	28	26	35	44
Leisure	12	11	42	53
Social	1	45	103	128
Employment				
Business Park	188	36	41	176
Total	**235**	**575**	**642**	**405**

Table 15: External Vehicular Trip Generation (Employment & Retail/Leisure/Social)

7.5 This table includes only the external trips, with the trips categorised as internal having been discounted on the basis that they will route along local roads and comprise a higher proportion of walking and cycling than external trips. They therefore will not be assigned to the highway network as part of the highway impact work accompanying any planning application.

PRIMARY EDUCATION MODAL SPLIT

7.6 For primary school trips, given the newly formed primary school would be within close proximity to the new development and benefit from high quality footway links (between the site and the school), it is assumed that all internal trips will take place by foot/cycle. However, as noted above, 10% of trips have been retained to allow for an element of choice for residents and it is assumed that 100% (of these remaining 10% of trips) will be undertaken by car and will comprise 50% car driver and 50% passenger (i.e parent travelling with their child).

SECONDARY EDUCATION MODAL SPLIT

7.7 The above modal split is considered to be inappropriate for education trips, for example it would imply that 80% of the secondary school trips are undertaken by vehicle drivers, which is not possible considering these trips are assumed to be unescorted. Instead these trips have been assigned specific modal splits given the local characteristics of the area. Primary education trips have all been assumed to have been internalised, with existing residents not considered as new trips as discussed previously, therefore the mode of transport used for these trips has not been considered as part of this assessment.

7.8 It is assumed that all secondary trips in the AM are undertaken by public transport utilising school bus services as appropriate. Whilst it is acknowledged that there may be some trips that are undertaken by car this number will be negligible given that school bus services are available in the area and therefore will be utilised as appropriate.

7.9 For the PM period, it is recognised that the school day finishes before 16:00, and therefore the majority of every day school journeys (typically undertaken by students returning on the school bus) will be concluded prior to the 17:00-18:00 PM peak period. Therefore, any trips in the PM peak are assumed to be those associated with afterschool clubs and activities. Given the current absence of a regular bus service between Fordingbridge and Alderholt, these trips are assumed to comprise 1 adult collecting 1 student. Therefore, of these PM trips, 50% are assumed to be drivers, and 50% are assumed to be passengers.

7.10 The resulting modal split is summarised in **Table 16** below and, based on the trip generation identified within **Table 8** above, the subsequent external vehicular trip generation is summarised in **Table 17**.

MSOA	Public Transport	Walking	Cycling	Vehicle Driver	Vehicle Passenger	Total
AM Peak (08:00-09:00)	100%	0%	0%	0%	0%	100%
PM Peak (17:00-18:00)	0%	0%	0%	50%	50%	100%

Table 16: Secondary Education Modal Split

Unit Type	AM Peak (0800-0900)		PM Peak (1700- 1800)	
	Arrivals	Departures	Arrivals	Departures
Residential				
Primary Education	12	21	5	0
Secondary Education	0	0	54	0
Total	0	0	54	0

Table 17: External Vehicular Trip Generation (Education)

TOTAL EXTERNAL VEHICULAR TRIP GENERATION

7.11 Based on the information and assumptions provided above the following external vehicular trip generation has been calculated for the development across all land uses having considered the relevant aspects of internalisation as appropriate.

Unit Type	AM Peak (0800-0900)		PM Peak (1700- 1800)	
	Arrivals	Departures	Arrivals	Departures
Residential				
Employment	5	456	366	5
Primary Education	12	21	5	0
Secondary Education	0	0	54	0
Retail	28	26	35	44
Leisure	12	11	42	53
Social	1	45	103	128
Employment				
Business Park	188	36	41	176
Total	**246**	**596**	**647**	**405**

Table 18: External Vehicular Trip Generation – Proposed Development

7.12 The data within **Table 18** sets out that following the internalisation of the trips has been allowed for, the proposed development, comprising a range of land uses, will result in external trips to the development of 842 in the AM and 1052 in the PM peak periods respectively.

7.13 In total the following deductions have been made for the various journey purposes, although it should be noted these proportions are intended as a summary, given the nuances and rationale set out in the sections above.

- Employment 21% internal
- Education- Primary 90% internal
- Education- Secondary school 0% internal
- Retail/Personal Business 75% internal
- Leisure 50% internal
- Social 10% internal

PART C – REDUCTION IN EXISTING ALDERHOLT TRIPS

8. EXISTING ALDERHOLT TRAFFIC REDUCTION

8.1 Now that the trips associated with the proposed development have been accurately discounted and reduced accordingly to allow for the proposed additional facilities within Alderholt, the same must be done for the existing trips within Alderholt. The methodology applied to the proposed development trips above does not assume any of the existing trips made by current Alderholt residents will be reduced as a result of the proposed development and provision of additional facilities. There is therefore scope to apply a relevant reduction applying similar assumptions.

ANPR DATA

8.2 Automatic Number Plate Recognition surveys have been undertaken to determine the number of trips originating within Alderholt once any through trips have been removed from the network. These ANPR surveys were undertaken at

- 1. Sandleheath Road
- 2. Fordingbridge Road
- 3. Station Road
- 4. Harbridge Drove

8.3 The resulting arrivals and departures into Alderholt, based on the above surveys and allowing for the reduction of any through trips, is set out in **Table 19** below, whilst the ANPR data itself is included at **Appendix G**.

Unit Type	AM Peak (0800-0900)		PM Peak (1700- 1800)	
	Arrivals	Departures	Arrivals	Departures
Total Alderholt Trips	493	747	661	458
Through Trips To Be Removed	324	324	294	294
Net Alderholt Based Trips	**169**	**423**	**367**	**164**

Table 19: External Vehicular Traffic Flows

8.4 It should be noted that the above trips do not allow for any interaction between the camera locations at Locations 1 (Sandleheath Road) and 2 (Fordingbridge Road). This is because upon review the total trips routing between sites 1 & 2 totals c. 3 trips in the AM and PM and therefore, given they will have such a nominal effect on the overall flows, they have been included within the assessment to avoid unnecessary complication.

9. TRIP PURPOSES

9.1 For the purposes of this assessment the same five trip purpose groups have been identified as in the proposed development methodology applied above. To recap these are as follows:

- Employment – journeys to/from places of work
- Education – journeys to/from places of education. These will form a combination of primary and secondary education trips and will be assessed accordingly.
- Retail/Personal Business – journeys to/from places of retail/shopping and personal business
- Leisure – journeys to/from places of leisure and recreation
- Social – journeys to/from friends, family, day trips and holiday destinations assumed to be longer distance journeys

9.2 As above, the National Trip End Model has been interrogated for the East Dorset 001 MSOA which covers the extent of Alderholt. This area has been interrogated to determine the resulting trip purposes for the AM and PM peak periods. This data is a replication of the data utilised in the proposed development methodology, however for convenience the resulting trip purpose proportions are summarised below in Table 21.

Journey Purpose	AM Peak (08:00-09:00)	PM Peak (17:00-18:00)
Employment	36%	35%
Education	46%	14%
Retail/Personal Business	13%	21%
Leisure	3%	13%
Social	3%	17%
Total	**100%**	**100%**

Table 20: Residential Trip Purpose Proportions

9.3 The above trip purposes include for trips both departing and moving within Alderholt, with the possibility of trips being made from a residential area within Alderholt to employment or school setting, as well as external trips. Therefore assumptions have been made to reflect how these proportions vary across arrivals and departures for the current Alderholt situation, before the proposed development has been implemented. In making these assumptions it is pertinent to note that the above trips are vehicular trips rather than person trips rates as in the above proposed development section. Therefore the following journey purpose assumptions vary slightly compared to those applied within the proposed development methodology to allow for this variation in trip type.

AM Journey Purpose Assumptions:

9.4 The following assumptions have been made in determining % arrivals and departures per journey purpose.

- **Employment** – It is assumed that the majority of employment trips will be departing Alderholt to go to work. However it is reasonable to assume there are some areas of employment localised within Alderholt such as the shop, campsite, pub and other localised businesses. It is pertinent to again note that the quantified existing trips account for vehicular trips only, and therefore local trips undertaken by foot or cycle would not be included within this. Therefore it is assumed that in the AM peak 80% of employment purpose trips are departures and the remaining 20% are arrivals.
- **Education –** It is assumed that these existing education purpose trips will equally consist of first school aged, middle school aged children and secondary school aged children, in accordance with the three-tier education system currently in place within Alderholt.
- For the existing situation it is assumed that the arrivals to the first school comprise 50% trips made by residents to Alderholt, and the remaining 50% of trips made from external villages surrounding Alderholt, such as Cranborne etc. Therefore, given that these %s are being applied to vehicular trips only, it is assumed that 50% of these trips are arrivals, and 50% departures on the basis that parents dropping their child off by car are doing so as an independent trip and not part of any linked trip, in order to be robust and transparent.
- For middle school aged children it is acknowledged that there is not a middle school currently located within Alderholt and given there is not a particular bus service for middle school children, all trips are assumed to be undertaken by private vehicle. Of these trips it is again assumed they are undertaken independently of any other trip and therefore can be split evenly between 50% arrivals and 50% departures to allow for returning trips following dropping the child off at school. Given it is not known what proportion of these trips are linked for onward journeys to work this is considered the most robust and transparent method of assigning these trips.
- For secondary age children it is acknowledged that there is not a secondary school within Alderholt, however there is a school bus service which serves the Burgate School in Fordingbridge. However given that there is no formal arrangement determining catchment for this school not all Alderholt secondary aged children attend the Burgate School as per the current arrangement. Therefore it is assumed that 50% of pupils attend Burgate and route via bus, the remaining 50% route by private vehicle, again as part of an independent trip, and therefore comprise 50% arrivals and 50% departures as per the rationale set out above.

- Retail/Personal Business– These trip purposes are broad and are assumed to typically be two-way in nature. Given the absence of any justification to suggest otherwise, these trips have been split evenly across the arrivals and departures.
- Leisure – These trip purposes are broad and are assumed to typically be two-way in nature. Given the absence of any justification to suggest otherwise, these trips have been split evenly across the arrivals and departures.
- Social – These trips are associated with the undertaking of visiting friends and family as well as longer day trips and departing for holidays and therefore the duration of the activity is assumed to be over the course of several hours. As a result, during the AM peak it is assumed that these will predominantly comprise departures given that few trips are likely to be returning from such activities at this stage in the morning. An arbitrary 1% has been retained for arrivals to allow for these small number of trips, the remaining 99% have been assumed to be departures.

PM Journey Purpose Assumptions:

9.5 The following assumptions have been made in determining % arrivals and departures per journey purpose.

- Employment –It is assumed that the majority of employment trips will be arriving to Alderholt as they return from work. However, as in the AM peak, it is assumed that, given the small areas of existing employment within Alderholt, some trips will be those departing Alderholt and returning home. Therefore it is assumed that in the PM peak 20% of employment purpose trips will be departures and the remaining 80% are arrivals.
- Education – In the PM there are few numbers of education related trips due to the timings of a typical school day. Of the trips being made it is assumed that these will typically comprise trips being made from school and returning home, and that these trips are made for non-typical after school activities.
- Given all trips are assumed to be departing school and returning home, all PM first school, middle school and secondary school education trips have been assigned as arrivals to Alderholt and departures have been set to 0. This is based on the assumption parents had departed from Alderholt before the PM peak, or are collected as part of a linked trip within the other trip purpose categories.
- Retail/Personal Business– These trip purposes are broad and are assumed to typically be two-way in nature. Given the absence of any justification to suggest otherwise, these trips have been split evenly across the arrivals and departures.
- Leisure – These trip purposes are broad and are assumed to typically be two-way in nature and journeys undertaken at this time could comprise departing for or arriving back from an act of

leisure. Given the absence of any justification to suggest otherwise, these trips have been split evenly across the arrivals and departures.

- Social – These trips are associated with the undertaking of visiting friends and family as well as longer day trips and departing for holidays. Given that trips made at this time could comprise those returning from a day out or equally those on their way out in the evening, combined with the absence of any justification to suggest otherwise, these trips have been split evenly across the arrivals and departures.

TWO-WAY TRIP PURPOSES

9.6 Based on the assumptions and adjustments made above, the following two way journey purposes percentages used within the assessment for the residential trips have been summarised within Table 22 below.

Journey Purpose	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	Arrivals	Departures	Arrivals	Departures
Employment	19%	46%	41%	22%
Education (First)	12%	7%	5%	0%
Education (Middle)	24%	15%	5%	0%
Education (Secondary)	24%	15%	11%	0%
Retail/Personal Business	17%	10%	16%	33%
Leisure/Recreation	4%	2%	9%	20%
Social	0%	5%	13%	26%
Total	100%	100%	100%	100%

Table 21: Existing Alderholt Vehicular Trip Purpose Proportions

9.7 The above trip proportions have been derived by proportioning the journey purpose into the relevant arrival/departure split, see Appendix H for information on calculations.

9.8 The application of the above trip purposes by arrivals and departures has been applied to the existing Alderholt based vehicular trips identified above and is summarised in Table 22 below.

Journey Purpose	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	Arrivals	Departures	Arrivals	Departures
Employment	32	194	135	35
Education (First)	24	37	22	0
Education (Middle)	52	79	23	0
Education (Secondary)	26	39	23	0
Retail/Personal Business	28	43	51	53
Leisure/Recreation	6	9	31	32
Social	0	21	41	43
Total	169	423	327	164

Table 22: Existing Alderholt Vehicular Trip Purpose Proportions

10. EXISTING VEHICULAR INTERNALISATION

10.1 Having determined the resulting vehicular trip assignment per journey purpose it is now important to determine the level of internalisation/reduction that the proposed range of additional facilities will have on the existing residents' trips to/from Alderholt.

10.2 The following methodology follows the same assumptions as those applied to the proposed development in **Part B** above and therefore sets out summaries of the assumptions, with further detail supplemented as appropriate, rather than repeating a detailed methodology.

Employment Trips

10.3 In order to discount an appropriate level of trips from the existing Alderholt settlement as a result of the proposed employment and local centre the same discount factor of 21% has been applied as for the proposed development set out in **Part B**. This factor is based on the internalisation experienced at four comparable sites in order to provide a robust comparison for the level of internalisation experienced. The resulting split between internal and external trips to Alderholt is set out in **Table 23** below.

Unit Type	AM Peak (0800-0900)		PM Peak (1700- 1800)	
	Arrivals	Departures	Arrivals	Departures
Internal	7	41	28	7
External	25	154	107	28
Total	32	194	135	35

Table 23: Existing Trips - Employment Purpose

Education Trips

10.4 As mentioned previously as part of the proposed development a larger primary school will be constructed to replace the existing primary school within Alderholt. For the purposes of this assessment 2011 Census Data for the ages of school aged children has been used to inform the proportions between First, Middle and Secondary school ages. These proportions determined 32% were of First school age, 34% middle school aged, and 34% secondary school aged.

10.5 According to the tables set out above, the surveys identify 61 and 22 first education vehicular trips through any of the cordons within the AM and PM peak periods respectively. This is because it is 50% of the trips associated with the first school are undertaken by foot/cycle, or undertaken by car within the Alderholt without passing through the cordon. It is also acknowledged that a proportion of trips to/from the school are made by parents and children who live within the surrounding villages and areas and, in the absence of any formal data, it is assumed they make up 50% of total trips to/from the school. Following the implementation of the development the redeveloped primary school, it cannot be stated that travel behaviour will change, as existing Alderholt residents will likely still go to the primary school within Alderholt, whilst trips incoming from external locations will continue to occur. Therefore no internalisation factor has been applied to these trips.

10.6 Of the middle school aged trips, it is assumed that in the AM peak period they generate 131 trips, whilst in the PM they generate 23 trips. At present these trips have to route outwards of Alderholt to other schools due to the absence of a middle school. As a result of the proposed development the current primary school will expand and incorporate middle school ages, therefore providing a local middle school option for these children. It is however still acknowledged that there will be an element of choice involved in choosing whether to attend the local school, therefore an internalisation factor of 90% of trips has been applied. This therefore assumes that 10% of existing middle school trips will continue to attend school elsewhere and accounts for an element of choice between schools as appropriate. Therefore the resulting trips can be split as 118 becoming internal to Alderholt and 13 remaining external in the AM peak period, and 21 internal trips and 2 external trips in the PM peak period.

10.7 Of the secondary school trips it is assumed that in the AM peak period at present these are associated with parents dropping their child off at school, given the lack of a formal link between schools and lack of bus service, and hence have been apportioned evenly to assume similar number of people depart Alderholt and then subsequently return. Following the implementation of the new development there will be improved bus links as well as a formal link between Alderholt, the new primary school, and Burgate School. Therefore public transport links will be improved removing the need for parents to travel by car to drop their child at school. In addition cycle links are to be improved towards the east and this will therefore allow greater numbers of school children to cycle to school should they wish.

10.8 It is however still acknowledged that there will be an element of choice involved in choosing which school to attend, and therefore an internalisation factor of 90% of trips has been applied. Therefore the resulting trips can be split as 59 being removed from the external vehicular network and 7 remaining in the AM peak period.

10.9 In the PM it is acknowledged that the small number of vehicular trips on the network will typically be associated with collecting a child from an extra curricular activity after the school day and therefore will likely result in a parent collecting a child by car. This will remain the same following the development as although public transport will be improved, and greater number of facilities will be present in Alderholt for students to utilise, the reality is these trips will continue to occur and therefore it is robust so assume nothing will change on these trips. Therefore the trips external to Alderholt will remain at 23 in the PM peak period for Secondary school aged pupils.

10.10 The resulting split of vehicular trips is therefore summarised in **Table 24** below.

Unit Type	AM Peak (0800-0900)		PM Peak (1700- 1800)	
	Arrivals	Departures	Arrivals	Departures
First – Internal	22	33	20	0
First – External	2	4	2	0
Middle – Internal	47	71	21	0
Middle – External	5	8	2	0
Secondary – Internal	23	35	0	0
Secondary – External	3	4	23	0
Total Education	102	155	69	0

Table 24: Existing Vehicular Trips - Education Purpose

Retail/Personal Business

10.11 As set out above, the proposed development will provide a wide range of enhanced facilities through a substantial local centre, within which a range of retail opportunities will be provided alongside daily shopping facilities. This enhanced accessibility, combined with the fact that these trips are being made within the peak periods and therefore are unlikely to be large shopping trips, instead more errand type trips, it is assumed that 75% of the existing trips become internal following the implementation of the development. The remaining 25% it is acknowledged will continue to route to neighbouring areas such as Verwood or Fordingbridge for more niche retail/personal business trips.

10.12 The resulting trip generation split across internalised and external trips is shown within **Table 25**.

Unit Type	AM Peak (0800-0900)		PM Peak (1700- 1800)	
	Arrivals	Departures	Arrivals	Departures
Internal	21	22	26	27
External	7	22	26	27
Total	28	43	51	53

Table 25: Existing Vehicular Trips – Retail/Personal Business Purpose

Leisure/Recreation

10.13 As set out above, the proposed development will provide a wide range of enhanced leisure facilities including areas of parkland, WTA tennis facilities and a vast array of cycle and leisure routes. As a result of this enhanced accessibility and provision of additional choice of activities, it is assumed that 50% of the existing trips will become internal following the implementation of the development. The remaining 50% it is acknowledged will continue to route to neighbouring areas such as Verwood or Fordingbridge for existing leisure/recreational activities and commitments.

10.14 The resulting trip generation split across internalised and external trips is shown within **Table 26**.

Unit Type	AM Peak (0800-0900)		PM Peak (1700- 1800)	
	Arrivals	Departures	Arrivals	Departures
Internal	3	5	15	16
External	3	5	15	16
Total	6	9	31	32

Table 26: Existing Vehicular Trips – Leisure/Recreation Purpose

Social

10.15 The proposed development will result in an increased population and additional public house and café facilities. Therefore, a small proportion of trips that previously were undertaken for meeting friends and family may not remain within Alderholt when they previously went elsewhere. However, it is acknowledged that this proportion of trips will be low, therefore in the absence of specific data a 10% internalisation factor has been applied, with the remaining 90% of trips continuing to route out of Alderholt as per their current arrangement to areas such as Verwood or Fordingbridge for existing leisure/recreational activities and commitments.

10.16 The resulting trip generation split across internalised and external trips is shown within **Table 27**.

Unit Type	AM Peak (0800-0900)		PM Peak (1700- 1800)	
	Arrivals	Departures	Arrivals	Departures
Internal	0	2	4	4
External	0	19	37	39
Total	0	21	41	43

Table 27: Existing Vehicular Trips – Social Purpose

Total Trip Internalisation for Residential Trips

10.17 Based on the information and methodology set out in the sections above, the following trip generation in terms of existing vehicular trips routing in/out of the existing Alderholt area and subsequent internalisation reductions has been determined and is summarised within **Table 28**.

Unit Type	AM Peak (0800-0900)		PM Peak (1700- 1800)	
	Arrivals	Departures	Arrivals	Departures
Internal				
Employment	7	41	28	7
First Education	22	33	20	0
Middle Education	47	71	21	0
Secondary Education	23	35	0	0
Shopping	21	22	26	27
Leisure	3	5	15	16
Social	0	2	4	4
Sub-Total	**123**	**209**	**114**	**54**
External				
Employment	25	154	107	28
First Education	2	4	2	0
Middle Education	5	8	2	0
Secondary Education	3	4	23	0
Shopping	7	22	26	27
Leisure	3	5	15	16
Social	0	19	37	39
Sub-Total	**46**	**214**	**213**	**110**
Total				
Employment	32	194	135	35
First Education	24	37	22	0
Middle Education	52	79	23	0
Secondary Education	26	39	23	0
Shopping	28	43	51	53
Leisure	6	9	31	32
Social	0	21	41	43
Total	**169**	**423**	**327**	**164**

Table 28: Total Existing Trips Proportioned

10.18 In total the following deductions have been made for the various journey purposes, although it should be noted these proportions are intended as a summary, given the nuances and rationale set out in the sections above.

- Employment 21% internal
- Education- First school 90% internal
- Education- Middle school 90% internal

- Education- Secondary school 90% internal
- Retail/Personal Business 75% internal
- Leisure 50% internal
- Social 10% internal

11. NET IMPACT OF ALDERHOLT

11.1 Based on the above methodology, the net impact of the development on vehicle trips to/from Alderholt has been calculated and shown within **Table 29** below. This has been calculated by subtracting the existing trips currently arriving/departing Alderholt that will as a result of the development remain within Alderholt, from the external trips generated by the proposed development.

Unit Type	AM Peak (0800-0900)		PM Peak (1700- 1800)	
	Arrivals	Departures	Arrivals	Departures
Proposed Development New to Network (External)				
Employment	5	456	366	5
Primary Education	12	21	5	0
Secondary Education	0	0	54	0
Shopping	28	26	35	44
Leisure	12	11	42	53
Social	1	45	103	128
Business Park	188	36	41	176
Total	**246**	**596**	**647**	**405**
Existing Alderholt removed from Network (Internal)				
Employment	7	41	28	7
First Education	22	33	20	0
Middle Education	47	71	21	0
Secondary Education	23	35	0	0
Shopping	21	22	26	27
Leisure	3	5	15	16
Social	0	2	4	4
Sub-Total	**123**	**209**	**114**	**54**
Net Impact				
Employment	-2	416	338	-3
Education	-80	-119	19	0
Retail	7	4	10	17
Leisure	9	7	27	37
Social	0	43	99	124
Business Park	188	36	41	176
Total	**123**	**387**	**533**	**350**
	510		884	

Table 29: Net Impact of the Proposed Development

11.2 **Table 29** above illustrates that following the implementation of the wide and comprehensive range of facilities associated with the proposed development there will be an additional 510 vehicular trips within the AM peak and 884 in the PM peak.

11.3 To put this into context of a typical residential development, Table 30 below illustrates what the vehicular trip generation would be based on vehicular trip rates derived from the TRICS database, without any deductions made to allow for the likely internalisation of trips between land uses.

Unit Type	AM Peak (0800-0900)		PM Peak (1700- 1800)	
	Arrivals	Departures	Arrivals	Departures
1750 Dwellings	252	721	641	285
1ha Employment	200	36	35	165
Total	452	757	676	450
	1209		1126	

Table 30: Comparative Figures For Typical Development

11.4 As can be seen from Table 30 above, the internalisation associated with the proposed development results in substantially less vehicular trips being undertaken, with the development generating 510 trips in the AM peak, rather than a total 1209 trips in the AM. This equates to 58% reduction compared to a typical residential/employment scheme of the above mix. For the PM a similar albeit less dramatic impact is delivered, with the proposed development generating 884 vehicular trips, compared to an otherwise total of 1126, resulting in a reduction of 22% compared to a typical development.

11.5 The above illustrates the significant benefits that the proposed development will have in providing additional homes, a greater range of local facilities for residents within Alderholt, as well as other employment, recreation and connectivity benefits, whilst minimising the increase on the local highway network through appropriately planned and scaled development.

PART D – OTHER CONSIDERATIONS AND CONCLUSIONS

12. POST COVID-19 WORKING FROM HOME FACTOR

12.1 As part of a separate exercise Paul Basham Associates are undertaking work to identify whether there is justification for applying a reduction to housing and employment trips on the basis that working practises and reporting structures have changed as a result of the pandemic. Home working has become more accepted by employers and greater numbers of people are not only permitted but expect flexibility from their employer, choosing to successfully work from home resulting in a relocating to live, rather than to work mentality.

12.2 The research described above is ongoing and any reduction to trip rates will be treated separately and justified accordingly at the appropriate time.

13. SUMMARY AND CONCLUSION

13.1 This Trip Internalisation Report (TIR) has been prepared by Paul Basham Associates and set out to quantify the number of trips that would remain internal to the proposed development and/or Alderholt, given the scale of development and associated facilities and land uses being proposed as part of the scheme.

13.2 This TIR has reviewed the five typical journey purposes in turn and identified what trips may be discounted based on 2011 Census data and professional judgement.

13.3 For the proposed residential development these reductions include 21% of residential trips to places of work being internalised. In addition, 90% of primary school journeys, are internalised through the creation of a larger more established primary school, whilst 0% of secondary journeys are internalised due to there being a larger primary school in Alderholt, but no secondary school. It is also proposed that due to the proposed district centre sports facilities and Alderholt Park, 75% of retail and personal business and 50% of leisure trips are internalised, particularly given that at present Alderholt offers very little in terms of these facilities, and so both proposed and existing residents will benefit from such additions in facilities. Social trips, due to their varied nature and distance travelled are internalised by 10% to account for the increase in options and local population.

13.4 For the proposed employment business park, the same internalisation percentage (of 21%) has been applied for trips to/from the place of employment as has been used for trips to/from the residential areas.

13.5 These external trips have then been assigned to various modes of choice utilising 2011 Census Journey to Work data. The resulting percentage whom it is determined would drive a vehicle is 88%. This figure is typically higher than a figure derived from TRICS and is therefore considered robust as part of this assessment.

13.6 Subsequently similar reductions have been applied to trips identified from existing trips leaving Alderholt. These number of trips have been quantified through detailed ANPR data.

13.7 These existing trips have had reductions applied in the order of 21% for employment purpose trips, 90% for first/middle school education and 90% in the AM only for secondary trips, given the increase in a formal connection to/from Burgate and associated bus and cycle links. Further reductions of 75% for retail trips, and 50% of leisure trips were made given the scale of internal facilities being proposed at the new local centre and adjoining leisure/sports facilities, whilst social trips were reduced by 10%

13.8 As a result of the above reductions the proposed development results in external vehicular trips totalling 246 arrivals and 596 departures in the AM peak hour period (08:00-09:00) and in the PM peak hour period (17:00-18:00) the external vehicular trip generation totals 647 arrivals and 405 departures. However the deduction in existing Alderholt based trips totals a reduction of 123 arrivals and 209 departures in the AM peak hour period (08:00-09:00) and in the PM peak hour period (17:00-18:00) the reductions total 114 arrivals and 54 departures. Therefore, deducting the reduced trips from the network against the proposed external trips results in a net impact of 510 in the AM peak period and 884 in the PM peak period.

13.9 The above therefore illustrates the beneficial impact the proposals will have on the wider Alderholt area in providing widescale development whilst reducing the impact of the proposals on the local highway network, encouraging more sustainable trips and reducing the need for outward travel by car. We would welcome Dorset Council, Hampshire County Council and National Highways England to review the above and confirm they are happy with the methodology and resulting trip generation for the proposals.

Appendix A

Indicative Master Plan

Scott Worsfold Associates
RIBA Chartered Architects

Sketch Master Plan - Neighbourhood B

Alderholt Park, Dorset

SCALE	DATE	AUTHOR	CHK'D
1000 @ A1	April 2022	All	GW

JOB NO.	DRAWING NO.	REV
22-1126	SKL.02	P1

Appendix B

Calculation Reference: AUDIT-247601-210616-0646

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	**SOUTH EAST**		
	HF	HERTFORDSHIRE	1 days
	KC	KENT	1 days
	WS	WEST SUSSEX	2 days
04	**EAST ANGLIA**		
	NF	NORFOLK	1 days
06	**WEST MIDLANDS**		
	ST	STAFFORDSHIRE	1 days
07	**YORKSHIRE & NORTH LINCOLNSHIRE**		
	NE	NORTH EAST LINCOLNSHIRE	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 151 to 918 (units:)
Range Selected by User: 100 to 2000 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 08/10/20

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	3 days
Tuesday	1 days
Wednesday	2 days
Thursday	1 days

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

Selected survey types:

Manual count	7 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town	7

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

Selected Location Sub Categories:

Residential Zone	6
No Sub Category	1

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

Secondary Filtering selection:

Use Class:

C3	7 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:
All Surveys Included
Population within 1 mile:

5,001 to 10,000	3 days
10,001 to 15,000	4 days

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

Population within 5 miles:

5,001 to 25,000	1 days
50,001 to 75,000	2 days
75,001 to 100,000	4 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	4 days
1.6 to 2.0	1 days

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

Travel Plan:

Yes	4 days
No	3 days

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

PTAL Rating:

No PTAL Present	7 days

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

LIST OF SITES relevant to selection parameters

1 **HF-03-A-03** **MIXED HOUSES** **HERTFORDSHIRE**
HARE STREET ROAD
BUNTINGFORD

Edge of Town
Residential Zone
Total No of Dwellings: 160
Survey date: MONDAY 08/07/19 Survey Type: MANUAL

2 **KC-03-A-07** **MIXED HOUSES** **KENT**
RECULVER ROAD
HERNE BAY

Edge of Town
Residential Zone
Total No of Dwellings: 288
Survey date: WEDNESDAY 27/09/17 Survey Type: MANUAL

3 **NE-03-A-02** **SEMI DETACHED & DETACHED** **NORTH EAST LINCOLNSHIRE**
HANOVER WALK
SCUNTHORPE

Edge of Town
No Sub Category
Total No of Dwellings: 432
Survey date: MONDAY 12/05/14 Survey Type: MANUAL

4 **NF-03-A-06** **MIXED HOUSES** **NORFOLK**
BEAUFORT WAY
GREAT YARMOUTH
BRADWELL
Edge of Town
Residential Zone
Total No of Dwellings: 275
Survey date: MONDAY 23/09/19 Survey Type: MANUAL

5 **ST-03-A-07** **DETACHED & SEMI-DETACHED** **STAFFORDSHIRE**
BEACONSIDE
STAFFORD
MARSTON GATE
Edge of Town
Residential Zone
Total No of Dwellings: 248
Survey date: WEDNESDAY 22/11/17 Survey Type: MANUAL

6 **WS-03-A-04** **MIXED HOUSES** **WEST SUSSEX**
HILLS FARM LANE
HORSHAM
BROADBRIDGE HEATH
Edge of Town
Residential Zone
Total No of Dwellings: 151
Survey date: THURSDAY 11/12/14 Survey Type: MANUAL

7 **WS-03-A-11** **MIXED HOUSES** **WEST SUSSEX**
ELLIS ROAD
WEST HORSHAM
S BROADBRIDGE HEATH
Edge of Town
Residential Zone
Total No of Dwellings: 918
Survey date: TUESDAY 02/04/19 Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
ES-03-A-04	Flats

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	353	0.077	7	353	0.289	7	353	0.366
08:00 - 09:00	7	353	0.144	**7**	**353**	**0.412**	**7**	**353**	**0.556**
09:00 - 10:00	7	353	0.138	7	353	0.158	7	353	0.296
10:00 - 11:00	7	353	0.108	7	353	0.140	7	353	0.248
11:00 - 12:00	7	353	0.114	7	353	0.132	7	353	0.246
12:00 - 13:00	7	353	0.150	7	353	0.136	7	353	0.286
13:00 - 14:00	7	353	0.144	7	353	0.146	7	353	0.290
14:00 - 15:00	7	353	0.169	7	353	0.192	7	353	0.361
15:00 - 16:00	7	353	0.283	7	353	0.188	7	353	0.471
16:00 - 17:00	7	353	0.290	7	353	0.170	7	353	0.460
17:00 - 18:00	**7**	**353**	**0.366**	7	353	0.163	7	353	0.529
18:00 - 19:00	7	353	0.317	7	353	0.195	7	353	0.512
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.300			2.321			4.621

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.*

Parameter summary

Trip rate parameter range selected:	151 - 918 (units:)
Survey date date range:	01/01/13 - 08/10/20
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	1

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TAXIS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	353	0.000	7	353	0.000	7	353	0.000
08:00 - 09:00	7	353	0.003	7	353	0.003	7	353	0.006
09:00 - 10:00	7	353	0.002	7	353	0.002	7	353	0.004
10:00 - 11:00	7	353	0.001	7	353	0.001	7	353	0.002
11:00 - 12:00	7	353	0.000	7	353	0.000	7	353	0.000
12:00 - 13:00	7	353	0.000	7	353	0.000	7	353	0.000
13:00 - 14:00	7	353	0.000	7	353	0.000	7	353	0.000
14:00 - 15:00	7	353	0.001	7	353	0.001	7	353	0.002
15:00 - 16:00	**7**	**353**	**0.004**	**7**	**353**	**0.004**	**7**	**353**	**0.008**
16:00 - 17:00	7	353	0.001	7	353	0.002	7	353	0.003
17:00 - 18:00	7	353	0.001	7	353	0.000	7	353	0.001
18:00 - 19:00	7	353	0.000	7	353	0.000	7	353	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.013			0.013			0.026

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	353	0.002	7	353	0.001	7	353	0.003
08:00 - 09:00	7	353	0.001	7	353	0.002	7	353	0.003
09:00 - 10:00	**7**	**353**	**0.003**	7	353	0.001	7	353	0.004
10:00 - 11:00	7	353	0.001	7	353	0.002	7	353	0.003
11:00 - 12:00	7	353	0.001	7	353	0.001	7	353	0.002
12:00 - 13:00	7	353	0.002	**7**	**353**	**0.003**	**7**	**353**	**0.005**
13:00 - 14:00	7	353	0.002	7	353	0.001	7	353	0.003
14:00 - 15:00	7	353	0.002	7	353	0.003	7	353	0.005
15:00 - 16:00	7	353	0.002	7	353	0.002	7	353	0.004
16:00 - 17:00	7	353	0.002	7	353	0.002	7	353	0.004
17:00 - 18:00	7	353	0.002	7	353	0.000	7	353	0.002
18:00 - 19:00	7	353	0.001	7	353	0.002	7	353	0.003
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.021			0.020			0.041

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PSVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	353	0.000	7	353	0.000	7	353	0.000
08:00 - 09:00	**7**	**353**	**0.001**	**7**	**353**	**0.001**	**7**	**353**	**0.002**
09:00 - 10:00	7	353	0.000	7	353	0.000	7	353	0.000
10:00 - 11:00	7	353	0.000	7	353	0.000	7	353	0.000
11:00 - 12:00	7	353	0.000	7	353	0.000	7	353	0.000
12:00 - 13:00	7	353	0.000	7	353	0.000	7	353	0.000
13:00 - 14:00	7	353	0.000	7	353	0.000	7	353	0.000
14:00 - 15:00	7	353	0.000	7	353	0.000	7	353	0.000
15:00 - 16:00	7	353	0.000	7	353	0.000	7	353	0.000
16:00 - 17:00	7	353	0.000	7	353	0.000	7	353	0.000
17:00 - 18:00	7	353	0.000	7	353	0.000	7	353	0.000
18:00 - 19:00	7	353	0.000	7	353	0.000	7	353	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.001			0.001			0.002

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	353	0.004	7	353	0.006	7	353	0.010
08:00 - 09:00	7	353	0.006	**7**	**353**	**0.018**	**7**	**353**	**0.024**
09:00 - 10:00	7	353	0.001	7	353	0.003	7	353	0.004
10:00 - 11:00	7	353	0.001	7	353	0.003	7	353	0.004
11:00 - 12:00	7	353	0.002	7	353	0.001	7	353	0.003
12:00 - 13:00	7	353	0.003	7	353	0.002	7	353	0.005
13:00 - 14:00	7	353	0.002	7	353	0.001	7	353	0.003
14:00 - 15:00	7	353	0.003	7	353	0.001	7	353	0.004
15:00 - 16:00	7	353	0.006	7	353	0.003	7	353	0.009
16:00 - 17:00	7	353	0.009	7	353	0.007	7	353	0.016
17:00 - 18:00	**7**	**353**	**0.012**	7	353	0.007	7	353	0.019
18:00 - 19:00	7	353	0.007	7	353	0.006	7	353	0.013
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.056			0.058			0.114

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	353	0.095	7	353	0.438	7	353	0.533
08:00 - 09:00	7	353	0.183	**7**	**353**	**0.709**	**7**	**353**	**0.892**
09:00 - 10:00	7	353	0.179	7	353	0.233	7	353	0.412
10:00 - 11:00	7	353	0.145	7	353	0.208	7	353	0.353
11:00 - 12:00	7	353	0.155	7	353	0.192	7	353	0.347
12:00 - 13:00	7	353	0.215	7	353	0.187	7	353	0.402
13:00 - 14:00	7	353	0.212	7	353	0.203	7	353	0.415
14:00 - 15:00	7	353	0.241	7	353	0.271	7	353	0.512
15:00 - 16:00	7	353	0.505	7	353	0.257	7	353	0.762
16:00 - 17:00	7	353	0.494	7	353	0.256	7	353	0.750
17:00 - 18:00	**7**	**353**	**0.595**	7	353	0.238	7	353	0.833
18:00 - 19:00	7	353	0.503	7	353	0.310	7	353	0.813
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.522			3.502			7.024

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

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

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

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	353	0.015	7	353	0.028	7	353	0.043
08:00 - 09:00	7	353	0.036	**7**	**353**	**0.106**	**7**	**353**	**0.142**
09:00 - 10:00	7	353	0.025	7	353	0.022	7	353	0.047
10:00 - 11:00	7	353	0.023	7	353	0.023	7	353	0.046
11:00 - 12:00	7	353	0.015	7	353	0.013	7	353	0.028
12:00 - 13:00	7	353	0.017	7	353	0.011	7	353	0.028
13:00 - 14:00	7	353	0.016	7	353	0.023	7	353	0.039
14:00 - 15:00	7	353	0.032	7	353	0.030	7	353	0.062
15:00 - 16:00	**7**	**353**	**0.086**	7	353	0.035	7	353	0.121
16:00 - 17:00	7	353	0.038	7	353	0.017	7	353	0.055
17:00 - 18:00	7	353	0.031	7	353	0.030	7	353	0.061
18:00 - 19:00	7	353	0.047	7	353	0.049	7	353	0.096
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.381			0.387			0.768

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	353	0.002	**7**	**353**	**0.014**	7	353	0.016
08:00 - 09:00	7	353	0.001	7	353	0.013	7	353	0.014
09:00 - 10:00	7	353	0.002	7	353	0.006	7	353	0.008
10:00 - 11:00	7	353	0.002	7	353	0.002	7	353	0.004
11:00 - 12:00	7	353	0.004	7	353	0.005	7	353	0.009
12:00 - 13:00	7	353	0.002	7	353	0.003	7	353	0.005
13:00 - 14:00	7	353	0.004	7	353	0.002	7	353	0.006
14:00 - 15:00	7	353	0.004	7	353	0.004	7	353	0.008
15:00 - 16:00	7	353	0.014	7	353	0.008	**7**	**353**	**0.022**
16:00 - 17:00	7	353	0.009	7	353	0.002	7	353	0.011
17:00 - 18:00	7	353	0.007	7	353	0.002	7	353	0.009
18:00 - 19:00	**7**	**353**	**0.016**	7	353	0.004	7	353	0.020
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.067			0.065			0.132

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	353	0.000	7	353	0.003	7	353	0.003
08:00 - 09:00	7	353	0.000	**7**	**353**	**0.006**	**7**	**353**	**0.006**
09:00 - 10:00	7	353	0.000	7	353	0.002	7	353	0.002
10:00 - 11:00	7	353	0.000	7	353	0.000	7	353	0.000
11:00 - 12:00	7	353	0.000	7	353	0.000	7	353	0.000
12:00 - 13:00	7	353	0.000	7	353	0.000	7	353	0.000
13:00 - 14:00	7	353	0.000	7	353	0.000	7	353	0.000
14:00 - 15:00	7	353	0.001	7	353	0.000	7	353	0.001
15:00 - 16:00	**7**	**353**	**0.003**	7	353	0.001	7	353	0.004
16:00 - 17:00	7	353	0.002	7	353	0.000	7	353	0.002
17:00 - 18:00	7	353	0.002	7	353	0.000	7	353	0.002
18:00 - 19:00	7	353	0.003	7	353	0.001	7	353	0.004
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.011			0.013			0.024

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

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

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

MULTI-MODAL COACH PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	353	0.000	7	353	0.000	7	353	0.000
08:00 - 09:00	7	353	0.000	**7**	**353**	**0.001**	**7**	**353**	**0.001**
09:00 - 10:00	7	353	0.000	7	353	0.000	7	353	0.000
10:00 - 11:00	7	353	0.000	7	353	0.000	7	353	0.000
11:00 - 12:00	7	353	0.000	7	353	0.000	7	353	0.000
12:00 - 13:00	7	353	0.000	7	353	0.000	7	353	0.000
13:00 - 14:00	7	353	0.000	7	353	0.000	7	353	0.000
14:00 - 15:00	7	353	0.000	7	353	0.000	7	353	0.000
15:00 - 16:00	**7**	**353**	**0.000**	7	353	0.000	7	353	0.000
16:00 - 17:00	7	353	0.000	7	353	0.000	7	353	0.000
17:00 - 18:00	7	353	0.000	7	353	0.000	7	353	0.000
18:00 - 19:00	7	353	0.000	7	353	0.000	7	353	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.001			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 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	353	0.002	7	353	0.017	7	353	0.019
08:00 - 09:00	7	353	0.001	**7**	**353**	**0.020**	7	353	0.021
09:00 - 10:00	7	353	0.002	7	353	0.008	7	353	0.010
10:00 - 11:00	7	353	0.002	7	353	0.002	7	353	0.004
11:00 - 12:00	7	353	0.004	7	353	0.006	7	353	0.010
12:00 - 13:00	7	353	0.003	7	353	0.004	7	353	0.007
13:00 - 14:00	7	353	0.004	7	353	0.002	7	353	0.006
14:00 - 15:00	7	353	0.005	7	353	0.004	7	353	0.009
15:00 - 16:00	7	353	0.018	7	353	0.009	**7**	**353**	**0.027**
16:00 - 17:00	7	353	0.012	7	353	0.003	7	353	0.015
17:00 - 18:00	7	353	0.009	7	353	0.003	7	353	0.012
18:00 - 19:00	**7**	**353**	**0.019**	7	353	0.005	7	353	0.024
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.081			0.083			0.164

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	353	0.116	7	353	0.489	7	353	0.605
08:00 - 09:00	7	353	0.227	**7**	**353**	**0.853**	**7**	**353**	**1.080**
09:00 - 10:00	7	353	0.206	7	353	0.266	7	353	0.472
10:00 - 11:00	7	353	0.172	7	353	0.235	7	353	0.407
11:00 - 12:00	7	353	0.176	7	353	0.212	7	353	0.388
12:00 - 13:00	7	353	0.238	7	353	0.204	7	353	0.442
13:00 - 14:00	7	353	0.234	7	353	0.230	7	353	0.464
14:00 - 15:00	7	353	0.281	7	353	0.306	7	353	0.587
15:00 - 16:00	7	353	0.616	7	353	0.305	7	353	0.921
16:00 - 17:00	7	353	0.553	7	353	0.283	7	353	0.836
17:00 - 18:00	**7**	**353**	**0.646**	7	353	0.278	7	353	0.924
18:00 - 19:00	7	353	0.577	7	353	0.371	7	353	0.948
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.042			4.032			8.074

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

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

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

MULTI-MODAL CARS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	353	0.056	7	353	0.232	7	353	0.288
08:00 - 09:00	7	353	0.117	**7**	**353**	**0.324**	**7**	**353**	**0.441**
09:00 - 10:00	7	353	0.093	7	353	0.114	7	353	0.207
10:00 - 11:00	7	353	0.072	7	353	0.099	7	353	0.171
11:00 - 12:00	7	353	0.081	7	353	0.095	7	353	0.176
12:00 - 13:00	7	353	0.109	7	353	0.098	7	353	0.207
13:00 - 14:00	7	353	0.105	7	353	0.105	7	353	0.210
14:00 - 15:00	7	353	0.118	7	353	0.141	7	353	0.259
15:00 - 16:00	7	353	0.212	7	353	0.123	7	353	0.335
16:00 - 17:00	7	353	0.216	7	353	0.121	7	353	0.337
17:00 - 18:00	**7**	**353**	**0.297**	7	353	0.123	7	353	0.420
18:00 - 19:00	7	353	0.253	7	353	0.148	7	353	0.401
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.729			1.723			3.452

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL LGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	353	0.013	**7**	**353**	**0.024**	7	353	0.037
08:00 - 09:00	7	353	0.012	7	353	0.020	7	353	0.032
09:00 - 10:00	7	353	0.021	7	353	0.022	**7**	**353**	**0.043**
10:00 - 11:00	7	353	0.018	7	353	0.017	7	353	0.035
11:00 - 12:00	7	353	0.015	7	353	0.018	7	353	0.033
12:00 - 13:00	7	353	0.014	7	353	0.011	7	353	0.025
13:00 - 14:00	7	353	0.018	7	353	0.018	7	353	0.036
14:00 - 15:00	7	353	0.021	7	353	0.017	7	353	0.038
15:00 - 16:00	7	353	0.020	7	353	0.023	7	353	0.043
16:00 - 17:00	7	353	0.021	7	353	0.016	7	353	0.037
17:00 - 18:00	**7**	**353**	**0.025**	7	353	0.012	7	353	0.037
18:00 - 19:00	7	353	0.015	7	353	0.012	7	353	0.027
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.213			0.210			0.423

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

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

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

MULTI-MODAL MOTOR CYCLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	353	0.000	7	353	0.001	7	353	0.001
08:00 - 09:00	7	353	0.000	**7**	**353**	**0.003**	7	353	0.003
09:00 - 10:00	7	353	0.000	7	353	0.000	7	353	0.000
10:00 - 11:00	7	353	0.000	7	353	0.000	7	353	0.000
11:00 - 12:00	7	353	0.000	7	353	0.000	7	353	0.000
12:00 - 13:00	7	353	0.000	7	353	0.000	7	353	0.000
13:00 - 14:00	7	353	0.000	7	353	0.000	7	353	0.000
14:00 - 15:00	7	353	0.001	7	353	0.000	7	353	0.001
15:00 - 16:00	7	353	0.001	7	353	0.000	7	353	0.001
16:00 - 17:00	**7**	**353**	**0.002**	7	353	0.002	**7**	**353**	**0.004**
17:00 - 18:00	7	353	0.002	7	353	0.001	7	353	0.003
18:00 - 19:00	7	353	0.002	7	353	0.002	7	353	0.004
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.008			0.009			0.017

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 C

Calculation Reference: AUDIT-247601-210720-0700

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
05	**EAST MIDLANDS**		
	LN	LINCOLNSHIRE	1 days
06	**WEST MIDLANDS**		
	WO	WORCESTERSHIRE	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: 2900 to 5000 (units: sqm)
Range Selected by User: 2500 to 15000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 14/10/19

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:

Tuesday	1 days
Thursday	1 days
Friday	2 days

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

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town	3
Neighbourhood Centre (PPS6 Local Centre)	1

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

Selected Location Sub Categories:

Industrial Zone	3
Village	1

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

Secondary Filtering selection:

Use Class:
Not Known 4 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 500m Range:
All Surveys Included
Population within 1 mile:

10,001 to 15,000	3 days
15,001 to 20,000	1 days

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

Population within 5 miles:

50,001 to 75,000	1 days
125,001 to 250,000	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	1 days
1.1 to 1.5	3 days

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

Travel Plan:

No	4 days

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

PTAL Rating:

No PTAL Present	4 days

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

LIST OF SITES relevant to selection parameters

1	**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*
2	**EX-02-B-02**	**BUSINESS PARK**		**ESSEX**
	WYNCOLLS ROAD			
	COLCHESTER			
	SEVERALLS INDUSTRIAL PK			
	Edge of Town			
	Industrial Zone			
	Total Gross floor area:		4083 sqm	
	Survey date: FRIDAY		*18/05/18*	*Survey Type: MANUAL*
3	**LN-02-B-02**	**BUSINESS PARK**		**LINCOLNSHIRE**
	CARDINAL CLOSE			
	LINCOLN			
	Edge of Town			
	Industrial Zone			
	Total Gross floor area:		5000 sqm	
	Survey date: THURSDAY		*25/06/15*	*Survey Type: MANUAL*
4	**WO-02-B-02**	**BUSINESS PARK**		**WORCESTERSHIRE**
	BIRMINGHAM ROAD			
	NEAR BROMSGROVE			
	LICKEY END			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total Gross floor area:		4187 sqm	
	Survey date: TUESDAY		*26/06/18*	*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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	4043	0.705	4	4043	0.130	4	4043	0.835
08:00 - 09:00	**4**	**4043**	**1.998**	4	4043	0.359	**4**	**4043**	**2.357**
09:00 - 10:00	4	4043	0.989	4	4043	0.588	4	4043	1.577
10:00 - 11:00	4	4043	0.649	4	4043	0.625	4	4043	1.274
11:00 - 12:00	4	4043	0.631	4	4043	0.606	4	4043	1.237
12:00 - 13:00	4	4043	0.705	4	4043	0.742	4	4043	1.447
13:00 - 14:00	4	4043	0.792	4	4043	0.717	4	4043	1.509
14:00 - 15:00	4	4043	0.464	4	4043	0.649	4	4043	1.113
15:00 - 16:00	4	4043	0.421	4	4043	0.544	4	4043	0.965
16:00 - 17:00	4	4043	0.519	4	4043	1.435	4	4043	1.954
17:00 - 18:00	4	4043	0.353	**4**	**4043**	**1.651**	4	4043	2.004
18:00 - 19:00	4	4043	0.241	4	4043	0.526	4	4043	0.767
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			8.467			8.572			17.039

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.*

Parameter summary

Trip rate parameter range selected:	2900 - 5000 (units: sqm)
Survey date date range:	01/01/13 - 14/10/19
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS No. Days	ARRIVALS Ave. GFA	ARRIVALS Trip Rate	DEPARTURES No. Days	DEPARTURES Ave. GFA	DEPARTURES Trip Rate	TOTALS No. Days	TOTALS Ave. GFA	TOTALS Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
08:00 - 09:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
09:00 - 10:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
10:00 - 11:00	**4**	**4043**	**0.006**	**4**	**4043**	**0.006**	**4**	**4043**	**0.012**
11:00 - 12:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
12:00 - 13:00	4	4043	0.000	4	4043	0.006	4	4043	0.006
13:00 - 14:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
14:00 - 15:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
15:00 - 16:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
16:00 - 17:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
17:00 - 18:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
18:00 - 19:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.006			0.012			0.018

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

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TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK

MULTI-MODAL OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	4043	0.012	4	4043	0.006	4	4043	0.018
08:00 - 09:00	4	4043	0.037	4	4043	0.037	4	4043	0.074
09:00 - 10:00	**4**	**4043**	**0.049**	**4**	**4043**	**0.043**	**4**	**4043**	**0.092**
10:00 - 11:00	4	4043	0.006	4	4043	0.019	4	4043	0.025
11:00 - 12:00	4	4043	0.031	4	4043	0.037	4	4043	0.068
12:00 - 13:00	4	4043	0.037	4	4043	0.043	4	4043	0.080
13:00 - 14:00	4	4043	0.025	4	4043	0.019	4	4043	0.044
14:00 - 15:00	4	4043	0.000	4	4043	0.006	4	4043	0.006
15:00 - 16:00	4	4043	0.049	4	4043	0.043	4	4043	0.092
16:00 - 17:00	4	4043	0.025	4	4043	0.025	4	4043	0.050
17:00 - 18:00	4	4043	0.000	4	4043	0.012	4	4043	0.012
18:00 - 19:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.271			0.290			0.561

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	4043	0.012	4	4043	0.000	4	4043	0.012
08:00 - 09:00	**4**	**4043**	**0.043**	4	4043	0.000	**4**	**4043**	**0.043**
09:00 - 10:00	4	4043	0.019	4	4043	0.000	4	4043	0.019
10:00 - 11:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
11:00 - 12:00	4	4043	0.012	4	4043	0.012	4	4043	0.024
12:00 - 13:00	4	4043	0.006	4	4043	0.012	4	4043	0.018
13:00 - 14:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
14:00 - 15:00	4	4043	0.006	4	4043	0.006	4	4043	0.012
15:00 - 16:00	4	4043	0.000	4	4043	0.012	4	4043	0.012
16:00 - 17:00	4	4043	0.000	4	4043	0.031	4	4043	0.031
17:00 - 18:00	4	4043	0.000	**4**	**4043**	**0.037**	4	4043	0.037
18:00 - 19:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.098			0.110			0.208

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	4043	0.934	4	4043	0.142	4	4043	1.076
08:00 - 09:00	**4**	**4043**	**2.381**	4	4043	0.458	**4**	**4043**	**2.839**
09:00 - 10:00	4	4043	1.293	4	4043	0.742	4	4043	2.035
10:00 - 11:00	4	4043	0.971	4	4043	0.866	4	4043	1.837
11:00 - 12:00	4	4043	0.946	4	4043	0.798	4	4043	1.744
12:00 - 13:00	4	4043	1.002	4	4043	1.020	4	4043	2.022
13:00 - 14:00	4	4043	1.138	4	4043	1.014	4	4043	2.152
14:00 - 15:00	4	4043	0.656	4	4043	0.952	4	4043	1.608
15:00 - 16:00	4	4043	0.612	4	4043	0.792	4	4043	1.404
16:00 - 17:00	4	4043	0.686	4	4043	2.035	4	4043	2.721
17:00 - 18:00	4	4043	0.476	**4**	**4043**	**2.245**	4	4043	2.721
18:00 - 19:00	4	4043	0.383	4	4043	0.693	4	4043	1.076
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			11.478			11.757			23.235

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	4043	0.037	4	4043	0.043	4	4043	0.080
08:00 - 09:00	4	4043	0.124	4	4043	0.062	4	4043	0.186
09:00 - 10:00	4	4043	0.043	4	4043	0.025	4	4043	0.068
10:00 - 11:00	4	4043	0.031	4	4043	0.043	4	4043	0.074
11:00 - 12:00	4	4043	0.012	4	4043	0.043	4	4043	0.055
12:00 - 13:00	4	4043	0.056	4	4043	0.093	4	4043	0.149
13:00 - 14:00	**4**	**4043**	**0.161**	**4**	**4043**	**0.124**	**4**	**4043**	**0.285**
14:00 - 15:00	4	4043	0.031	4	4043	0.056	4	4043	0.087
15:00 - 16:00	4	4043	0.031	4	4043	0.019	4	4043	0.050
16:00 - 17:00	4	4043	0.049	4	4043	0.068	4	4043	0.117
17:00 - 18:00	4	4043	0.080	4	4043	0.068	4	4043	0.148
18:00 - 19:00	4	4043	0.031	4	4043	0.031	4	4043	0.062
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.686			0.675			1.361

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 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	4043	0.019	4	4043	0.000	4	4043	0.019
08:00 - 09:00	**4**	**4043**	**0.155**	4	4043	0.000	4	4043	0.155
09:00 - 10:00	4	4043	0.031	4	4043	0.000	4	4043	0.031
10:00 - 11:00	4	4043	0.031	4	4043	0.000	4	4043	0.031
11:00 - 12:00	4	4043	0.000	4	4043	0.019	4	4043	0.019
12:00 - 13:00	4	4043	0.049	4	4043	0.006	4	4043	0.055
13:00 - 14:00	4	4043	0.056	4	4043	0.037	4	4043	0.093
14:00 - 15:00	4	4043	0.012	4	4043	0.031	4	4043	0.043
15:00 - 16:00	4	4043	0.000	4	4043	0.006	4	4043	0.006
16:00 - 17:00	4	4043	0.006	4	4043	0.068	4	4043	0.074
17:00 - 18:00	4	4043	0.031	**4**	**4043**	**0.173**	**4**	**4043**	**0.204**
18:00 - 19:00	4	4043	0.006	4	4043	0.025	4	4043	0.031
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.396			0.365			0.761

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 RAIL PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	4043	0.006	4	4043	0.000	4	4043	0.006
08:00 - 09:00	**4**	**4043**	**0.019**	4	4043	0.000	**4**	**4043**	**0.019**
09:00 - 10:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
10:00 - 11:00	4	4043	0.006	4	4043	0.000	4	4043	0.006
11:00 - 12:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
12:00 - 13:00	4	4043	0.006	4	4043	0.000	4	4043	0.006
13:00 - 14:00	4	4043	0.000	4	4043	0.006	4	4043	0.006
14:00 - 15:00	4	4043	0.000	4	4043	0.006	4	4043	0.006
15:00 - 16:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
16:00 - 17:00	4	4043	0.000	4	4043	0.006	4	4043	0.006
17:00 - 18:00	4	4043	0.000	**4**	**4043**	**0.019**	4	4043	0.019
18:00 - 19:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.037			0.037			0.074

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	4043	0.025	4	4043	0.000	4	4043	0.025
08:00 - 09:00	**4**	**4043**	**0.173**	4	4043	0.000	4	4043	0.173
09:00 - 10:00	4	4043	0.031	4	4043	0.000	4	4043	0.031
10:00 - 11:00	4	4043	0.037	4	4043	0.000	4	4043	0.037
11:00 - 12:00	4	4043	0.000	4	4043	0.019	4	4043	0.019
12:00 - 13:00	4	4043	0.056	4	4043	0.006	4	4043	0.062
13:00 - 14:00	4	4043	0.056	4	4043	0.043	4	4043	0.099
14:00 - 15:00	4	4043	0.012	4	4043	0.037	4	4043	0.049
15:00 - 16:00	4	4043	0.000	4	4043	0.006	4	4043	0.006
16:00 - 17:00	4	4043	0.006	4	4043	0.074	4	4043	0.080
17:00 - 18:00	4	4043	0.031	**4**	**4043**	**0.192**	**4**	**4043**	**0.223**
18:00 - 19:00	4	4043	0.006	4	4043	0.025	4	4043	0.031
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.433			0.402			0.835

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	4043	1.008	4	4043	0.186	4	4043	1.194
08:00 - 09:00	**4**	**4043**	**2.721**	4	4043	0.519	**4**	**4043**	**3.240**
09:00 - 10:00	4	4043	1.385	4	4043	0.767	4	4043	2.152
10:00 - 11:00	4	4043	1.039	4	4043	0.909	4	4043	1.948
11:00 - 12:00	4	4043	0.971	4	4043	0.872	4	4043	1.843
12:00 - 13:00	4	4043	1.119	4	4043	1.132	4	4043	2.251
13:00 - 14:00	4	4043	1.354	4	4043	1.181	4	4043	2.535
14:00 - 15:00	4	4043	0.705	4	4043	1.051	4	4043	1.756
15:00 - 16:00	4	4043	0.643	4	4043	0.829	4	4043	1.472
16:00 - 17:00	4	4043	0.742	4	4043	2.208	4	4043	2.950
17:00 - 18:00	4	4043	0.588	**4**	**4043**	**2.542**	4	4043	3.130
18:00 - 19:00	4	4043	0.421	4	4043	0.748	4	4043	1.169
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			12.696			12.944			25.640

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 CARS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	4043	0.625	4	4043	0.080	4	4043	0.705
08:00 - 09:00	**4**	**4043**	**1.744**	4	4043	0.155	**4**	**4043**	**1.899**
09:00 - 10:00	4	4043	0.705	4	4043	0.303	4	4043	1.008
10:00 - 11:00	4	4043	0.340	4	4043	0.278	4	4043	0.618
11:00 - 12:00	4	4043	0.309	4	4043	0.303	4	4043	0.612
12:00 - 13:00	4	4043	0.433	4	4043	0.489	4	4043	0.922
13:00 - 14:00	4	4043	0.513	4	4043	0.433	4	4043	0.946
14:00 - 15:00	4	4043	0.266	4	4043	0.451	4	4043	0.717
15:00 - 16:00	4	4043	0.229	4	4043	0.340	4	4043	0.569
16:00 - 17:00	4	4043	0.346	4	4043	1.231	4	4043	1.577
17:00 - 18:00	4	4043	0.322	**4**	**4043**	**1.509**	4	4043	1.831
18:00 - 19:00	4	4043	0.216	4	4043	0.501	4	4043	0.717
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			6.048			6.073			12.121

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL LGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	4043	0.068	4	4043	0.043	4	4043	0.111
08:00 - 09:00	4	4043	0.204	4	4043	0.161	4	4043	0.365
09:00 - 10:00	4	4043	0.216	4	4043	0.241	4	4043	0.457
10:00 - 11:00	**4**	**4043**	**0.297**	**4**	**4043**	**0.315**	**4**	**4043**	**0.612**
11:00 - 12:00	4	4043	0.284	4	4043	0.266	4	4043	0.550
12:00 - 13:00	4	4043	0.229	4	4043	0.210	4	4043	0.439
13:00 - 14:00	4	4043	0.254	4	4043	0.247	4	4043	0.501
14:00 - 15:00	4	4043	0.198	4	4043	0.192	4	4043	0.390
15:00 - 16:00	4	4043	0.142	4	4043	0.161	4	4043	0.303
16:00 - 17:00	4	4043	0.142	4	4043	0.161	4	4043	0.303
17:00 - 18:00	4	4043	0.031	4	4043	0.130	4	4043	0.161
18:00 - 19:00	4	4043	0.025	4	4043	0.025	4	4043	0.050
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.090			2.152			4.242

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 MOTOR CYCLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
08:00 - 09:00	4	4043	0.006	4	4043	0.000	4	4043	0.006
09:00 - 10:00	**4**	**4043**	**0.012**	4	4043	0.000	4	4043	0.012
10:00 - 11:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
11:00 - 12:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
12:00 - 13:00	4	4043	0.006	4	4043	0.000	4	4043	0.006
13:00 - 14:00	4	4043	0.000	4	4043	0.012	4	4043	0.012
14:00 - 15:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
15:00 - 16:00	4	4043	0.000	4	4043	0.006	4	4043	0.006
16:00 - 17:00	4	4043	0.006	**4**	**4043**	**0.019**	**4**	**4043**	**0.025**
17:00 - 18:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
18:00 - 19:00	4	4043	0.000	4	4043	0.000	4	4043	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.030			0.037			0.067

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 D

Trip Purpose Proportions - AM/PM Arrivals vs Departures

Trips per Purpose & Resuting Proportions

	AM		PM	
Trip Type	TOTAL	%	TOTAL	%
HB - Work/Business	2330	36%	1907	34.9%
HB - Education	2978	46%	776	14.2%
HB - Shopping/Personal Business	829	13%	1152	21.1%
HB - Leisure & Recreation	178	3%	692	12.7%
HB - Visiting Friends/Day Trips	203	3%	935	17.1%
Total	6518	100%	5462	100.0%

Trips Purpose Proportions Arrivals/Departures Manual Assumptions

	AM		
Trip Type	Arrivals	Departures	Total
HB - Work/Business	1%	99%	100%
HB - Education (Primary)	33%	67%	100%
HB - Education (Secondary)	0%	100%	100%
HB - Shopping/Personal Business	50%	50%	100%
HB - Leisure & Recreation	50%	50%	100%
HB - Visiting Friends/Day Trips	1%	99%	100%
Total			

	PM		
Trip Type	Arrivals	Departure:	Total
HB - Work/Business	99%	1%	100%
HB - Education (Primary)	100%	0%	100%
HB - Education (Secondary)	100%	0%	100%
HB - Shopping/Personal Business	50%	50%	100%
HB - Leisure & Recreation	50%	50%	100%
HB - Visiting Friends/Day Trips	50%	50%	100%
Total			

Trips Purpose Portions Arrivals/Departures

Trip Type	Arrivals	%	Departures		Total	
HB - Work/Business	23	**2%**	2307	**44%**	2330	
HB - Education (Primary)	744	**58%**	1488	**28%**	2231	2976
HB - Education (Secondary)	0	**0%**	745	**14%**	745	
HB - Shopping/Personal Business	415	**33%**	415	**8%**	829	
HB - Leisure & Recreation	89	**7%**	89	**2%**	178	
HB - Visiting Friends/Day Trips	2	**0%**	201	**4%**	203	
Total	1273	**100%**	5243	**100%**	6516	
	0.20		0.80		1.00	

Trip Type	Arrivals	%	Departures		Total	
HB - Work/Business	1888	**47%**	19	**1%**	1907	
HB - Education (Primary)	388	**10%**	0	**0%**	388	776
HB - Education (Secondary)	388	**10%**	0	**0%**	388	
HB - Shopping/Personal Business	576	**14%**	576	**41%**	1152	
HB - Leisure & Recreation	346	**9%**	346	**25%**	692	
HB - Visiting Friends/Day Trips	468	**12%**	468	**33%**	935	
Total	4053	**100%**	1409	**100%**	5462	
	0.74		0.26		1.00	

Notes:
Trip Proportion calculated through interrogating journey purpose %s.
Trip Purposes manually assigned a split between ARR and DEP.

Trip Proportions by ARR/DEP calculated through original journey purpose trip numbers/%arrivals to produce number of arrivals. Number of arrivals/total numebr produces % of arrivals per purpose.
For example Work Business Arrival Trip proportion
1% of 2330 trips = 23 trips
same done for other 3 purposes (totalling 1372 arrival trips)
23 arrival trips out of total 1372 trips = 2% arrivals for employment/business

Appendix E

WF01BEW - Location of usual residence and place of work (OA level)

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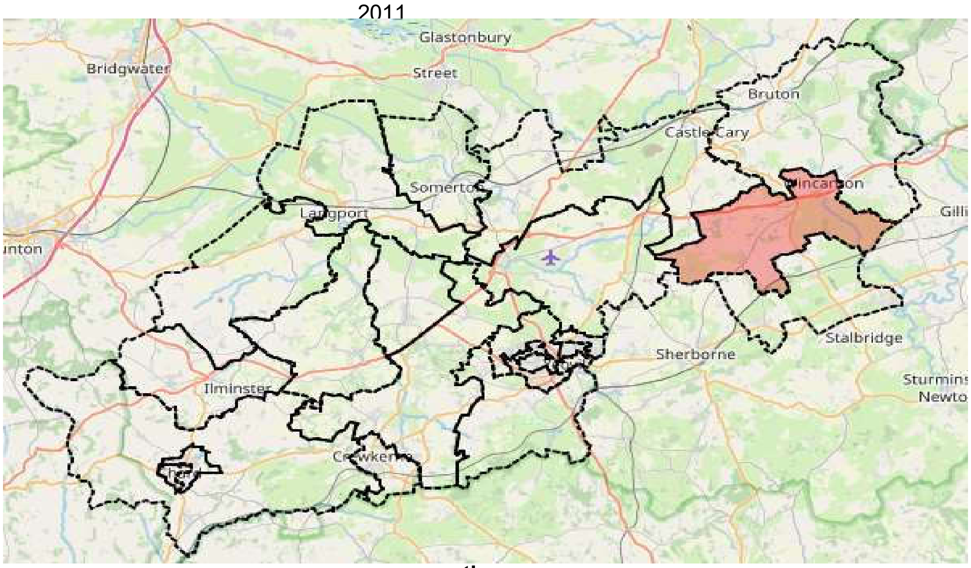
population	All usual residents ages 16 and over in employment the week before the census
units	Persons
date	2011



place of work	currently residing in E02006079 : South Somerset 005
E02006079 : South Somerset 005	1,065
Hartlepool	0
Middlesbrough	0
Redcar and Cleveland	0
Stockton-on-Tees	0
Darlington	0
County Durham	0
Northumberland	0
Gateshead	0
Newcastle upon Tyne	0
North Tyneside	0
South Tyneside	0
Sunderland	0
Halton	0
Warrington	0
Blackburn with Darwen	0
Blackpool	0
Cheshire East	0
Cheshire West and Chester	0
Allerdale	0
Barrow-in-Furness	0
Carlisle	0
Copeland	0
Eden	0

TOTAL:	3,695
% LIVING + WORKING IN S. SOMERSET 005	29%

South Lakeland	0
Burnley	0
Chorley	0
Fylde	0
Hyndburn	0
Lancaster	0
Pendle	0
Preston	1
Ribble Valley	0
Rossendale	0
South Ribble	0
West Lancashire	0
Wyre	0
Bolton	0
Bury	0
Manchester	1
Oldham	0
Rochdale	0
Salford	0
Stockport	0
Tameside	0
Trafford	0
Wigan	0
Knowsley	0
Liverpool	0
St. Helens	0
Sefton	0
Wirral	0
Kingston upon Hull, City of	0
East Riding of Yorkshire	0
North East Lincolnshire	0
North Lincolnshire	0
York	0
Craven	0
Hambleton	0
Harrogate	0
Richmondshire	0
Ryedale	0
Scarborough	0
Selby	0
Barnsley	0
Doncaster	0
Rotherham	0
Sheffield	1
Bradford	2
Calderdale	1
Kirklees	0
Leeds	0
Wakefield	1
Derby	0
Leicester	0
Rutland	0
Nottingham	0
Amber Valley	0

Bolsover	0
Chesterfield	0
Derbyshire Dales	0
Erewash	0
High Peak	0
North East Derbyshire	0
South Derbyshire	0
Blaby	0
Charnwood	0
Harborough	1
Hinckley and Bosworth	0
Melton	0
North West Leicestershire	1
Oadby and Wigston	0
Boston	0
East Lindsey	0
Lincoln	0
North Kesteven	0
South Holland	0
South Kesteven	0
West Lindsey	0
Corby	0
Daventry	0
East Northamptonshire	0
Kettering	0
Northampton	0
South Northamptonshire	0
Wellingborough	1
Ashfield	0
Bassetlaw	0
Broxtowe	0
Gedling	0
Mansfield	0
Newark and Sherwood	0
Rushcliffe	0
Herefordshire, County of	1
Telford and Wrekin	0
Stoke-on-Trent	0
Shropshire	1
Cannock Chase	0
East Staffordshire	0
Lichfield	0
Newcastle-under-Lyme	0
South Staffordshire	0
Stafford	0
Staffordshire Moorlands	0
Tamworth	0
North Warwickshire	0
Nuneaton and Bedworth	0
Rugby	0
Stratford-on-Avon	0
Warwick	0
Bromsgrove	0
Malvern Hills	0

Redditch	0
Worcester	0
Wychavon	0
Wyre Forest	0
Birmingham	1
Coventry	0
Dudley	0
Sandwell	0
Solihull	0
Walsall	0
Wolverhampton	0
Peterborough	1
Luton	0
Southend-on-Sea	0
Thurrock	0
Bedford	0
Central Bedfordshire	0
Cambridge	0
East Cambridgeshire	0
Fenland	0
Huntingdonshire	0
South Cambridgeshire	0
Basildon	0
Braintree	0
Brentwood	0
Castle Point	0
Chelmsford	0
Colchester	0
Epping Forest	1
Harlow	0
Maldon	0
Rochford	0
Tendring	0
Uttlesford	0
Broxbourne	0
Dacorum	1
East Hertfordshire	0
Hertsmere	1
North Hertfordshire	0
St Albans	1
Stevenage	0
Three Rivers	0
Watford	0
Welwyn Hatfield	0
Breckland	0
Broadland	0
Great Yarmouth	0
King's Lynn and West Norfolk	0
North Norfolk	0
Norwich	0
South Norfolk	0
Babergh	0
Forest Heath	0
Ipswich	0

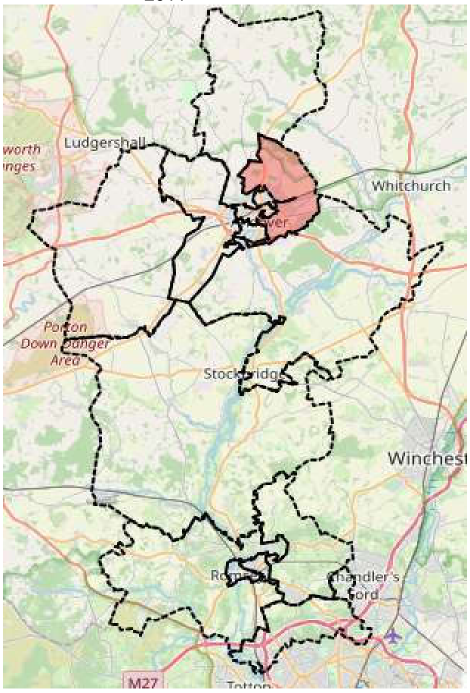
Mid Suffolk	0
St Edmundsbury	0
Suffolk Coastal	0
Waveney	0
Barking and Dagenham	1
Barnet	0
Bexley	0
Brent	0
Bromley	0
Camden	3
Croydon	0
Ealing	1
Enfield	1
Greenwich	0
Hackney	0
Hammersmith and Fulham	1
Haringey	0
Harrow	0
Havering	0
Hillingdon	2
Hounslow	0
Islington	1
Kensington and Chelsea	3
Kingston upon Thames	0
Lambeth	3
Lewisham	0
Merton	0
Newham	0
Redbridge	1
Richmond upon Thames	0
Southwark	0
Sutton	0
Tower Hamlets	4
Waltham Forest	0
Wandsworth	1
Westminster,City of London	10
Medway	0
Bracknell Forest	0
West Berkshire	1
Reading	2
Slough	1
Windsor and Maidenhead	1
Wokingham	1
Milton Keynes	1
Brighton and Hove	1
Portsmouth	3
Southampton	2
Isle of Wight	0
Aylesbury Vale	2
Chiltern	0
South Bucks	0
Wycombe	3
Eastbourne	0
Hastings	0

Lewes	0
Rother	0
Wealden	0
Basingstoke and Deane	3
East Hampshire	0
Eastleigh	2
Fareham	1
Gosport	0
Hart	1
Havant	0
New Forest	2
Rushmoor	0
Test Valley	4
Winchester	3
Ashford	0
Canterbury	0
Dartford	1
Dover	0
Gravesham	0
Maidstone	0
Sevenoaks	0
Shepway	0
Swale	0
Thanet	0
Tonbridge and Malling	1
Tunbridge Wells	1
Cherwell	1
Oxford	0
South Oxfordshire	0
Vale of White Horse	2
West Oxfordshire	0
Elmbridge	1
Epsom and Ewell	0
Guildford	0
Mole Valley	0
Reigate and Banstead	0
Runnymede	2
Spelthorne	0
Surrey Heath	1
Tandridge	0
Waverley	0
Woking	1
Adur	0
Arun	1
Chichester	1
Crawley	1
Horsham	0
Mid Sussex	1
Worthing	0
Bath and North East Somerset	24
Bristol, City of	8
Cornwall,Isles of Scilly	4
Wiltshire	109
North Somerset	6

South Gloucestershire	7
Plymouth	3
Torbay	0
Bournemouth	3
Poole	6
Swindon	1
East Devon	4
Exeter	1
Mid Devon	1
North Devon	1
South Hams	0
Teignbridge	0
Torridge	0
West Devon	0
Christchurch	2
East Dorset	4
North Dorset	220
Purbeck	1
West Dorset	167
Weymouth and Portland	1
Cheltenham	0
Cotswold	3
Forest of Dean	0
Gloucester	0
Stroud	1
Tewkesbury	0
Mendip	112
Sedgemoor	11
South Somerset	1,809
Taunton Deane	18
West Somerset	1
Isle of Anglesey	0
Gwynedd	0
Conwy	0
Denbighshire	0
Flintshire	0
Wrexham	0
Ceredigion	0
Pembrokeshire	1
Carmarthenshire	0
Swansea	0
Neath Port Talbot	0
Bridgend	0
The Vale of Glamorgan	1
Cardiff	1
Rhondda Cynon Taf	0
Caerphilly	0
Blaenau Gwent	0
Torfaen	0
Monmouthshire	0
Newport	0
Powys	0
Merthyr Tydfil	0

WF01BEW - Location of usual residence and place of work (OA level)

population	All usual residents ages 16 and over in employment the week before the census
units	Persons
date	2011



place of work	currently residing in E02004816 : Test Valley 003
E02004814 : Test Valley 001	32
E02004815 : Test Valley 002	97
E02004816 : Test Valley 003	905
E02004817 : Test Valley 004	444
E02004818 : Test Valley 005	411
E02004819 : Test Valley 006	341
E02004820 : Test Valley 007	99
E02004821 : Test Valley 008	76
E02004822 : Test Valley 009	30
E02004823 : Test Valley 010	2
E02004824 : Test Valley 011	22
E02004825 : Test Valley 012	5
E02004826 : Test Valley 013	14
E02004827 : Test Valley 014	2
E02004828 : Test Valley 015	12
Hartlepool	0
Middlesbrough	0
Redcar and Cleveland	0
Stockton-on-Tees	0
Darlington	0
County Durham	0
Northumberland	0
Gateshead	0

TOTAL:	6,333
% LIVING + WORKING IN TV 003:	14%

Newcastle upon Tyne	0
North Tyneside	0
South Tyneside	0
Sunderland	0
Halton	1
Warrington	0
Blackburn with Darwen	0
Blackpool	0
Cheshire East	0
Cheshire West and Chester	0
Allerdale	0
Barrow-in-Furness	0
Carlisle	0
Copeland	0
Eden	0
South Lakeland	1
Burnley	0
Chorley	0
Fylde	0
Hyndburn	0
Lancaster	0
Pendle	0
Preston	0
Ribble Valley	0
Rossendale	0
South Ribble	0
West Lancashire	0
Wyre	0
Bolton	0
Bury	0
Manchester	0
Oldham	0
Rochdale	0
Salford	1
Stockport	0
Tameside	0
Trafford	0
Wigan	0
Knowsley	0
Liverpool	0
St. Helens	0
Sefton	0
Wirral	0
Kingston upon Hull, City of	0
East Riding of Yorkshire	0
North East Lincolnshire	0
North Lincolnshire	0
York	1
Craven	0
Hambleton	0
Harrogate	0
Richmondshire	1
Ryedale	0
Scarborough	0
Selby	1
Barnsley	0
Doncaster	0
Rotherham	0
Sheffield	0
Bradford	1
Calderdale	0
Kirklees	1

Leeds	0
Wakefield	0
Derby	0
Leicester	0
Rutland	0
Nottingham	1
Amber Valley	0
Bolsover	0
Chesterfield	0
Derbyshire Dales	0
Erewash	0
High Peak	0
North East Derbyshire	0
South Derbyshire	0
Blaby	0
Charnwood	0
Harborough	0
Hinckley and Bosworth	0
Melton	0
North West Leicestershire	2
Oadby and Wigston	0
Boston	0
East Lindsey	0
Lincoln	0
North Kesteven	0
South Holland	0
South Kesteven	0
West Lindsey	0
Corby	0
Daventry	0
East Northamptonshire	0
Kettering	0
Northampton	0
South Northamptonshire	0
Wellingborough	0
Ashfield	0
Bassetlaw	0
Broxtowe	0
Gedling	0
Mansfield	0
Newark and Sherwood	0
Rushcliffe	0
Herefordshire, County of	0
Telford and Wrekin	0
Stoke-on-Trent	0
Shropshire	2
Cannock Chase	0
East Staffordshire	0
Lichfield	0
Newcastle-under-Lyme	0
South Staffordshire	0
Stafford	0
Staffordshire Moorlands	0
Tamworth	0
North Warwickshire	0
Nuneaton and Bedworth	0
Rugby	0
Stratford-on-Avon	0
Warwick	1
Bromsgrove	0
Malvern Hills	0
Redditch	0

Worcester	0
Wychavon	0
Wyre Forest	0
Birmingham	4
Coventry	0
Dudley	1
Sandwell	0
Solihull	0
Walsall	0
Wolverhampton	0
Peterborough	0
Luton	0
Southend-on-Sea	0
Thurrock	0
Bedford	0
Central Bedfordshire	0
Cambridge	0
East Cambridgeshire	0
Fenland	0
Huntingdonshire	0
South Cambridgeshire	0
Basildon	0
Braintree	1
Brentwood	0
Castle Point	0
Chelmsford	1
Colchester	0
Epping Forest	0
Harlow	1
Maldon	0
Rochford	0
Tendring	0
Uttlesford	0
Broxbourne	1
Dacorum	2
East Hertfordshire	0
Hertsmere	1
North Hertfordshire	0
St Albans	0
Stevenage	0
Three Rivers	0
Watford	0
Welwyn Hatfield	0
Breckland	0
Broadland	0
Great Yarmouth	0
King's Lynn and West Norfolk	0
North Norfolk	0
Norwich	0
South Norfolk	0
Babergh	0
Forest Heath	0
Ipswich	0
Mid Suffolk	1
St Edmundsbury	0
Suffolk Coastal	1
Waveney	0
Barking and Dagenham	0
Barnet	0
Bexley	0
Brent	0
Bromley	0

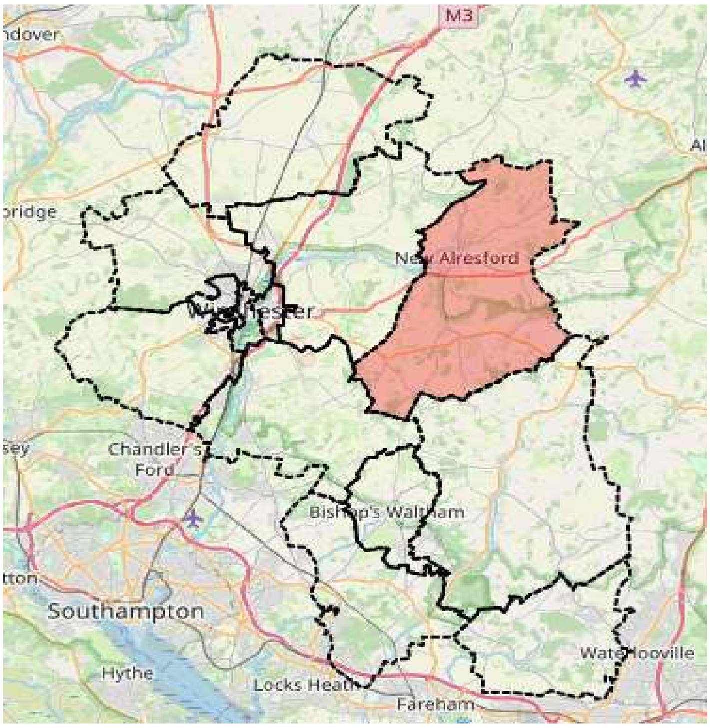
Camden	7
Croydon	0
Ealing	3
Enfield	0
Greenwich	0
Hackney	0
Hammersmith and Fulham	2
Haringey	0
Harrow	0
Havering	0
Hillingdon	8
Hounslow	6
Islington	2
Kensington and Chelsea	0
Kingston upon Thames	0
Lambeth	3
Lewisham	0
Merton	4
Newham	1
Redbridge	0
Richmond upon Thames	2
Southwark	5
Sutton	1
Tower Hamlets	8
Waltham Forest	0
Wandsworth	6
Westminster,City of London	35
Medway	1
Bracknell Forest	17
West Berkshire	118
Reading	10
Slough	5
Windsor and Maidenhead	4
Wokingham	8
Milton Keynes	0
Brighton and Hove	1
Portsmouth	7
Southampton	64
Isle of Wight	0
Aylesbury Vale	1
Chiltern	1
South Bucks	0
Wycombe	1
Eastbourne	0
Hastings	0
Lewes	0
Rother	0
Wealden	0
Basingstoke and Deane	356
East Hampshire	6
Eastleigh	59
Fareham	8
Gosport	1
Hart	25
Havant	5
New Forest	18
Rushmoor	24
Test Valley	2,492
Winchester	162
Ashford	1
Canterbury	0
Dartford	1

Dover	0
Gravesham	0
Maidstone	0
Sevenoaks	0
Shepway	0
Swale	0
Thanet	0
Tonbridge and Malling	0
Tunbridge Wells	0
Cherwell	5
Oxford	2
South Oxfordshire	4
Vale of White Horse	8
West Oxfordshire	1
Elmbridge	3
Epsom and Ewell	0
Guildford	4
Mole Valley	2
Reigate and Banstead	4
Runnymede	3
Spelthorne	2
Surrey Heath	8
Tandridge	2
Waverley	2
Woking	5
Adur	0
Arun	1
Chichester	1
Crawley	2
Horsham	0
Mid Sussex	0
Worthing	3
Bath and North East Somerset	0
Bristol, City of	5
Cornwall,Isles of Scilly	0
Wiltshire	213
North Somerset	0
South Gloucestershire	5
Plymouth	0
Torbay	1
Bournemouth	4
Poole	4
Swindon	10
East Devon	0
Exeter	0
Mid Devon	0
North Devon	0
South Hams	0
Teignbridge	0
Torridge	0
West Devon	0
Christchurch	0
East Dorset	2
North Dorset	6
Purbeck	1
West Dorset	0
Weymouth and Portland	0
Cheltenham	0
Cotswold	0
Forest of Dean	1
Gloucester	0
Stroud	1

Tewkesbury	1
Mendip	3
Sedgemoor	0
South Somerset	2
Taunton Deane	1
West Somerset	0
Isle of Anglesey	0
Gwynedd	0
Conwy	0
Denbighshire	0
Flintshire	0
Wrexham	0
Ceredigion	0
Pembrokeshire	0
Carmarthenshire	0
Swansea	1
Neath Port Talbot	0
Bridgend	0
The Vale of Glamorgan	0
Cardiff	1
Rhondda Cynon Taf	0
Caerphilly	0
Blaenau Gwent	0
Torfaen	0
Monmouthshire	0
Newport	0
Powys	0
Merthyr Tydfil	0

WF01BEW - Location of usual residence and place of work (OA level)

population	All usual residents ages 16 and over in employment the week before the census
units	Persons
date	2011



place of work	currently residing in E02004832 : Winchester 004
E02004832 : Winchester 004	768
Hartlepool	0
Middlesbrough	0
Redcar and Cleveland	0
Stockton-on-Tees	0
Darlington	0
County Durham	0
Northumberland	0
Gateshead	0
Newcastle upon Tyne	0
North Tyneside	0
South Tyneside	0
Sunderland	0
Halton	0
Warrington	0

TOTAL:	3,741
% LIVING + WORKING IN WINCHESTER 004	21%

Blackburn with Darwen	0
Blackpool	0
Cheshire East	0
Cheshire West and Chester	0
Allerdale	0
Barrow-in-Furness	0
Carlisle	0
Copeland	0
Eden	0
South Lakeland	0
Burnley	0
Chorley	0
Fylde	0
Hyndburn	0
Lancaster	0
Pendle	0
Preston	1
Ribble Valley	0
Rossendale	0
South Ribble	0
West Lancashire	0
Wyre	0
Bolton	0
Bury	0
Manchester	2
Oldham	0
Rochdale	0
Salford	0
Stockport	0
Tameside	0
Trafford	0
Wigan	0
Knowsley	0
Liverpool	1
St. Helens	0
Sefton	0
Wirral	0
Kingston upon Hull, City of	0
East Riding of Yorkshire	0
North East Lincolnshire	0
North Lincolnshire	0
York	0
Craven	0
Hambleton	0
Harrogate	0
Richmondshire	0
Ryedale	0
Scarborough	0
Selby	0
Barnsley	0

Doncaster	0
Rotherham	1
Sheffield	0
Bradford	0
Calderdale	0
Kirklees	0
Leeds	0
Wakefield	0
Derby	0
Leicester	0
Rutland	0
Nottingham	0
Amber Valley	0
Bolsover	0
Chesterfield	0
Derbyshire Dales	0
Erewash	0
High Peak	0
North East Derbyshire	0
South Derbyshire	1
Blaby	0
Charnwood	0
Harborough	0
Hinckley and Bosworth	1
Melton	0
North West Leicestershire	1
Oadby and Wigston	0
Boston	0
East Lindsey	0
Lincoln	0
North Kesteven	0
South Holland	0
South Kesteven	1
West Lindsey	0
Corby	0
Daventry	0
East Northamptonshire	0
Kettering	0
Northampton	0
South Northamptonshire	1
Wellingborough	0
Ashfield	0
Bassetlaw	0
Broxtowe	0
Gedling	0
Mansfield	0
Newark and Sherwood	0
Rushcliffe	0
Herefordshire, County of	0
Telford and Wrekin	0

Stoke-on-Trent	0
Shropshire	0
Cannock Chase	0
East Staffordshire	0
Lichfield	0
Newcastle-under-Lyme	0
South Staffordshire	0
Stafford	0
Staffordshire Moorlands	0
Tamworth	0
North Warwickshire	0
Nuneaton and Bedworth	0
Rugby	0
Stratford-on-Avon	0
Warwick	1
Bromsgrove	0
Malvern Hills	0
Redditch	0
Worcester	0
Wychavon	0
Wyre Forest	0
Birmingham	2
Coventry	0
Dudley	0
Sandwell	0
Solihull	0
Walsall	0
Wolverhampton	0
Peterborough	0
Luton	1
Southend-on-Sea	0
Thurrock	0
Bedford	1
Central Bedfordshire	0
Cambridge	0
East Cambridgeshire	1
Fenland	0
Huntingdonshire	0
South Cambridgeshire	0
Basildon	1
Braintree	0
Brentwood	0
Castle Point	0
Chelmsford	0
Colchester	3
Epping Forest	0
Harlow	1
Maldon	0
Rochford	0
Tendring	4

Uttlesford	0
Broxbourne	0
Dacorum	0
East Hertfordshire	0
Hertsmere	0
North Hertfordshire	0
St Albans	0
Stevenage	1
Three Rivers	3
Watford	0
Welwyn Hatfield	0
Breckland	0
Broadland	0
Great Yarmouth	0
King's Lynn and West Norfolk	0
North Norfolk	0
Norwich	0
South Norfolk	0
Babergh	0
Forest Heath	0
Ipswich	0
Mid Suffolk	0
St Edmundsbury	0
Suffolk Coastal	2
Waveney	0
Barking and Dagenham	0
Barnet	1
Bexley	0
Brent	0
Bromley	1
Camden	10
Croydon	0
Ealing	2
Enfield	0
Greenwich	2
Hackney	5
Hammersmith and Fulham	3
Haringey	0
Harrow	1
Havering	0
Hillingdon	11
Hounslow	12
Islington	5
Kensington and Chelsea	2
Kingston upon Thames	2
Lambeth	8
Lewisham	0
Merton	3
Newham	0
Redbridge	0

Richmond upon Thames	5
Southwark	10
Sutton	1
Tower Hamlets	9
Waltham Forest	0
Wandsworth	1
Westminster,City of London	78
Medway	1
Bracknell Forest	10
West Berkshire	30
Reading	12
Slough	4
Windsor and Maidenhead	8
Wokingham	7
Milton Keynes	1
Brighton and Hove	1
Portsmouth	33
Southampton	108
Isle of Wight	1
Aylesbury Vale	0
Chiltern	1
South Bucks	2
Wycombe	0
Eastbourne	0
Hastings	0
Lewes	0
Rother	0
Wealden	1
Basingstoke and Deane	182
East Hampshire	301
Eastleigh	110
Fareham	52
Gosport	3
Hart	41
Havant	20
New Forest	21
Rushmoor	46
Test Valley	76
Winchester	1,519
Ashford	0
Canterbury	0
Dartford	0
Dover	0
Gravesham	0
Maidstone	1
Sevenoaks	1
Shepway	0
Swale	0
Thanet	0
Tonbridge and Malling	0

Tunbridge Wells	1
Cherwell	0
Oxford	3
South Oxfordshire	0
Vale of White Horse	4
West Oxfordshire	0
Elmbridge	6
Epsom and Ewell	0
Guildford	24
Mole Valley	1
Reigate and Banstead	2
Runnymede	7
Spelthorne	1
Surrey Heath	16
Tandridge	1
Waverley	39
Woking	8
Adur	0
Arun	0
Chichester	10
Crawley	3
Horsham	2
Mid Sussex	0
Worthing	0
Bath and North East Somerset	1
Bristol, City of	3
Cornwall,Isles of Scilly	1
Wiltshire	20
North Somerset	0
South Gloucestershire	3
Plymouth	0
Torbay	0
Bournemouth	1
Poole	1
Swindon	2
East Devon	0
Exeter	1
Mid Devon	0
North Devon	2
South Hams	2
Teignbridge	0
Torridge	0
West Devon	0
Christchurch	2
East Dorset	4
North Dorset	0
Purbeck	0
West Dorset	0
Weymouth and Portland	0
Cheltenham	0

Cotswold	1
Forest of Dean	0
Gloucester	0
Stroud	0
Tewkesbury	0
Mendip	1
Sedgemoor	1
South Somerset	3
Taunton Deane	0
West Somerset	0
Isle of Anglesey	0
Gwynedd	0
Conwy	0
Denbighshire	0
Flintshire	0
Wrexham	0
Ceredigion	0
Pembrokeshire	0
Carmarthenshire	0
Swansea	0
Neath Port Talbot	0
Bridgend	0
The Vale of Glamorgan	0
Cardiff	0
Rhondda Cynon Taf	0
Caerphilly	0
Blaenau Gwent	0
Torfaen	0
Monmouthshire	0
Newport	0
Powys	0
Merthyr Tydfil	0

Appendix F

MSOA	ublic Transpo	Walking	Cycling	Vehicle Driver	Vehicle Passenger	Total
East Dorset 001 (Alderholt)	3%	5%	2%	86%	4%	100%
New Forest 001 (Fordingbridge)	4%	10%	3%	78%	5%	100%
Average??	4%	8%	3%	82%	5%	100%

WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)
ONS Crown Copyright Reserved [from Nomis on 20 July 2021]
Population All usual residents aged 16 and over in employment the week before the census
Units : Persons
Date : 2011
usual resid E02004243 : East Dorset 001 (2011 super output area - middle layer)

place of wo	All categor	Work mair	Undergrou	Train	Bus, minib	Taxi	Motorcycl	Driving a c	Passenger	Bicycle	On foot	Other method of travel to work
Total	2422	0	5	22	33	4	18	2067	101	47	118	7
	100%	0%	0%	1%	1%	0%	1%	85%	4%	2%	5%	0%
	All	Public Trar	Walk	Cycle	Driver	Passenger						
	100%	3%	5%	2%	86%	4%						

WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)
ONS Crown Copyright Reserved [from Nomis on 20 July 2021]
Population All usual residents aged 16 and over in employment the week before the census
Units : Persons
Date : 2011
usual resid E02004779 : New Forest 001 (2011 super output area - middle layer)

place of wo	All categor	Work mair	Undergrou	Train	Bus, minib	Taxi	Motorcycle	Driving a c	Passenger	Bicycle	On foot	Other method of travel to work
Total	3753	0	8	60	70	2	30	2912	181	108	370	12
	100%	0%	0%	1%	1%	0%	1%	85%	4%	2%	5%	0%
	All	Public Trar	Walk	Cycle	Driver	Passenger						
	100%	4%	10%	3%	78%	5%						

Appendix G

FLOW	1 EB						1 WB					
Time	Car	LGV	OGV1	OGV2	Bus	Total	Car	LGV	OGV1	OGV2	Bus	Total
07:00 - 07:15	4	1	0	0	0	**5**	12	3	0	0	0	**15**
07:15 - 07:30	10	3	1	0	1	**15**	18	7	1	0	0	**26**
07:30 - 07:45	10	2	1	0	1	**14**	16	1	1	0	0	**18**
07:45 - 08:00	7	0	0	0	0	**7**	29	1	1	0	0	**31**
08:00 - 08:15	10	2	0	0	0	**12**	21	6	0	0	0	**27**
08:15 - 08:30	11	2	1	0	0	**14**	24	6	0	0	1	**31**
08:30 - 08:45	13	6	0	0	0	**19**	29	5	0	0	0	**34**
08:45 - 09:00	20	5	0	0	0	**25**	25	2	1	0	2	**30**
09:00 - 09:15	18	0	1	0	0	**19**	9	3	0	0	0	**12**
09:15 - 09:30	14	2	1	0	0	**17**	5	4	0	0	0	**9**
09:30 - 09:45	13	1	1	0	0	**15**	7	1	1	0	0	**9**
09:45 - 10:00	12	0	0	0	0	**12**	8	3	1	0	0	**12**
PM total	**142**	**24**	**6**	**0**	**2**	**174**	**203**	**42**	**6**	**0**	**3**	**254**
16:00 - 16:15	15	3	0	0	0	**18**	12	3	4	0	0	**19**
16:15 - 16:30	19	6	0	0	0	**25**	8	1	0	0	1	**10**
16:30 - 16:45	24	9	0	2	0	**35**	11	4	0	0	0	**15**
16:45 - 17:00	18	1	1	0	0	**20**	4	3	0	0	0	**7**
17:00 - 17:15	33	4	0	0	0	**37**	13	2	0	0	0	**15**
17:15 - 17:30	20	4	0	0	0	**24**	4	3	0	0	0	**7**
17:30 - 17:45	15	0	0	0	0	**15**	10	2	0	0	0	**12**
17:45 - 18:00	15	3	0	0	0	**18**	6	4	0	0	0	**10**
18:00 - 18:15	11	2	0	0	0	**13**	13	2	0	0	0	**15**
18:15 - 18:30	6	1	1	0	0	**8**	9	0	0	0	0	**9**
18:30 - 18:45	9	0	0	0	0	**9**	5	1	1	0	0	**7**
18:45 - 19:00	2	1	0	0	0	**3**	4	3	0	0	0	**7**
PM total	**187**	**34**	**2**	**2**	**0**	**225**	**99**	**28**	**5**	**0**	**1**	**133**

INBOUND MATCHES	1 EB						1 WB					
Time	Car	LGV	OGV1	OGV2	Bus	Total	Car	LGV	OGV1	OGV2	Bus	Total
07:00 - 07:15	1	1	0	0	0	**2**						**0**
07:15 - 07:30	4	2	1	0	1	**8**						**0**
07:30 - 07:45	7	0	1	0	0	**8**						**0**
07:45 - 08:00	6	0	0	0	0	**6**						**0**
08:00 - 08:15	9	1	0	0	0	**10**						**0**
08:15 - 08:30	5	2	0	0	0	**7**						**0**
08:30 - 08:45	8	3	0	0	0	**11**						**0**
08:45 - 09:00	10	2	0	0	0	**12**						**0**
09:00 - 09:15	9	0	1	0	0	**10**						**0**
09:15 - 09:30	7	0	0	0	0	**7**						**0**
09:30 - 09:45	9	0	1	0	0	**10**						**0**
09:45 - 10:00	4	0	0	0	0	**4**						**0**
PM total	**79**	**11**	**4**	**0**	**1**	**95**	**0**	**0**	**0**	**0**	**0**	**0**
16:00 - 16:15	8	3	0	0	0	**11**						**0**
16:15 - 16:30	10	3	0	0	0	**13**						**0**
16:30 - 16:45	9	5	0	0	0	**14**						**0**
16:45 - 17:00	8	0	1	0	0	**9**						**0**
17:00 - 17:15	20	3	0	0	0	**23**						**0**
17:15 - 17:30	13	3	0	0	0	**16**						**0**
17:30 - 17:45	10	0	0	0	0	**10**						**0**
17:45 - 18:00	10	2	0	0	0	**12**						**0**
18:00 - 18:15	3	0	0	0	0	**3**						**0**
18:15 - 18:30	1	0	1	0	0	**2**						**0**
18:30 - 18:45	3	0	0	0	0	**3**						**0**
18:45 - 19:00	1	0	0	0	0	**1**						**0**
PM total	**96**	**19**	**2**	**0**	**0**	**117**	**0**	**0**	**0**	**0**	**0**	**0**

MATCH RATE	1 EB						1 WB					
Time	**Car**	**LGV**	**OGV1**	**OGV2**	**Bus**	**Total**	**Car**	**LGV**	**OGV1**	**OGV2**	**Bus**	**Total**
07:00 - 07:15	25%	100%	-	-	-	**40%**						**0**
07:15 - 07:30	40%	67%	100%	-	100%	**53%**						**0**
07:30 - 07:45	70%	0%	100%	-	0%	**57%**						**0**
07:45 - 08:00	86%	-	-	-	-	**86%**						**0**
08:00 - 08:15	90%	50%	-	-	-	**83%**						**0**
08:15 - 08:30	45%	100%	0%	-	-	**50%**						**0**
08:30 - 08:45	62%	50%	-	-	-	**58%**						**0**
08:45 - 09:00	50%	40%	-	-	-	**48%**						**0**
09:00 - 09:15	50%	-	100%	-	-	**53%**						**0**
09:15 - 09:30	50%	0%	0%	-	-	**41%**						**0**
09:30 - 09:45	69%	0%	100%	-	-	**67%**						**0**
09:45 - 10:00	33%	-	-	-	-	**33%**						**0**
PM total	**56%**	**46%**	**67%**	**-**	**50%**	**55%**	**0**	**0**	**0**	**0**	**0**	**0**
16:00 - 16:15	53%	100%	-	-	-	**61%**						**0**
16:15 - 16:30	53%	50%	-	-	-	**52%**						**0**
16:30 - 16:45	38%	56%	-	0%	-	**40%**						**0**
16:45 - 17:00	44%	0%	100%	-	-	**45%**						**0**
17:00 - 17:15	61%	75%	-	-	-	**62%**						**0**
17:15 - 17:30	65%	75%	-	-	-	**67%**						**0**
17:30 - 17:45	67%	-	-	-	-	**67%**						**0**
17:45 - 18:00	67%	67%	-	-	-	**67%**						**0**
18:00 - 18:15	27%	0%	-	-	-	**23%**						**0**
18:15 - 18:30	17%	0%	100%	-	-	**25%**						**0**
18:30 - 18:45	33%	-	-	-	-	**33%**						**0**
18:45 - 19:00	50%	0%	-	-	-	**33%**						**0**
PM total	**51%**	**56%**	**100%**	**0%**	**-**	**52%**	**0**	**0**	**0**	**0**	**0**	**0**

2 EB						2 WB					
Car	**LGV**	**OGV1**	**OGV2**	**Bus**	**Total**	**Car**	**LGV**	**OGV1**	**OGV2**	**Bus**	**Total**
32	2	0	0	0	**34**	9	2	1	0	0	**12**
36	8	1	0	1	**46**	13	5	0	0	0	**18**
22	19	0	0	1	**42**	18	6	1	0	0	**25**
58	10	2	1	1	**72**	25	4	1	0	0	**30**
69	8	0	0	0	**77**	24	2	0	0	0	**26**
41	2	1	0	0	**44**	31	8	0	1	1	**41**
61	7	1	0	0	**69**	35	5	2	1	0	**43**
55	3	2	0	0	**60**	32	5	1	0	1	**39**
33	5	3	0	0	**41**	22	6	0	0	0	**28**
33	5	2	0	0	**40**	19	3	0	1	0	**23**
31	4	0	0	0	**35**	21	2	1	0	0	**24**
27	7	2	0	0	**36**	21	3	1	0	0	**25**
498	**80**	**14**	**1**	**3**	**596**	**270**	**51**	**8**	**3**	**2**	**334**
23	5	0	0	0	**28**	53	7	0	0	0	**60**
35	5	0	0	0	**40**	56	5	0	1	1	**63**
20	5	0	0	0	**25**	73	7	0	0	0	**80**
33	3	1	0	0	**37**	53	6	0	0	0	**59**
32	2	0	0	0	**34**	79	3	0	0	0	**82**
39	0	0	0	0	**39**	60	1	2	0	0	**63**
28	3	0	0	0	**31**	65	1	1	0	0	**67**
23	2	1	0	0	**26**	38	0	0	0	0	**38**
24	1	0	0	0	**25**	45	0	0	0	0	**45**
31	1	0	0	0	**32**	28	0	0	0	0	**28**
15	0	0	0	0	**15**	24	0	1	0	0	**25**
20	0	0	0	0	**20**	22	0	0	0	0	**22**
323	**27**	**2**	**0**	**0**	**352**	**596**	**30**	**4**	**1**	**1**	**632**

2 EB						2 WB					
Car	**LGV**	**OGV1**	**OGV2**	**Bus**	**Total**	**Car**	**LGV**	**OGV1**	**OGV2**	**Bus**	**Total**
					0	6	2	1	0	0	**9**
					0	10	4	0	0	0	**14**
					0	15	5	1	0	0	**21**
					0	23	3	1	0	0	**27**
					0	19	1	0	0	0	**20**
					0	20	4	0	1	1	**26**
					0	22	4	2	1	0	**29**
					0	20	4	1	0	1	**26**
					0	11	5	0	0	0	**16**
					0	10	3	0	1	0	**14**
					0	12	1	1	0	0	**14**
					0	12	0	1	0	0	**13**
0	**0**	**0**	**0**	**0**	**0**	**180**	**36**	**8**	**3**	**2**	**229**
					0	26	7	0	0	0	**33**
					0	32	4	0	1	1	**38**
					0	41	6	0	0	0	**47**
					0	25	5	0	0	0	**30**
					0	41	3	0	0	0	**44**
					0	28	1	2	0	0	**31**
					0	34	1	1	0	0	**36**
					0	12	0	0	0	0	**12**
					0	16	0	0	0	0	**16**
					0	9	0	0	0	0	**9**
					0	8	0	1	0	0	**9**
					0	9	0	0	0	0	**9**
0	**0**	**0**	**0**	**0**	**0**	**281**	**27**	**4**	**1**	**1**	**314**

2 EB						2 WB					
Car	LGV	OGV1	OGV2	Bus	Total	Car	LGV	OGV1	OGV2	Bus	Total
					0	67%	100%	100%	-	-	**75%**
					0	77%	80%	-	-	-	**78%**
					0	83%	83%	100%	-	-	**84%**
					0	92%	75%	100%	-	-	**90%**
					0	79%	50%	-	-	-	**77%**
					0	65%	50%	-	100%	100%	**63%**
					0	63%	80%	100%	100%	-	**67%**
					0	63%	80%	100%	-	100%	**67%**
					0	50%	83%	-	-	-	**57%**
					0	53%	100%	-	100%	-	**61%**
					0	57%	50%	100%	-	-	**58%**
					0	57%	0%	100%	-	-	**52%**
0	**0**	**0**	**0**	**0**	**0**	**67%**	**71%**	**100%**	**100%**	**100%**	**69%**
					0	49%	100%	-	-	-	**55%**
					0	57%	80%	-	100%	100%	**60%**
					0	56%	86%	-	-	-	**59%**
					0	47%	83%	-	-	-	**51%**
					0	52%	100%	-	-	-	**54%**
					0	47%	100%	100%	-	-	**49%**
					0	52%	100%	100%	-	-	**54%**
					0	32%	-	-	-	-	**32%**
					0	36%	-	-	-	-	**36%**
					0	32%	-	-	-	-	**32%**
					0	33%	-	100%	-	-	**36%**
					0	41%	-	-	-	-	**41%**
0	**0**	**0**	**0**	**0**	**0**	**47%**	**90%**	**100%**	**100%**	**100%**	**50%**

3 EB						3 WB					
Car	**LGV**	**OGV1**	**OGV2**	**Bus**	**Total**	**Car**	**LGV**	**OGV1**	**OGV2**	**Bus**	**Total**
9	1	0	0	0	**10**	17	2	1	0	0	**20**
25	6	1	0	1	**33**	18	11	0	0	1	**30**
13	9	2	0	0	**24**	30	6	1	1	2	**40**
50	6	1	0	2	**59**	47	7	1	0	0	**55**
40	6	0	0	0	**46**	41	4	1	0	2	**48**
31	5	1	0	0	**37**	41	6	1	1	0	**49**
45	6	0	0	0	**51**	37	8	2	0	0	**47**
34	4	1	0	0	**39**	40	5	0	1	0	**46**
31	6	2	0	0	**39**	27	8	0	0	0	**35**
25	5	0	0	0	**30**	21	5	0	1	0	**27**
19	4	2	0	0	**25**	28	3	1	0	0	**32**
20	6	0	0	0	**26**	23	1	2	0	0	**26**
342	**64**	**10**	**0**	**3**	**419**	**370**	**66**	**10**	**4**	**5**	**455**
33	9	1	0	1	**44**	31	10	0	0	1	**42**
39	7	0	0	0	**46**	38	7	0	0	0	**45**
45	0	0	0	0	**45**	56	7	0	0	0	**63**
33	2	0	0	0	**35**	44	7	0	0	0	**51**
50	1	0	0	0	**51**	48	4	0	0	0	**52**
41	0	0	0	0	**41**	39	3	2	0	1	**45**
25	4	1	0	0	**30**	43	6	0	0	0	**49**
30	2	0	0	0	**32**	25	2	0	0	0	**27**
39	0	0	0	0	**39**	29	4	0	0	0	**33**
25	0	1	0	0	**26**	25	1	1	0	0	**27**
21	0	0	0	0	**21**	17	0	1	0	0	**18**
21	0	0	0	0	**21**	36	0	0	0	0	**36**
402	**25**	**3**	**0**	**1**	**431**	**431**	**51**	**4**	**0**	**2**	**488**

3 EB						3 WB					
Car	**LGV**	**OGV1**	**OGV2**	**Bus**	**Total**	**Car**	**LGV**	**OGV1**	**OGV2**	**Bus**	**Total**
8	1	0	0	0	**9**						**0**
16	5	1	0	0	**22**						**0**
9	9	2	0	0	**20**						**0**
49	6	1	0	2	**58**						**0**
32	6	0	0	0	**38**						**0**
23	5	1	0	0	**29**						**0**
40	3	0	0	0	**43**						**0**
23	4	1	0	0	**28**						**0**
23	5	2	0	0	**30**						**0**
20	4	0	0	0	**24**						**0**
13	4	2	0	0	**19**						**0**
9	2	0	0	0	**11**						**0**
265	**54**	**10**	**0**	**2**	**331**	**0**	**0**	**0**	**0**	**0**	**0**
12	5	1	0	0	**18**						**0**
18	4	0	0	0	**22**						**0**
25	0	0	0	0	**25**						**0**
12	2	0	0	0	**14**						**0**
29	1	0	0	0	**30**						**0**
17	0	0	0	0	**17**						**0**
12	4	0	0	0	**16**						**0**
12	2	0	0	0	**14**						**0**
25	0	0	0	0	**25**						**0**
13	0	1	0	0	**14**						**0**
11	0	0	0	0	**11**						**0**
5	0	0	0	0	**5**						**0**
191	**18**	**2**	**0**	**0**	**211**	**0**	**0**	**0**	**0**	**0**	**0**

3 EB						3 WB					
Car	LGV	OGV1	OGV2	Bus	Total	Car	LGV	OGV1	OGV2	Bus	Total
89%	100%	-	-	-	**90%**						**0**
64%	83%	100%	-	0%	**67%**						**0**
69%	100%	100%	-	-	**83%**						**0**
98%	100%	100%	-	100%	**98%**						**0**
80%	100%	-	-	-	**83%**						**0**
74%	100%	100%	-	-	**78%**						**0**
89%	50%	-	-	-	**84%**						**0**
68%	100%	100%	-	-	**72%**						**0**
74%	83%	100%	-	-	**77%**						**0**
80%	80%	-	-	-	**80%**						**0**
68%	100%	100%	-	-	**76%**						**0**
45%	33%	-	-	-	**42%**						**0**
77%	**84%**	**100%**	**-**	**67%**	**79%**	**0**	**0**	**0**	**0**	**0**	**0**
36%	56%	100%	-	0%	**41%**						**0**
46%	57%	-	-	-	**48%**						**0**
56%	-	-	-	-	**56%**						**0**
36%	100%	-	-	-	**40%**						**0**
58%	100%	-	-	-	**59%**						**0**
41%	-	-	-	-	**41%**						**0**
48%	100%	0%	-	-	**53%**						**0**
40%	100%	-	-	-	**44%**						**0**
64%	-	-	-	-	**64%**						**0**
52%	-	100%	-	-	**54%**						**0**
52%	-	-	-	-	**52%**						**0**
24%	-	-	-	-	**24%**						**0**
48%	**72%**	**67%**	**-**	**0%**	**49%**	**0**	**0**	**0**	**0**	**0**	**0**

4 NB						4 SB					
Car	LGV	OGV1	OGV2	Bus	Total	Car	LGV	OGV1	OGV2	Bus	Total
8	1	1	0	1	**11**	25	3	0	0	0	**28**
11	5	1	0	0	**17**	37	3	0	0	1	**41**
22	2	0	1	1	**26**	39	9	2	0	0	**50**
19	4	1	0	0	**24**	47	8	1	0	0	**56**
21	7	2	0	0	**30**	47	4	0	0	0	**51**
18	6	0	1	0	**25**	44	12	0	0	0	**56**
20	4	0	0	0	**24**	35	5	0	0	0	**40**
16	6	0	0	0	**22**	31	6	1	0	0	**38**
19	6	1	0	0	**26**	33	3	1	0	0	**37**
6	4	2	0	0	**12**	25	5	1	1	0	**32**
8	8	2	0	0	**18**	30	0	0	0	0	**30**
13	4	2	0	0	**19**	25	3	0	0	0	**28**
181	**57**	**12**	**2**	**2**	**254**	**418**	**61**	**6**	**1**	**1**	**487**
31	7	2	0	0	**40**	22	6	0	0	0	**28**
29	2	0	0	0	**31**	24	5	0	1	0	**30**
22	4	1	0	0	**27**	28	3	1	0	0	**32**
32	6	0	0	0	**38**	22	1	2	0	0	**25**
24	6	1	0	0	**31**	34	5	0	0	0	**39**
38	6	0	0	1	**45**	25	1	0	0	0	**26**
34	7	0	0	0	**41**	23	2	0	0	0	**25**
37	7	2	0	0	**46**	21	0	0	0	0	**21**
38	4	0	0	0	**42**	15	0	1	0	0	**16**
24	5	0	0	0	**29**	14	0	0	0	0	**14**
24	2	0	0	0	**26**	21	0	0	0	0	**21**
25	1	0	0	0	**26**	13	0	0	0	0	**13**
358	**57**	**6**	**0**	**1**	**422**	**262**	**23**	**4**	**1**	**0**	**290**

4 NB						4 SB					
Car	LGV	OGV1	OGV2	Bus	Total	Car	LGV	OGV1	OGV2	Bus	Total
6	1	0	0	1	**8**						**0**
6	3	1	0	0	**10**						**0**
15	1	0	1	1	**18**						**0**
12	2	1	0	0	**15**						**0**
12	7	2	0	0	**21**						**0**
15	4	0	1	0	**20**						**0**
15	3	0	0	0	**18**						**0**
11	4	0	0	0	**15**						**0**
7	4	1	0	0	**12**						**0**
3	1	1	0	0	**5**						**0**
2	5	1	0	0	**8**						**0**
6	3	0	0	0	**9**						**0**
110	**38**	**7**	**2**	**2**	**159**	**0**	**0**	**0**	**0**	**0**	**0**
11	4	2	0	0	**17**						**0**
9	1	0	0	0	**10**						**0**
9	0	0	0	0	**9**						**0**
15	4	0	0	0	**19**						**0**
9	4	0	0	0	**13**						**0**
14	6	0	0	1	**21**						**0**
13	3	0	0	0	**16**						**0**
9	2	1	0	0	**12**						**0**
18	3	0	0	0	**21**						**0**
8	1	0	0	0	**9**						**0**
3	1	0	0	0	**4**						**0**
6	1	0	0	0	**7**						**0**
124	**30**	**3**	**0**	**1**	**158**	**0**	**0**	**0**	**0**	**0**	**0**

4 NB						4 SB					
Car	LGV	OGV1	OGV2	Bus	Total	Car	LGV	OGV1	OGV2	Bus	Total
75%	100%	0%	-	100%	**73%**						**0**
55%	60%	100%	-	-	**59%**						**0**
68%	50%	-	100%	100%	**69%**						**0**
63%	50%	100%	-	-	**63%**						**0**
57%	100%	100%	-	-	**70%**						**0**
83%	67%	-	100%	-	**80%**						**0**
75%	75%	-	-	-	**75%**						**0**
69%	67%	-	-	-	**68%**						**0**
37%	67%	100%	-	-	**46%**						**0**
50%	25%	50%	-	-	**42%**						**0**
25%	63%	50%	-	-	**44%**						**0**
46%	75%	0%	-	-	**47%**						**0**
61%	**67%**	**58%**	**100%**	**100%**	**63%**	**0**	**0**	**0**	**0**	**0**	**0**
35%	57%	100%	-	-	**43%**						**0**
31%	50%	-	-	-	**32%**						**0**
41%	0%	0%	-	-	**33%**						**0**
47%	67%	-	-	-	**50%**						**0**
38%	67%	0%	-	-	**42%**						**0**
37%	100%	-	-	100%	**47%**						**0**
38%	43%	-	-	-	**39%**						**0**
24%	29%	50%	-	-	**26%**						**0**
47%	75%	-	-	-	**50%**						**0**
33%	20%	-	-	-	**31%**						**0**
13%	50%	-	-	-	**15%**						**0**
24%	100%	-	-	-	**27%**						**0**
35%	**53%**	**50%**	**-**	**100%**	**37%**	**0**	**0**	**0**	**0**	**0**	**0**

Appendix H

Trip Purpose Proportions - AM/PM Arrivals vs Departures

Trips per Purpose & Resuting Proportions

	AM		PM	
Trip Type	TOTAL	%	TOTAL	%
HB - Work/Business	2330	36%	1907	35%
HB - Education	2978	46%	776	14%
HB - Shopping/Personal Business	829	13%	1152	21%
HB - Leisure & Recreation	178	3%	692	13%
HB - Visiting Friends/Day Trips	203	3%	935	17%
Total	6518	100%	5462	100%

Trips Purpose Proportions Arrivals/Departures Manual Assumptions

	AM		
Trip Type	Arrivals	Departures	Total
HB - Work/Business	20%	80%	100%
HB - Education (First)	50%	50%	100%
HB - Education (Middle)	50%	50%	100%
HB - Education (Secondary)	50%	50%	100%
HB - Shopping/Personal Business	50%	50%	100%
HB - Leisure	50%	50%	100%
HB - Social	1%	99%	100%
Total			

	PM		
Trip Type	Arrivals	Departure	Total
HB - Work/Business	80%	20%	100%
HB - Education (First)	100%	0%	100%
HB - Education (Middle)	100%	0%	100%
HB - Education (Secondary)	100%	0%	100%
HB - Shopping/Personal Business	50%	50%	100%
HB - Leisure	50%	50%	100%
HB - Social	50%	50%	100%
Total			

Weighted Proportions Due to surveys counting Vehicle Trips rather than Person Trips

Proportion of Trips	Car	Other	Proportion of	Proportion	Car Trip Proportions of whole
Primary	50%	50%	32%	16%	24%
Middle	100%	0%	34%	34%	51%
Secondary	50%	50%	34%	17%	25%

Proportion of Trips	Car	Other	Proportion	Proportion	Car Trip Proportions of whole
Primary	100%	0%	32%	32%	32%
Middle	100%	0%	34%	34%	34%
Secondary	100%	0%	34%	34%	34%

Trips Purpose Portions Arrivals/Deps

Trip Type	Arrivals	%	Departures		Total	
HB - Work/Business	466	**19%**	1864	**46%**	2330	
HB - Education (Primary)	356	**14%**	356	**9%**	711	2978
HB - Education (Middle)	756	**31%**	756	**19%**	1511	
HB - Education (Secondary)	378	**15%**	378	**9%**	756	
HB - Shopping/Leisure/Other	415	**17%**	415	**10%**	829	
HB - Leisure	89	**4%**	89	**2%**	178	
HB - Social	2	**0%**	201	**5%**	203	
Total	2461	**100%**	4057	**100%**	6518	

Trips Purpose Portions Arrivals/Deps

Trip Type	Arrivals	%	Departures		Total	
HB - Work/Business	1526	**41%**	381	**22%**	1907	
HB - Education (Primary)	248	**7%**	0	**0%**	248	776
HB - Primary (Middle)	264	**7%**	0	**0%**	264	
HB - Education (Secondary)	264	**7%**	0	**0%**	264	
HB - Shopping/Leisure/Other	576	**16%**	576	**33%**	1152	
HB - Leisure	346	**9%**	346	**20%**	692	
HB - Social	468	**13%**	468	**26%**	935	
Total	3691	**100%**	1771	**100%**	5462	

Notes:

Trip Proportion calculated through interrogating journey purpose %s.

Trip Purposes manually assigned a split between ARR and DEP.

Trip Proportions by ARR/DEP calculated through original journey purpose trip numbers/%arrivals to produce number of arrivals. Number of arrivals/total numebr produces % of arrivals per purpose.

For example Work Business Arrival Trip proportion

1% of 2330 trips = 23 trips

same done for other 3 purposes (totalling 1372 arrival trips)

23 arrival trips out of total 1372 trips = 2% arrivals for employment/business

Appendix M

place of work : 2011 super output area - middle layer	currently residing in E02004243 : East Dorset 001	Percentage of total	Direction of travel from site
North of Verwood	305	14.7	W
Fordingbridge	260	12.5	N
Sailsbury	250	12.0	N
Ringwood	155	7.5	S
West Verwood	89	4.3	W
Blanford Forum	69	3.3	W
West of Ferndown	67	3.2	S
Wimborne Minster	60	2.9	W
East Verwood	59	2.8	W
Bournemouth	57	2.7	S
Southampton	40	1.9	S
Poole	40	1.9	S
Littledown	39	1.9	S
West of Wimborne Minster	37	1.8	W
North of Fordingbirdge	34	1.6	N
Blackwater	26	1.3	S
Colehill	25	1.2	W
East of Shaftesbury	23	1.1	N
Ferndown	23	1.1	S
Christchurch	22	1.1	S
West Moors	22	1.1	S+W
St Leonards	21	1.0	S
North of Sailsbury	18	0.9	N
Amesbury	17	0.8	N
Dorchester	16	0.8	W
Canford Heath	15	0.7	S
Burley and Bransgore	14	0.7	S
Creekmoor	13	0.6	S
Brankstone	13	0.6	S
Oakdale	13	0.6	S
Townsend	12	0.6	S
Hampreston	11	0.5	S
Eastleigh	10	0.5	S
Longfleet	10	0.5	S
South of Shafesbury	10	0.5	W
Warden Hill	10	0.5	N
West of Andover	9	0.4	N
Upper Parkstone	9	0.4	S
Sandbanks	9	0.4	S
New Milton	8	0.4	S
Nursling and Rownhams	8	0.4	S
Merley	8	0.4	S
Hamworthy	8	0.4	S
Corfe Mullen	8	0.4	S+W
Wareham	8	0.4	W
Lymington	7	0.3	S
Talbot Woods	7	0.3	S

Highcliffe-on-sea	7	0.3	S
London	6	0.3	S
Fareham	6	0.3	S
Romsey	6	0.3	N+S
Winchester	6	0.3	S
Broadstone	6	0.3	S
Shaftesbury	6	0.3	W
West of Blandford Forum	6	0.3	W
Lyndhurst	5	0.2	S
South of Bishop's Waltham	5	0.2	S
Bear Cross	5	0.2	S
Winton	5	0.2	S
Tidworth	5	0.2	N
Noth of Gillingham	5	0.2	W
Bentley Wood	5	0.2	N
Total	**2,078**	**100.00**	
TOTAL	935		

Percentage travelling north	Percentage travelling south	Percentage travelling west		Direction at A31
		14.7		
12.5				
12.0				
	7.5		S	EB
		4.3		
		3.3		
	3.2		S	WB
		2.9		
		2.8		
	2.7		S	WB
	1.9		S	EB
	1.9		S	WB
	1.9		S	WB
		1.8		
1.6				
	1.3		S	EB
		1.2		
1.1				
	1.1		S	WB
	1.1		S	WB
	0.5	0.5	S	WB
	1.0		S	WB
0.9				
0.8				
		0.8		
	0.7		S	WB
	0.7		S	EB
	0.6		S	WB
	0.6		S	WB
	0.6		S	WB
	0.6		S	WB
	0.5		S	WB
	0.5		S	EB
	0.5		S	WB
		0.5		
0.5				
0.4				
	0.4		S	WB
	0.4		S	WB
	0.4		S	EB
	0.4		S	EB
	0.4		S	WB
	0.4		S	WB
	0.2	0.2	S	WB
		0.4		
	0.3			
	0.3		S	WB

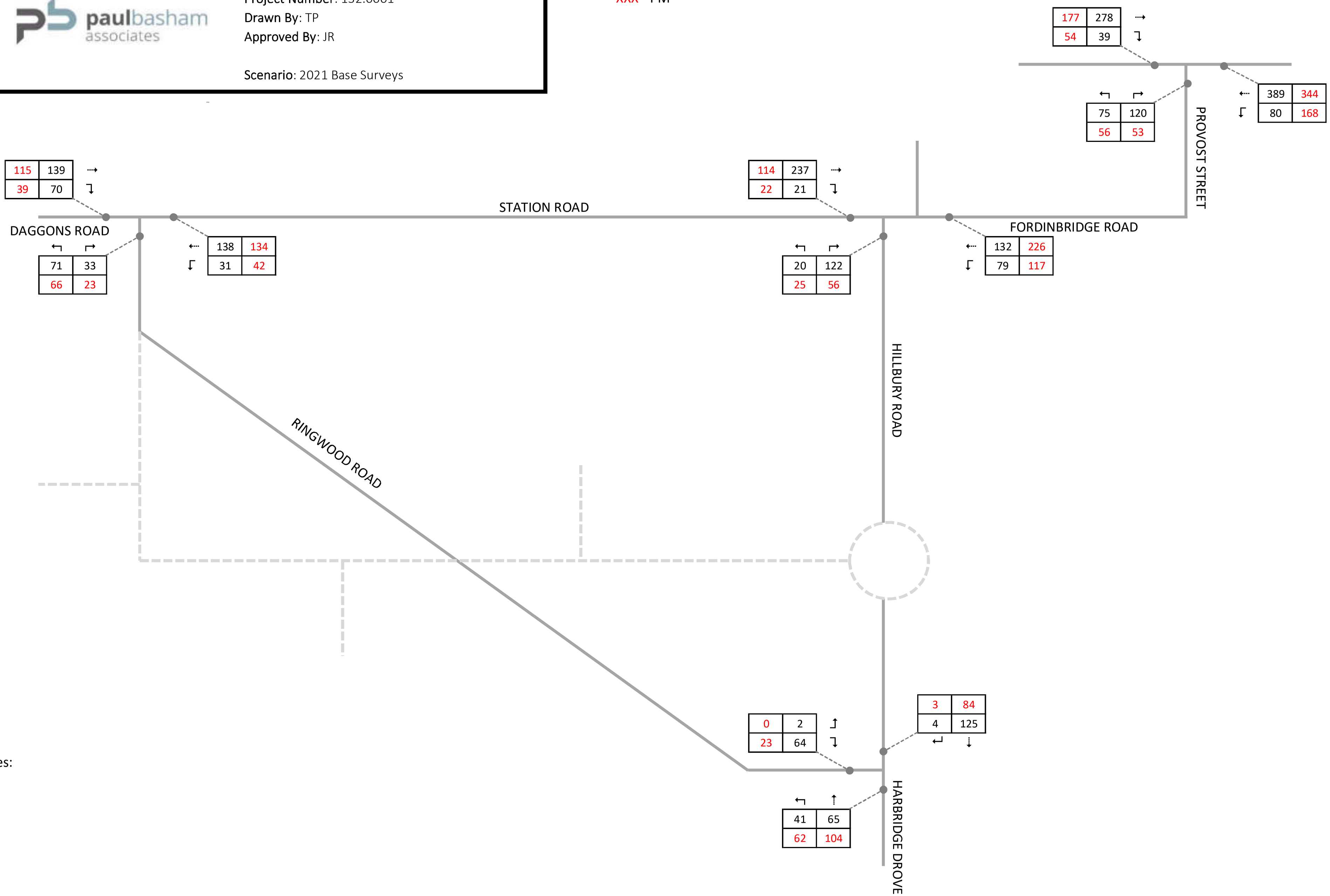
	0.3		S	WB
	0.3		S	EB
	0.3		S	EB
0.2	0.2		S	EB
	0.3		S	EB
	0.3		S	WB
		0.3		
		0.3		
	0.2		S	EB
	0.2		S	EB
	0.2		S	WB
	0.2		S	WB
0.2				
		0.2		
0.2				
31	**35**	**34**		

Appendix N

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: 2021 Base Surveys

XXX AM
XXX PM

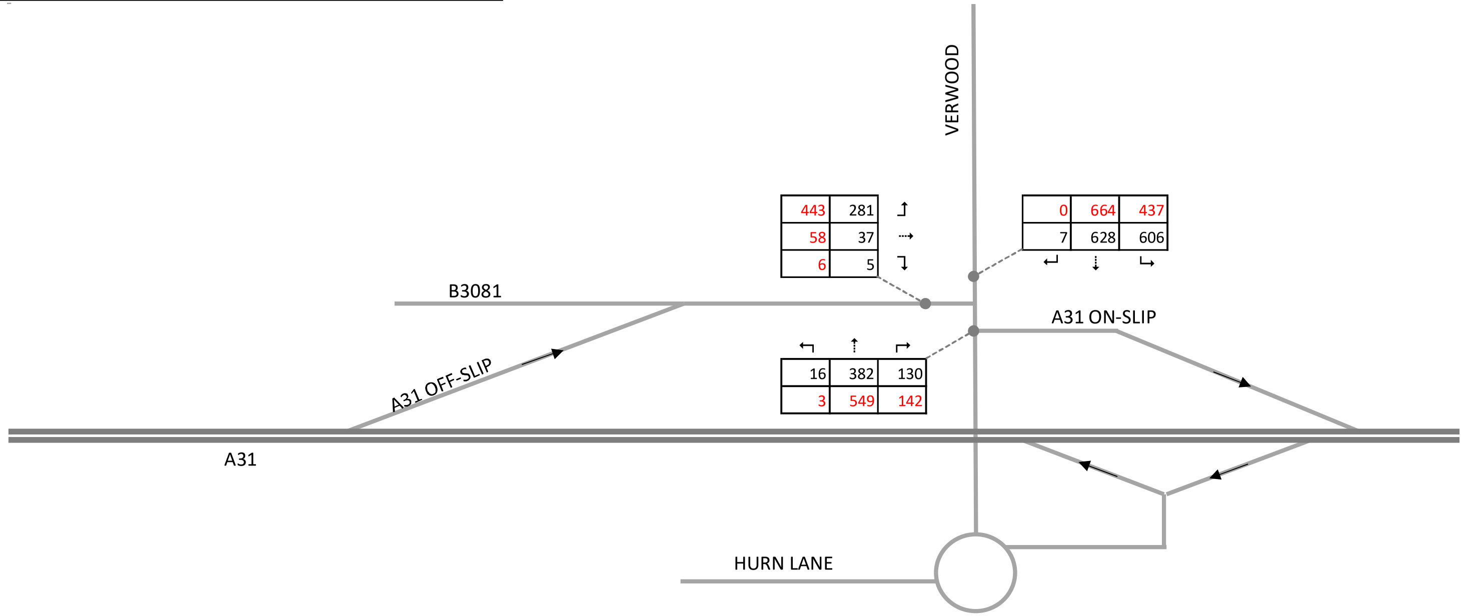


Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: 2021 Base Surveys

1.05 AM 2018-2021 TRUNK GROWTH RATE
1.05 PM 2018-2021 TRUNK GROWTH RATE



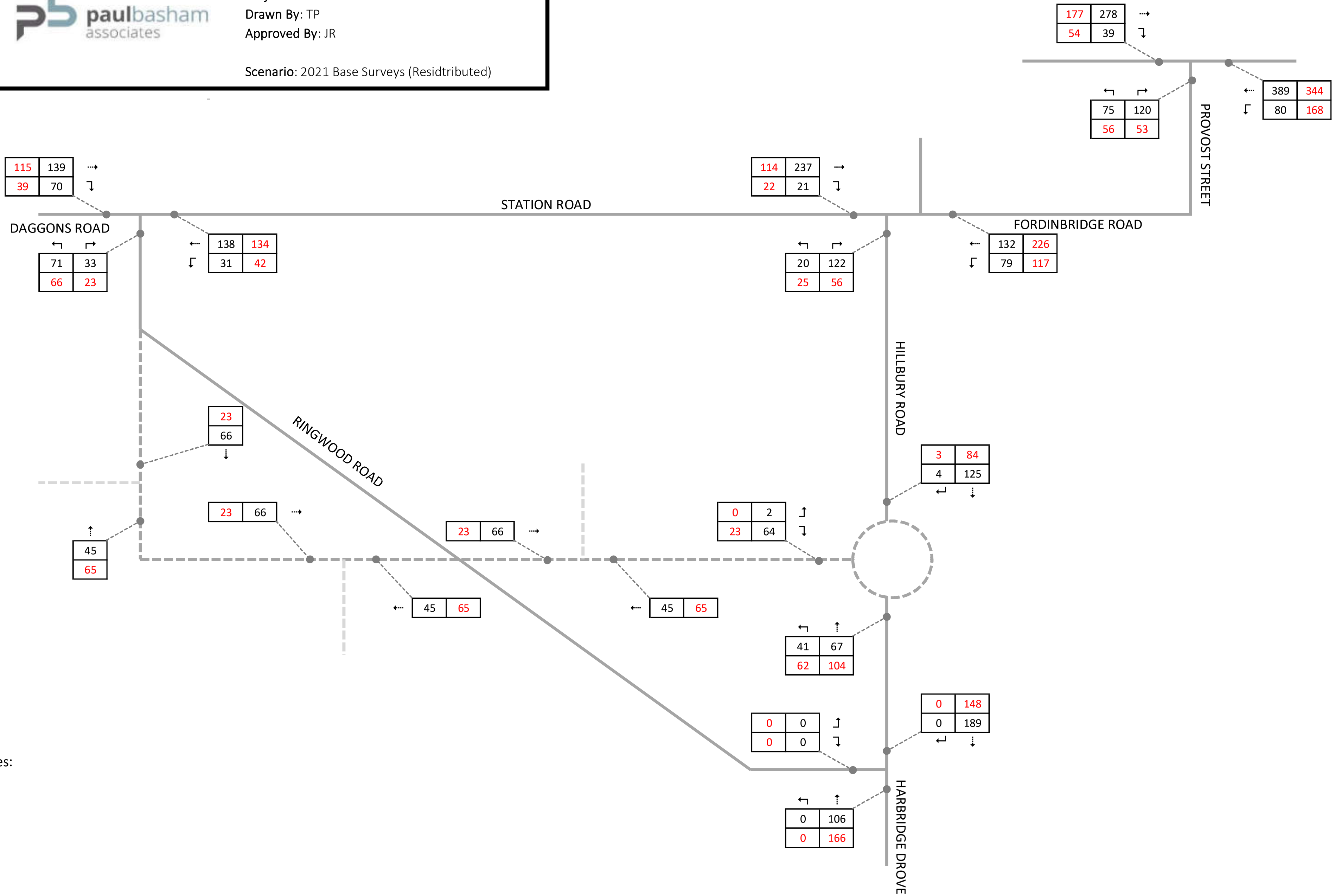
Notes:

paulbasham associates

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: 2021 Base Surveys (Residtributed)

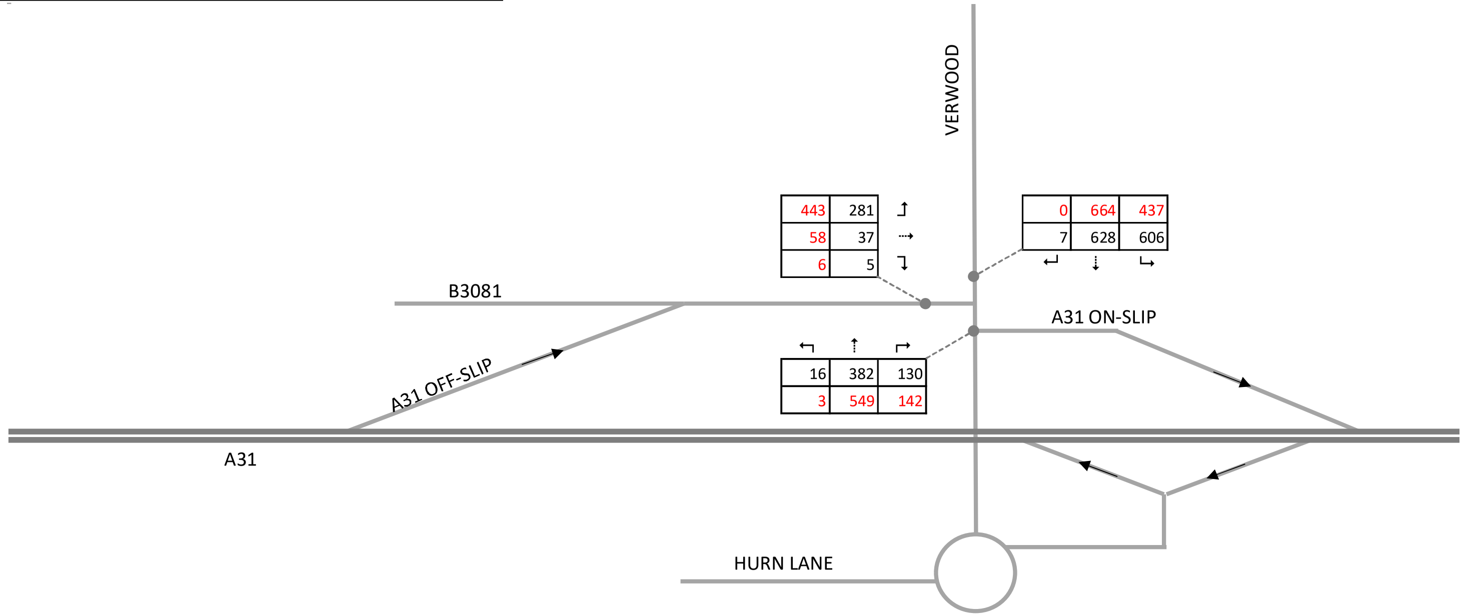
XXX AM
XXX PM



Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: 2021 Base Surveys (Residtributed)

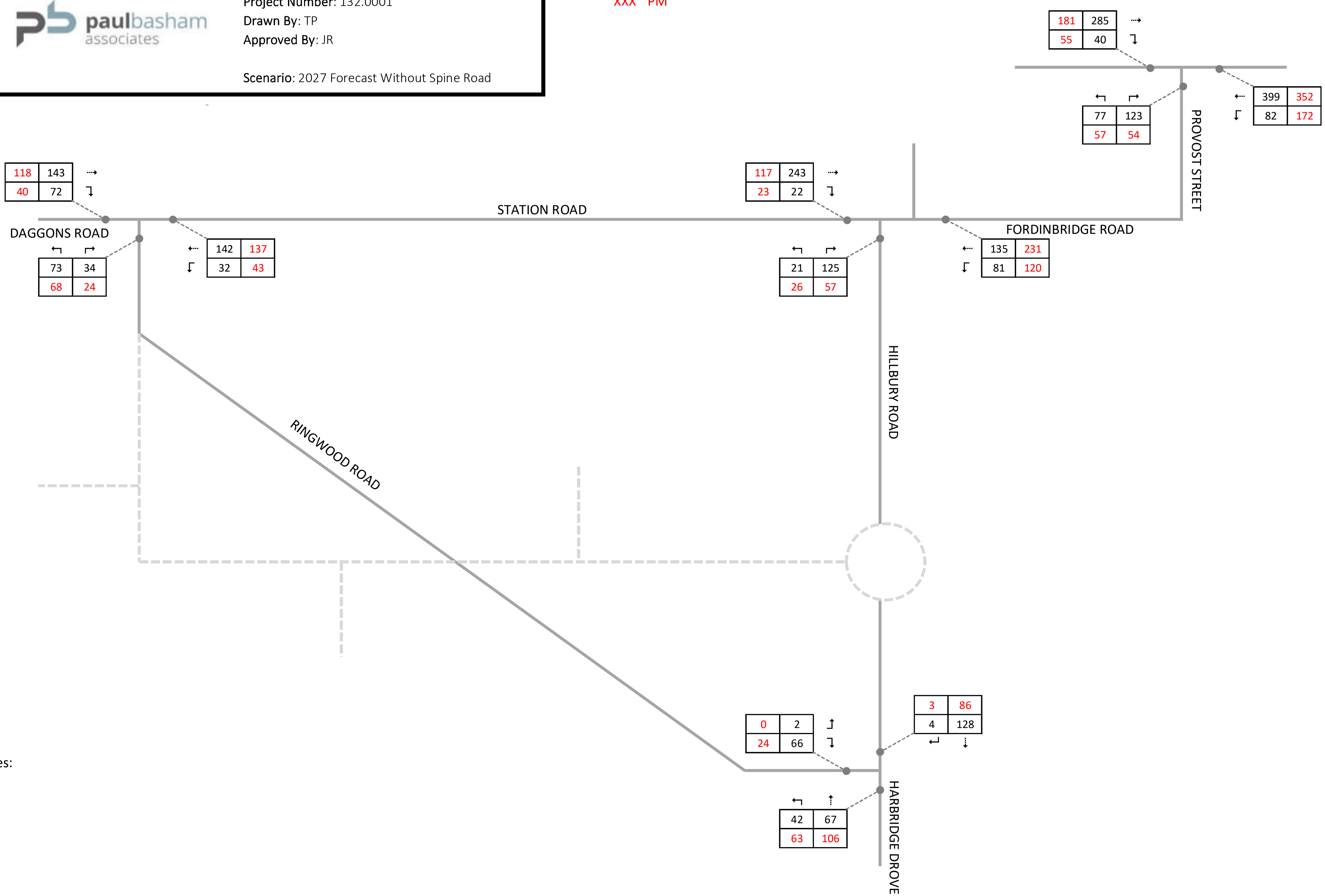


Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: 2027 Forecast Without Spine Road

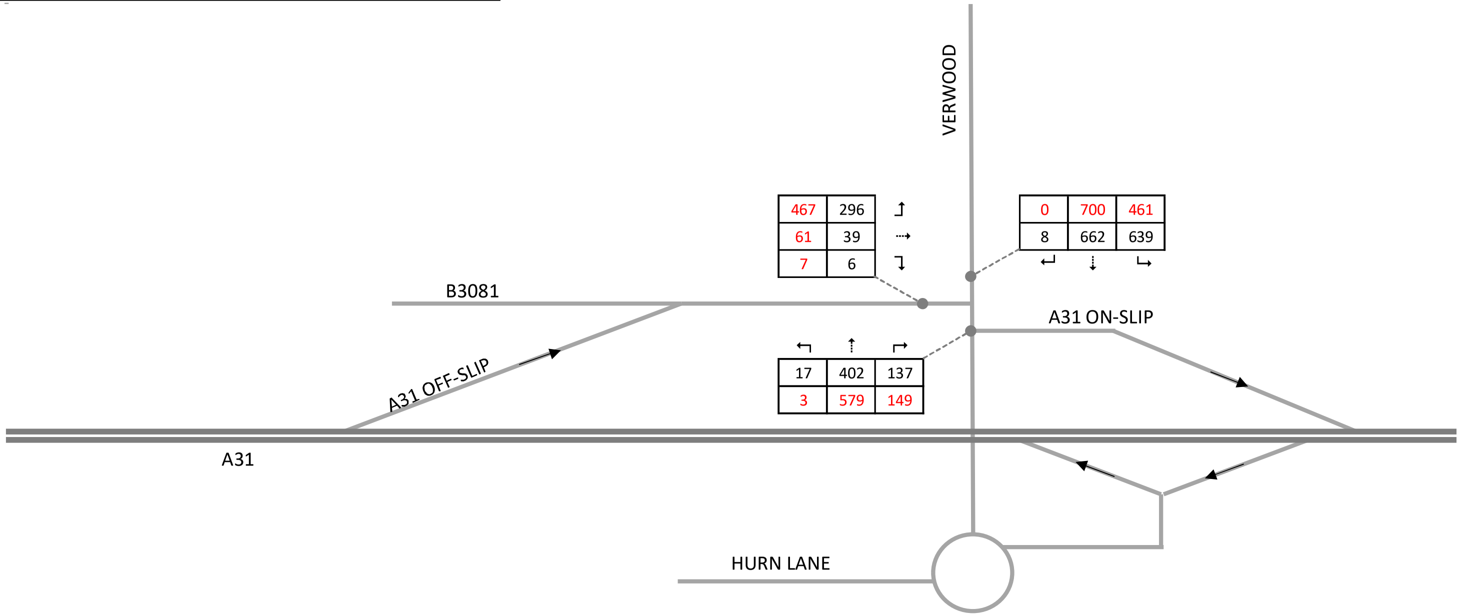
XXX AM
XXX PM



Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: 2027 Forecast Without Spine Road

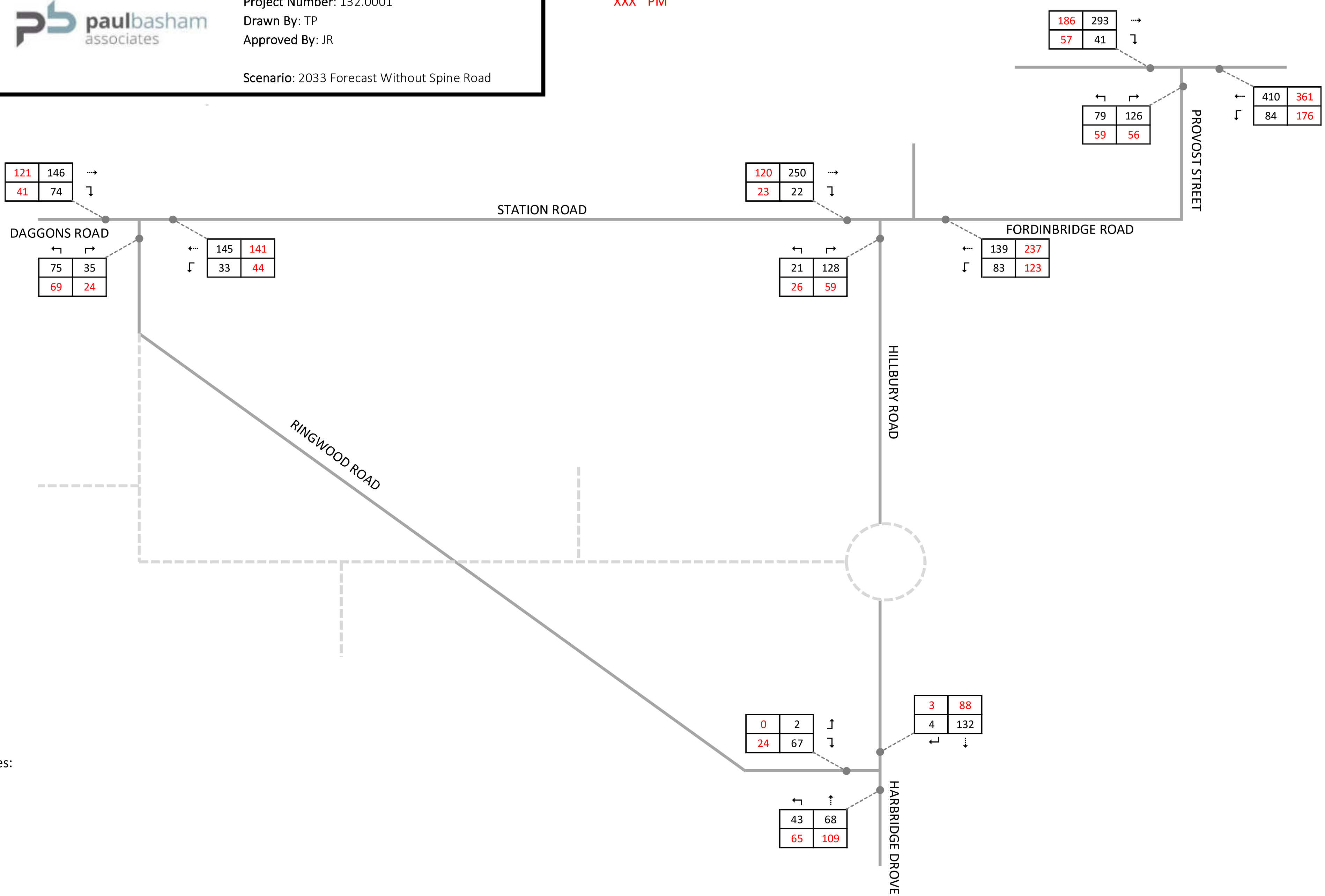


Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: 2033 Forecast Without Spine Road

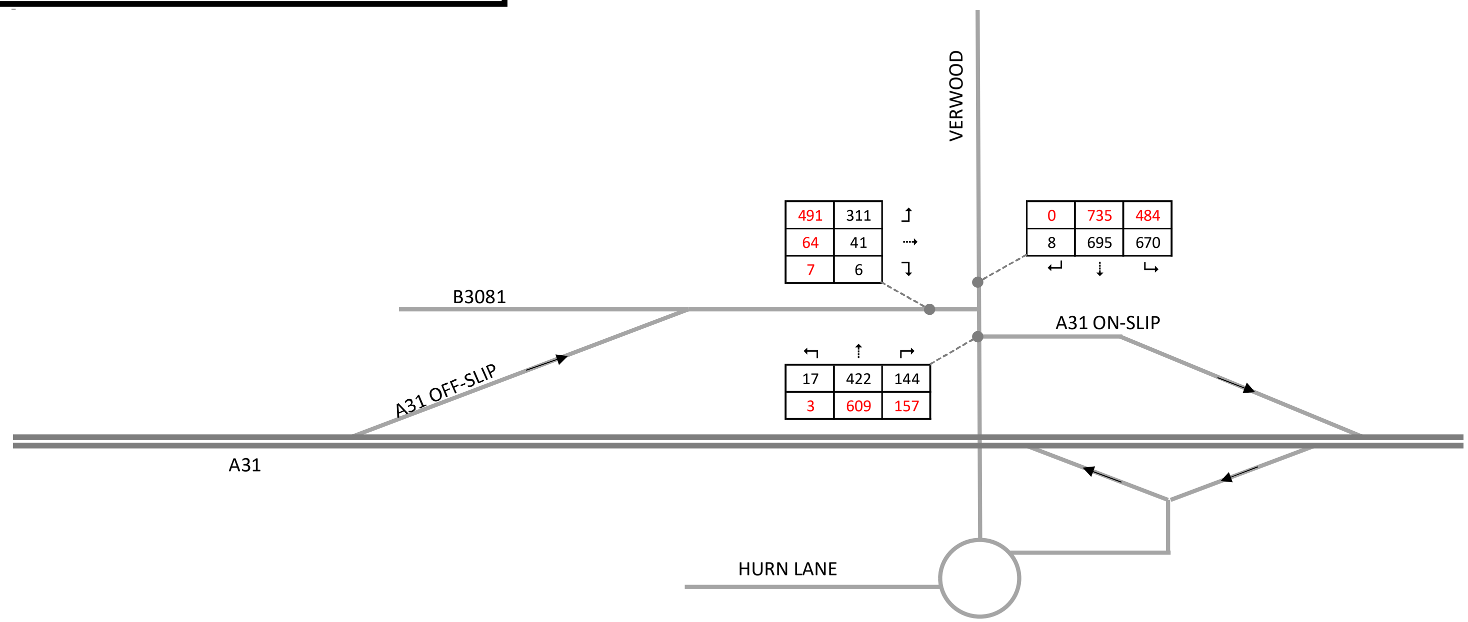
XXX AM
XXX PM



Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: 2033 Forecast Without Spine Road



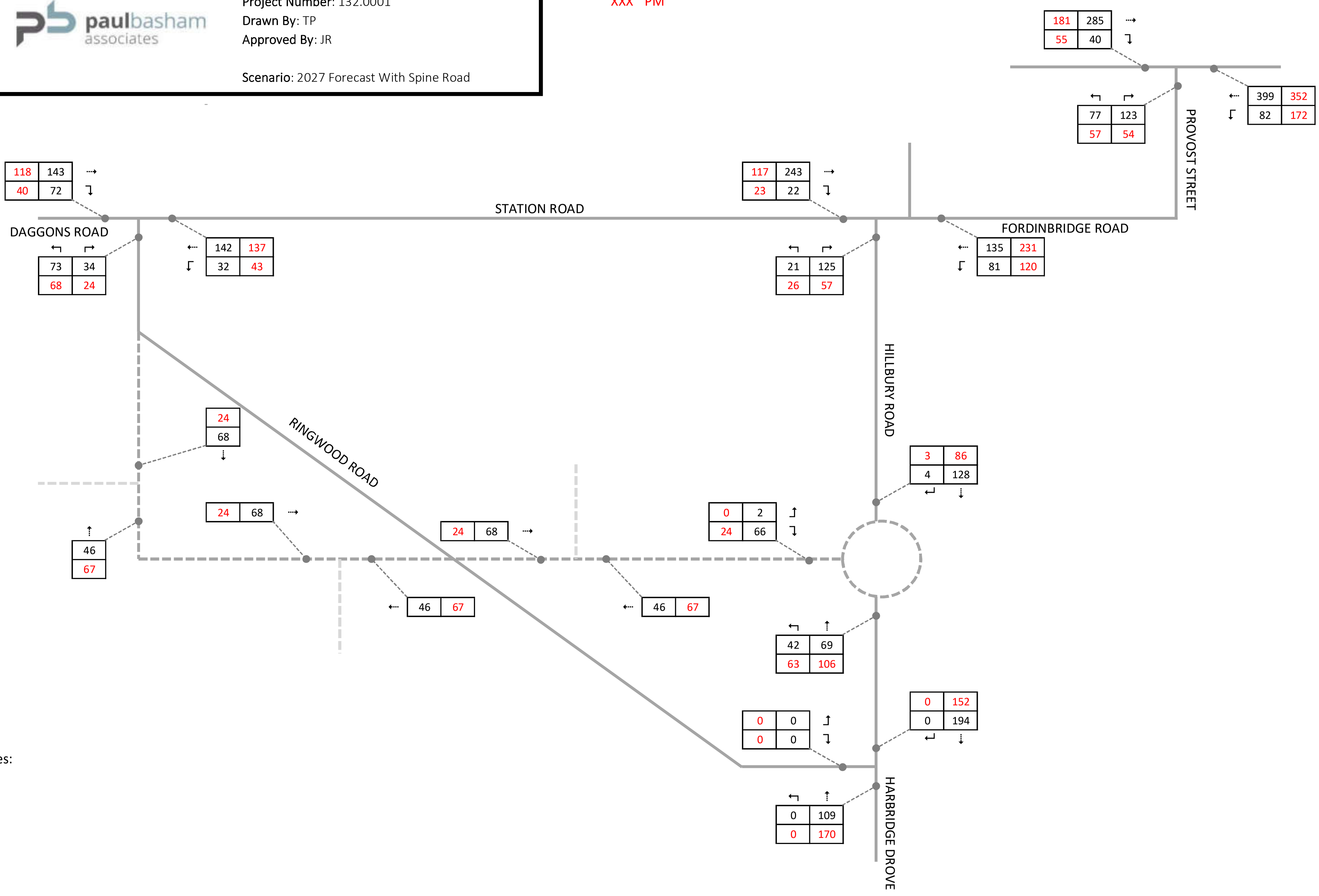
Notes:

paulbasham associates

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: 2027 Forecast With Spine Road

XXX AM
XXX PM



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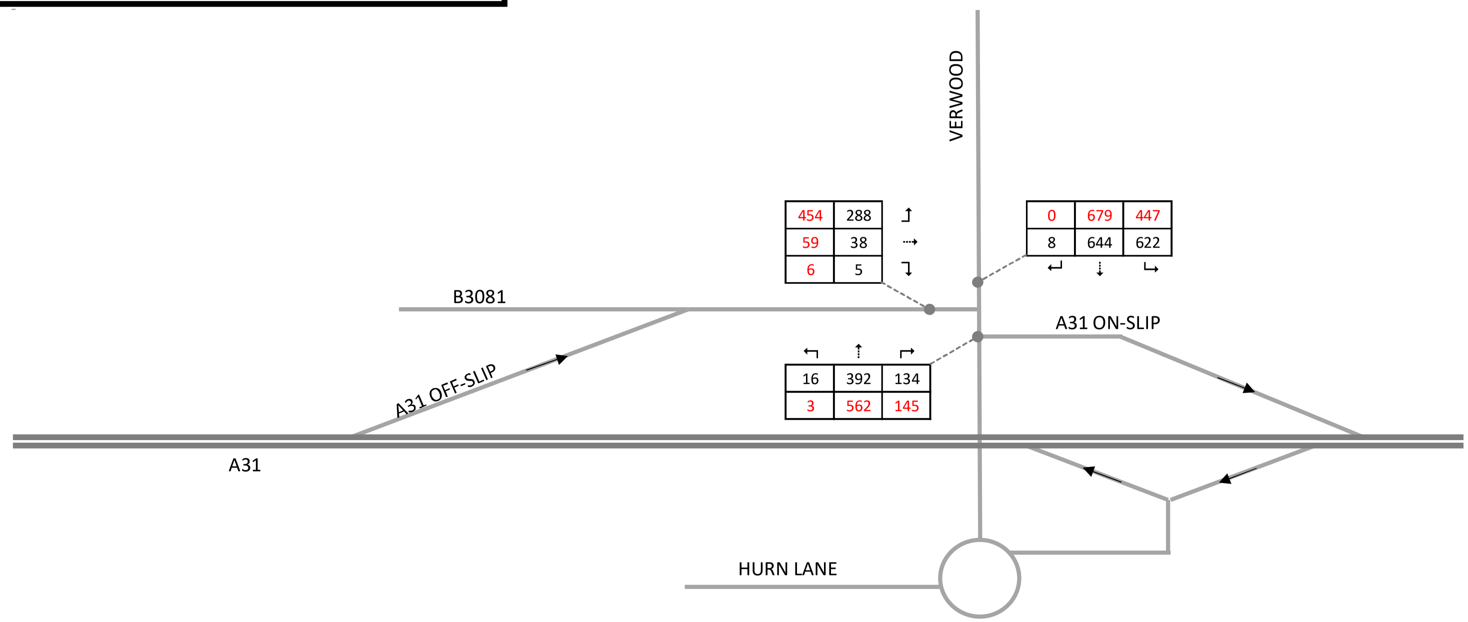
Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: 2027 Forecast With Spine Road



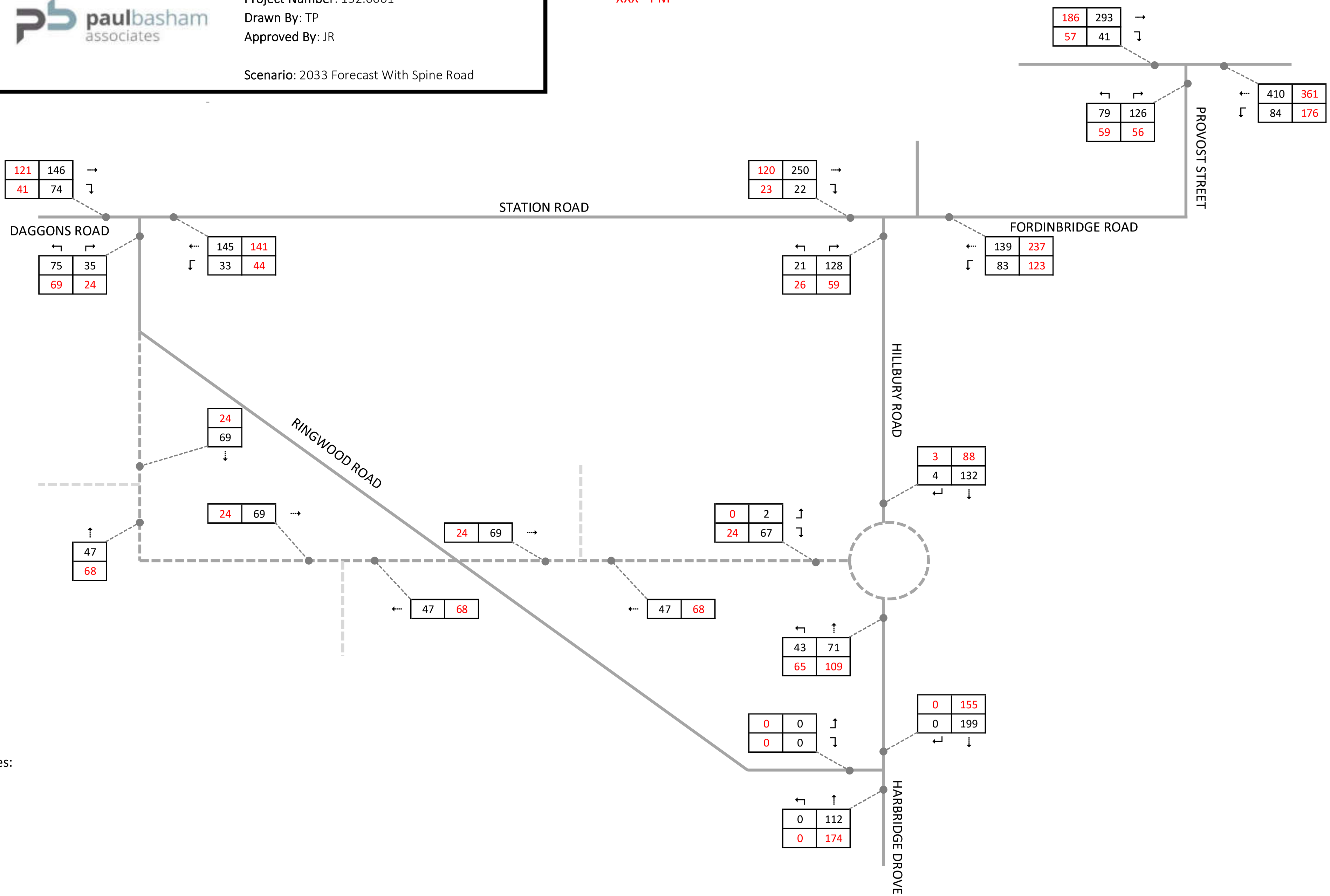
Notes:

paulbasham associates

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: 2033 Forecast With Spine Road

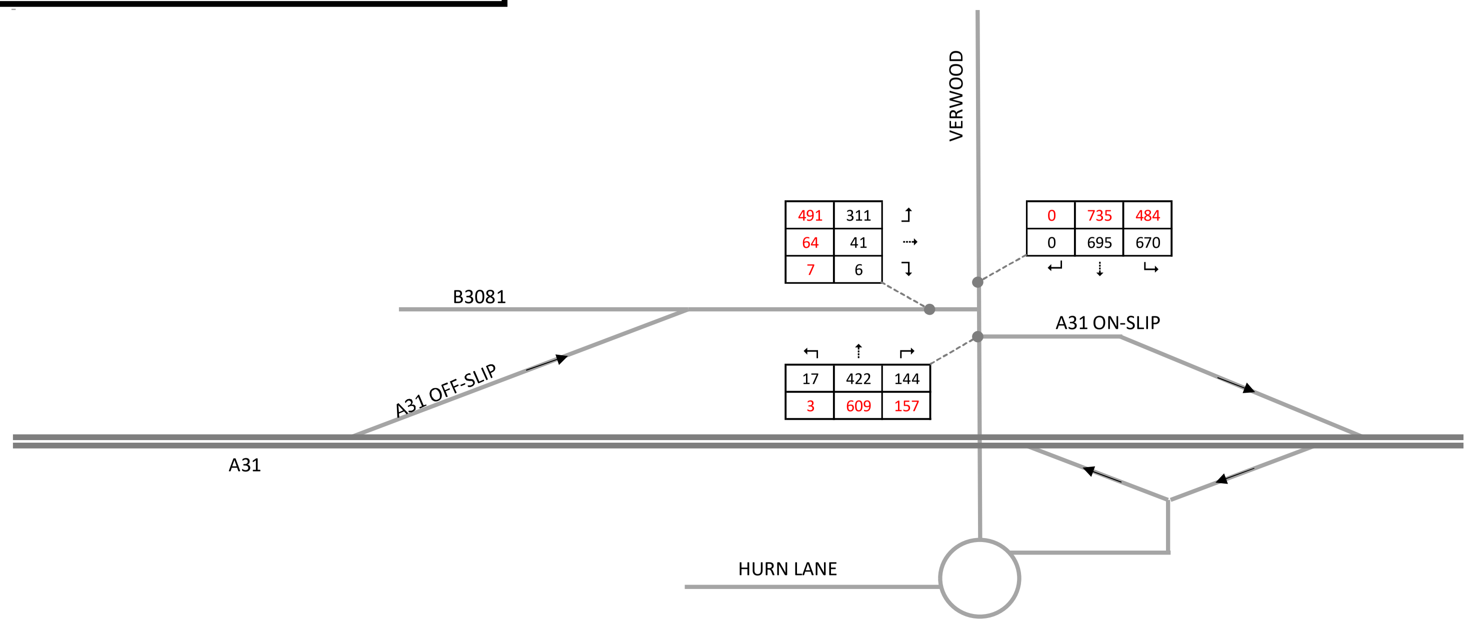
XXX AM
XXX PM



Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: 2033 Forecast With Spine Road

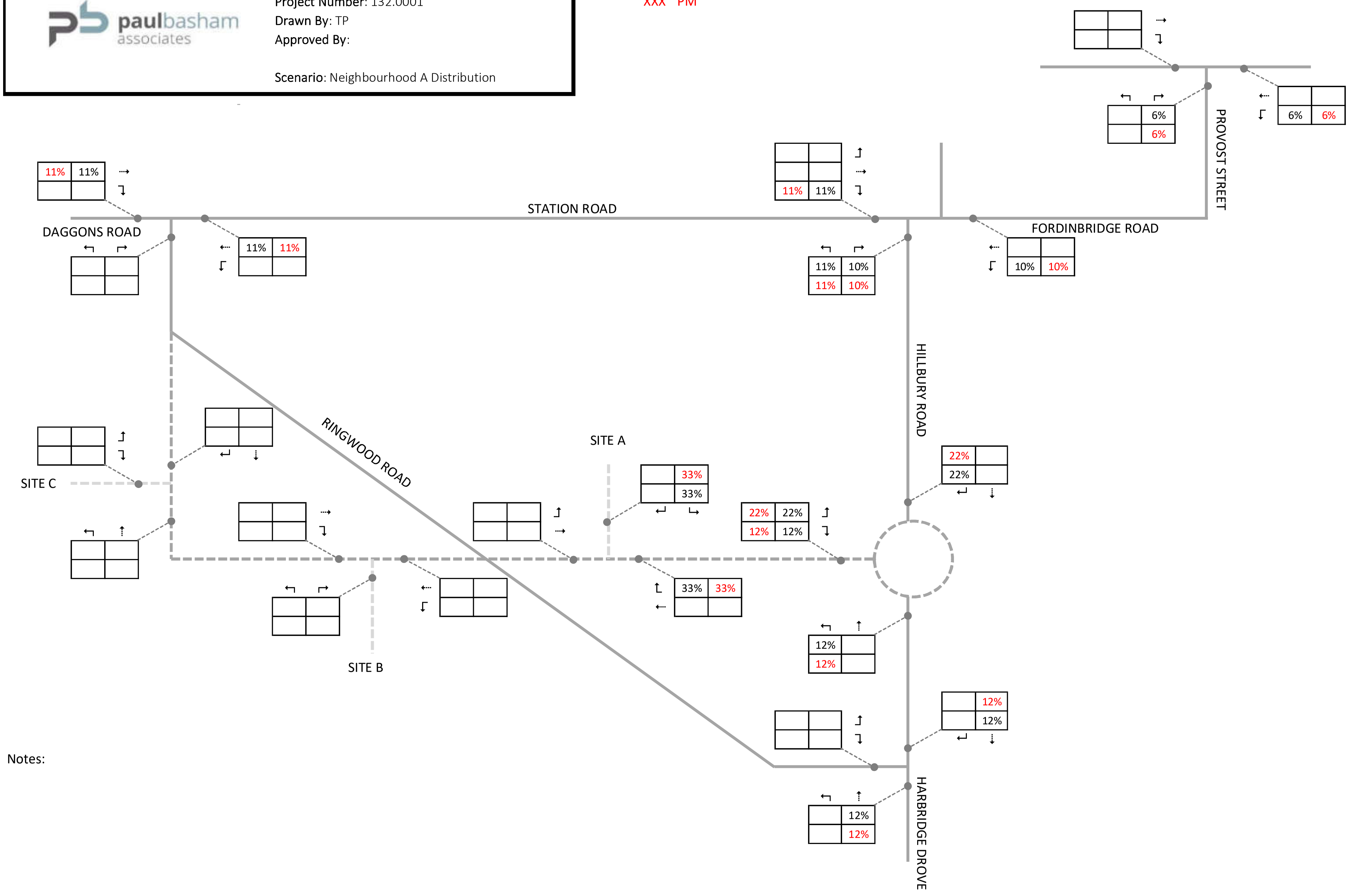


Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By:

Scenario: Neighbourhood A Distribution

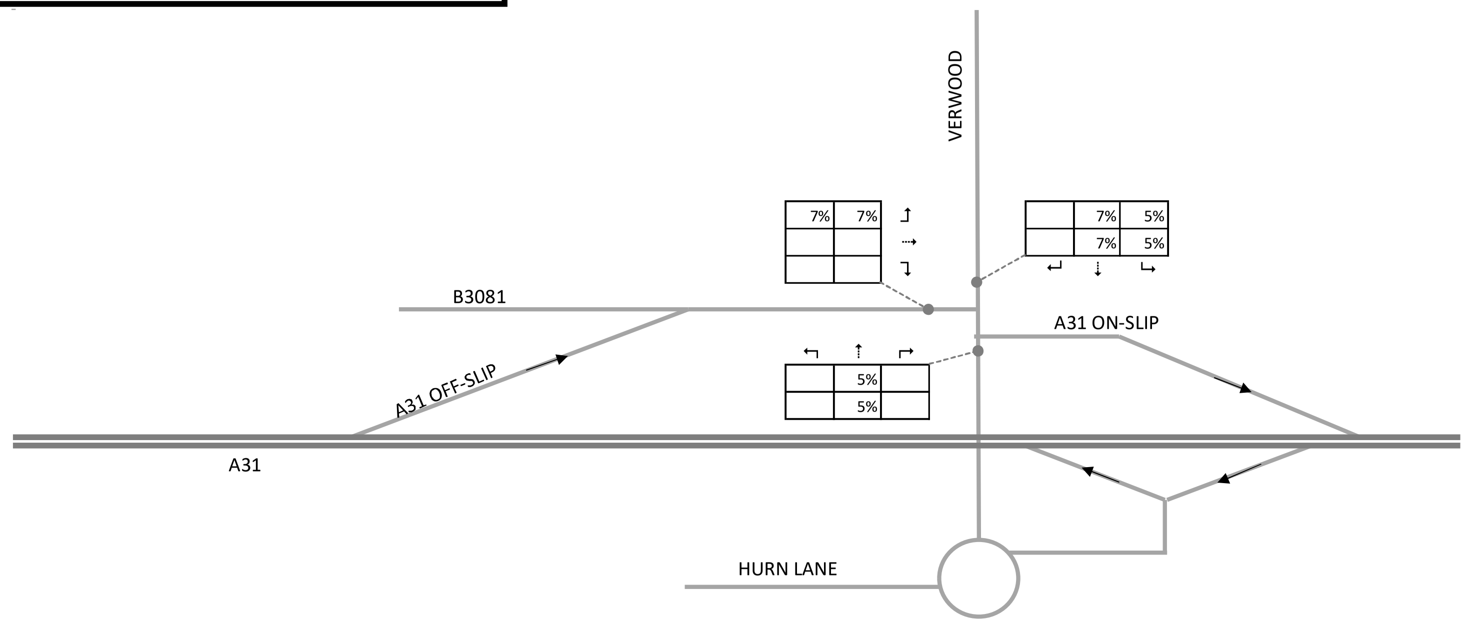
XXX AM
XXX PM



Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By:

Scenario: Neighbourhood A Distribution



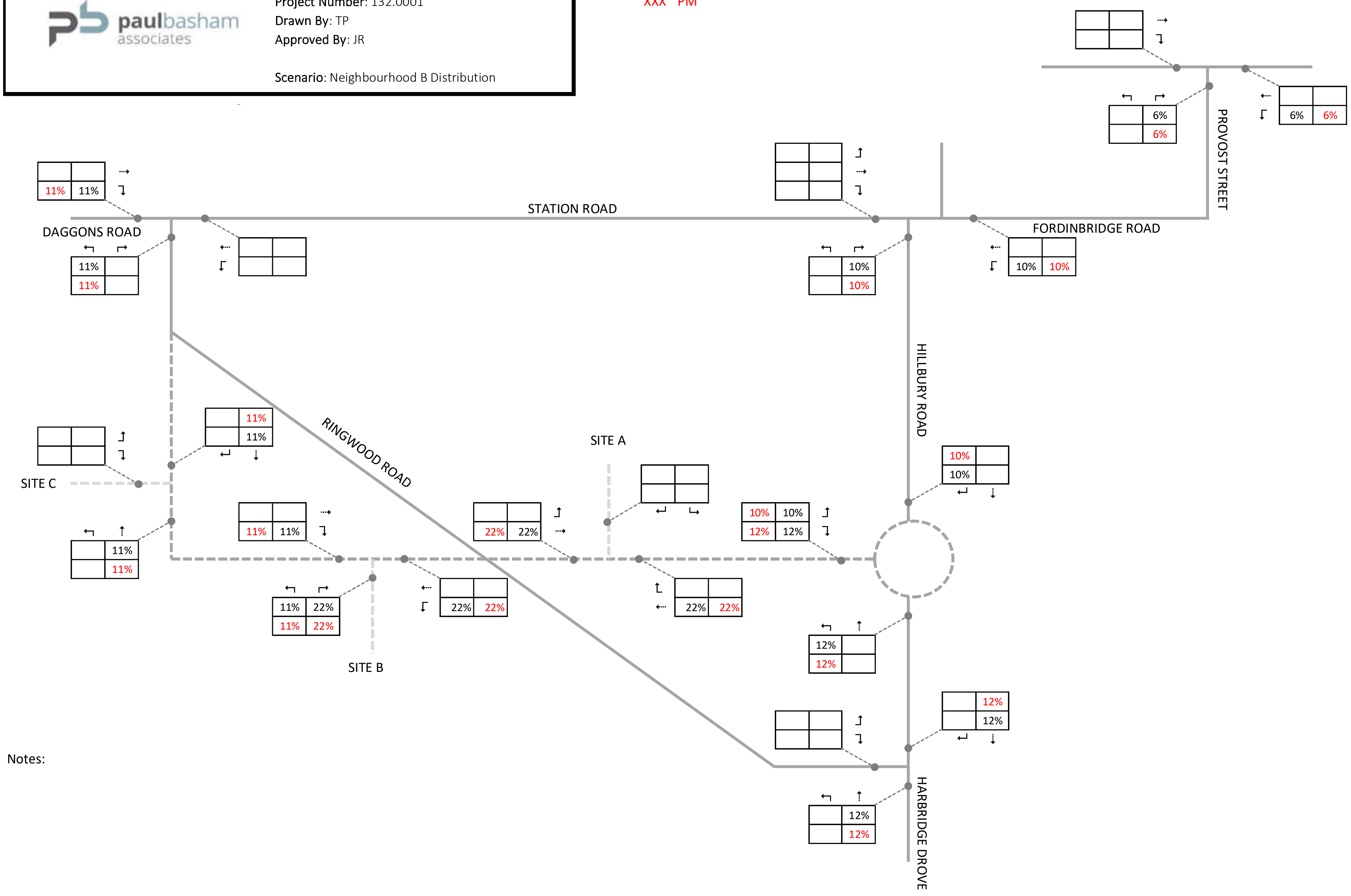
Notes:

paulbasham associates

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: Neighbourhood B Distribution

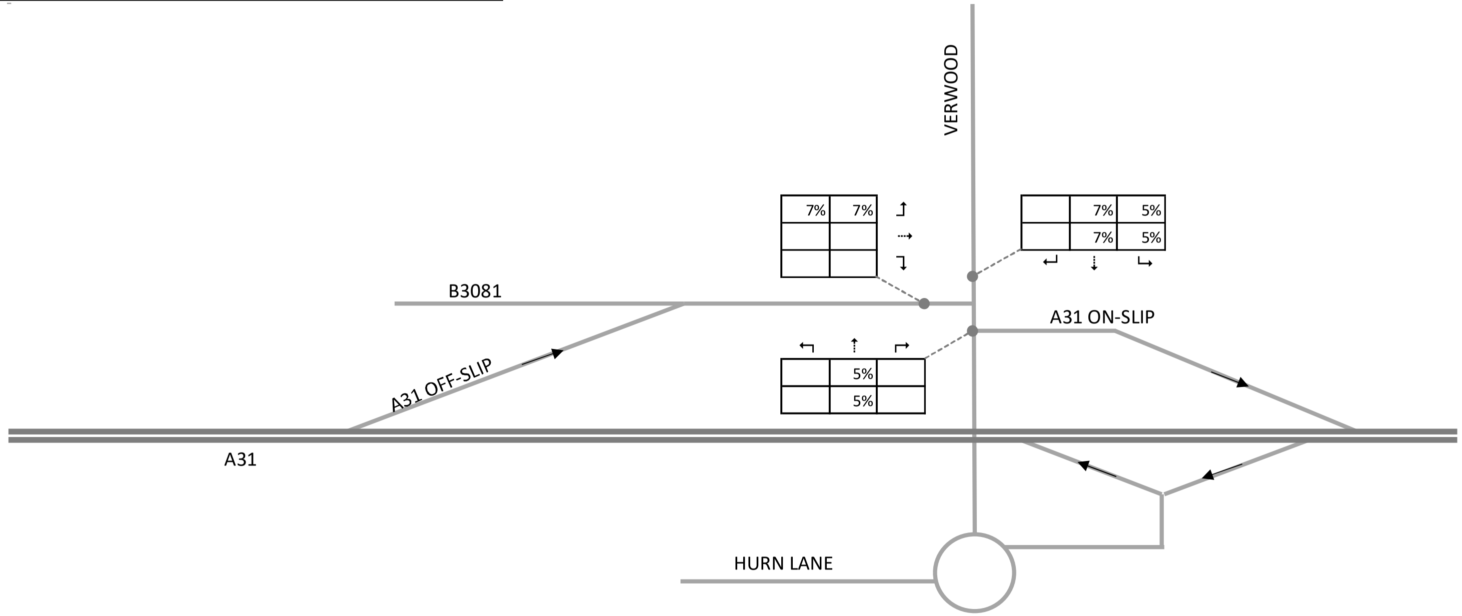
XXX AM
XXX PM



Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: Neighbourhood B Distribution

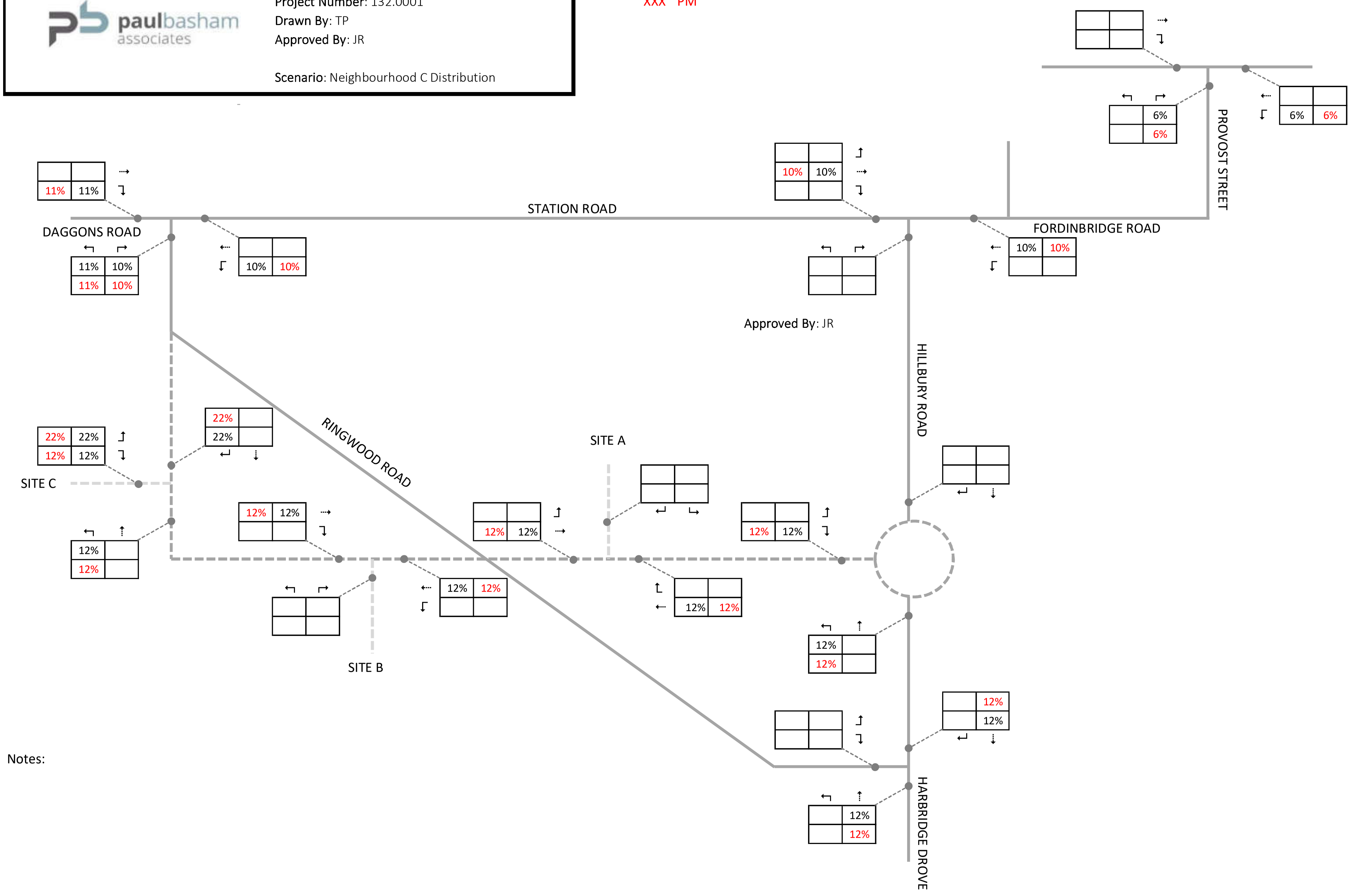


Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: Neighbourhood C Distribution

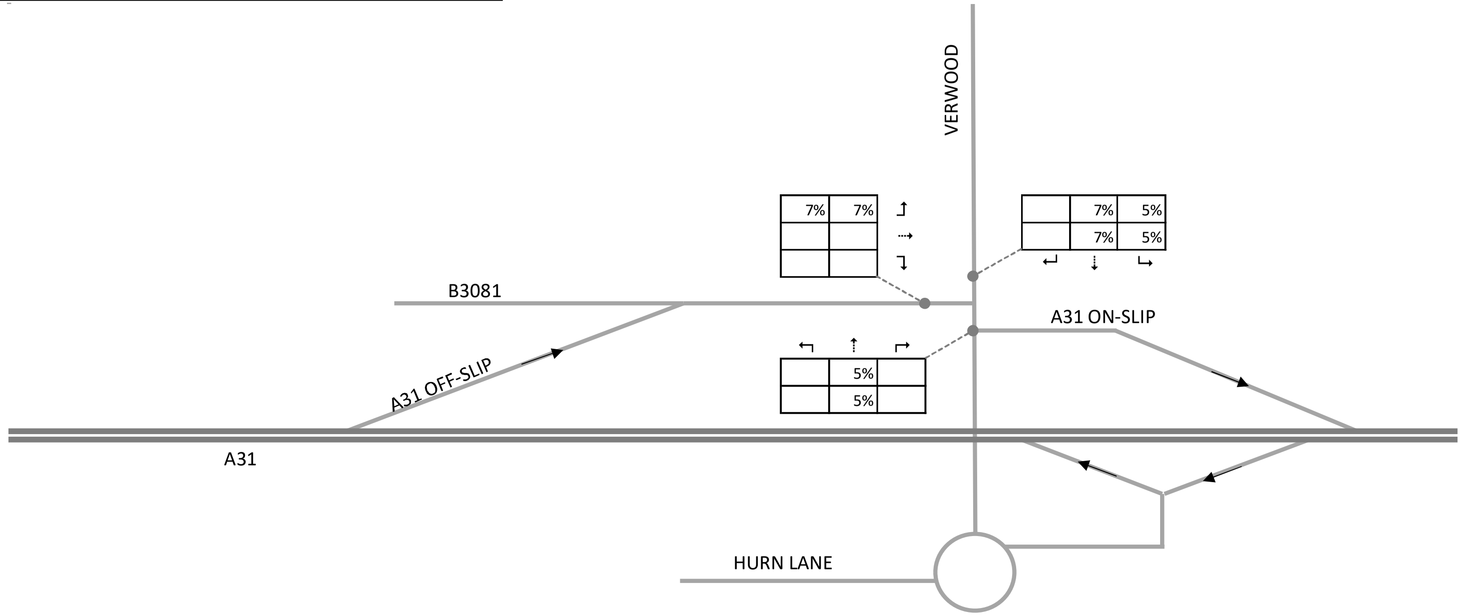
XXX AM
XXX PM



Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: Neighbourhood C Distribution

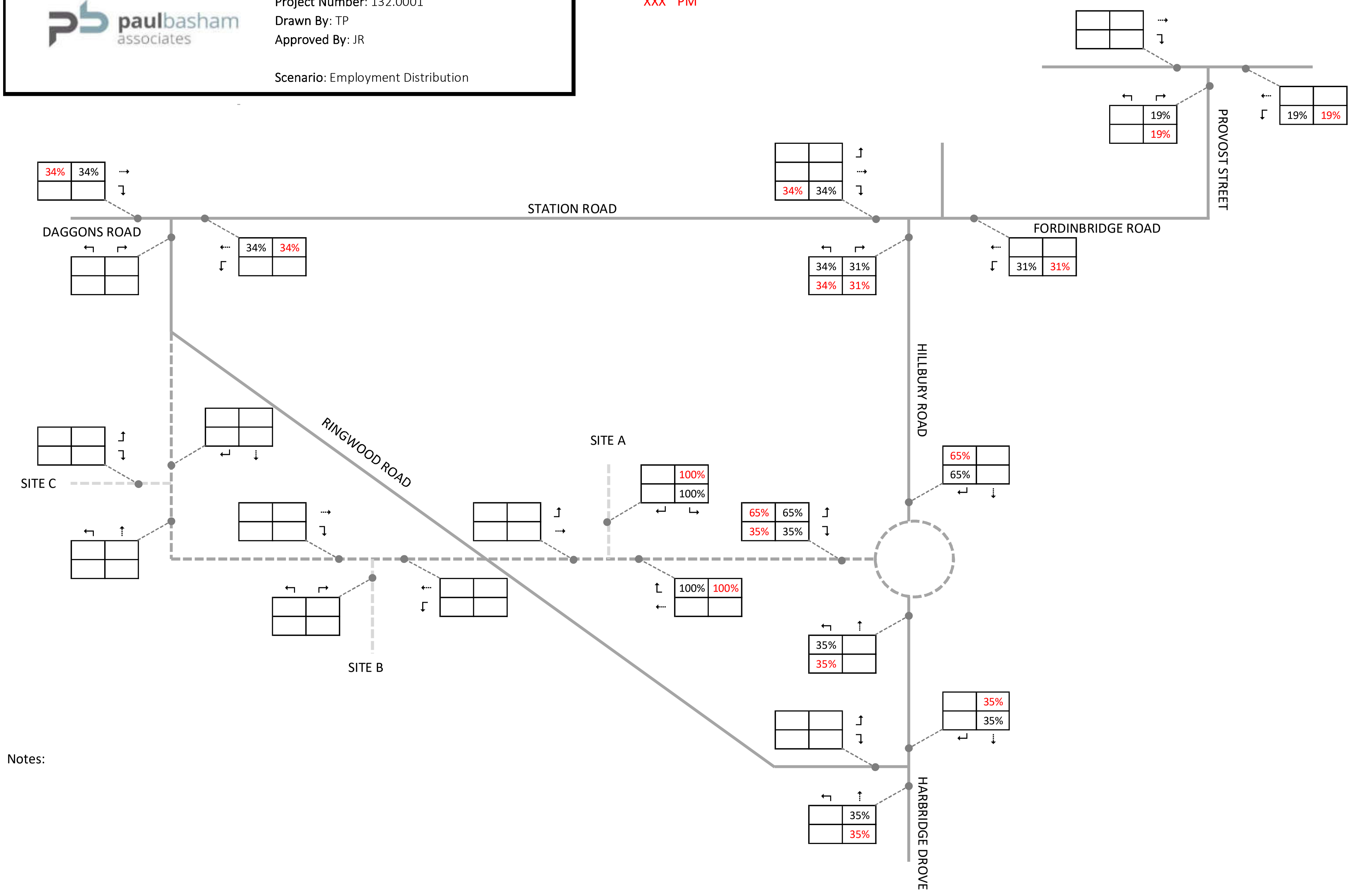


Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: Employment Distribution

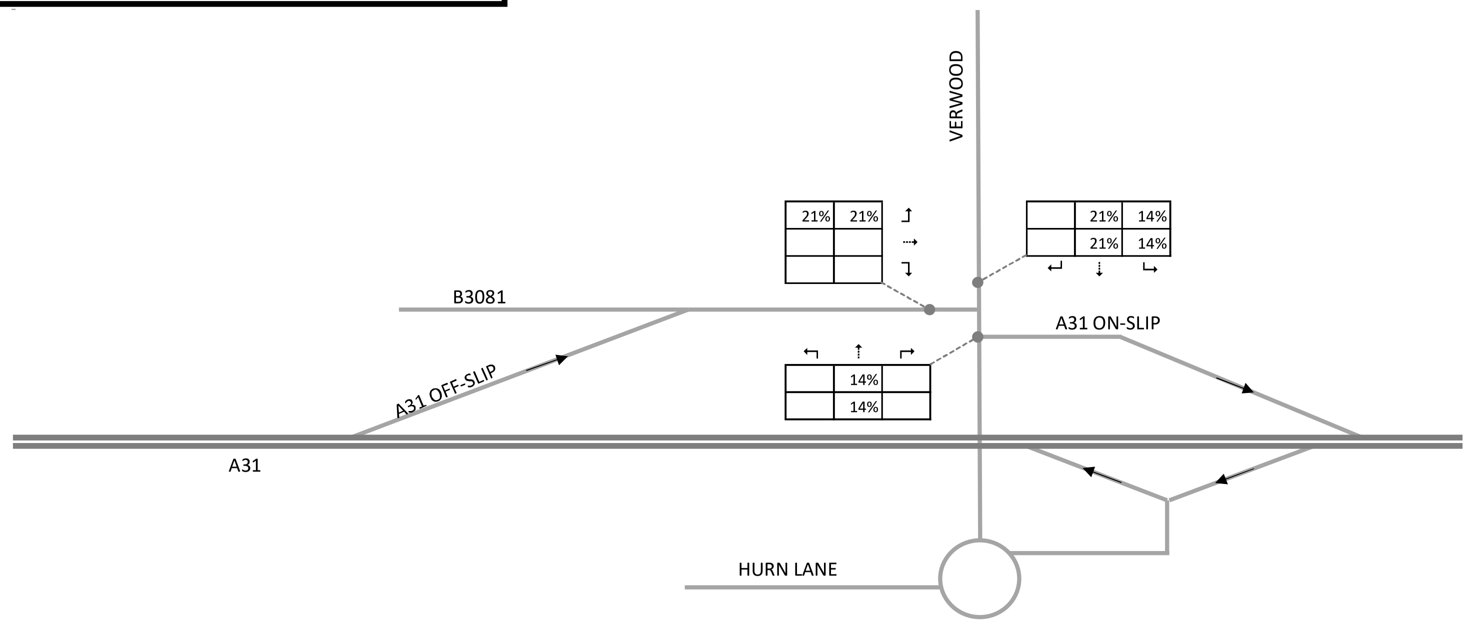
XXX AM
XXX PM



Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: Employment Distribution

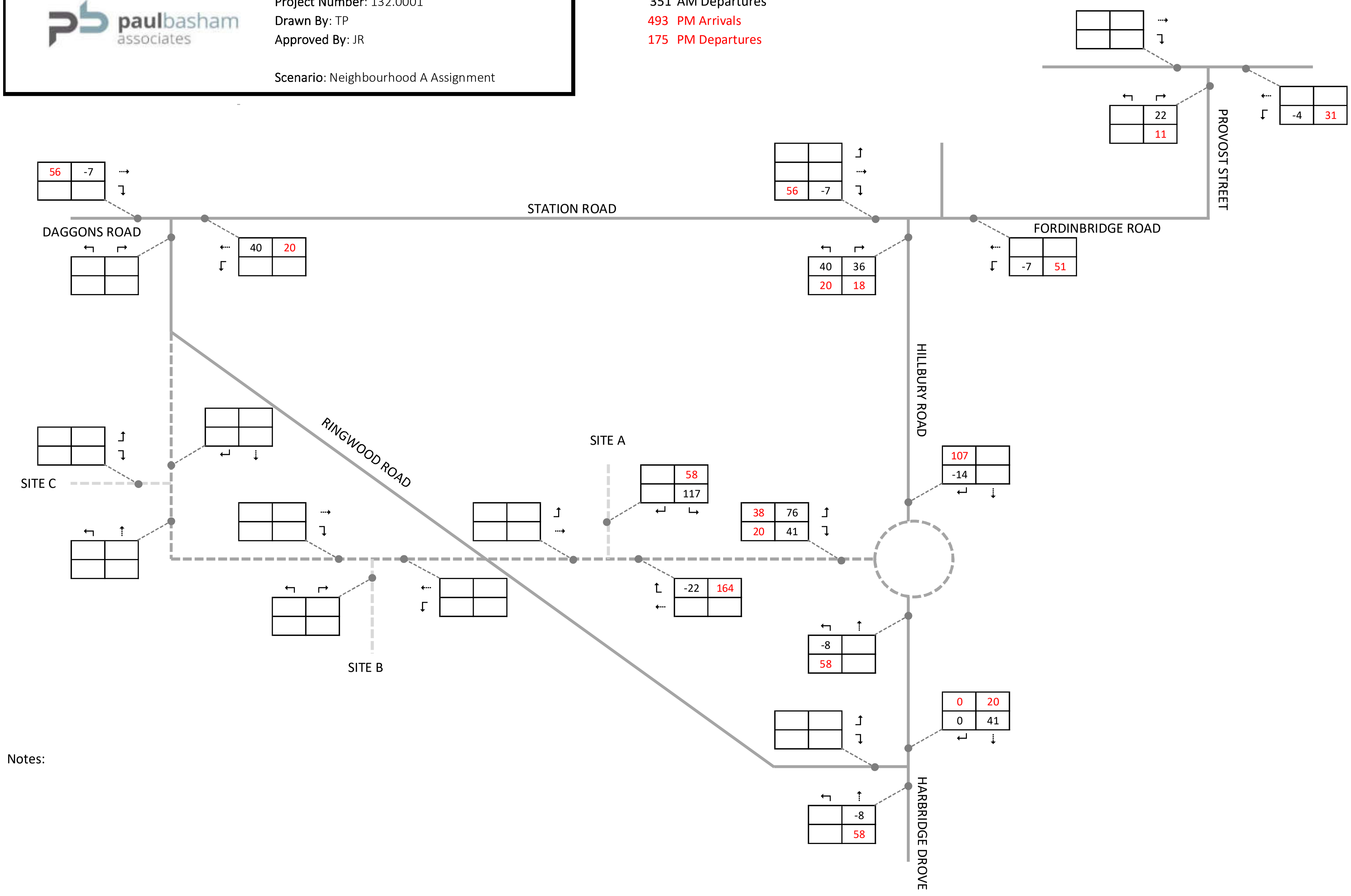


Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: Neighbourhood A Assignment

-66 AM Arrivals
351 AM Departures
493 PM Arrivals
175 PM Departures



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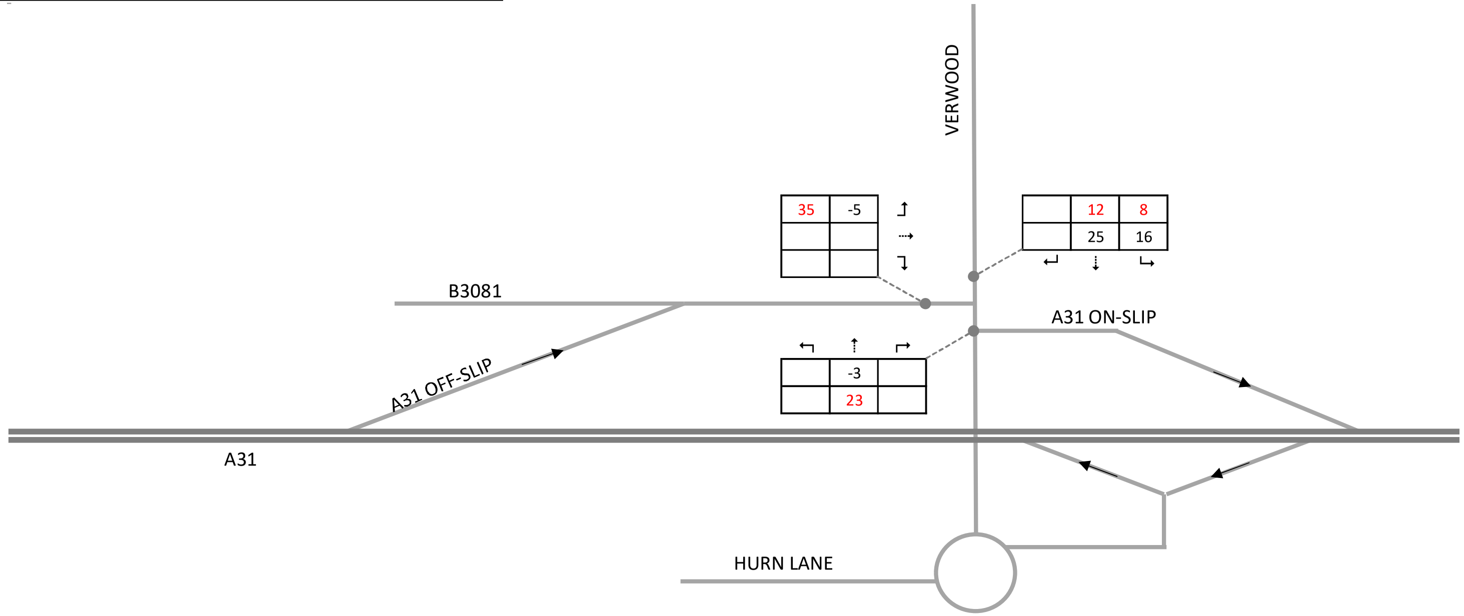
Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: Neighbourhood A Assignment

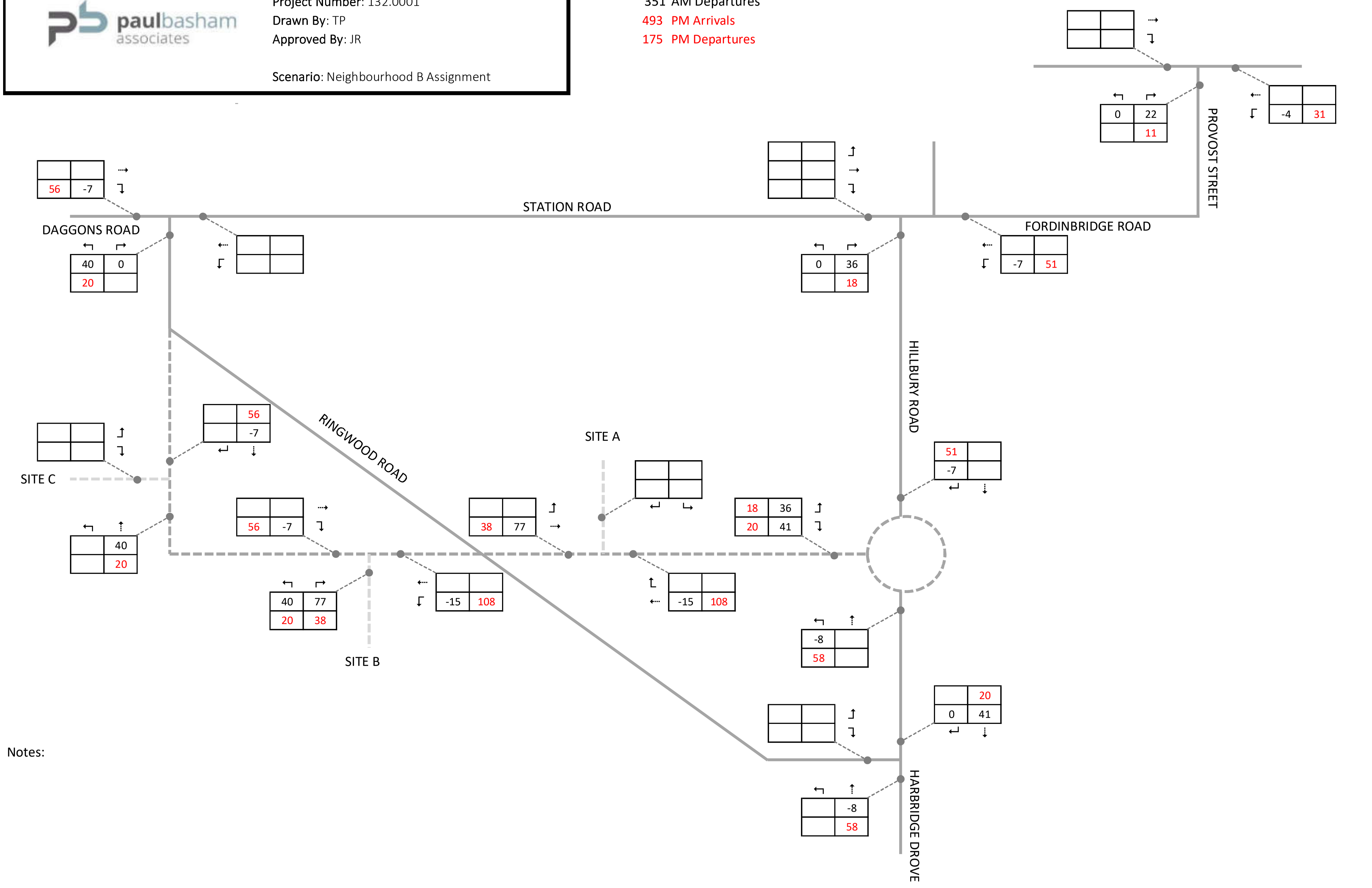


Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: Neighbourhood B Assignment

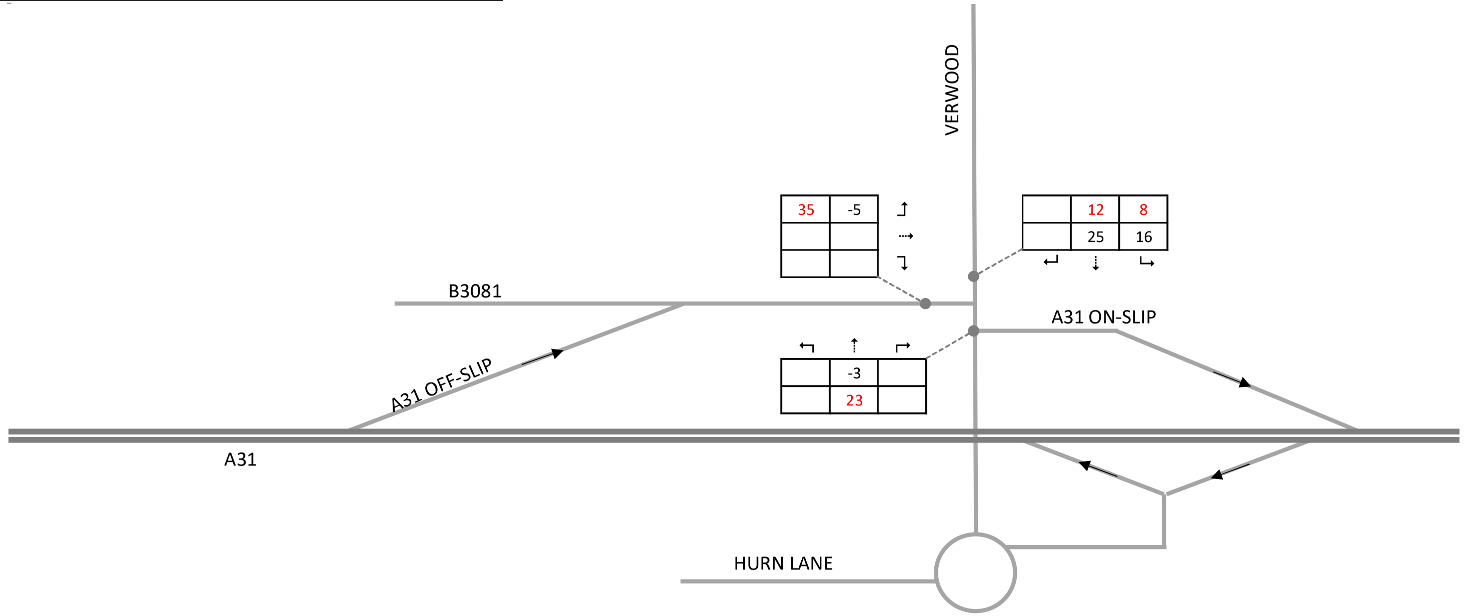
-66 AM Arrivals
351 AM Departures
493 PM Arrivals
175 PM Departures



Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: Neighbourhood B Assignment



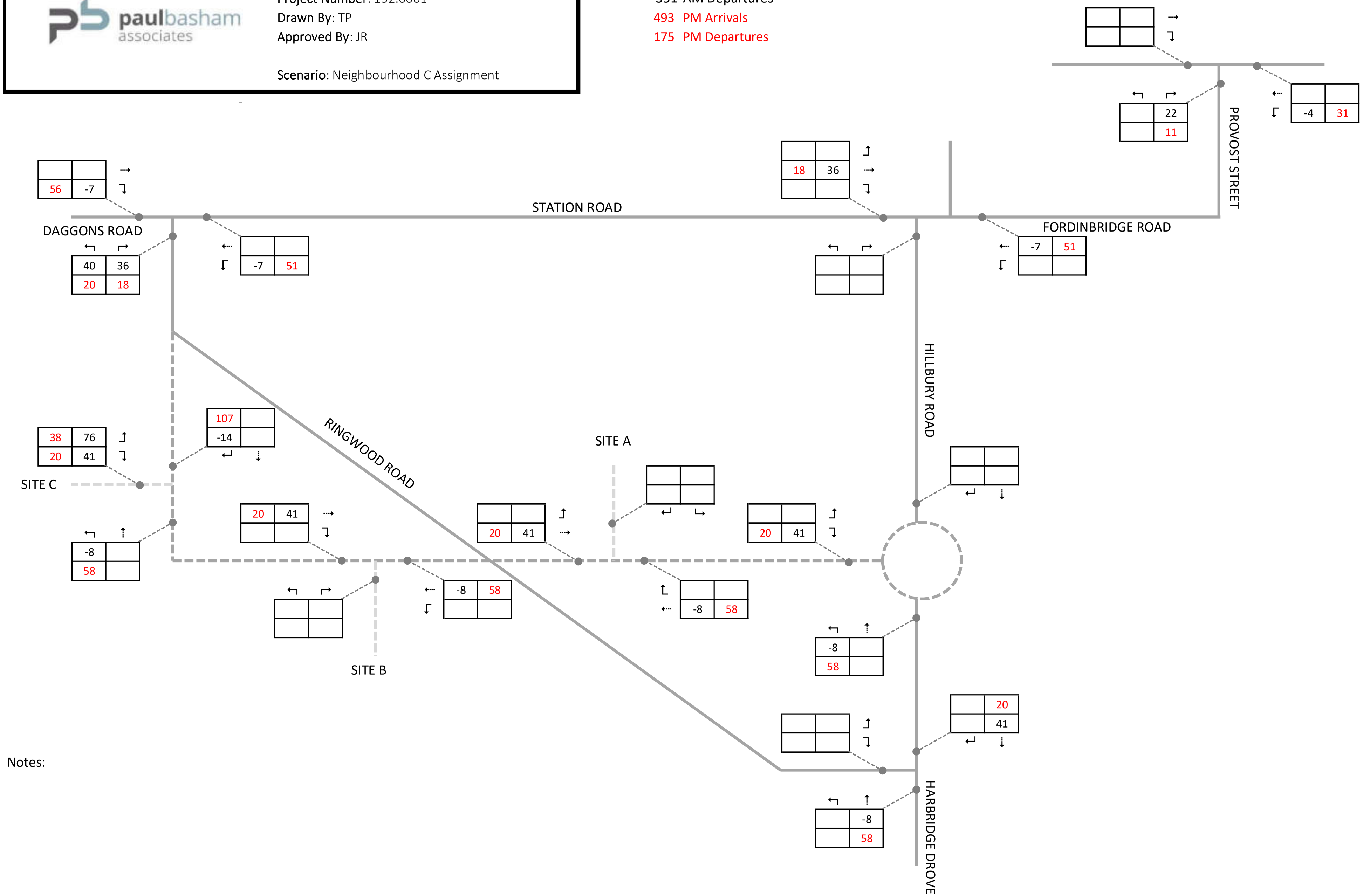
Notes:

paulbasham associates

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: Neighbourhood C Assignment

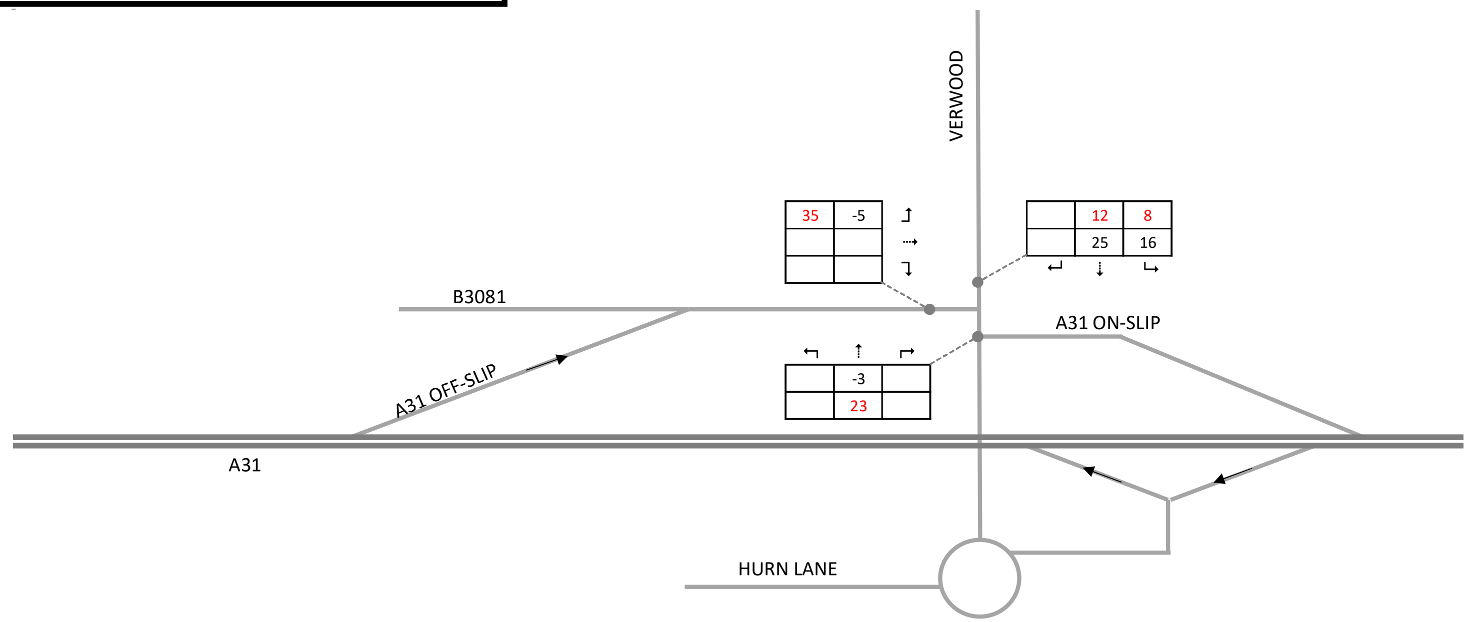
-66 AM Arrivals
351 AM Departures
493 PM Arrivals
175 PM Departures



Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: Neighbourhood C Assignment

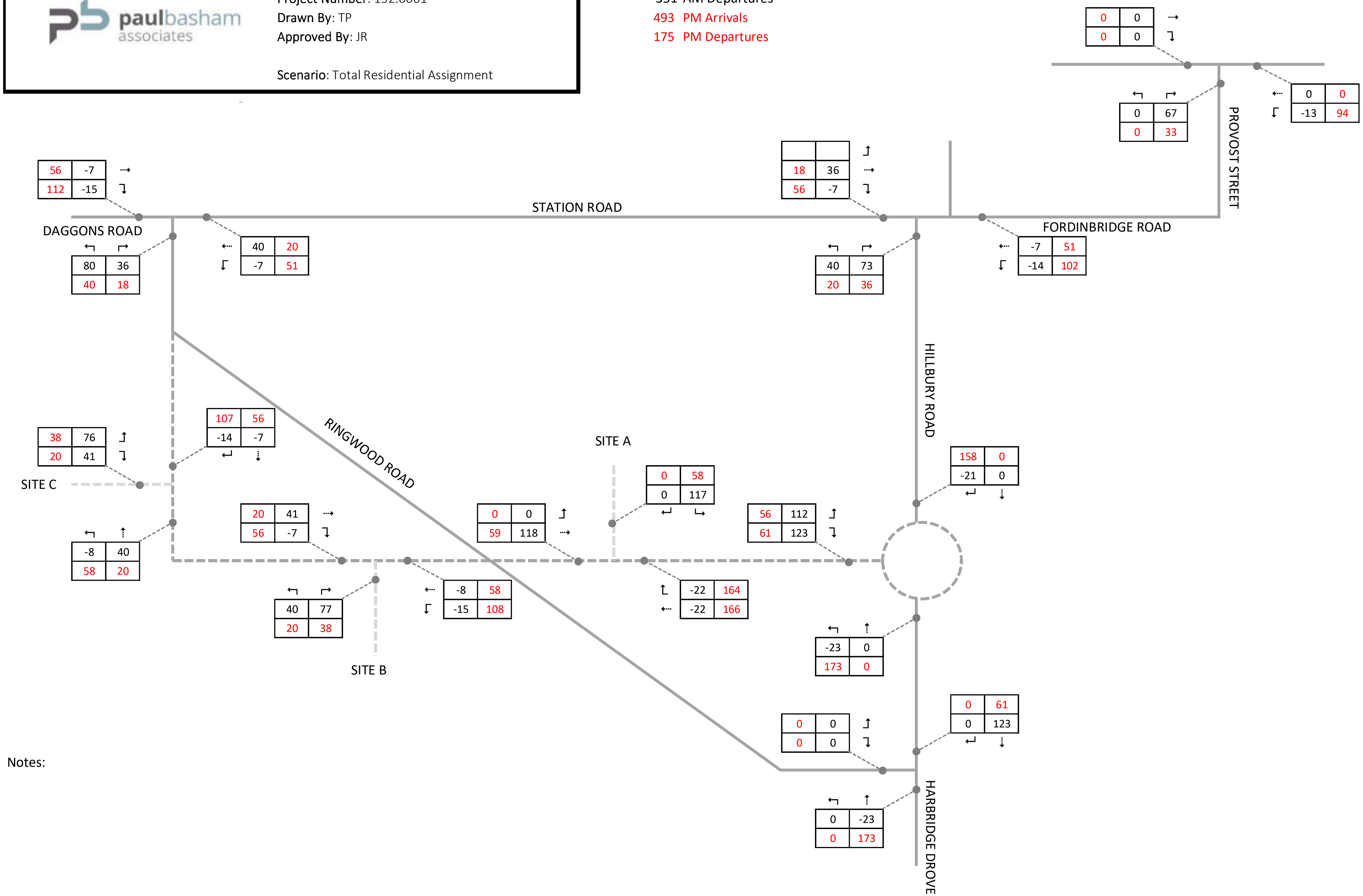


Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: Total Residential Assignment

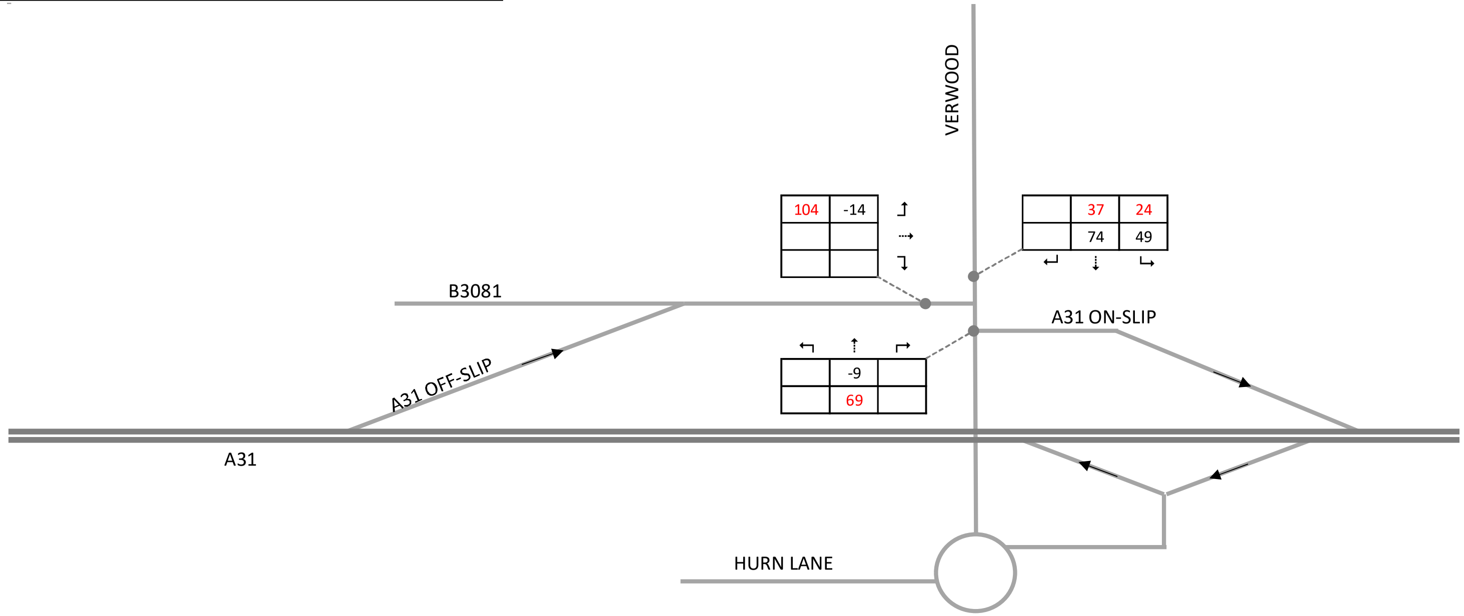
-66 AM Arrivals
351 AM Departures
493 PM Arrivals
175 PM Departures



Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: Total Residential Assignment

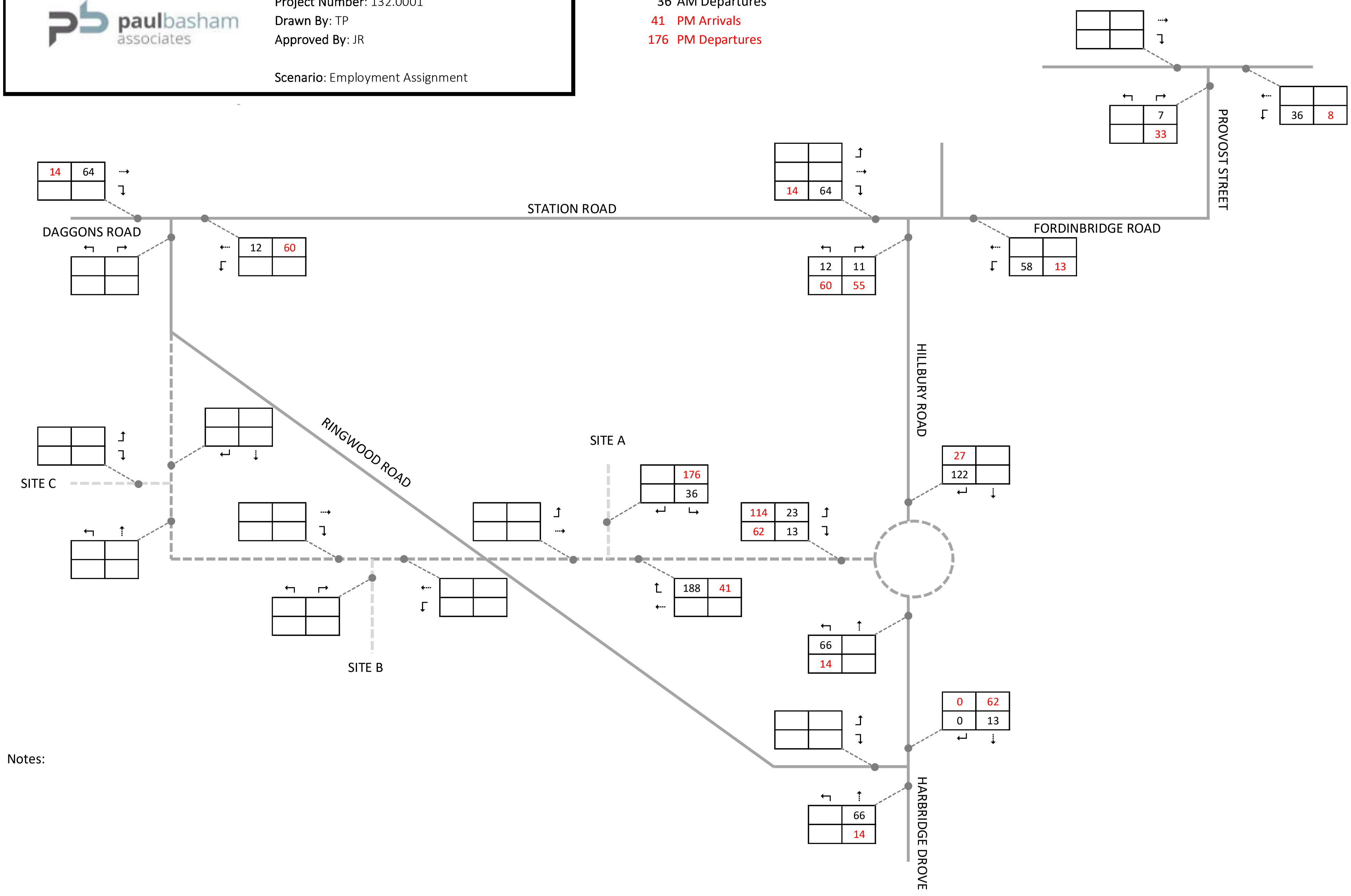


Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: Employment Assignment

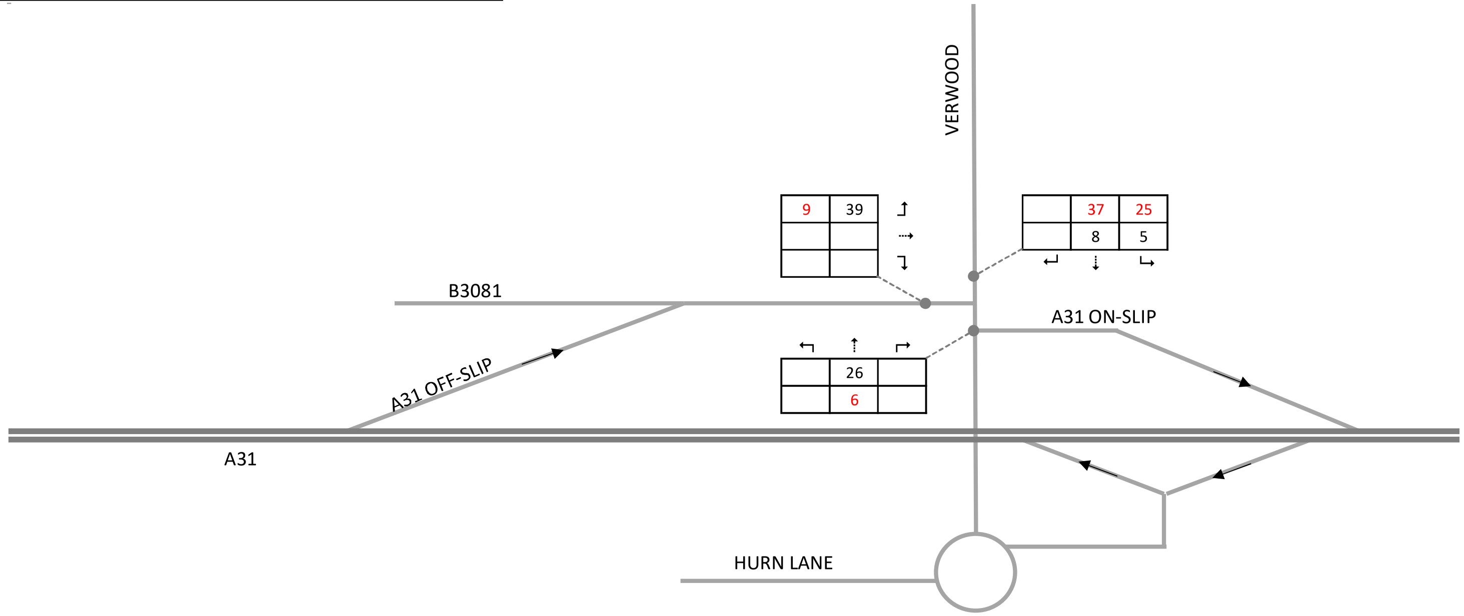
188 AM Arrivals
36 AM Departures
41 PM Arrivals
176 PM Departures



Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: Employment Assignment



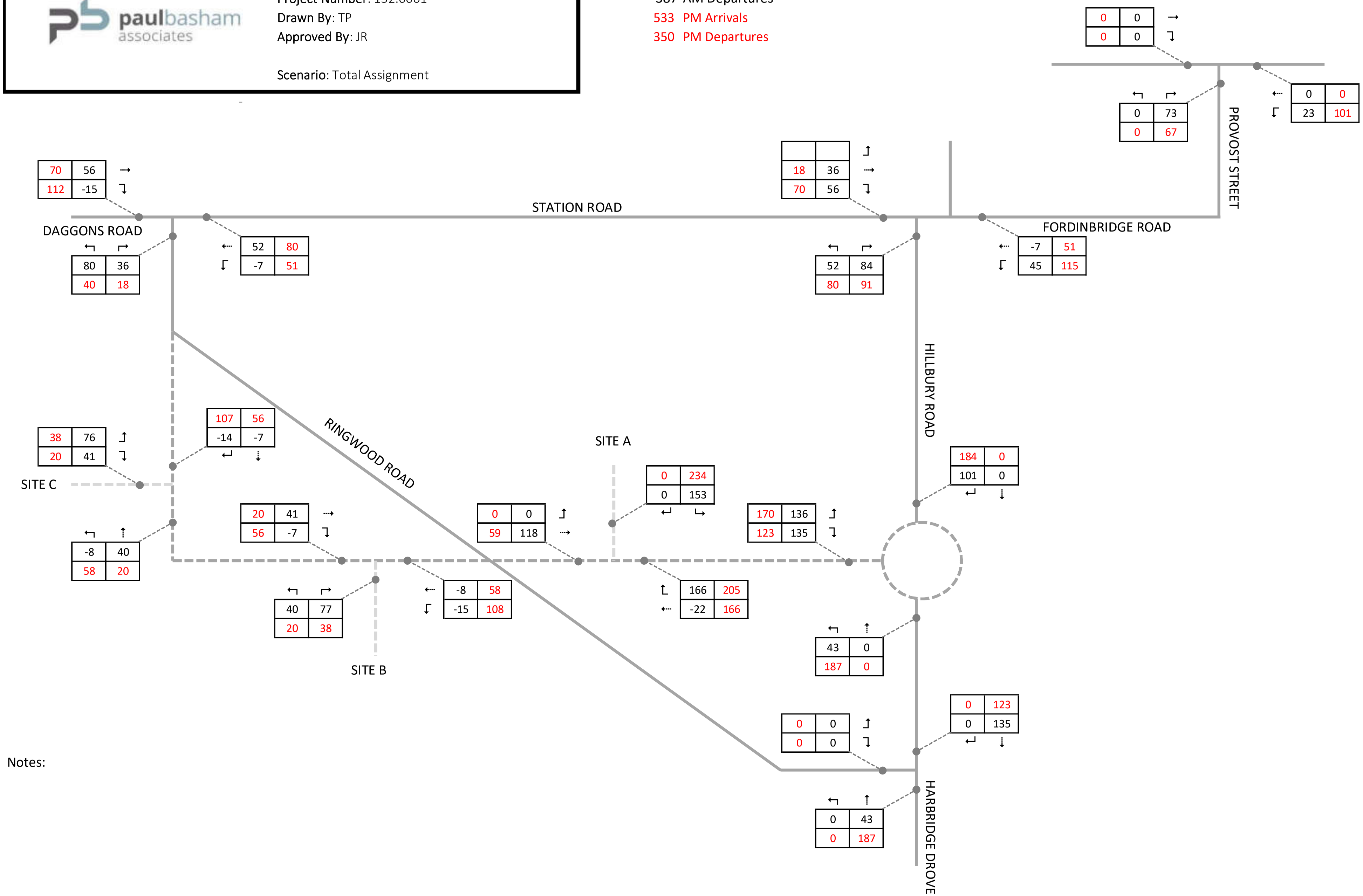
Notes:

paulbasham associates

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: Total Assignment

123 AM Arrivals
387 AM Departures
533 PM Arrivals
350 PM Departures

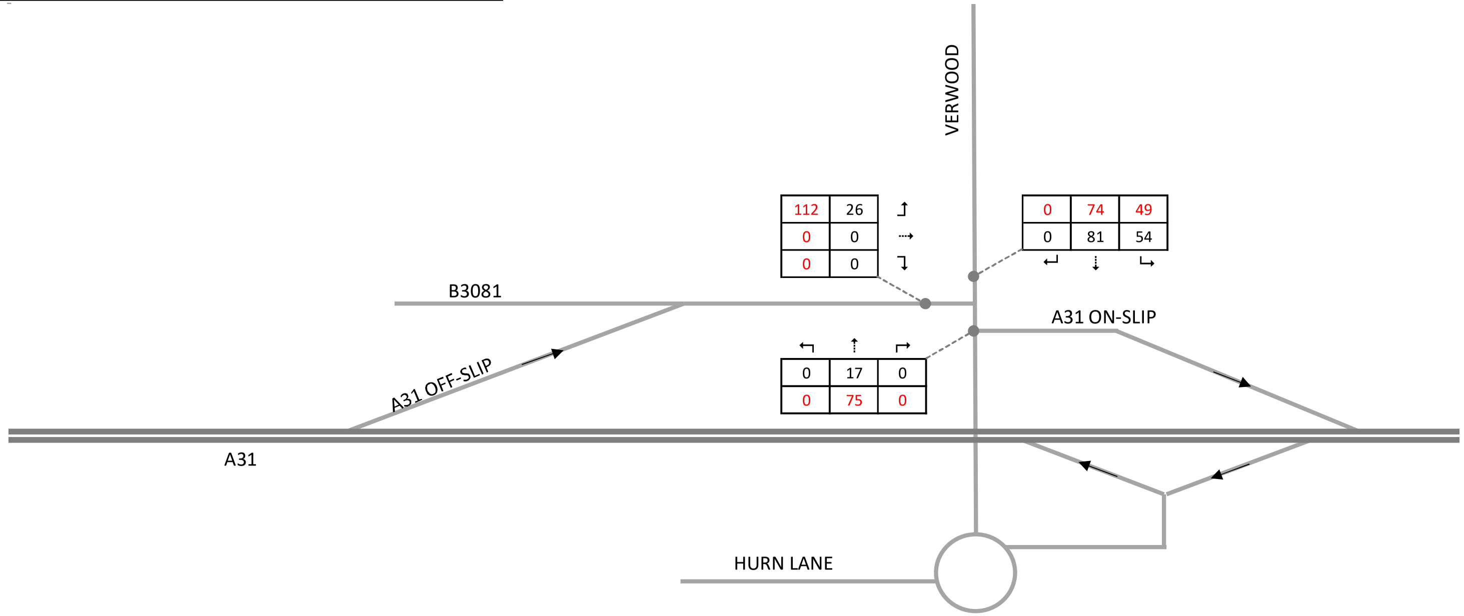


Notes:

paulbasham associates

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: Total Assignment

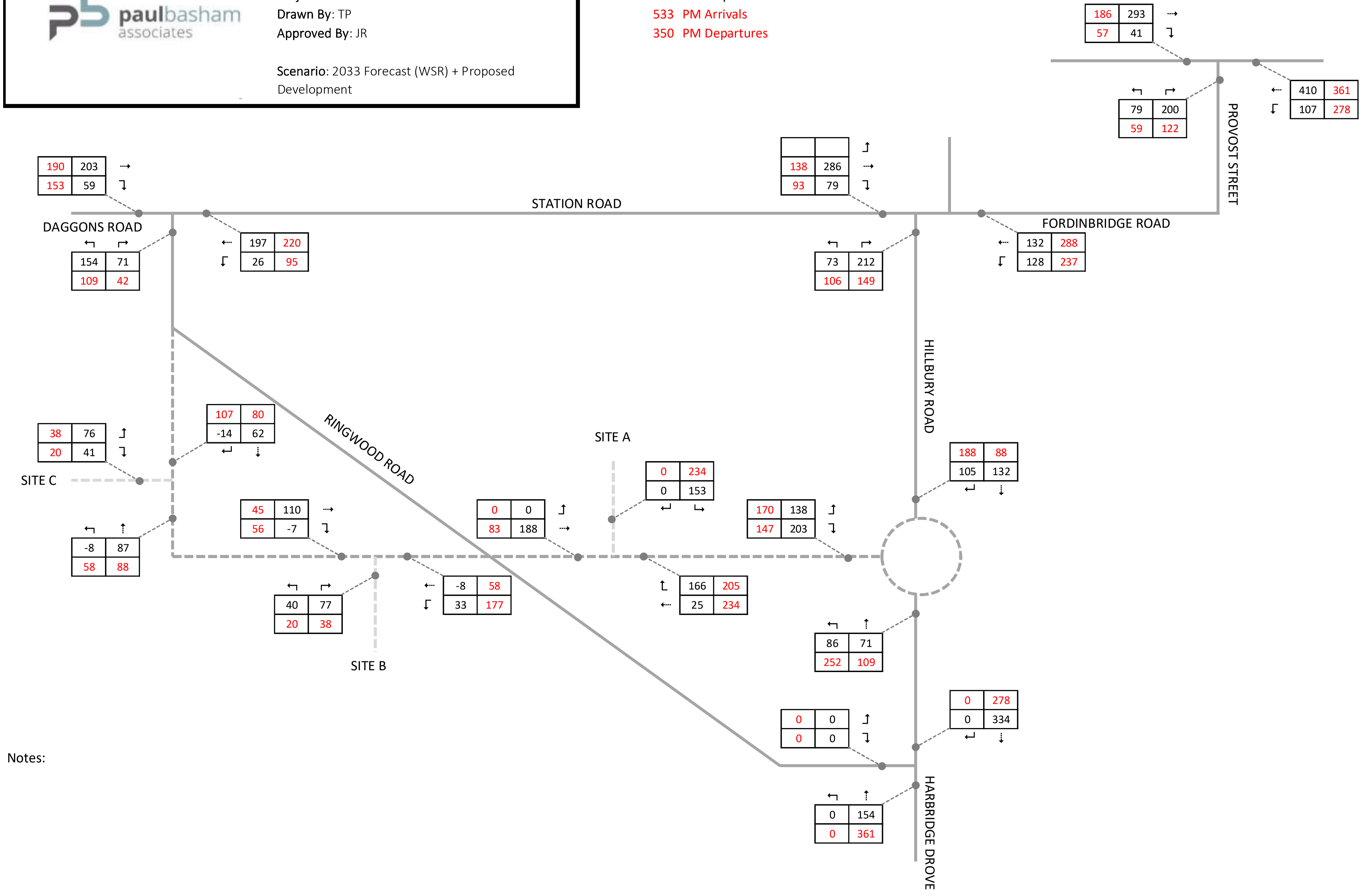


Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: 2033 Forecast (WSR) + Proposed Development

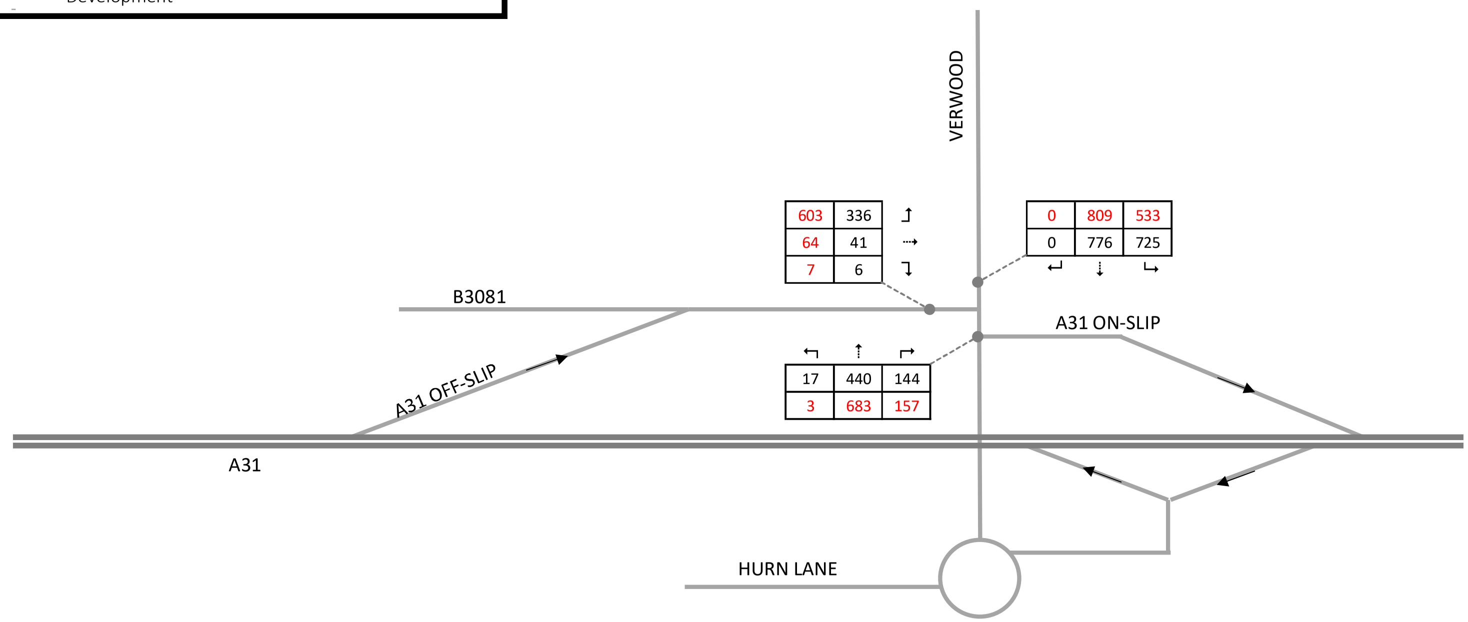
123 AM Arrivals
387 AM Departures
533 PM Arrivals
350 PM Departures



Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: 2033 Forecast (WSR) + Proposed Development

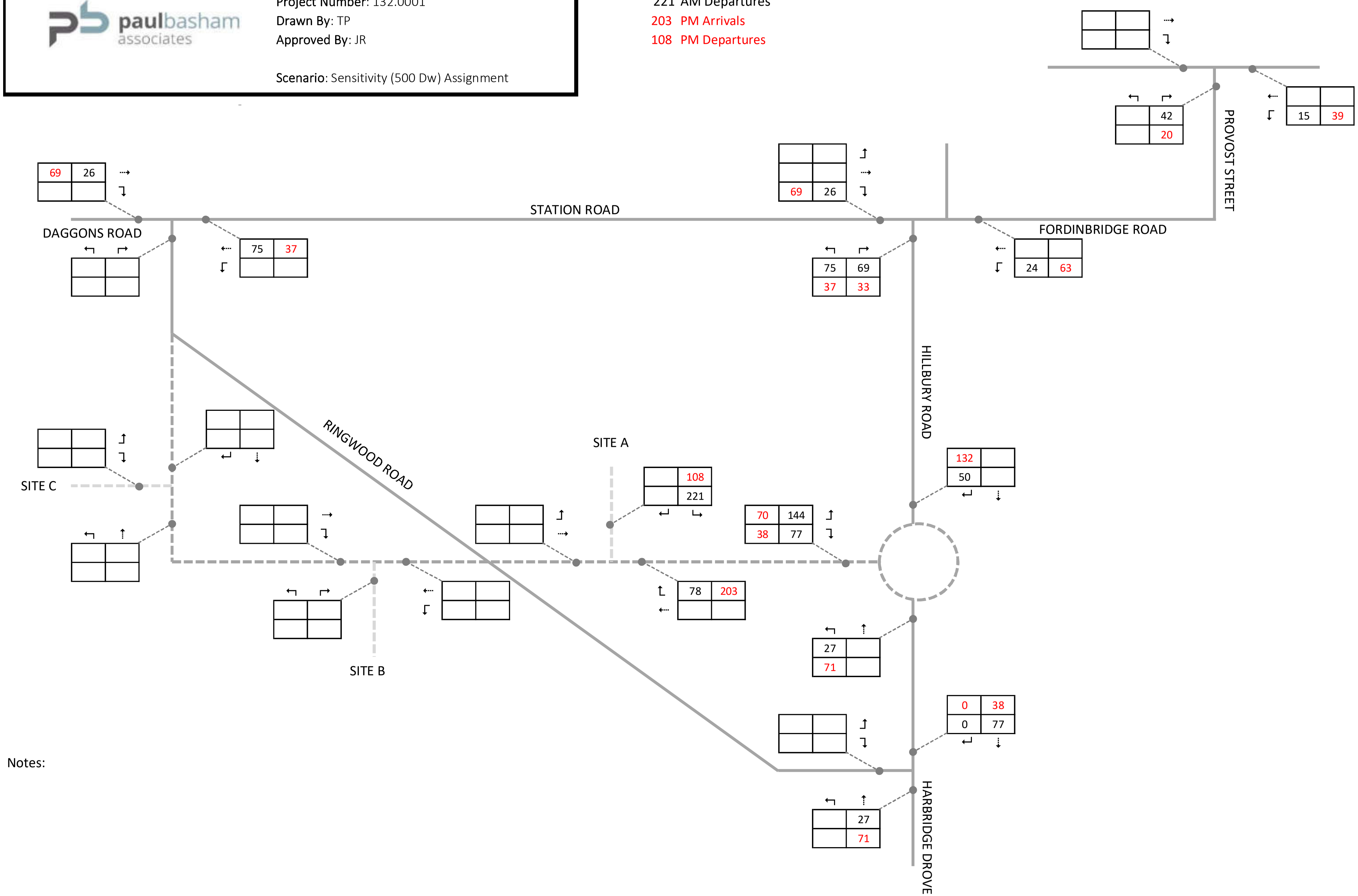


Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: Sensitivity (500 Dw) Assignment

78 AM Arrivals
221 AM Departures
203 PM Arrivals
108 PM Departures



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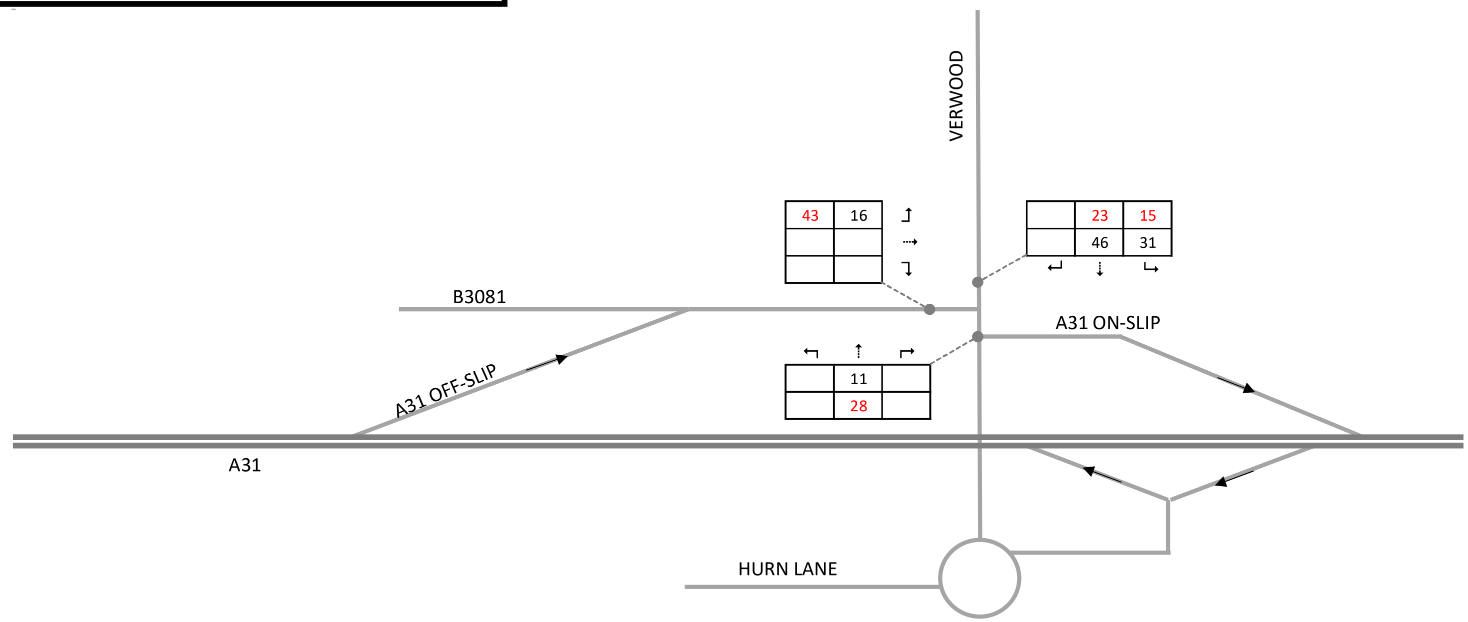
Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: Sensitivity (500 Dw) Assignment

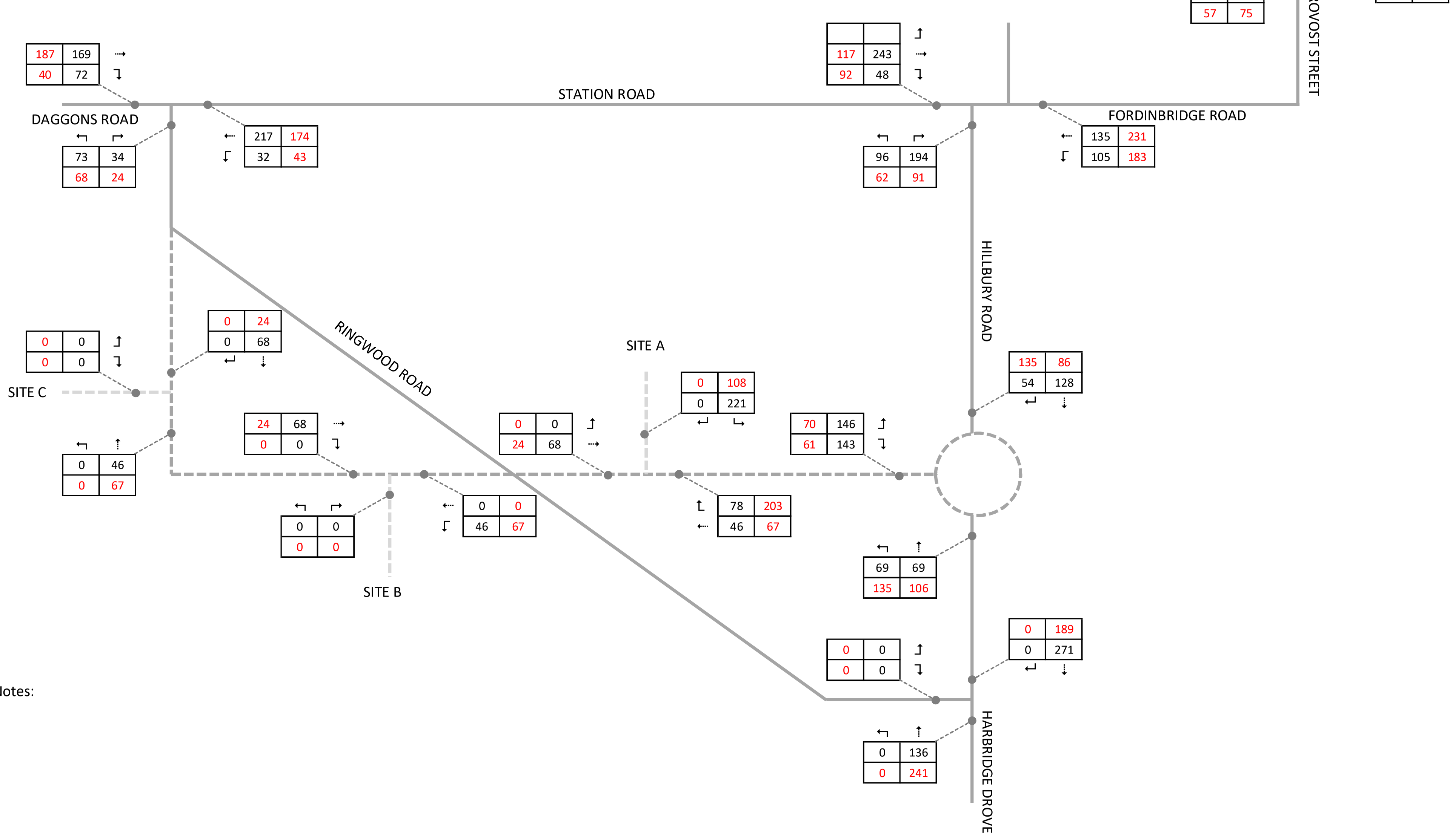


Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: 2027 Forecast (WSR) + Sensitivity Assessment

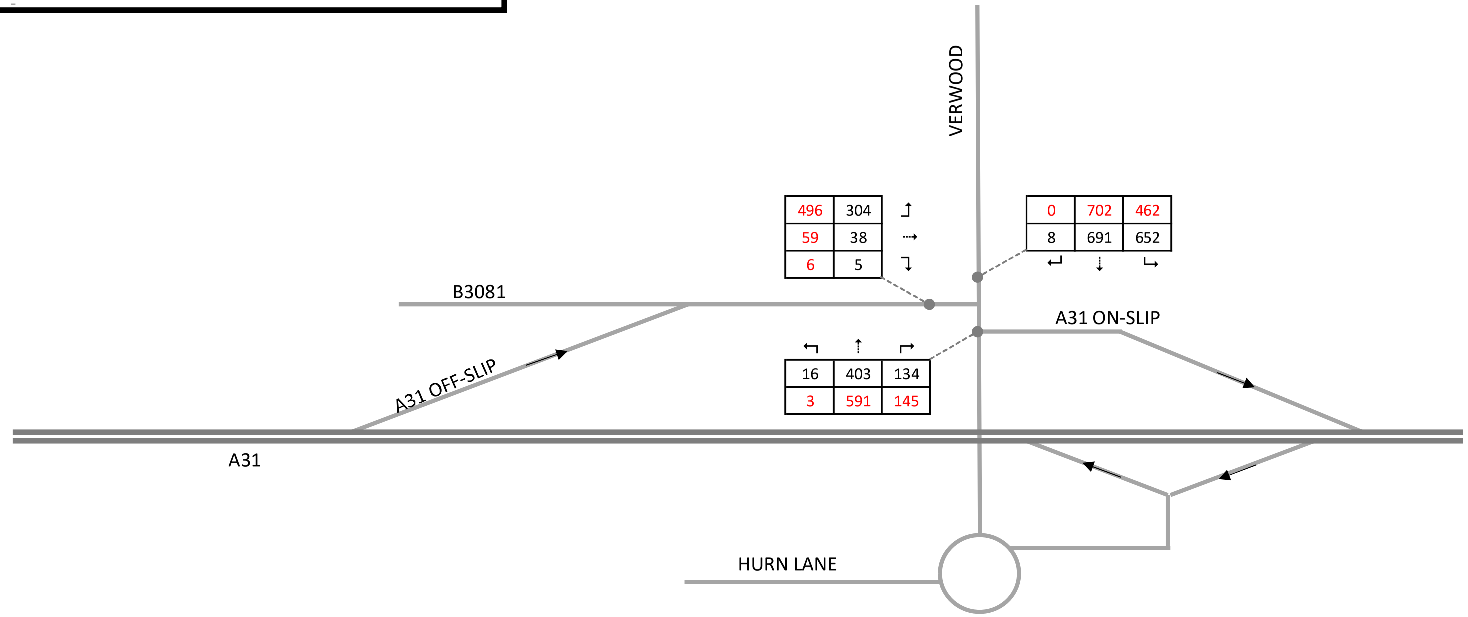
78 AM Arrivals
221 AM Departures
203 PM Arrivals
108 PM Departures



Notes:

Project Name: Alderholt
Project Number: 132.0001
Drawn By: TP
Approved By: JR

Scenario: 2027 Forecast (WSR) + Sensitivity Assessment



Notes:

Appendix O

Environment and the Economy
County Hall
Colliton Park
Dorchester
DT1 1XJ

Alderholt Paramics Model 2019

Forecasting Report

1750 Dwellings Update

Matthew Piles
Corporate Director for Economic Growth and Infrastructure

September 2021

DORSET COUNCIL,
ECONOMIC GROWTH AND INFRASTRUCTURE

DOCUMENT STATUS SHEET

Document Title	**Alderholt Paramics Model 2019 – Forecasting Report**
Author	**Alice Jones**
Checked	**Phil Channer**
Authorised for Issue	**Mike Moore**
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Registered Holder	**Phil Channer**

RECIPIENTS

Date	Name/Organisation
13/09/2021	**Tom Peters - Paul Basham Associates**
13/09/2021	**Shaan Novitzki - Paul Basham Associates**

Revisions
Details of revisions should be recorded manually on this form, which must be kept at the front of the document to which it refers

Rev	Description	Date

CONTENTS

1.0 INTRODUCTION

Background

1.1 Dorset Council's (DC's) Transportation Modelling team, was requested to undertake traffic modelling of Alderholt and the surrounding area to test the impact of proposed developments in and around Alderholt. To undertake this task a calibrated and validated traffic model of the area was created using Paramics Discovery software. Details of the base model are reported in the document 'Alderholt Paramics Model 2019 – Modelling Report, December 2019'.

1.2 This report details the development of the traffic forecasting model and the development testing scenarios. The overall modelled study area is shown in **Figure 1.1.**

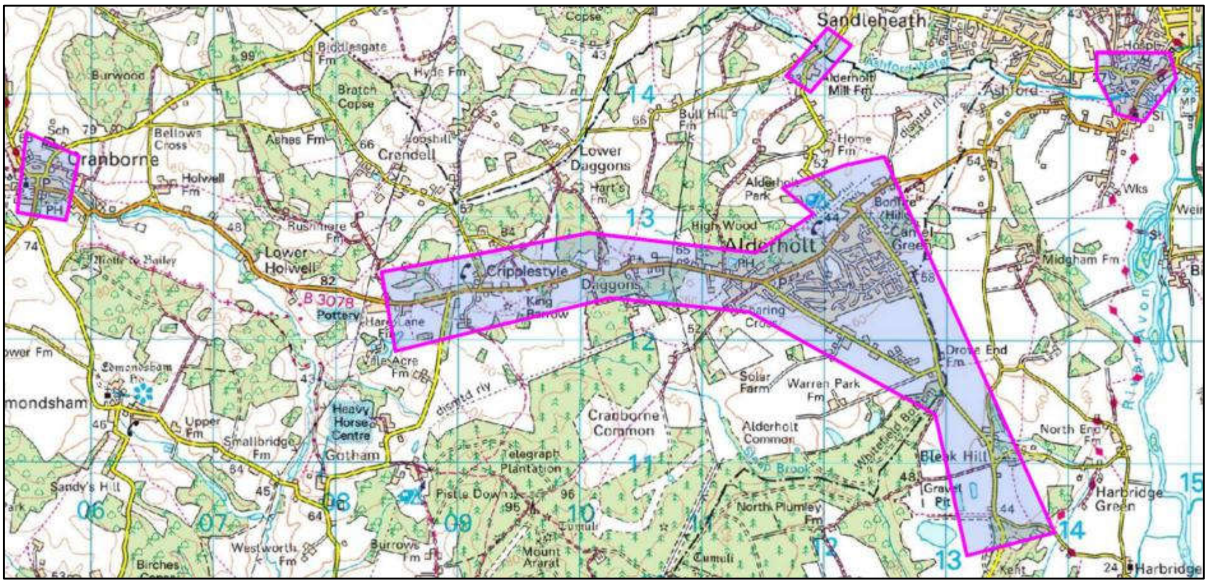


Figure 1.1 – Study Area

Software

1.3 Paramics Discovery version 22.0.4 was used for the model.

1.4 Traffic microsimulation models simulate the behaviour of individual vehicles within a predefined road network and are used to predict the likely impact of changes in traffic patterns resulting from changes to traffic flow or from changes to the physical environment" (from Wikipedia: https://en.wikipedia.org/wiki/Microsimulation)

2.0 MODEL SCOPE / PROPOSED USES

Proposed Uses of the Model

2.1 The study area is defined in **Figure 1.1**. The model has been specifically designed to assess the impact of a potential development in Alderholt. Three sub-models have also been created to examine potential capacity issues at Cranborne, White Mill bridge and Church Street, Fordingbridge.

Base Year

2.2 The base year of the model was taken as 2019 (June).

Summary of the Main Features of the Model

2.3 In summary, the traffic model developed for the study area has the following features and capabilities:

- A 'defined' model area, on which every major junction within Alderholt has been modelled in detail. Specifically, B3078 Station Road/Ringwood Road, B3078 Station Road/Hillbury Road, B3078 Fordingbridge Road/Sandleheath Road, and Hillbury Road/Ringwood Road.

- The model has been developed for the AM period (0700-1000hrs) and PM period (1600-1900hrs).

- Trip matrices are sub-divided into two vehicle classes (Light Vehicles/Heavy Vehicles)

3.0 DO MINIMUM FORECAST MODEL

Forecasting Approach

3.1 A forecast model has been developed to assess the impact of a potential developments in and around Alderholt. The forecasting has been carried out in line with guidance contained in TAG Unit M4 Forecasting and Uncertainty, May 2019.

3.2 NTEM TEMPRO growth has been used for trips with origins and/or destinations outside of Alderholt. Trips with origins and/or destinations within Alderholt are based on local developments with permissions, allocations or at proposed Strategic Housing Land Availability Assessment (SHLAA) sites.

3.3 The Local Plan period is likely to end in 2033. Therefore, 2033 has been chosen as the forecast year.

'5 Year Housing Land Supply for Christchurch and East Dorset Councils 2018-2023'

3.4 This document, published in March 2019, is the latest publish document regarding future housing supply.

Forecast Networks

3.5 The Do Minimum Forecast model network has been developed from the base network. It includes a mini-roundabout on Daggons Road/ Station Road to provide access to the potential Surplus Stores development.

3.6 A reference case year of 2033 has been assumed.

Local Plans

3.7 The Christchurch and East Dorset Local Plan – Core Strategy was adopted in April 2014. However, Christchurch Borough Council and East Dorset District Council ceased to exist on 31 March 2019. Alderholt is now within the new Dorset Council area. On 25 June 2019 Dorset Council cabinet agreed to stop progressing work on the Local Plan Reviews for the former District Councils with the exception of the Purbeck Local Plan 2019-2034, which is under examination. It is planned that a new Dorset Council Local Plan will be adopted in spring 2023.

3.8 In terms of traffic forecasting, the latest figures are shown in **Table 3.1**, **Table 3.2**, **Table 3.3**, and **Table 3.4** below. The document '*5 Year Housing Land Supply for Christchurch and East Dorset Councils 2018-2023*', published in March 2019, contains the latest official available information on potential housing. This report is an update to appendix 1 of the Christchurch and East Dorset Local Plan – Core Strategy.

Settlement	Site Address	Application Number	Type	Net Dwellings
Alderholt	Alderholt Surplus Stores, Daggons Road	3/11/0558	RM	89
Alderholt	Drove End Farm, Hillbury Road	3/17/0061	F	1
Alderholt	Land north of Ringwood Road	3/16/1446	O	43
Alderholt	Montana, 4 Hillbury Road	3/17/1875	F	1
Alderholt	Montana, 4 Hillbury Road	3/17/0347	F	3
Alderholt	The Cottage, Camel Green Road	3/16/1376	F	1
Verwood	42 Ringwood Road (C2 Element)	3/16/0165	F	1

Table 3.1 – East Dorset 5 Year Supply Sites (Current Planning Permissions)

Settlement	Full Address	SHLAA Site Ref Number	Potential Dwellings
Alderholt	23 - 31 Blackwater Grove, Alderholt	3/01/0697	2
Alderholt	10 Station Road and land adjacent, Alderholt	3/01/0701	5
Alderholt	43 - 57 Station Road, Alderholt	3/01/0703	1
Alderholt	3 - 15 Park Lane, 58 - 70 Station Road, 4 - 24 Camel Green Road, Alderholt	3/01/0705	1
Verwood	131-139 Newtown Road and 123-129 Lake Road, Verwood	3/22/0636	1
Verwood	50 - 62 Lake Road, Verwood	3/22/0641	4
Verwood	28 - 46 Lake Road and Public Open Space to west, Verwood	3/22/0650	1
Verwood	71 - 75 Burnbake Road and 8 - 14 Bugdens Lane, Verwood	3/22/0655	4
Verwood	44 - 70 Newtown Road and 42 - 50 Burnbake Road, Verwood	3/22/0656	1
Verwood	81 - 103 Manor Road, Verwood	3/22/0661	2

Table 3.2 – East Dorset 5 Year Supply Sites (5 Year Supply)

Settlement	Full Address	SHLAA Site Ref Number	Potential Dwellings
Alderholt	Land adj 58 Ringwood Road, Alderholt	3/01/0119	4
Alderholt	23 - 31 Blackwater Grove, Alderholt	3/01/0697	2
Alderholt	1-9 Blackwater Grove, Alderholt	3/01/0698	10
Alderholt	Public Open Space adjacent to 2 Blackwater Grove, Alderholt	3/01/0700	2
Alderholt	Village Hall and 3 - 9 Station Road, Alderholt	3/01/0702	4
Alderholt	43 - 57 Station Road, Alderholt	3/01/0703	3
Alderholt	3 - 15 Park Lane, 58 - 70 Station Road, 4 - 24 Camel Green Road, Alderholt	3/01/0705	4
Alderholt	5 - 33 Hayters Way, Alderholt	3/01/0707	4
Alderholt	8 - 26 Hillbury Road, Alderholt	3/01/0708	3

Table 3.3 – East Dorset 6 to 15 Year Supply Sites

Settlement	Full Address	SHLAA Site Ref Number	Potential Dwellings
Alderholt	92 - 106 Station Road, Alderholt	3/01/0709	4
Alderholt	7 - 25 Hillbury Road, Alderholt	3/01/0710	2
Alderholt	Public Open Space adjacent 1 Wren Gardens, Alderholt	3/01/0712	5
Alderholt	37 - 43 Ringwood Road and Public Open Space to the rear, Alderholt	3/01/0716	4
Verwood	2 - 24a Howe Lane, Verwood	3/22/0631	4
Verwood	2 - 10 St Michaels Road, Verwood	3/22/0635	2
Verwood	131-139 Newtown Road and 123-129 Lake Road, Verwood	3/22/0636	3
Verwood	97 - 105 Newtown Road, 3 - 9 Claylake Drive and 9 - 13 Owls Road Verwood	3/22/0639	2
Verwood	50 - 62 Lake Road, Verwood	3/22/0641	3
Verwood	52 - 60 Moneyfly Road, Verwood	3/22/0643	2
Verwood	189 - 199 Ringwood Road and 163 - 167 The Chase, Verwood	3/22/0647	2
Verwood	41 - 55 Lake Road and Public Open Space to east, Verwood	3/22/0649	3
Verwood	28 - 46 Lake Road and Public Open Space to west, Verwood	3/22/0650	3
Verwood	Conifers - Mount Pleasant, Sandy Lane, Verwood	3/22/0653	10
Verwood	71 - 75 Burnbake Road and 8 - 14 Bugdens Lane, Verwood	3/22/0655	4
Verwood	11 - 21 Burnbake Road, Verwood	3/22/0660	4
Verwood	81 - 103 Manor Road, Verwood	3/22/0661	4
Verwood	4 - 14a Springfield Road, 3 - 17 Manor Lane, 78 84 Manor Road, Verwood	3/22/0662	4
Verwood	5 - 19 Springfield Road and 94 - 100 Manor Road, Verwood	3/22/0663	10
Verwood	Caradon Place, Somerley Cottage, Cedar Breaks - Harwood, Eastworth Road, Verwood	3/22/0666	3
Verwood	75 - 93 Lake Road, 1 - 15 Whitbeam Way and 76 - 84 Woodlinken Drive, Verwood	3/22/0669	2

Table 3.3 – East Dorset 6 to 15 Year Supply Sites (continued)

3.9 The New Forest District Local Plan Part 2: Sites and Development Management Development Plan document was adopted in April; 2014.

3.10 The New Forest District Council Strategic Housing Land Availability Assessment (June 2018) contains the latest official available information on potential housing. Appendix 12 covers the area of Fordingbridge, Ashford and Sandleheath. Sites included are listed in **Table 3.4**.

Settlement	Full Address	SHLAA Site Ref Number	Area (Ha)	Potential Dwellings
Fordingbridge	Land at Burgate	SHLAA_FOR001		350
Fordingbridge	Land at Whitsbury Road (also FORD1)	SHLAA_FOR002		330+145
Ashford	Land north of Station Road	SHLAA_ASH001	18.4	140
Ashford	Ashford Works	SHLAA_ASH002	0.35	10
Ashford	Land adjoining Jubilee Crescent (also ASH1)	SHLAA_ASH003	0.4	10
Ashford	Land to the north and east of 174 Station Road	SHLAA_ASH004	2.2	26
Sandleheath	Land between Kerry Gardens and Sandle Manor Farm	SHLAA_SAN002	0.68	5
Sandleheath	Land west of the Scout Centre, south of Station Road	SHLAA_SAN006a	0.5	10
Sandleheath	Land west of the Scout Centre, south of allocation (also SAND1)	SHLAA_SAN006b	0.8	5

Table 3.4 – New Forest 5 Year Supply Sites (5 Year Supply)

Transport Assessments

3.11 The following Transport Assessments have been consulted to identify the impact predicted from each development:

- Alderholt Surplus Stores site at Daggons Road, Alderholt
- Land North of Ringwood Road, Alderholt
- Alderholt Nursery, Alderholt
- Lands North and South and Edmonsham Road, Verwood (VTSW4)

NTEM Growth

3.12 Origin and destination growth rates have been extracted from the National Trip End Model (NTEM) using the TEMPRO V7.2 program.

3.13 Growth rates for car trips were applied to zones outside of Alderholt. These rates were then adjusted by Fuel Price and Income forecast factors using the guidance in Tag Unit M4 Section 7.4.13.

3.14 Traffic growth factors applied to the model are contained in **Table 3.5**.

NTEM Area	Area Description	AM	PM
New Forest 001	Fordingbridge	1.1530	1.1502
New Forest 012	Ringwood	1.1759	1.1766
East Dorset	East Dorset	1.1552	1.1535

Table 3.5 – TEMPRO Growth Factors (2019-2033)

3.15 Freight traffic growth (LGV and OGV trips) is based on growth factors obtained from the National Transport Model (NTM). Growth factors used are shown in **Table 3.6**.

Period	LGV	OGV
AM Peak	1.401	1.059
PM Peak	1.401	1.069

Table 3.6 – Goods Vehicle Growth Factors (2019-2033)

Trip Rates

3.16 Various peak hour trip rates have been extracted from the TRICS 7.4.4 database and from locally observed traffic counts. All trip rates are shown in **Table 3.7**.

Development	Arr. 7-10	Dep. 7-10	2-Way AM	Arr. 16-19	Dep. 16-19	2-Way PM
Snails Lane *(Transport Assessment)*	0.41	0.972	1.382	0.988	0.624	1.612
Alderholt *(Transport Assessment)*	0.317	0.747	1.064	0.909	0.547	1.456
NFDC Local Plan work	0.435	1.25	1.685	1.198	0.849	2.047
Apple Tree Road, Alderholt *(observed)*	0.267	0.924	1.191	1.092	0.595	1.687
Pine Road, Alderholt *(observed)*	0.267	1.083	1.35	1.100	0.600	1.7
Broomfield Drive, Alderholt *(observed)*	0.188	0.667	0.855	0.688	0.458	1.146
Wren Gardens, Alderholt *(observed)*	0.341	0.976	1.317	1.049	0.537	2.903

Table 3.7 – Comparison of Trip Rates (vehicles per dwelling per hour)

3.17 Apple Tree Road appears to include a mixture of housing types and sizes and is considered appropriate to represent future development in Alderholt. However, the trip rates observed at Pine Road are higher and will be used for this assessment as a ‘worst case’ scenario.

Trip Distribution

3.18 Trip distribution for new developments in Alderholt are based on the existing distribution within the relevant zone. Census Journey to Work data was used to estimate the proportion of trips passing through Alderholt from new developments in Verwood and Fordingbridge.

Do Minimum Forecast Matrices

3.19 Forecast matrices were initially created to represent the 2033 Do Minimum scenario. These include the committed and supply site developments, constrained to NTEM growth. The 2019 and 2033 forecast matrix sizes are shown in **Table 3.8** and **Table 3.9** for the AM and PM peaks respectively.

Matrix Level	Base 2019	2033 Do Min.	Difference (2033-2019)	Percent Difference.
Light Vehicles	6344.90	7879.89	1534.99	24%
Heavy Vehicles	213.70	229.16	15.46	7%
Total	**6558.60**	**8109.05**	**1550.45**	**24%**

Table 3.8 – AM Period (0700-1000) Matrix Totals

Matrix Level	Base 2019	2033 Do Min.	Difference (2033-2019)	Percent Difference.
Light Vehicles	7070.93	8750.92	1679.98	24%
Heavy Vehicles	78.72	85.93	7.21	9%
Total	**7149.65**	**8836.84**	**1687.19**	**24%**

Table 3.9 – PM Period (1600-1900) Matrix Totals

4.0 DO SOMETHING FORECAST MODELS

Do Something Forecast Matrices

4.1 Three 2033 forecast matrices were created to represent potential developments of 500, 1000, and 2500 dwellings in Alderholt village. These include the background growth scenario used in the Do Minimum forecast matrix.

4.2 An additional forecast matrix representing 1750 dwellings was tested at the request of Paul Basham Associates.

4.3 The trips associated with proposed dwellings were split across three zones built into the model to represent sites identified for development. The percentage splits were roughly allocated according to provisional developer plans, as follows:

- Site West of Hillbury Road (Zone 29) = 30% of dwellings
- Site North of Warren Park Farm: (Zone 30) = 40% of dwellings
- Site West of Ringwood Road: (Zone 31) = 30% of dwellings

4.4 The location of the potential development zones are shown in **Figure 4.1**.

Figure 4.1 – Potential Development Zones

4.5 The trip rates were those used for the Do Minimum forecasting (Pine Road trip rates).

4.6 The distribution of trips was calculated according to an average of the distributions for each of the central Alderholt housing zones across the Do Minimum matrix (i.e. zone 4 to zone 28 inclusive).

4.7 The trip distribution *originating* from each of the potential new development zones are shown in **Figure 4.2**, **Figure 4.4**, **Figure 4.6**, **Figure 4.8**, **Figure 4.10** and **Figure 4.12** for zones 29, 30 and 31 respectively.

4.8 The trip distribution *arriving* at each of the potential new development zones are shown in **Figure 4.3**, **Figure 4.5**, **Figure 4.7**, **Figure 4.9**, **Figure 4.11** and **Figure 4.13** for zones 29, 30 and 31 respectively.

4.9 On the figures, the blue lines represent the amount of traffic as bandwidths. The thicker and darker the line, the greater the traffic.

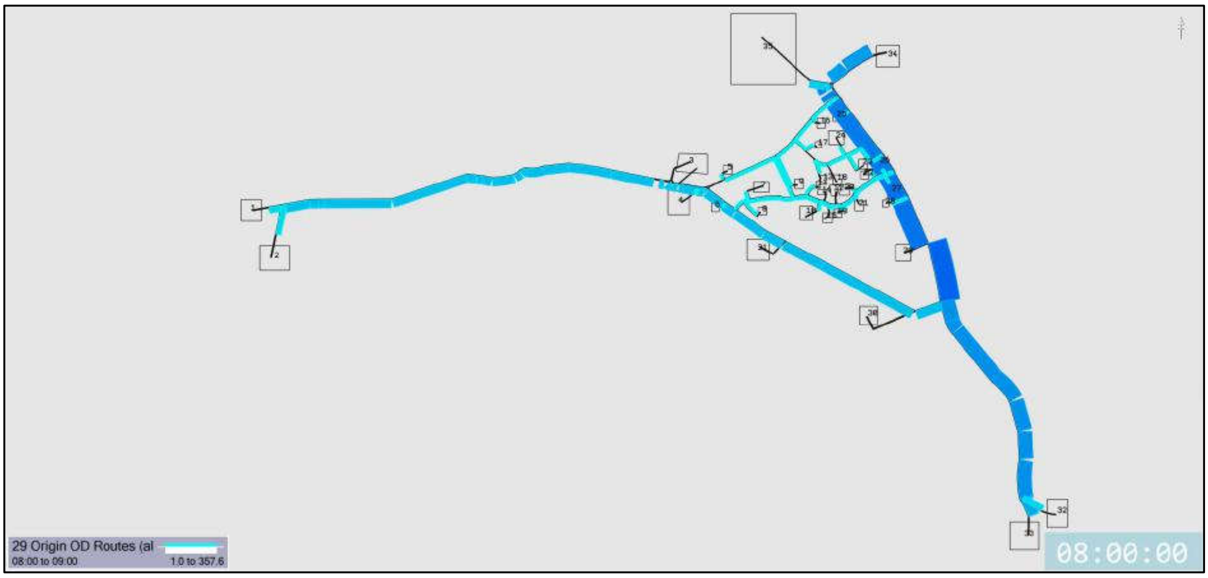


Figure 4.2 – Trip Distribution *from* Zone 29 (AM Peak)

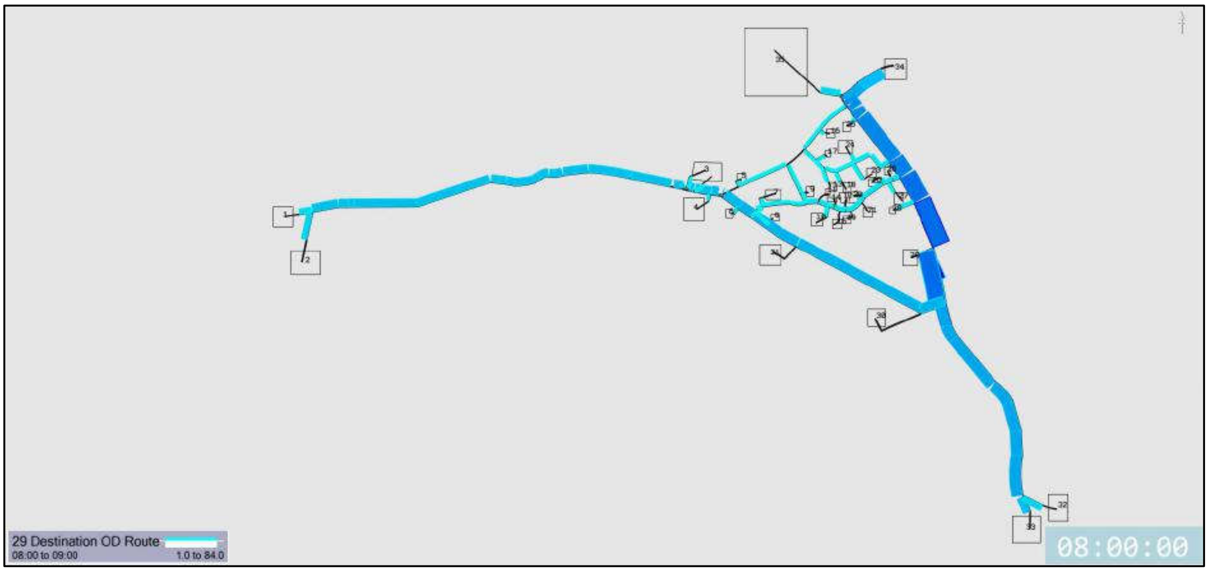


Figure 4.3 – Trip Distribution *to* Zone 29 (AM Peak)

4.10 In the AM peak, trips traveling to and from Zone 29 are mainly using Hillbury Road, Harbridge Drove, and Ringwood Road.

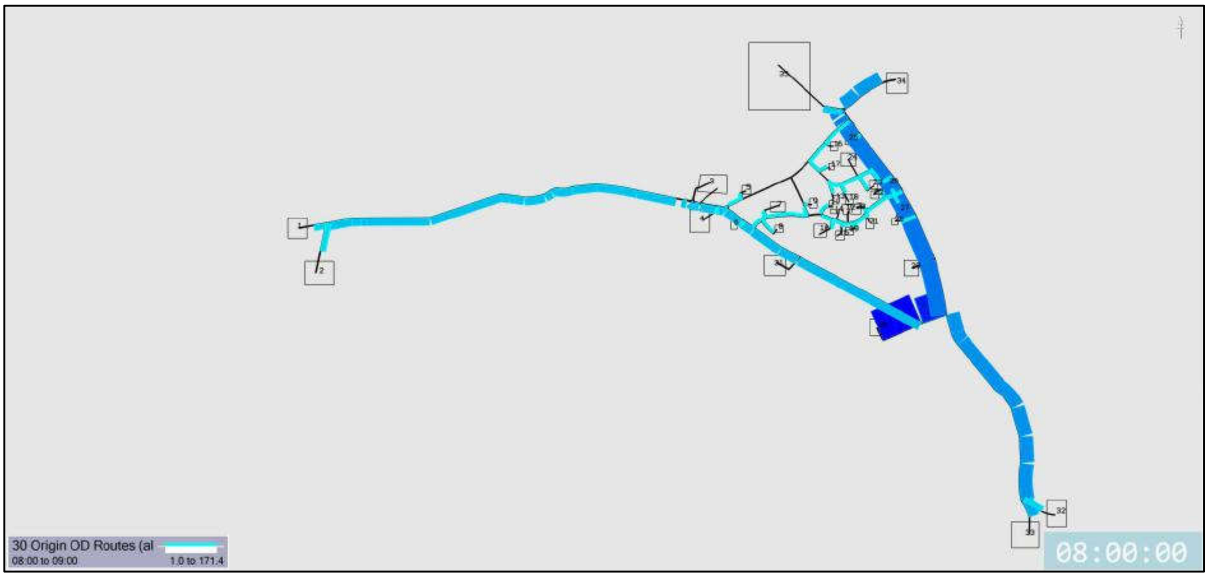


Figure 4.4 – Trip Distribution *from* Zone 30 (AM Peak)

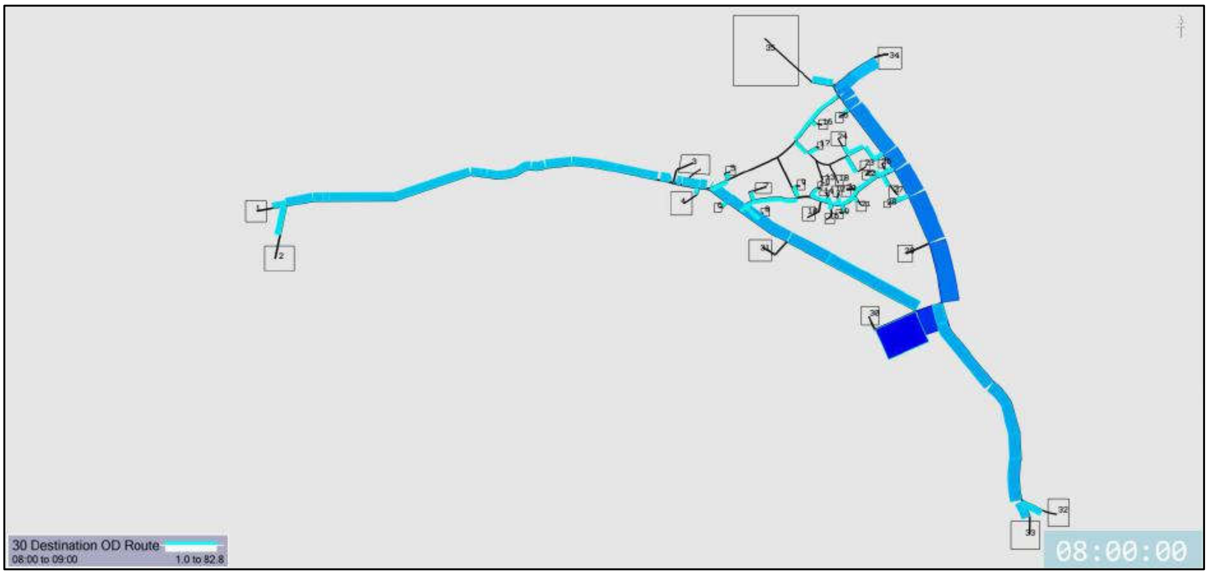


Figure 4.5 – Trip Distribution *to* Zone 30 (AM Peak)

4.11 In the AM peak, trips traveling to and from Zone 30 are mainly using Hillbury Road, Harbridge Drove and Ringwood Road.

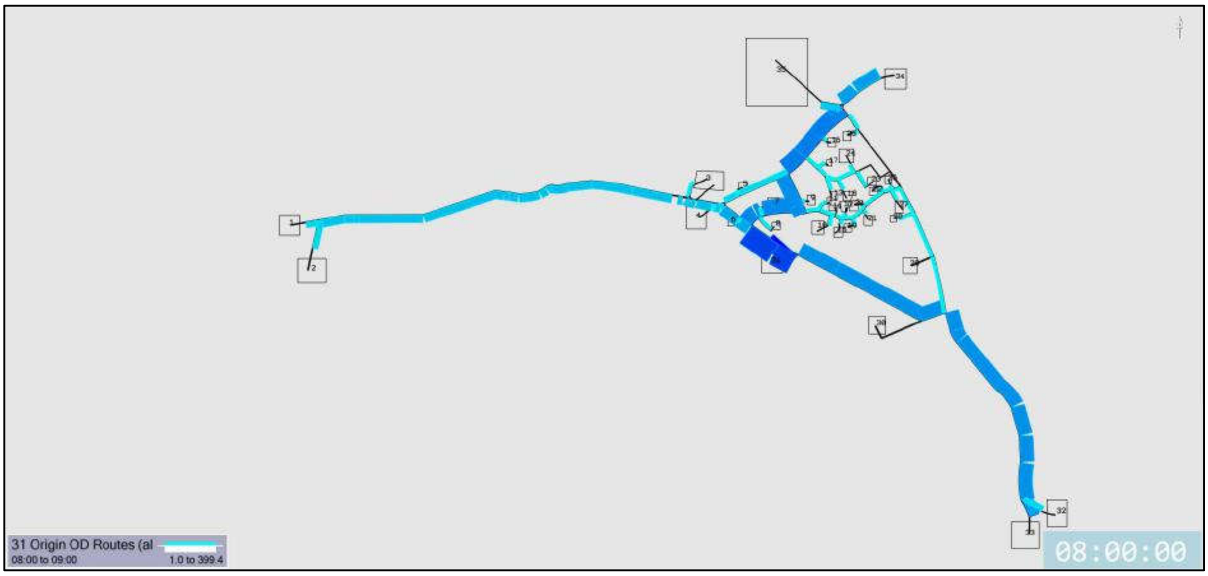


Figure 4.6 – Trip Distribution *from* Zone 31 (AM Peak)

Figure 4.7 – Trip Distribution *to* Zone 31 (AM Peak)

4.12 In the AM peak, trips traveling to and from Zone 31 are mainly using Ringwood Road and Harbridge Drove. The model shows a large proportion of trips cutting through Eastwood Drive, Park Lane to access the B3078. If this were a problem, traffic management measures could be introduced to encourage traffic to use the Station Road / Ringwood Road junction.

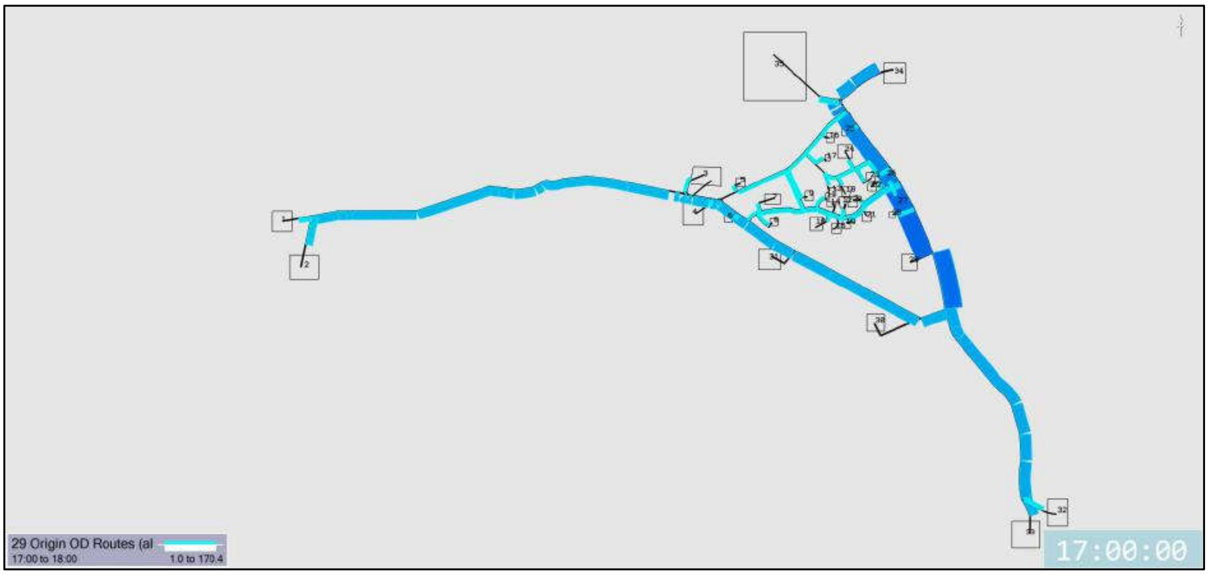


Figure 4.8 – Trip Distribution *from* Zone 29 (PM Peak)

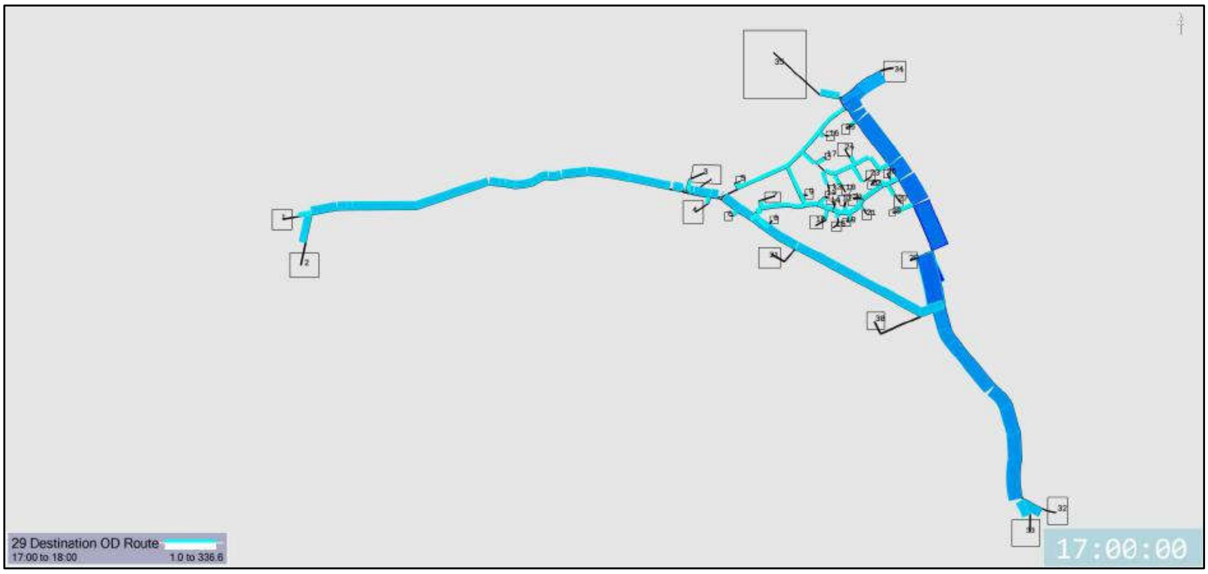


Figure 4.9 – Trip Distribution *to* Zone 29 (PM Peak)

4.13 In the PM peak, trips traveling to and from Zone 29 are mainly using Hillbury Road, Harbridge Drove and Ringwood Road.

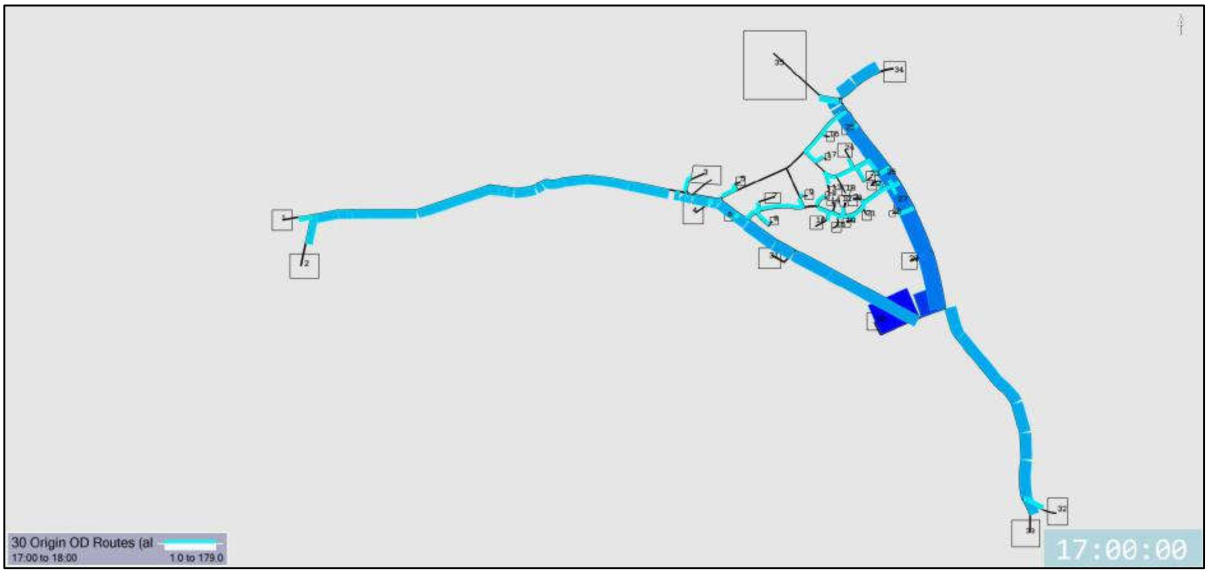


Figure 4.10 – Trip Distribution *from* Zone 30 (PM Peak)

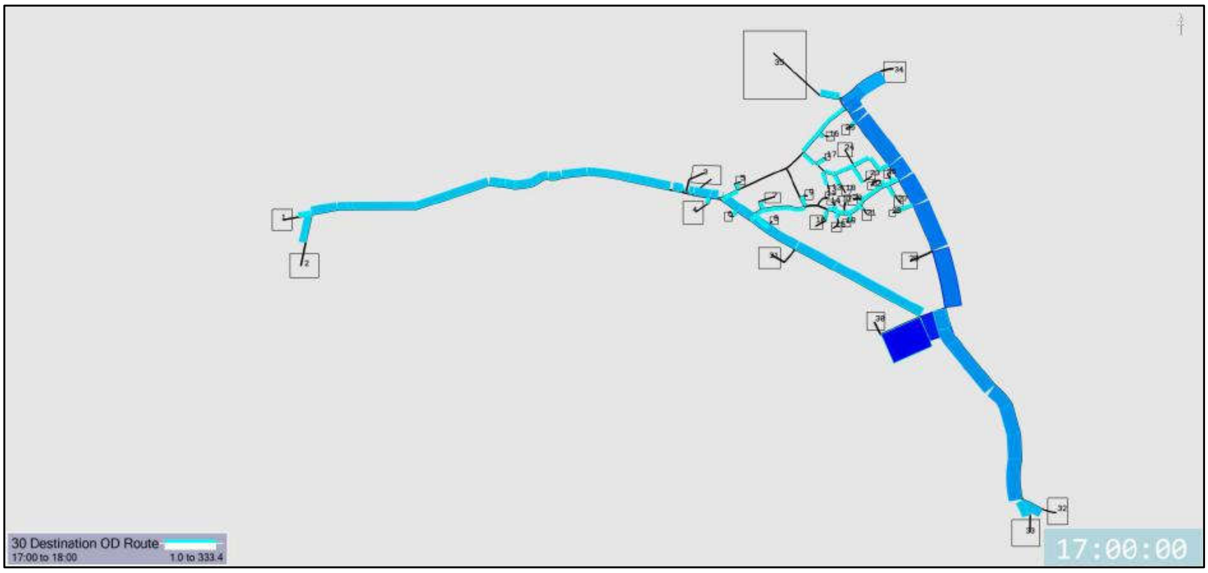


Figure 4.11 – Trip Distribution *to* Zone 30 (PM Peak)

4.14 In the PM peak, trips traveling to and from Zone 30 are mainly using Hillbury Road, Harbridge Drove and Ringwood Road.

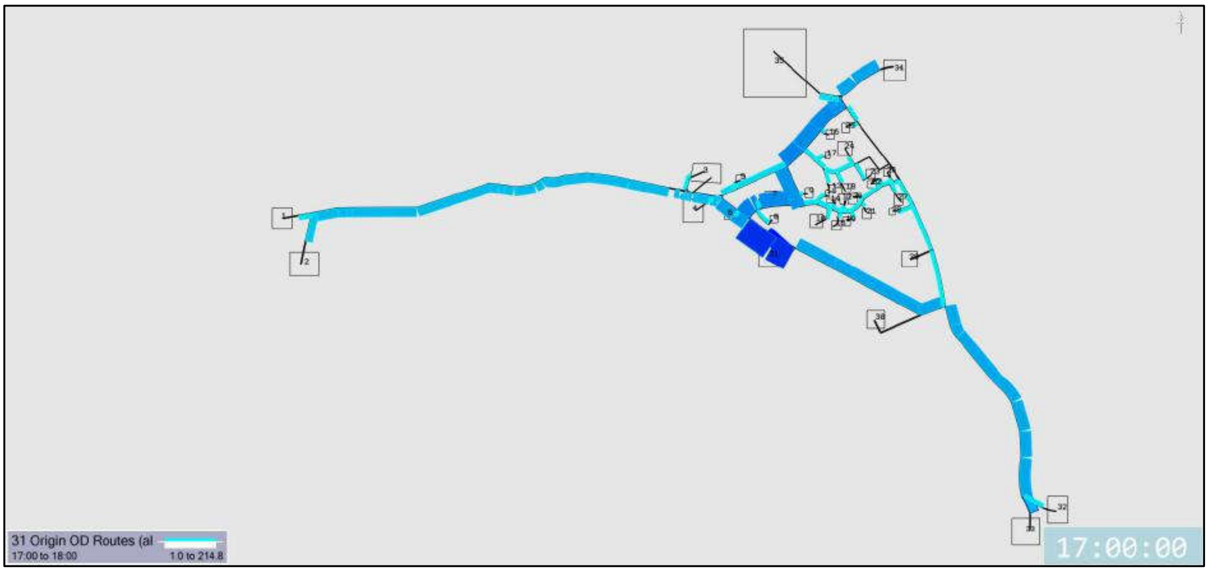


Figure 4.12 – Trip Distribution *from* Zone 31 (PM Peak)

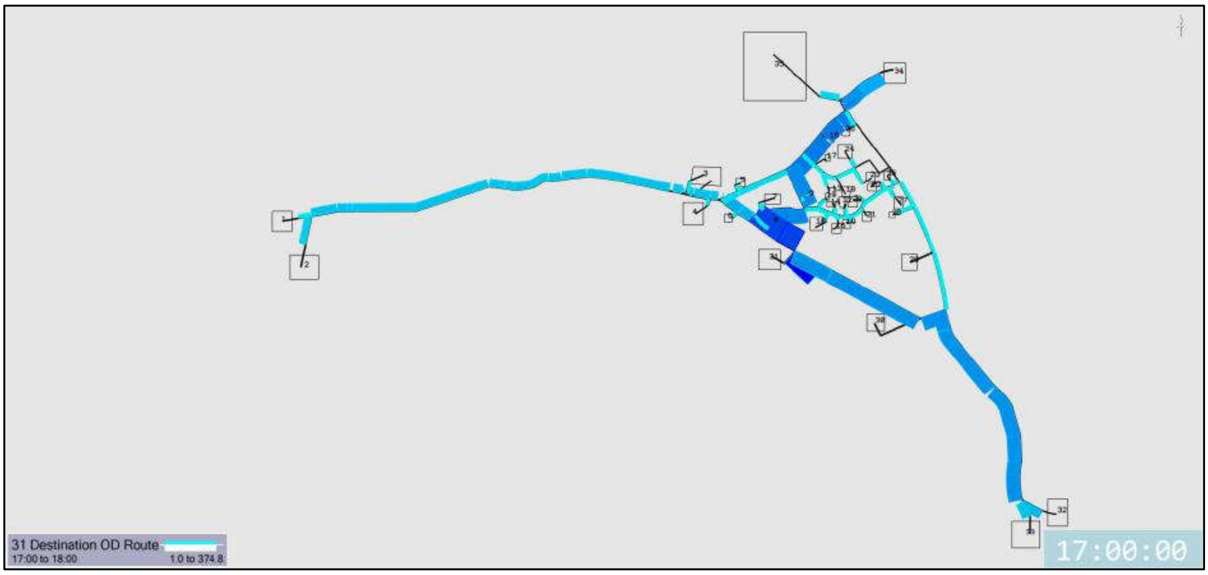


Figure 4.13 – Trip Distribution *to* Zone 31 (PM Peak)

4.15 In the AM peak, trips traveling to and from Zone 31 are mainly using Ringwood Road and Harbridge Drove. The model shows a large proportion of trips cutting through Eastwood Drive, Park Lane to access the B3078. If this were a problem, traffic management measures could be introduced to encourage traffic to use the Station Road / Ringwood Road junction.

Do Something Network

4.16 The network used is the same as the Do Minimum, however, it was discovered in the Do Something 2500 dwelling scenario that traffic waiting to turn left from Ringwood Road into Harbridge Drove cause excessive queuing and stopped vehicles exiting Zone 30.

4.17 To alleviate excessive queuing, the Ringwood Road/Hillbury Road/Harbridge Drove junction was changed from a priority T-junction to a mini roundabout in the Do Something 2500 scenario to allow traffic to flow more evenly across the network. The placement of the roundabout is shown in **Figure 4.14**.

Figure 4.14 – Do Something 2033 Network: Roundabout Close-up

4.18 The 2033 forecast matrix sizes are compared in **Table 4.1** and **Table 4.2** (*Do Minimum vs Do Something 500*), **Table 4.3** and **Table 4.4** (*Do Minimum vs Do Something 1000*), **Table 4.5** and **Table 4.6** (*Do Minimum vs Do Something 1750*), and **Table 4.7** and **Table 4.8** (*Do Minimum vs Do Something 2500*), for the AM and PM peaks respectively.

Matrix Level	2033 Do Min	DS 500	Difference (2033-2019)	Percent Difference.
Light Vehicles	7879.89	8879.66	999.77	13%
Heavy Vehicles	229.16	229.16	0.00	0%
Total	**8109.05**	**9108.83**	**999.77**	**12%**

Table 4.1 – AM Period (0700-1000) Matrix Totals

Matrix Level	2033 Do Min	DS 500	Difference (2033-2019)	Percent Difference.
Light Vehicles	8750.92	10013.01	1262.10	14%
Heavy Vehicles	85.93	85.93	0.00	0%
Total	**8836.84**	**10098.94**	**1262.10**	**14%**

Table 4.2 – PM Period (1600-1900) Matrix Totals

Matrix Level	2033 Do Min	DS 1000	Difference (2033-2019)	Percent Difference.
Light Vehicles	7879.89	9879.44	1999.55	25%
Heavy Vehicles	229.16	229.16	0.00	0%
Total	**8109.05**	**10108.60**	**1999.55**	**25%**

Table 4.3 – AM Period (0700-1000) Matrix Totals

Matrix Level	2033 Do Min	DS 1000	Difference (2033-2019)	Percent Difference.
Light Vehicles	8750.92	11186.69	2435.77	28%
Heavy Vehicles	85.93	85.93	0.00	0%
Total	**8836.84**	**11272.61**	**2435.77**	**28%**

Table 4.4 – PM Period (1600-1900) Matrix Totals

Matrix Level	2033 Do Min	DS 1750	Difference (2033-2019)	Percent Difference.
Light Vehicles	7879.89	10890.25	3010.36	38%
Heavy Vehicles	229.16	229.16	0.00	0%
Total	**8109.05**	**11119.42**	**3010.36**	**37%**

Table 4.5 – AM Period (0700-1000) Matrix Totals

Matrix Level	2033 Do Min	DS 1750	Difference (2033-2019)	Percent Difference.
Light Vehicles	8750.92	12458.35	3707.43	42%
Heavy Vehicles	85.93	85.93	0.00	0%
Total	**8836.84**	**12544.28**	**3707.43**	**42%**

Table 4.6 – PM Period (1600-1900) Matrix Totals

Matrix Level	2033 Do Min	DS 2500	Difference (2033-2019)	Percent Difference.
Light Vehicles	7879.89	12878.76	4932.21	63%
Heavy Vehicles	229.16	229.16	0.00	0%
Total	**8109.05**	**13107.93**	**4998.87**	**62%**

Table 4.7 – AM Period (0700-1000) Matrix Totals

Matrix Level	2033 Do Min	DS 2500	Difference (2033-2019)	Percent Difference.
Light Vehicles	8750.92	14707.71	5681.79	65%
Heavy Vehicles	85.93	85.93	0.00	0%
Total	**8836.84**	**14793.63**	**5956.79**	**67%**

Table 4.8 – PM Period (1600-1900) Matrix Totals

5.0 RESULTS

Unsatisfied Demand

5.1 To understand model performance, the expected peak hour demand from the matrix has been compared with the completed number of trips. All vehicles were released onto the network by the end of the AM and PM 3-hour periods in the Do Minimum scenario, the Do Something 500, the Do Something 1000, and the Do Something 1750. In the Do Something 2500 scenario there were trips queueing to get onto the network at Zone 35 (Sandleheath Road). The average of five runs is shown in **Table 5.1**.

	Run 1		Run 2		Run 3		Run 4		Run 5		Average	
Zone	**17:30**	**18:00**	**17:30**	**18:00**	**17:30**	**18:00**	**17:30**	**18:00**	**17:30**	**18:00**	**17:30**	**18:00**
35	19	61	32	60	51	92	24	51	22	52	30	63

Table 5.1 – Do Something 2500 Unsatisfied Demand during the Peak Period

Congestion

5.2 Three-hour matrices were used for both the AM and PM peaks and congestion heatmap snapshots were taken at the end of each peak hour and peak period model run. Hotspots show where vehicles are considered to be in a queued state which is when the speed drops below 4.47mph and the gap in front drops below 10metres. Vehicles are no longer queued when the speed rises above 6.71mph and the gap in front rises above 15 metres.

5.3 The model shows minimal congestion across the peaks for all scenarios, with the greatest congestion shown in the Do Something 2500 scenario. Snapshots of congestion heatmaps were taken halfway through the peak hour and the end of the peak hour, and where there were congestion hotspots these are shown in **Figure 5.1** to **Figure 5.21**. The main areas of congestion highlighted are Provost Street in Fordingbridge, and the Alderholt junctions at Pressey's Corner, and Ringwood Road/Hillbury Road/Harbridge Drove.

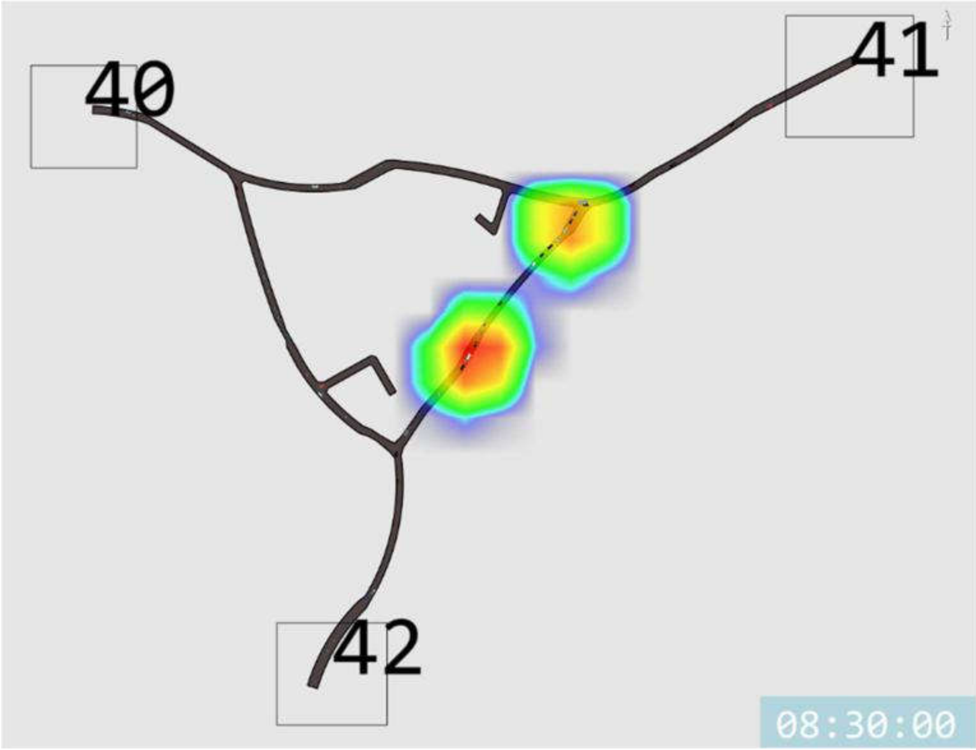


Figure 5.1 – Do Something 1000 Congestion Heatmap (Fordingbridge @ 08:30)

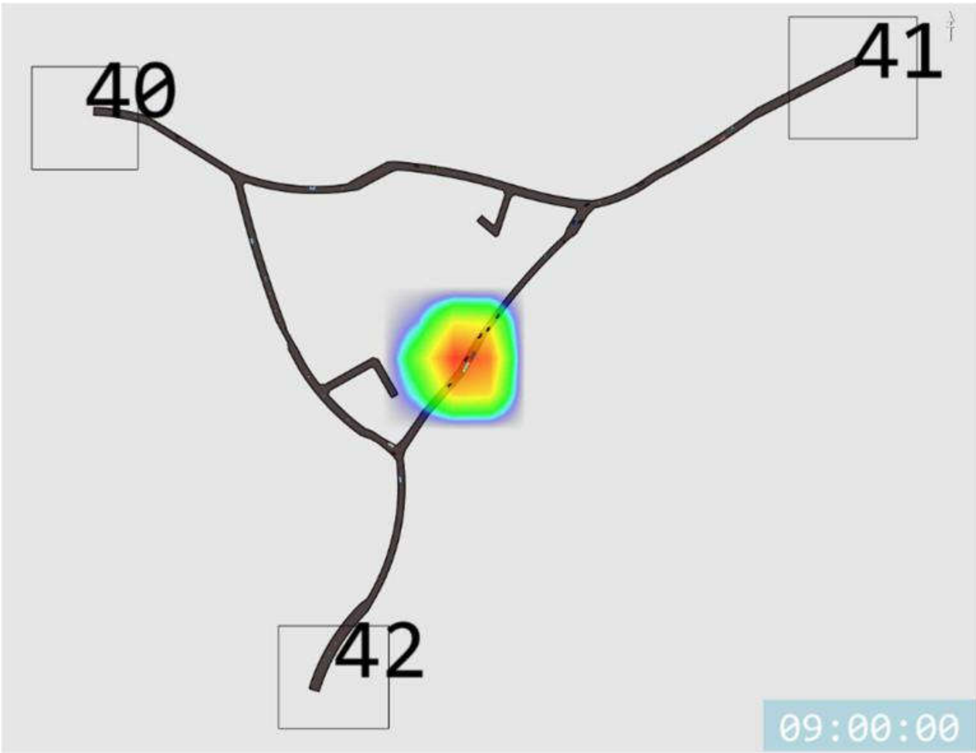


Figure 5.2 – Do Something 1000 Congestion Heatmap (Fordingbridge @ 09:00)

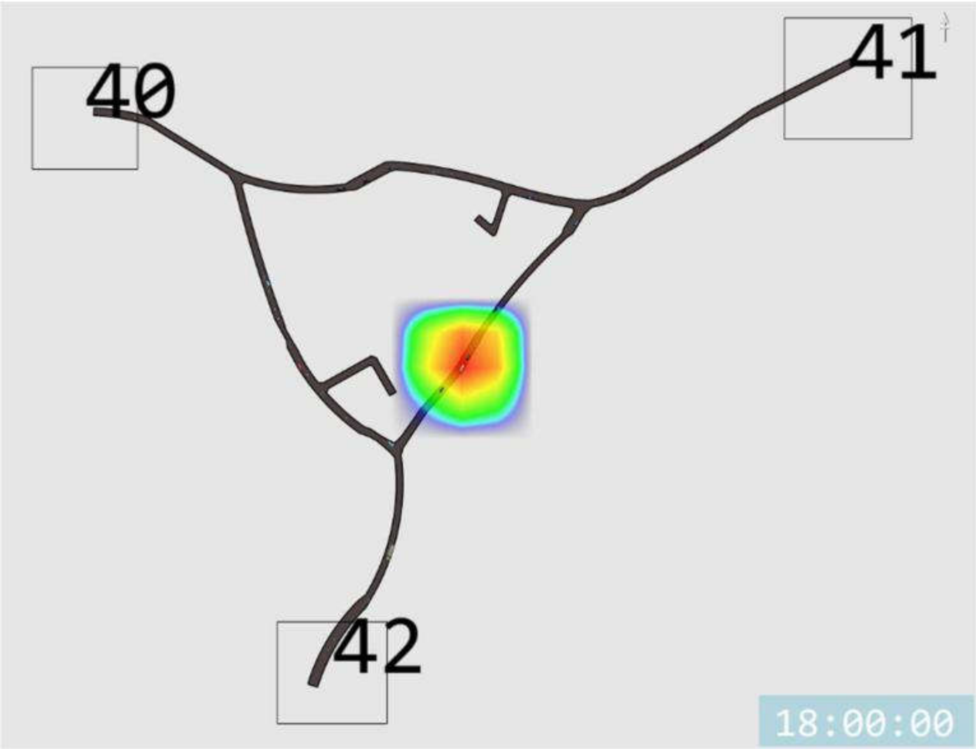


Figure 5.3 – Do Something 1000 Congestion Heatmap (Fordingbridge @ 18:00)

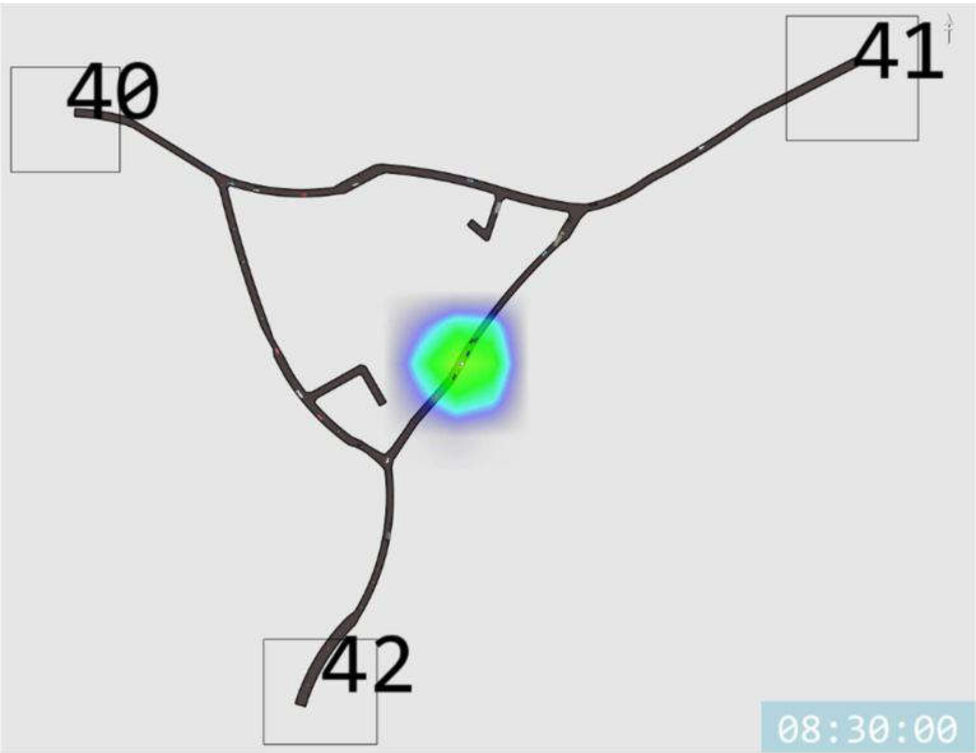


Figure 5.4 – Do Something 1750 Congestion Heatmap (Fordingbridge @ 08:30)

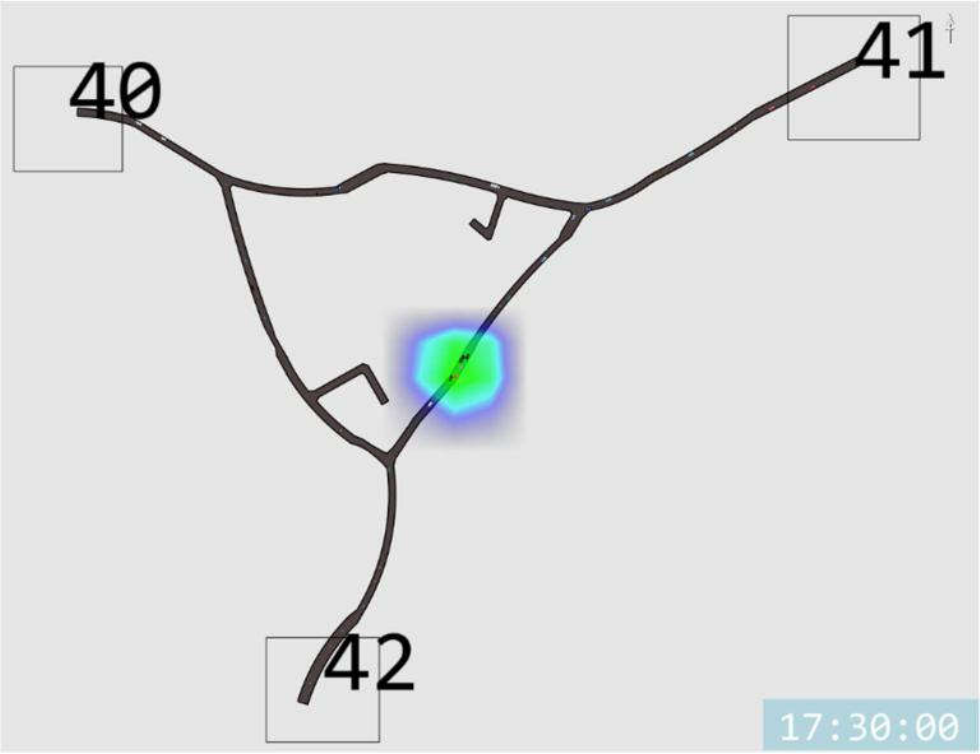


Figure 5.5 – Do Something 1750 Congestion Heatmap (Fordingbridge @ 17:30)

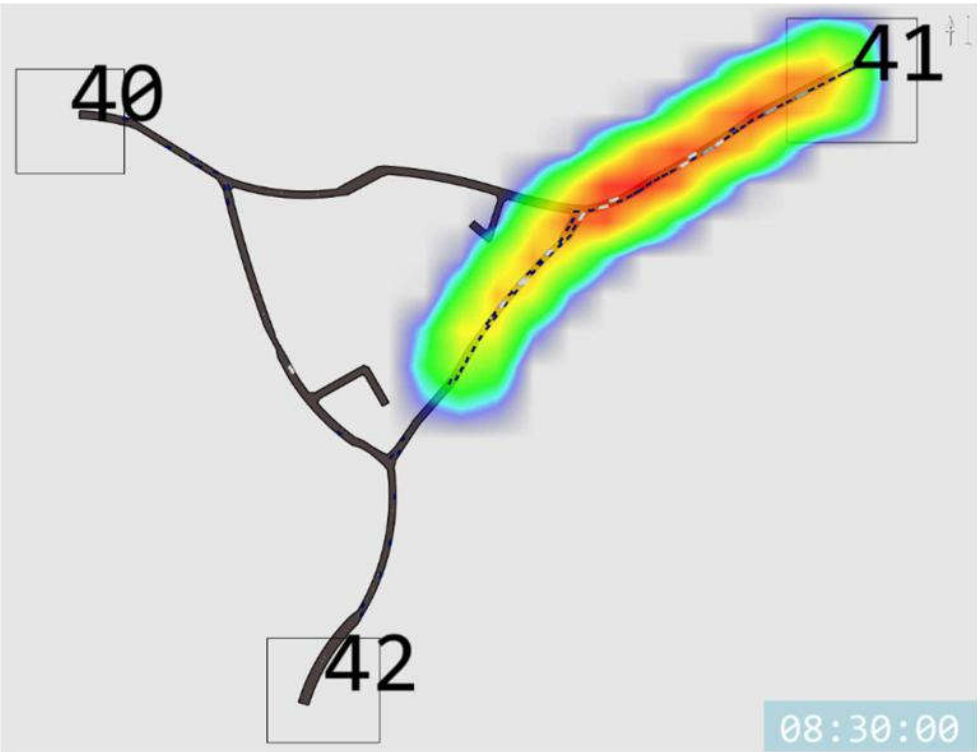


Figure 5.6 – Do Something 2500 Congestion Heatmap (Fordingbridge @ 08:30)

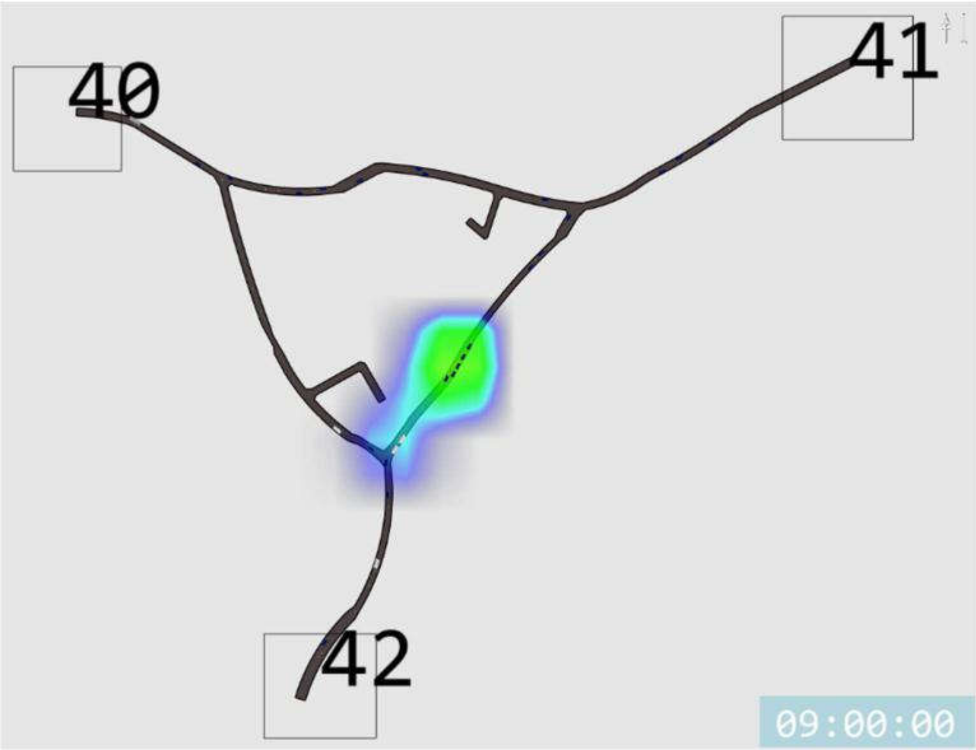


Figure 5.7 – Do Something 2500 Congestion Heatmap (Fordingbridge @ 09:00)

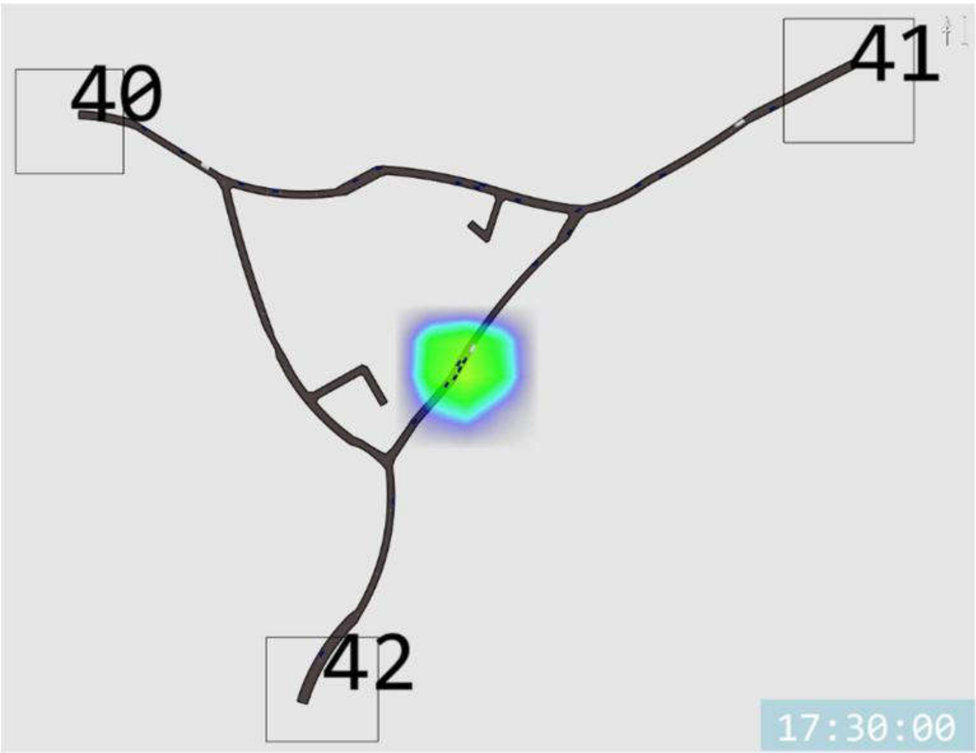


Figure 5.8 – Do Something 2500 Congestion Heatmap (Fordingbridge @ 17:30)

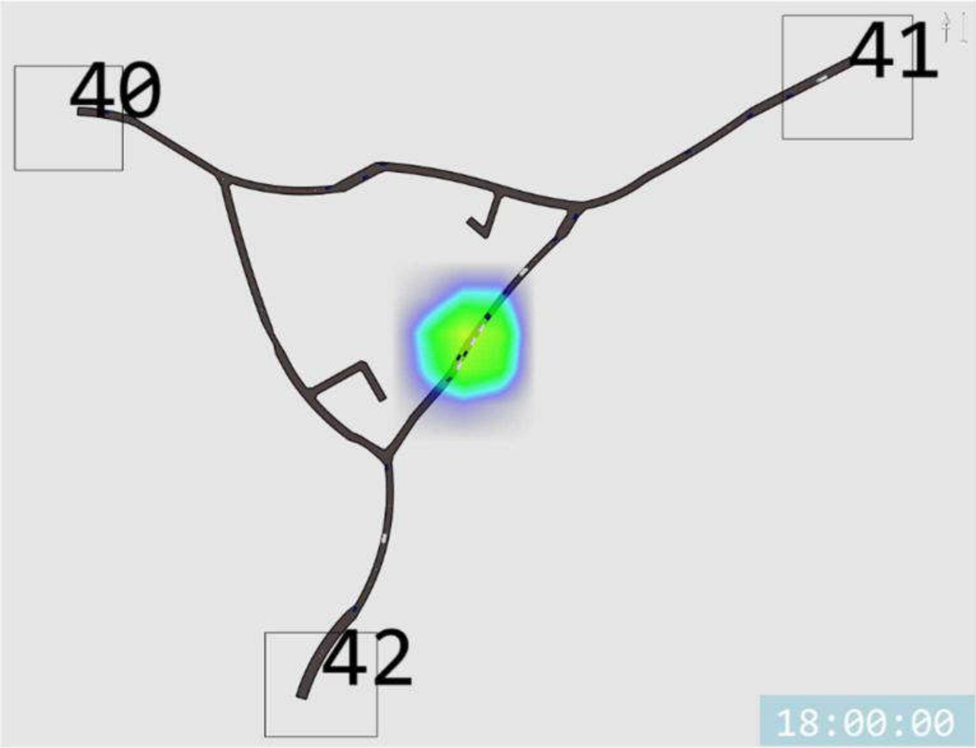


Figure 5.9 – Do Something 2500 Congestion Heatmap (Fordingbridge @ 18:00)

Figure 5.10 – Do Something 1000 Congestion Heatmap (Alderholt @ 08:30)

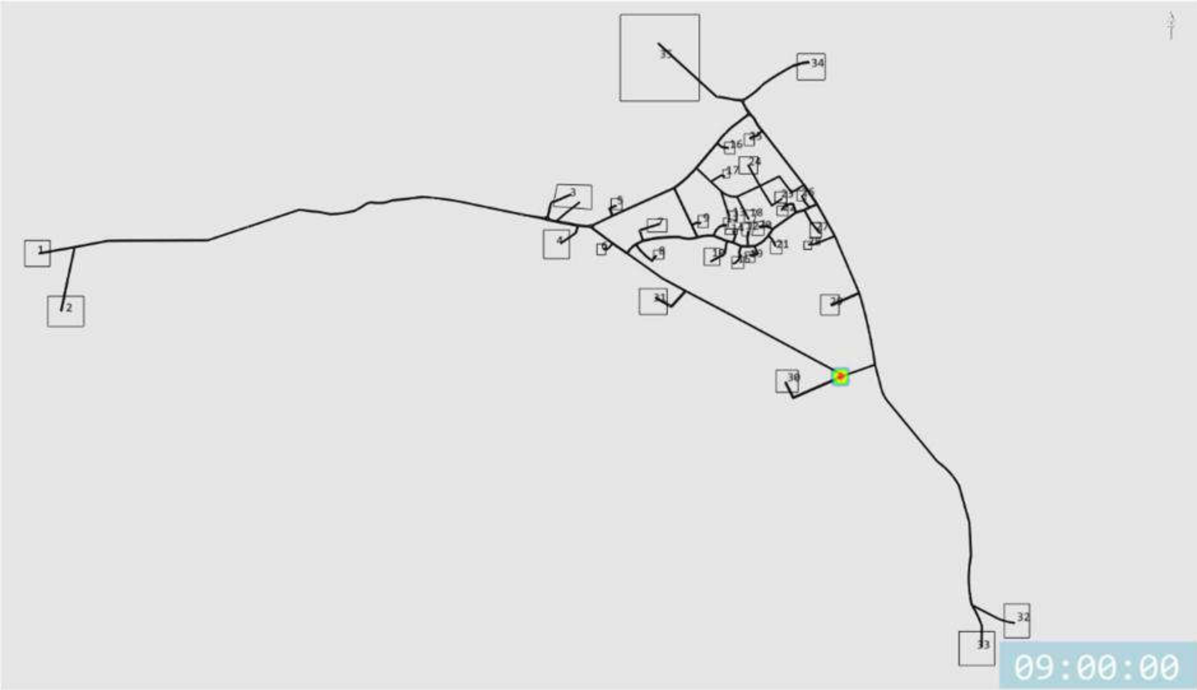


Figure 5.11 – Do Something 1000 Congestion Heatmap (Alderholt @ 09:00)

Figure 5.12 – Do Something 1000 Congestion Heatmap (Alderholt @ 17:30)

Figure 5.13 – Do Something 1000 Congestion Heatmap (Alderholt @ 18:00)

Figure 5.14 – Do Something 1750 Congestion Heatmap (Alderholt @ 08:30)

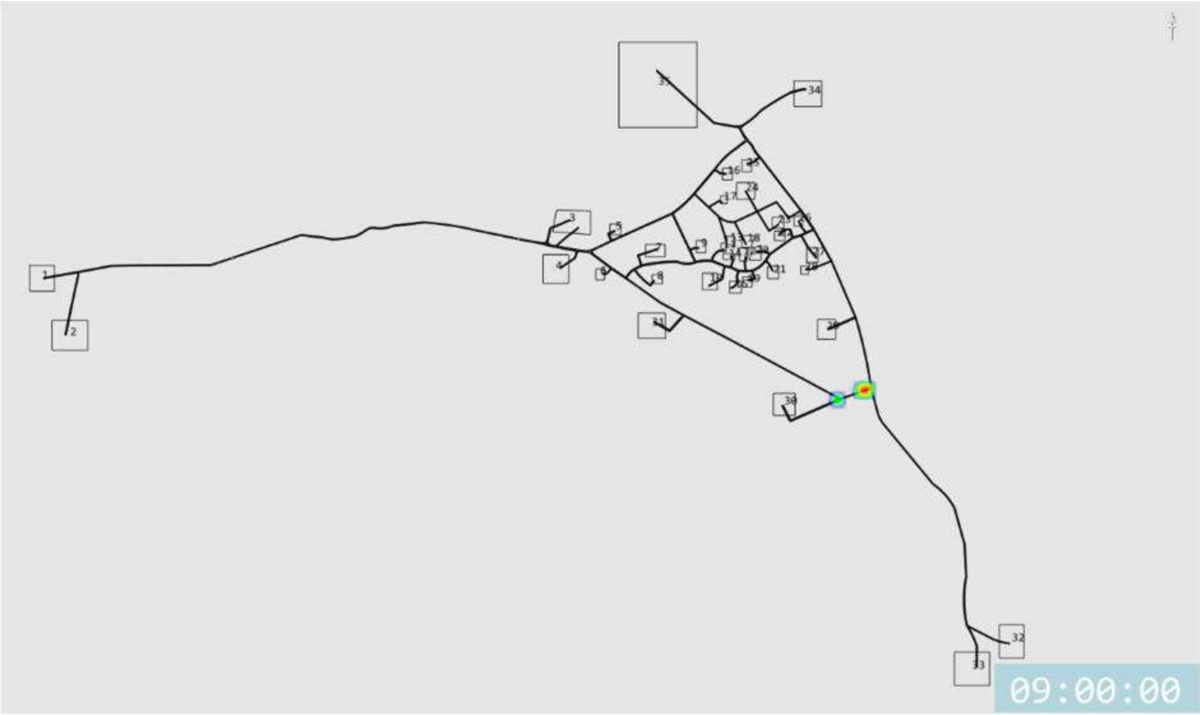


Figure 5.15 – Do Something 1750 Congestion Heatmap (Alderholt @ 09:00)

Figure 5.16 – Do Something 1750 Congestion Heatmap (Alderholt @ 17:30)

Figure 5.17 – Do Something 1750 Congestion Heatmap (Alderholt @ 18:00)

Figure 5.18 – Do Something 2500 Congestion Heatmap (Alderholt @ 08:30)

Figure 5.19 – Do Something 2500 Congestion Heatmap (Alderholt @ 09:00)

Figure 5.20 – Do Something 2500 Congestion Heatmap (Alderholt @ 17:30)

Figure 5.21 – Do Something 2500 Congestion Heatmap (Alderholt @ 18:00)

Do Minimum Modelled Flows

5.4 Comparisons between the 2019 Base Year and 2033 Forecast year modelled link flows are illustrated in **Figure 5.22**, **Figure 5.23**, **Figure 5.24**, and **Figure 5.25** for the AM and PM peaks respectively.

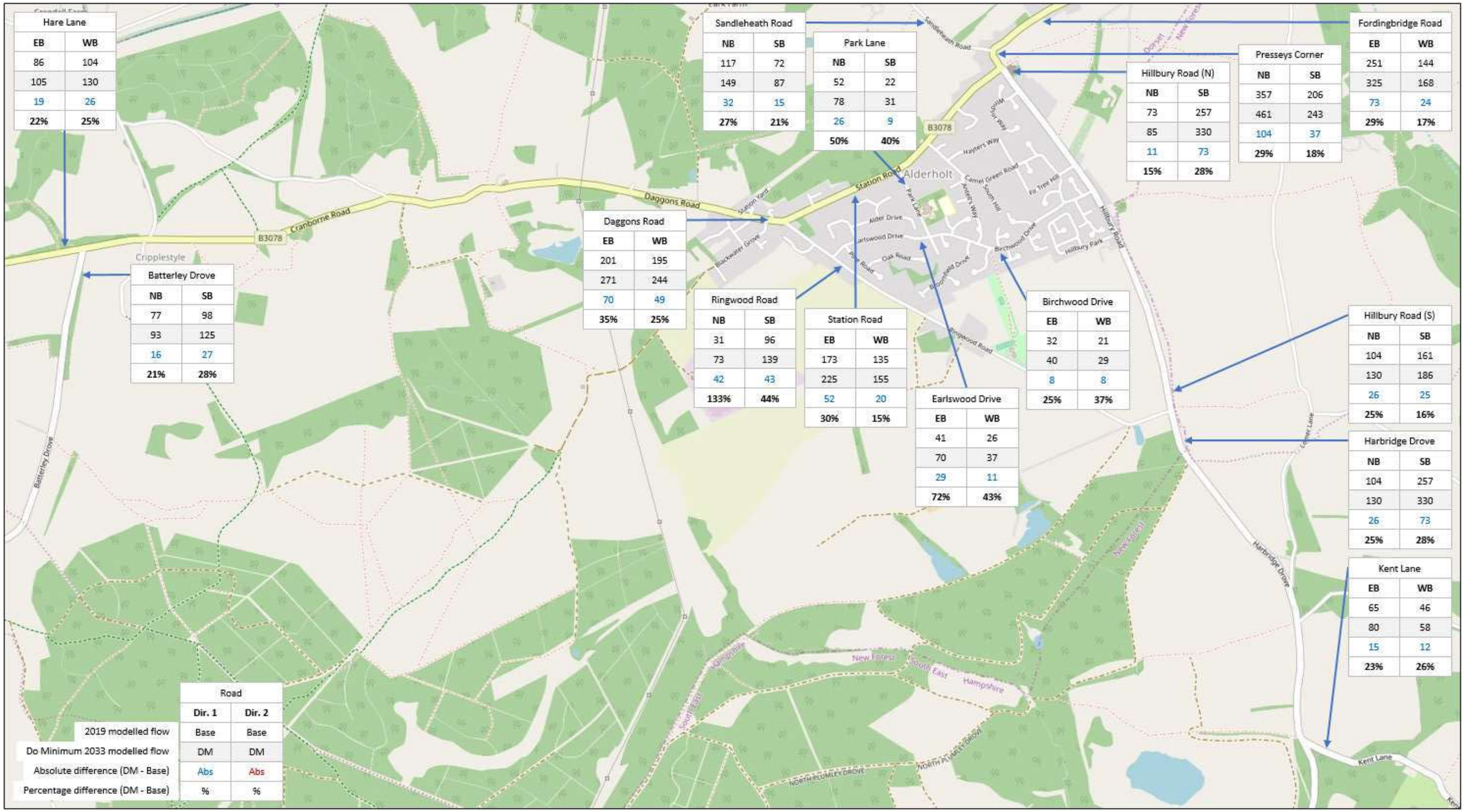


Figure 5.22 – Alderholt Modelled Flows AM (2019 Base and 2033 Do Minimum)

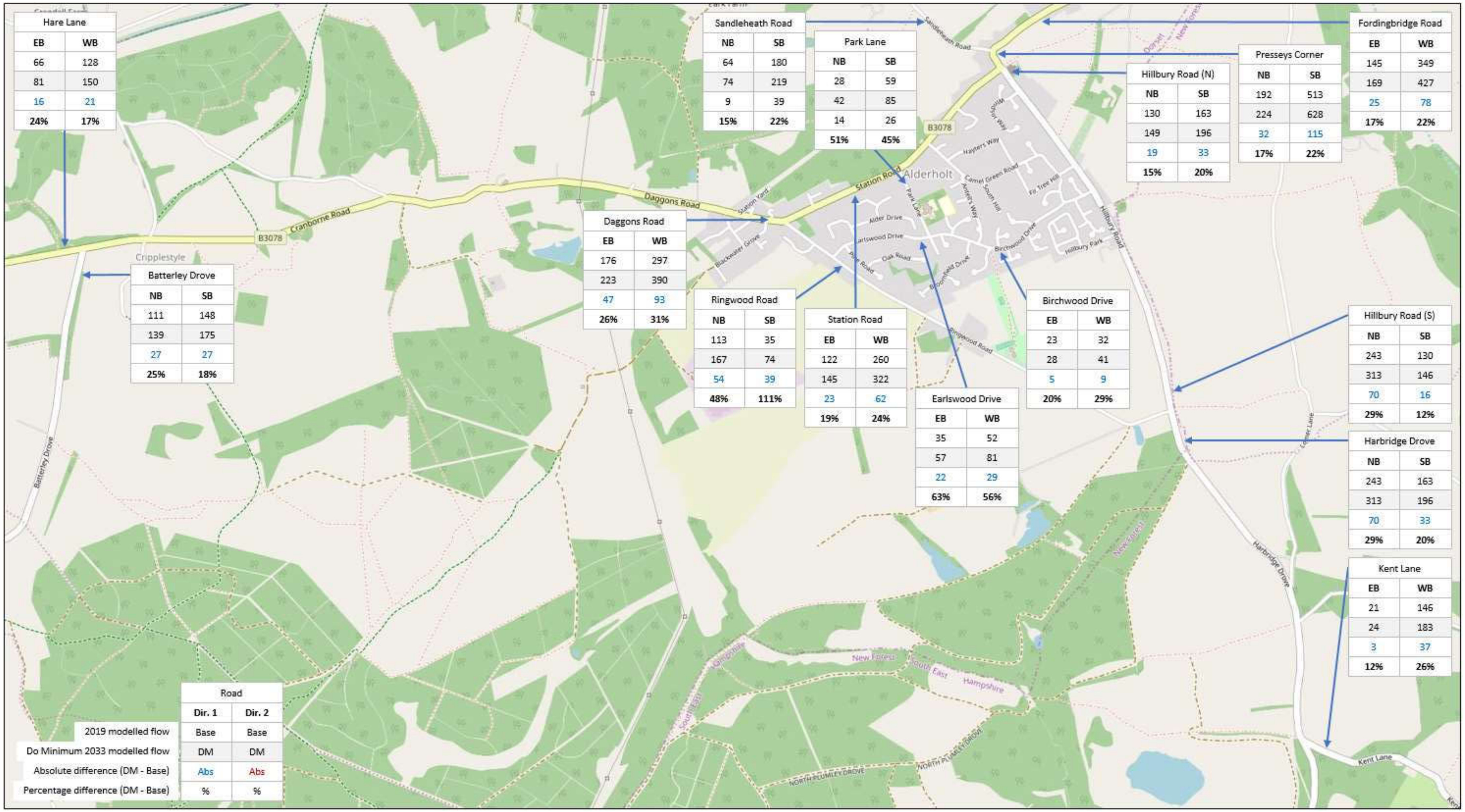


Figure 5.23 – Alderholt Modelled Flows PM (2019 Base and 2033 Do Minimum)

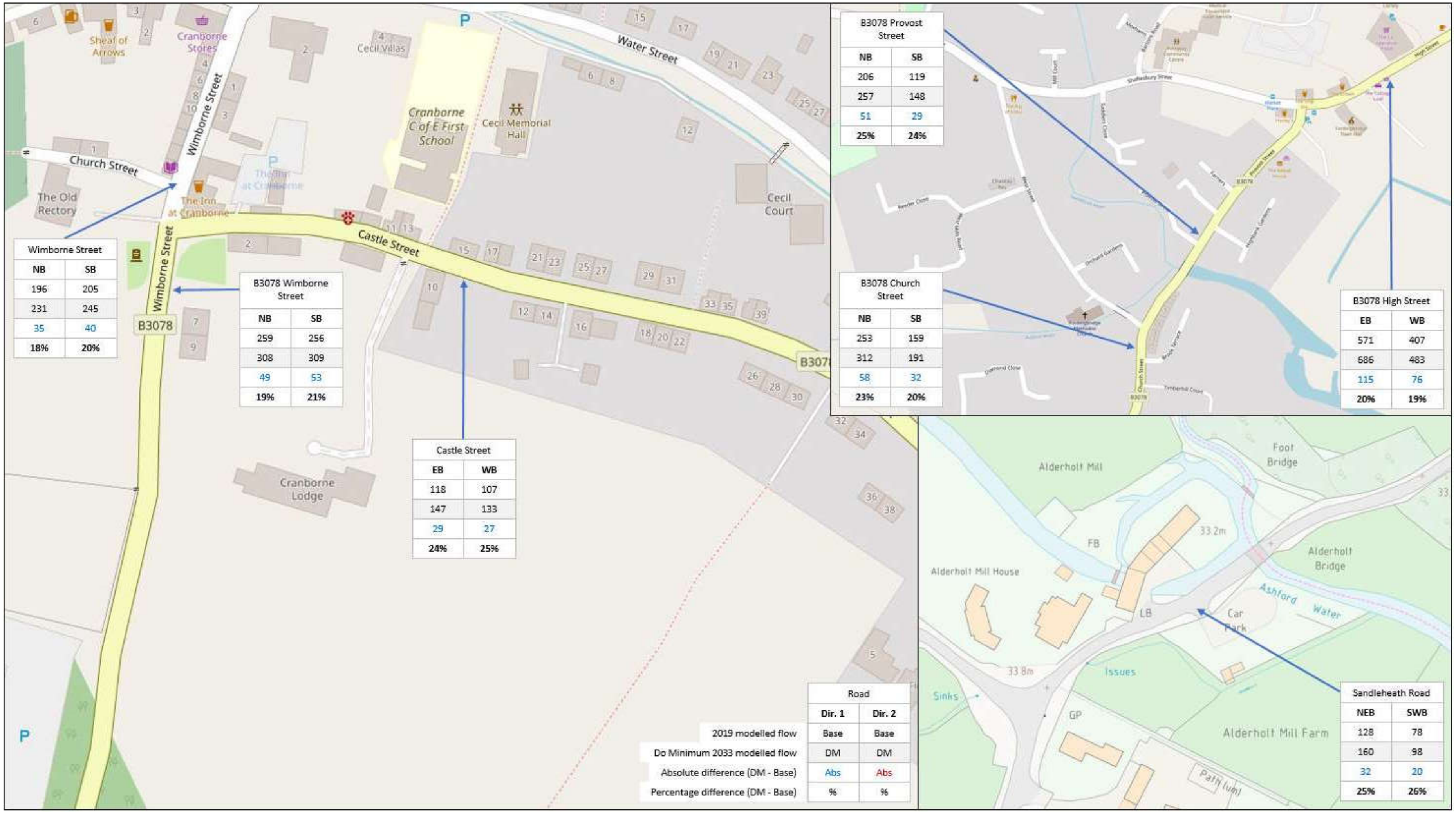


Figure 5.24 – Sub-Model Flows AM (2019 Base and 2033 Do Minimum)

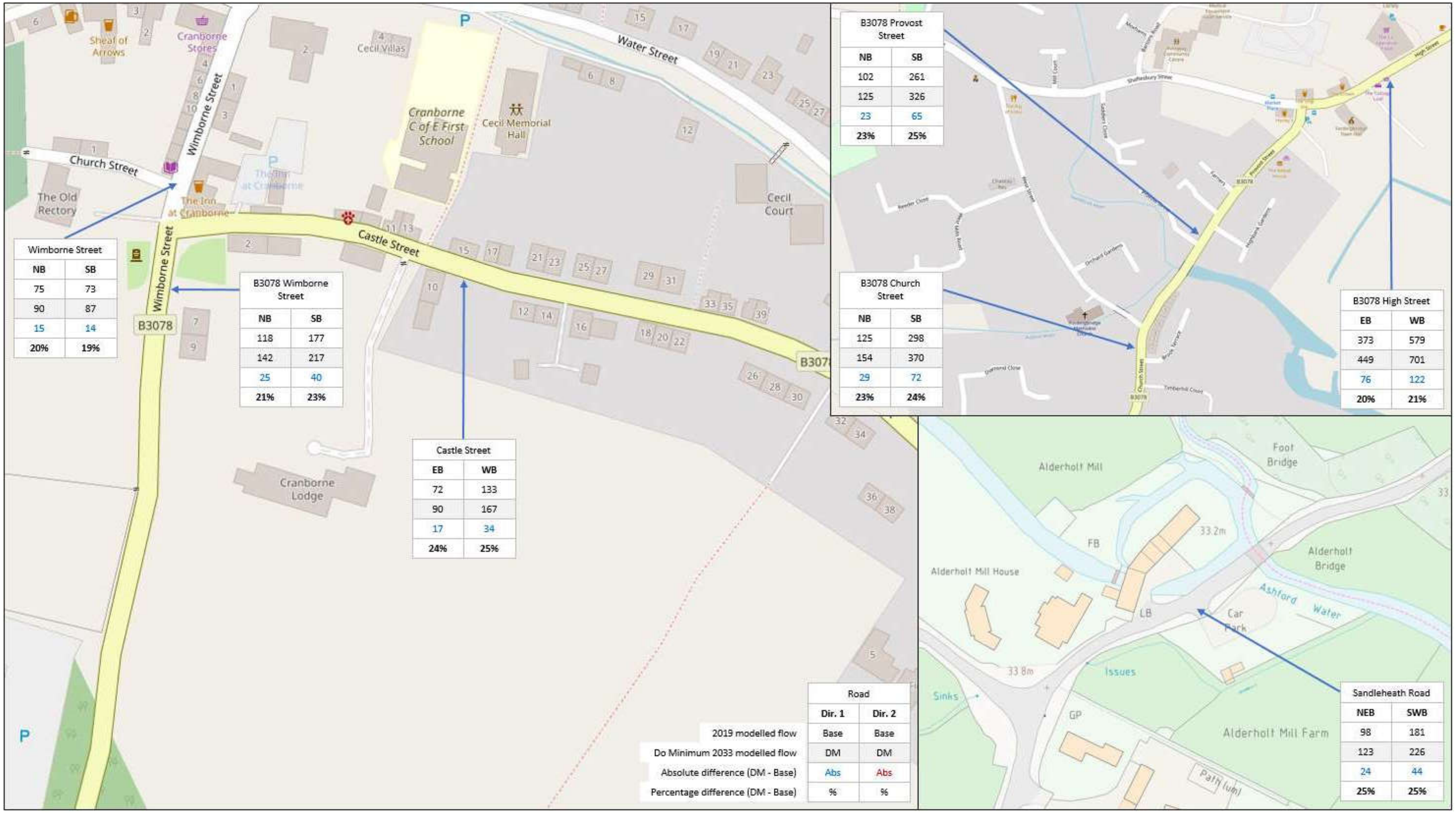


Figure 5.25 – Sub-Model Flows PM (2019 Base and 2033 Do Minimum)

5.5 The diagrams show that modelled flows increase on all roads in the Do Minimum 2033 scenario (the predicted background growth scenario). The model trip matrices contain 24% more traffic in 2033 compared with 2019 which is reflected in the flow comparison diagrams.

5.6 In the AM and PM peak hours, traffic is predicted to increase by approximately 130-140 vehicles on B3078 Daggons Road, 50 vehicles on Sandleheath Road, 100 vehicles on B3078 Fordingbridge Road and 100 vehicles on Harbridge Drove.

Do Something Modelled Flows

5.7 Comparisons between the Do Minimum and the Do Something 500 2033 Forecast year modelled link flows are illustrated in **Figure 5.26**, **Figure 5.27**, **Figure 5.28**, and **Figure 5.29** for the AM and PM peaks respectively. Comparisons between the Do Minimum and the Do Something 1000 scenario are illustrated in **Figure 5.30**, **Figure 5.31**, **Figure 5.32**, and **Figure 5.33**. Comparisons between the Do Minimum and the Do Something 1750 scenario are illustrated in **Figure 5.34**, **Figure 5.35**, **Figure 5.36**, and **Figure 5.37**. Comparisons between the Do Minimum and the Do Something 2500 scenario are illustrated in **Figure 5.38**, **Figure 5.39**, **Figure 5.40**, and **Figure 5.41**.

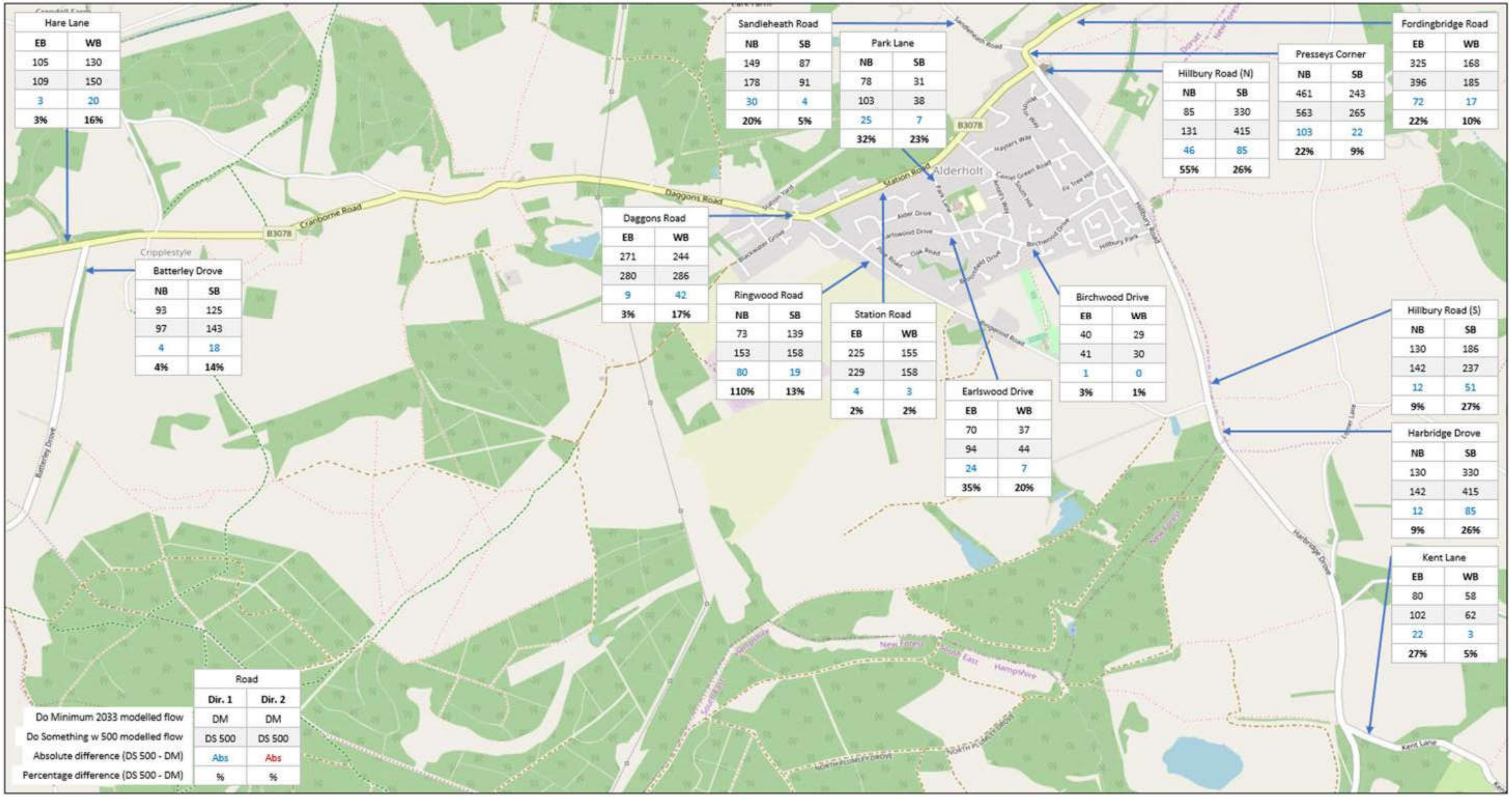


Figure 5.26 – Alderholt Modelled Flows AM (0800-0900) (Do Minimum vs DS 500 Additional Dwellings)

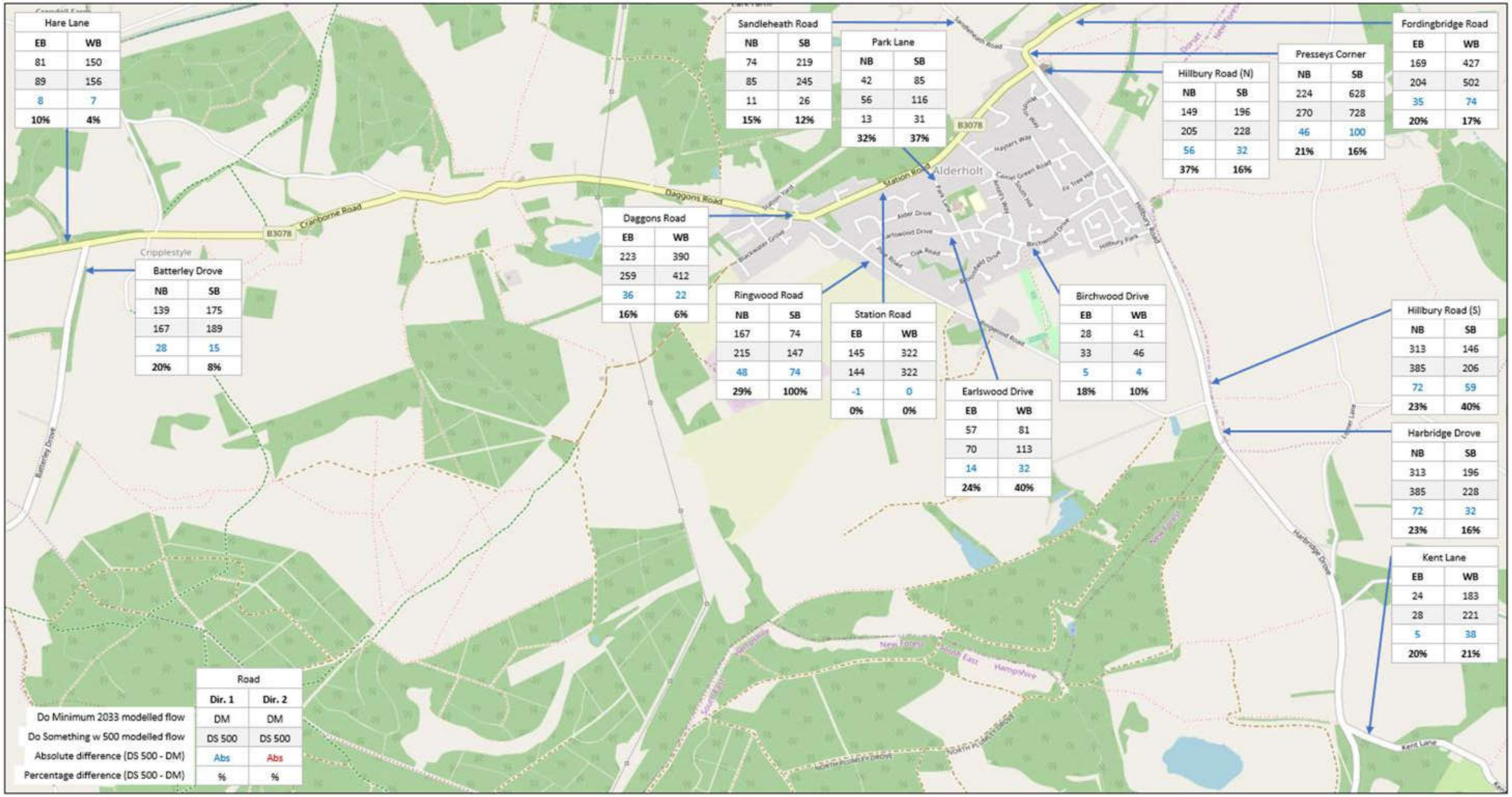


Figure 5.27 – Alderholt Modelled Flows PM (1700-1800) (Do Minimum vs DS 500 Additional Dwellings)

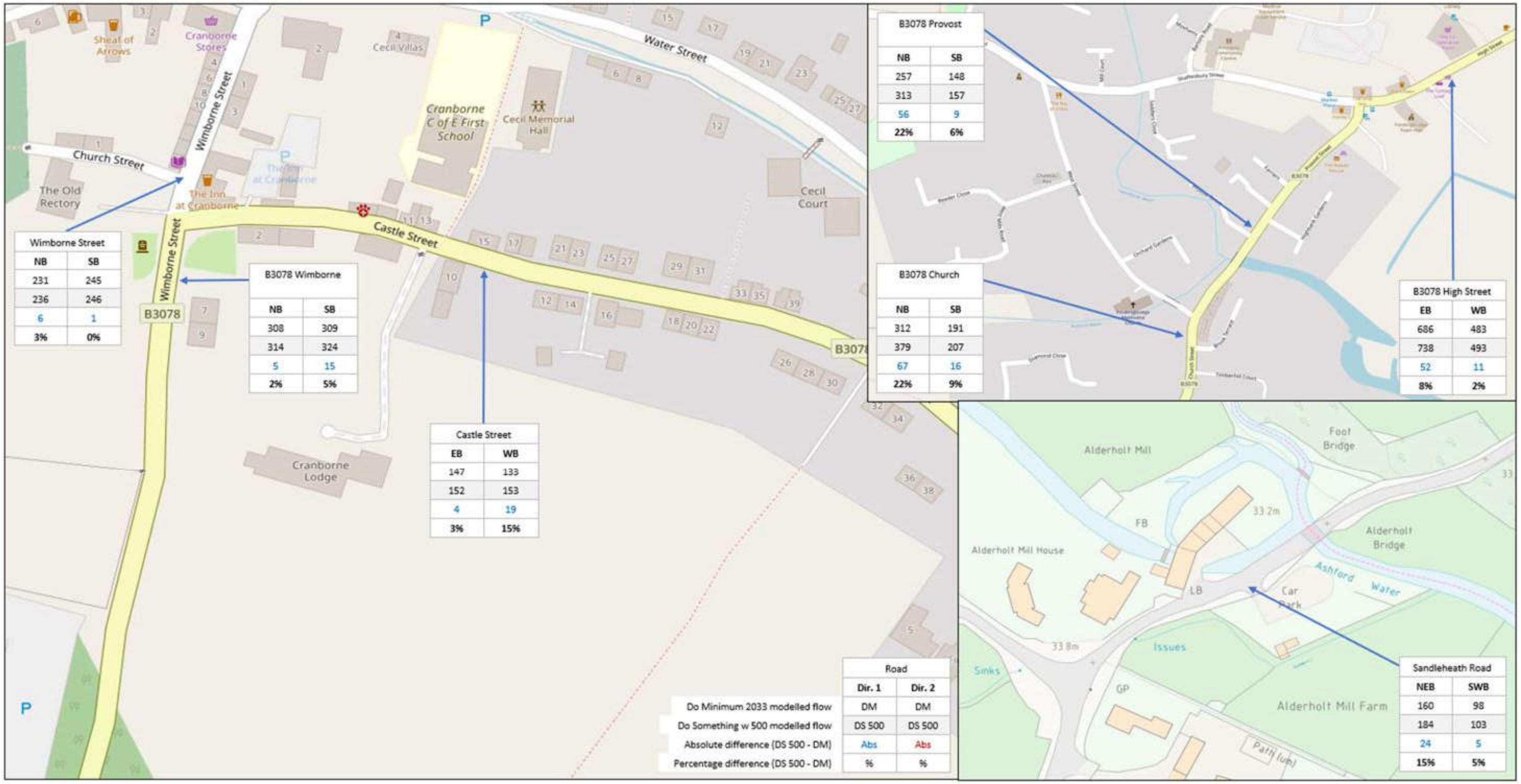


Figure 5.28 – Sub-Model Flows AM (0800-0900) (Do Minimum vs DS 500 Additional Dwellings)

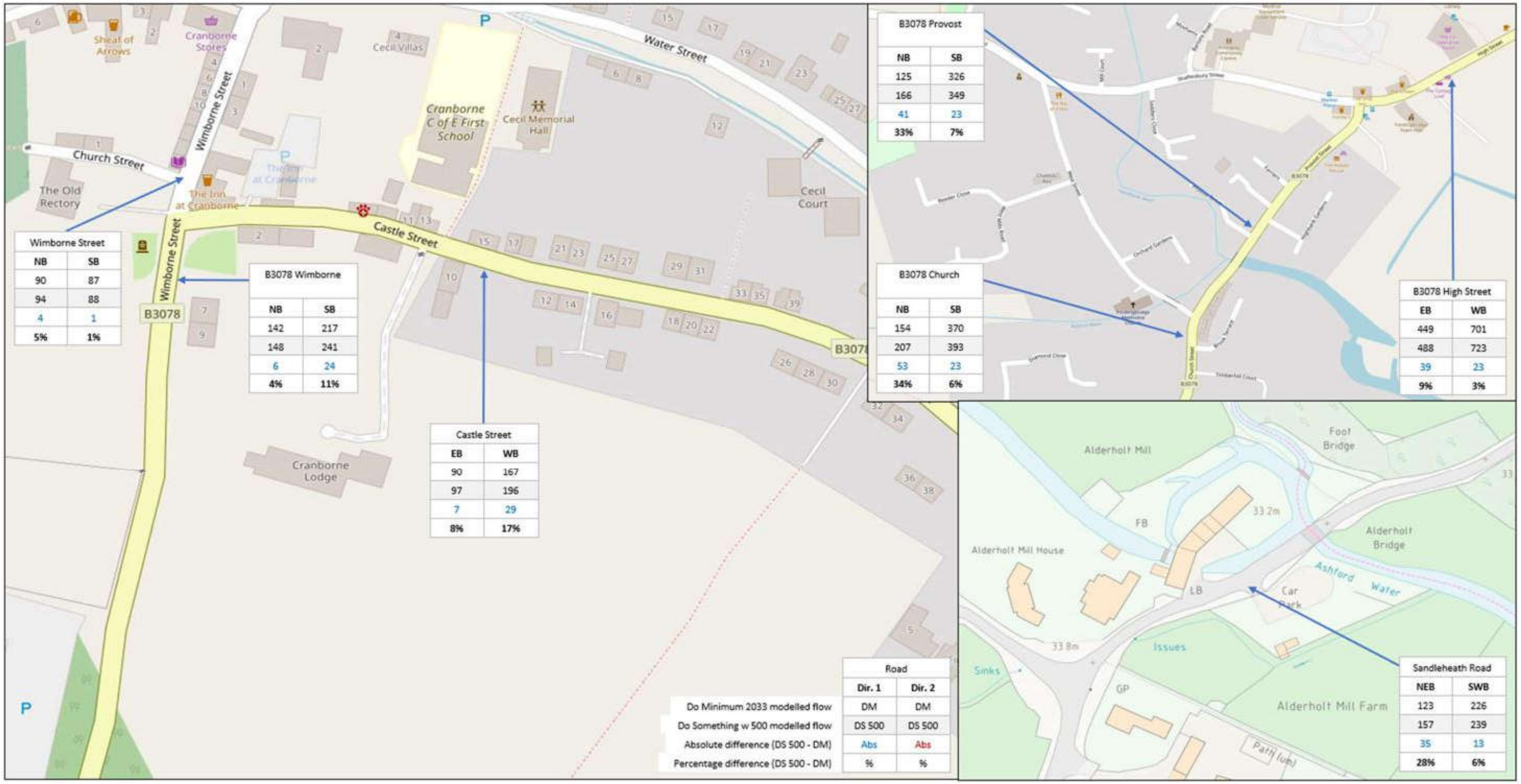


Figure 5.29 – Sub-Model Flows PM (1700-1800) (Do Minimum vs DS 500 Additional Dwellings)

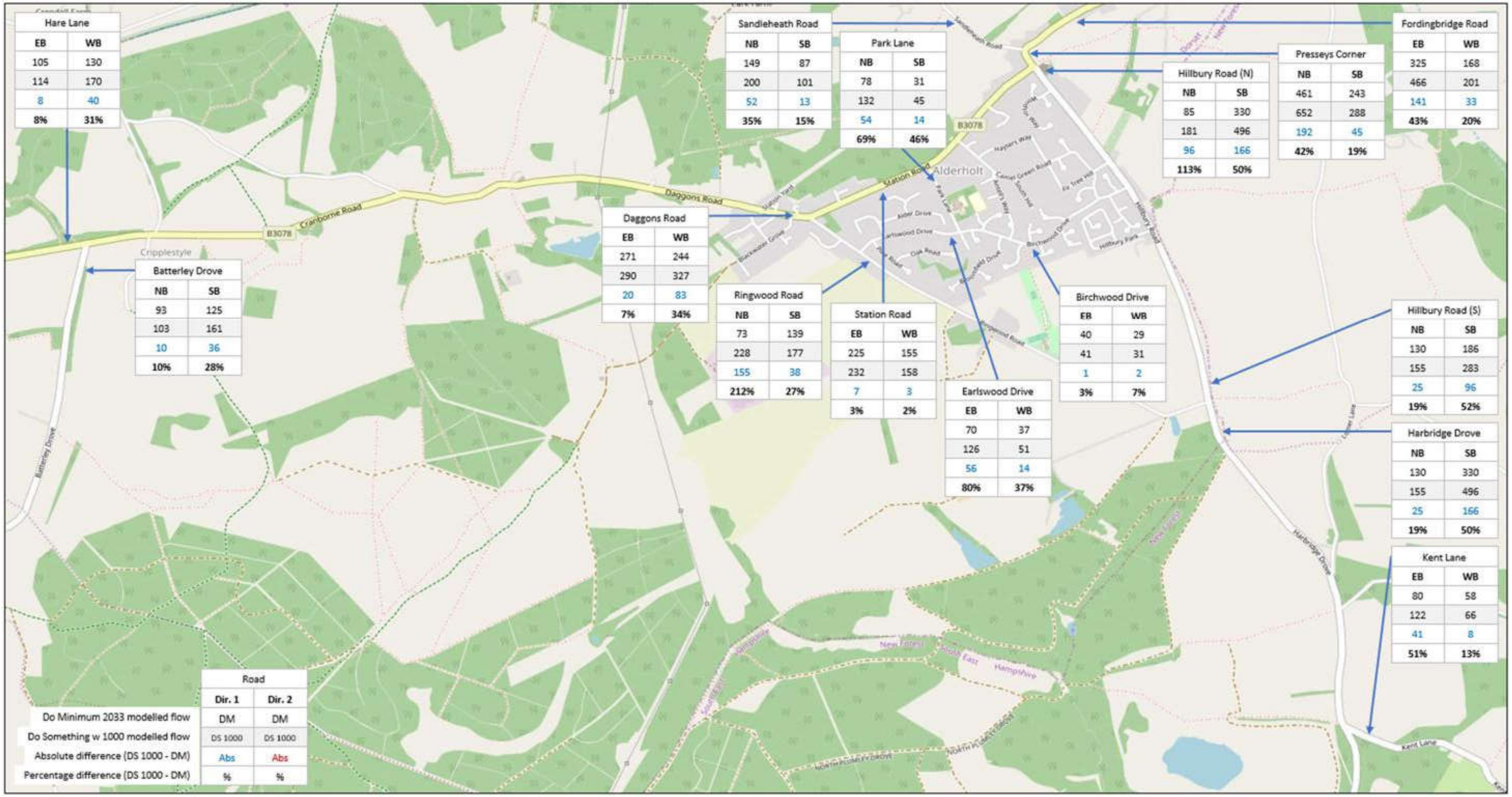


Figure 5.30 – Alderholt Modelled Flows AM (0800-0900) (Do Minimum vs DS 1000 Additional Dwellings)

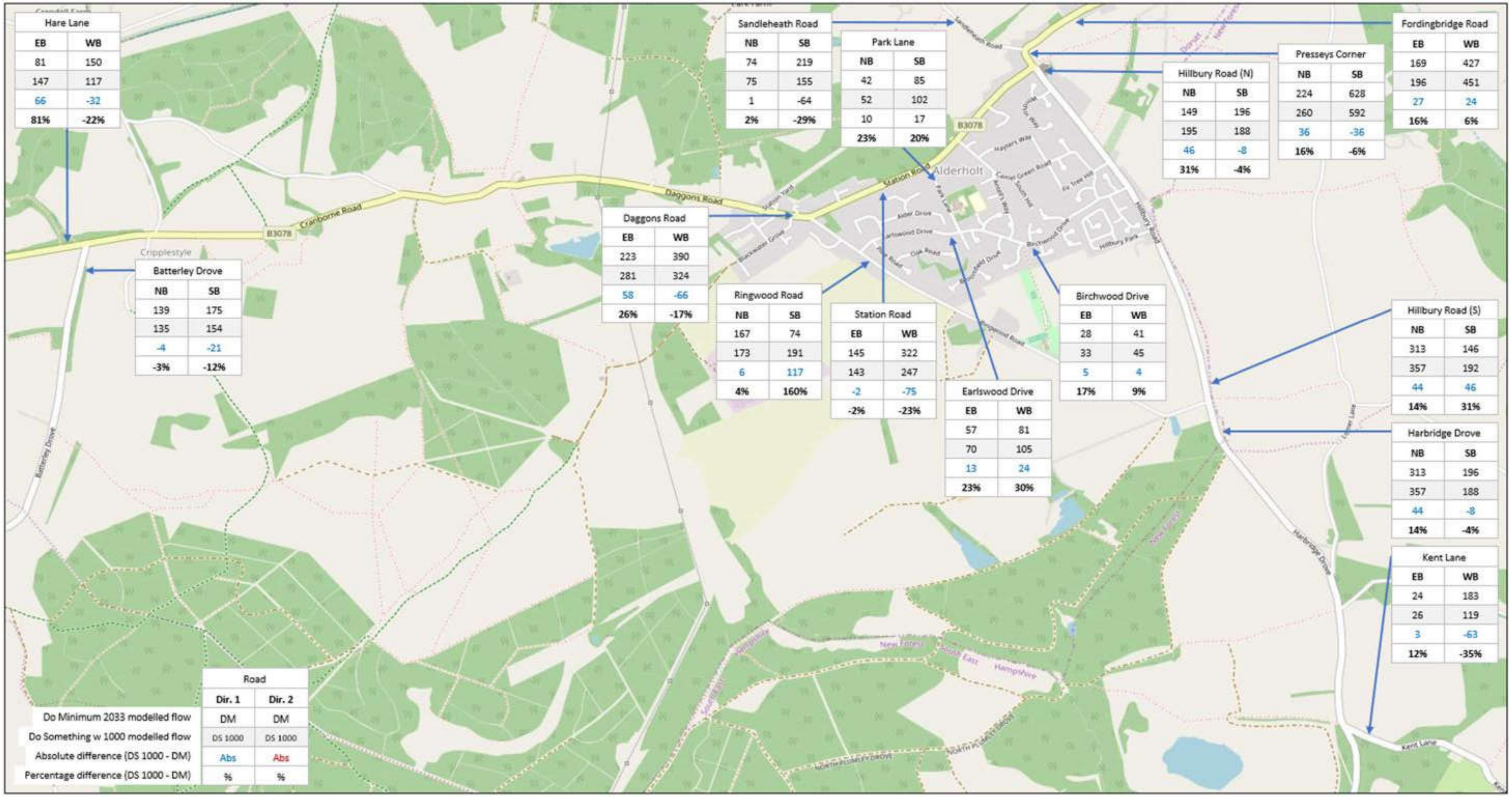


Figure 5.31 – Alderholt Modelled Flows PM (1700-1800) (Do Minimum vs DS 1000 Additional Dwellings)

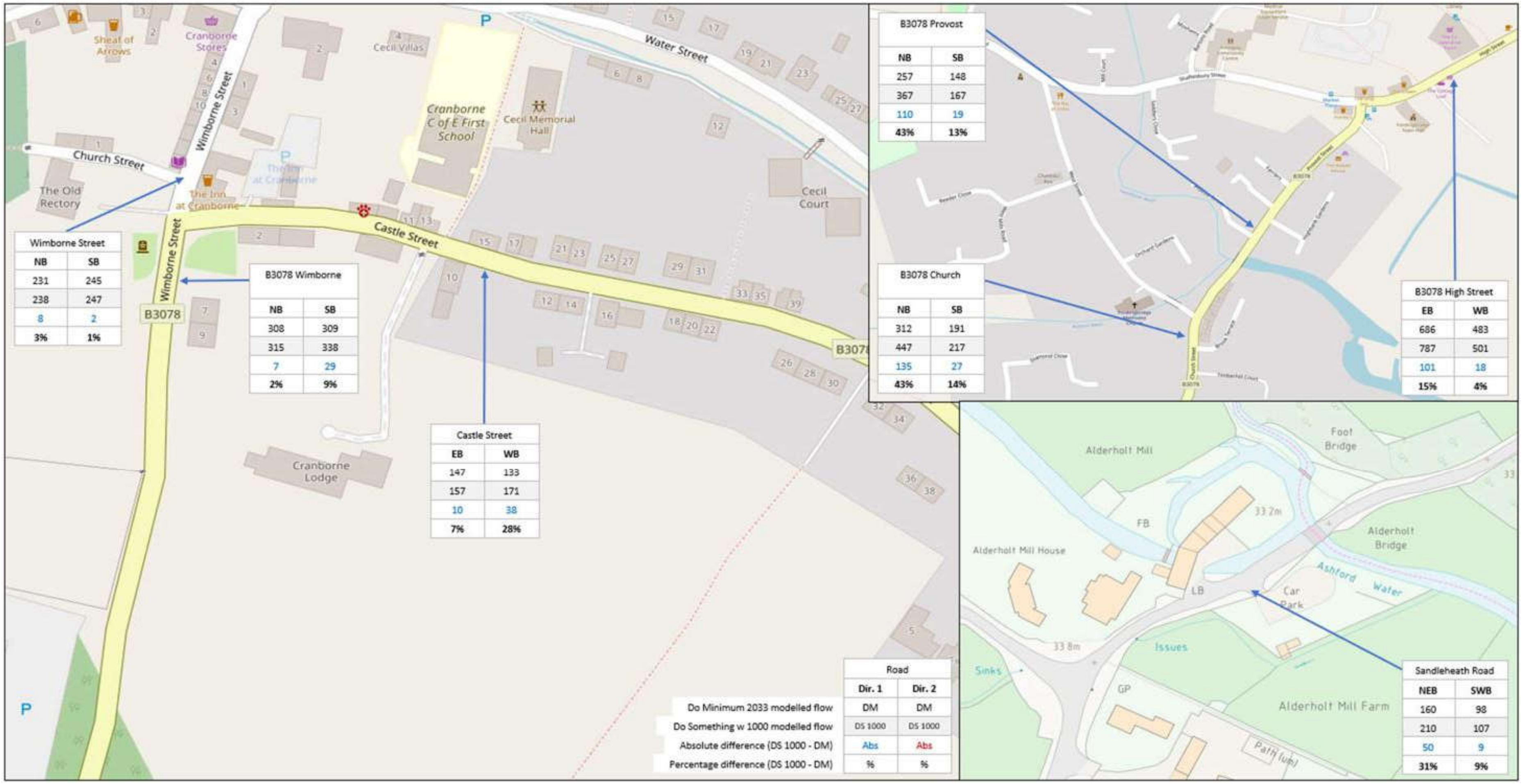


Figure 5.32 – Sub-Model Flows AM (0800-0900) (Do Minimum vs DS 1000 Additional Dwellings)

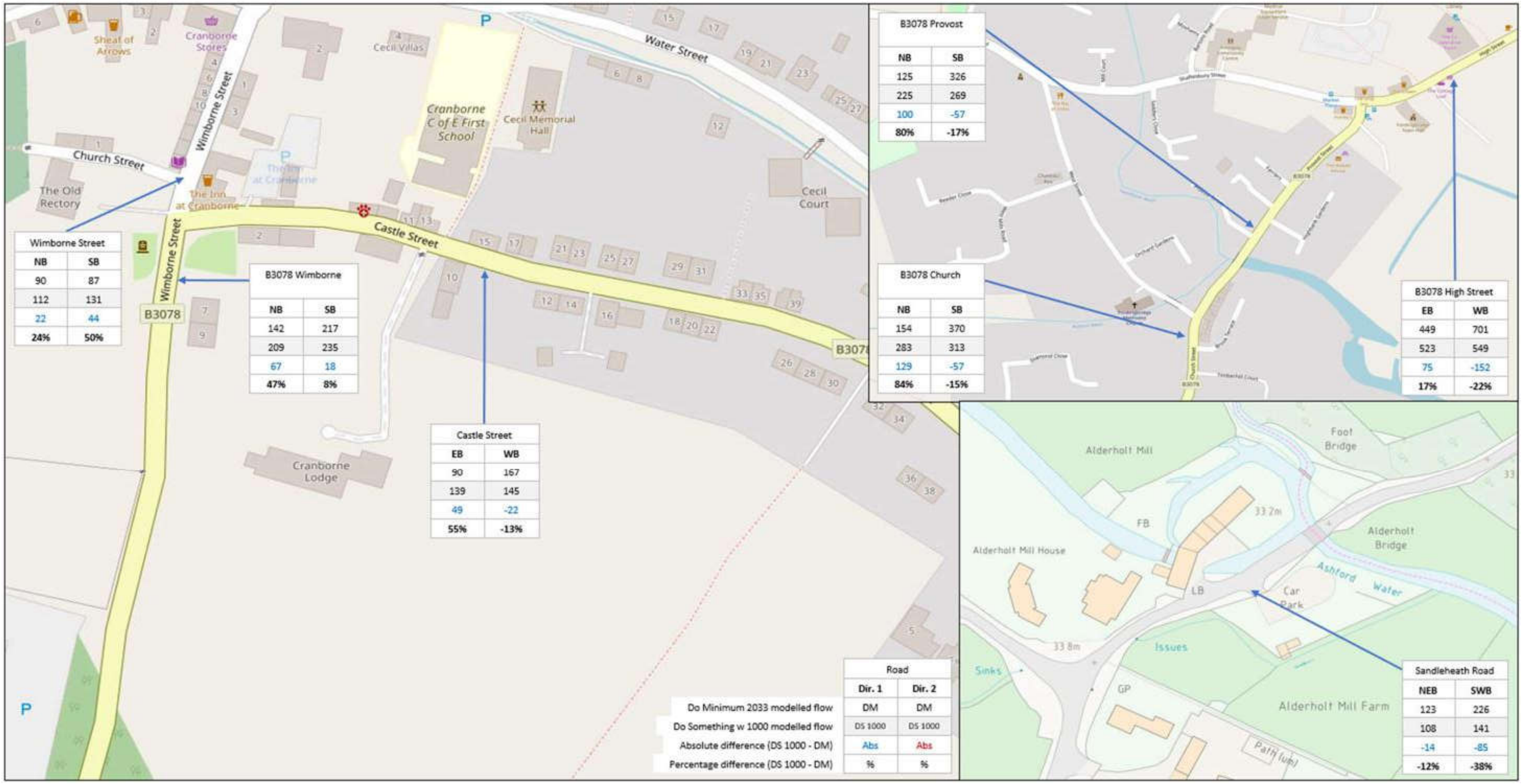


Figure 5.33 – Sub-Model Flows PM (1700-1800) (Do Minimum vs DS 1000 Additional Dwellings)

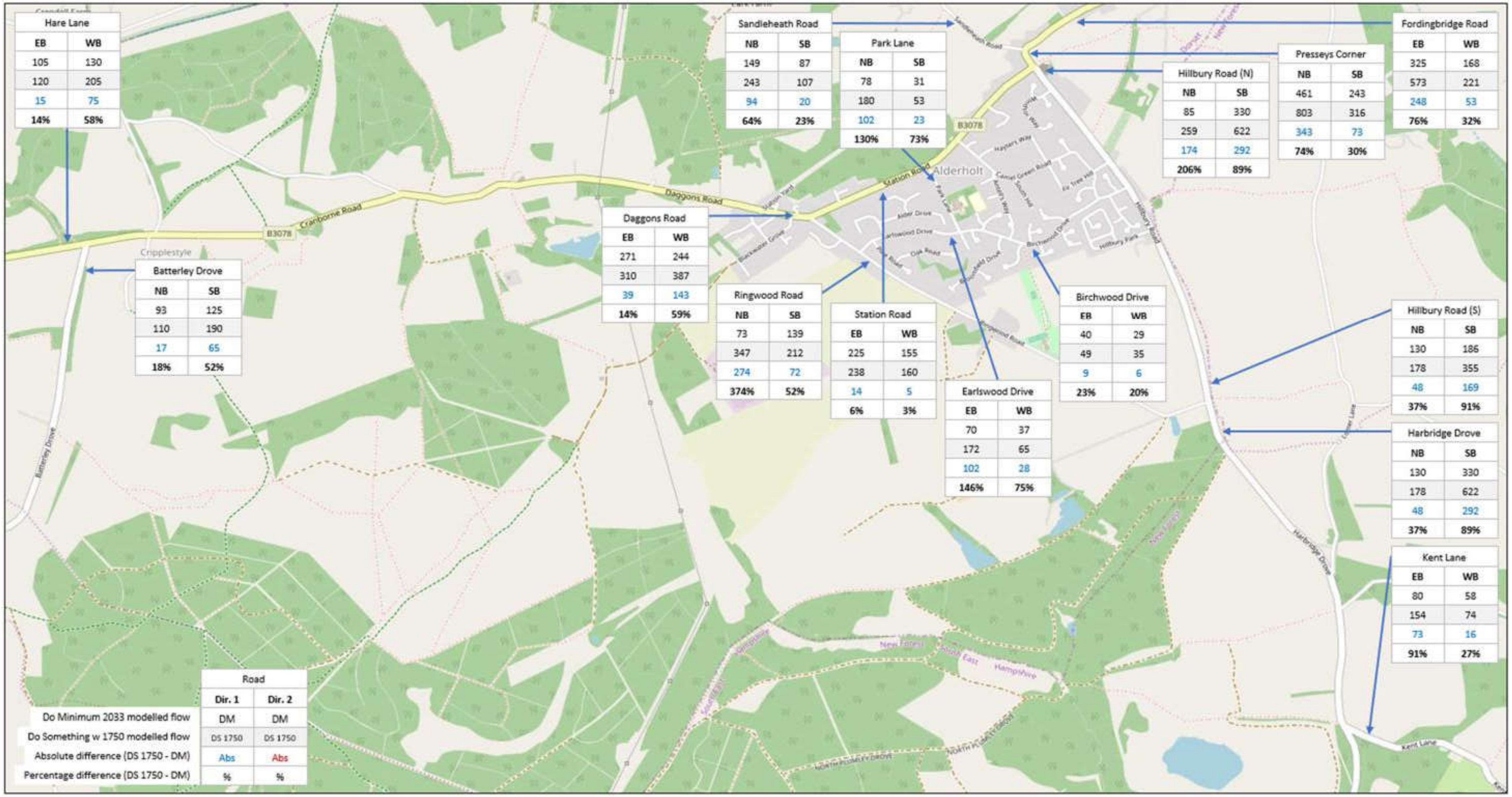


Figure 5.34 – Alderholt Modelled Flows AM (0800-0900) (Do Minimum vs DS 1750 Additional Dwellings)

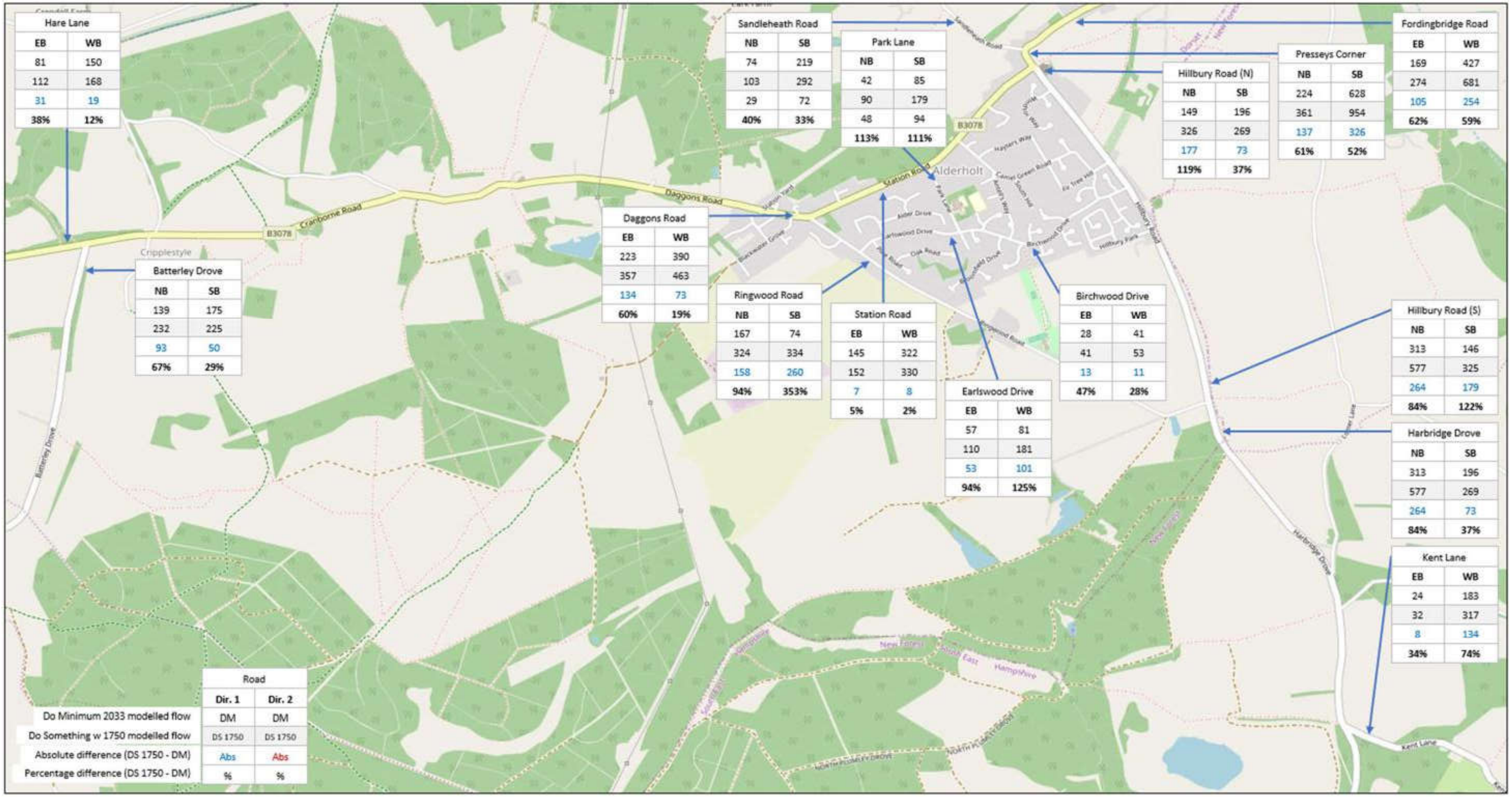


Figure 5.35 – Alderholt Modelled Flows PM (1700-1800) (Do Minimum vs DS 1750 Additional Dwellings)

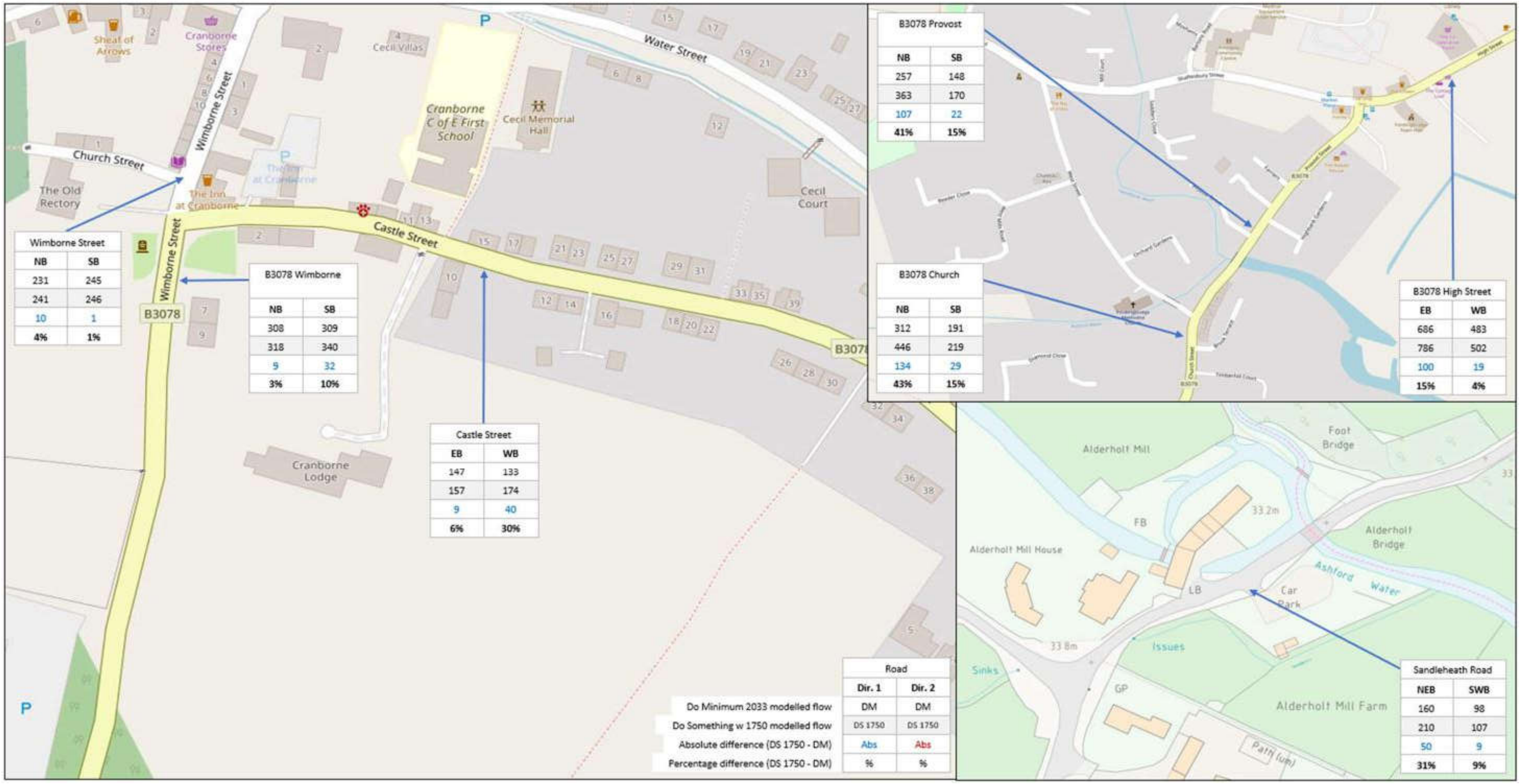


Figure 5.36 – Sub-Model Flows AM (0800-0900) (Do Minimum vs DS 1750 Additional Dwellings)

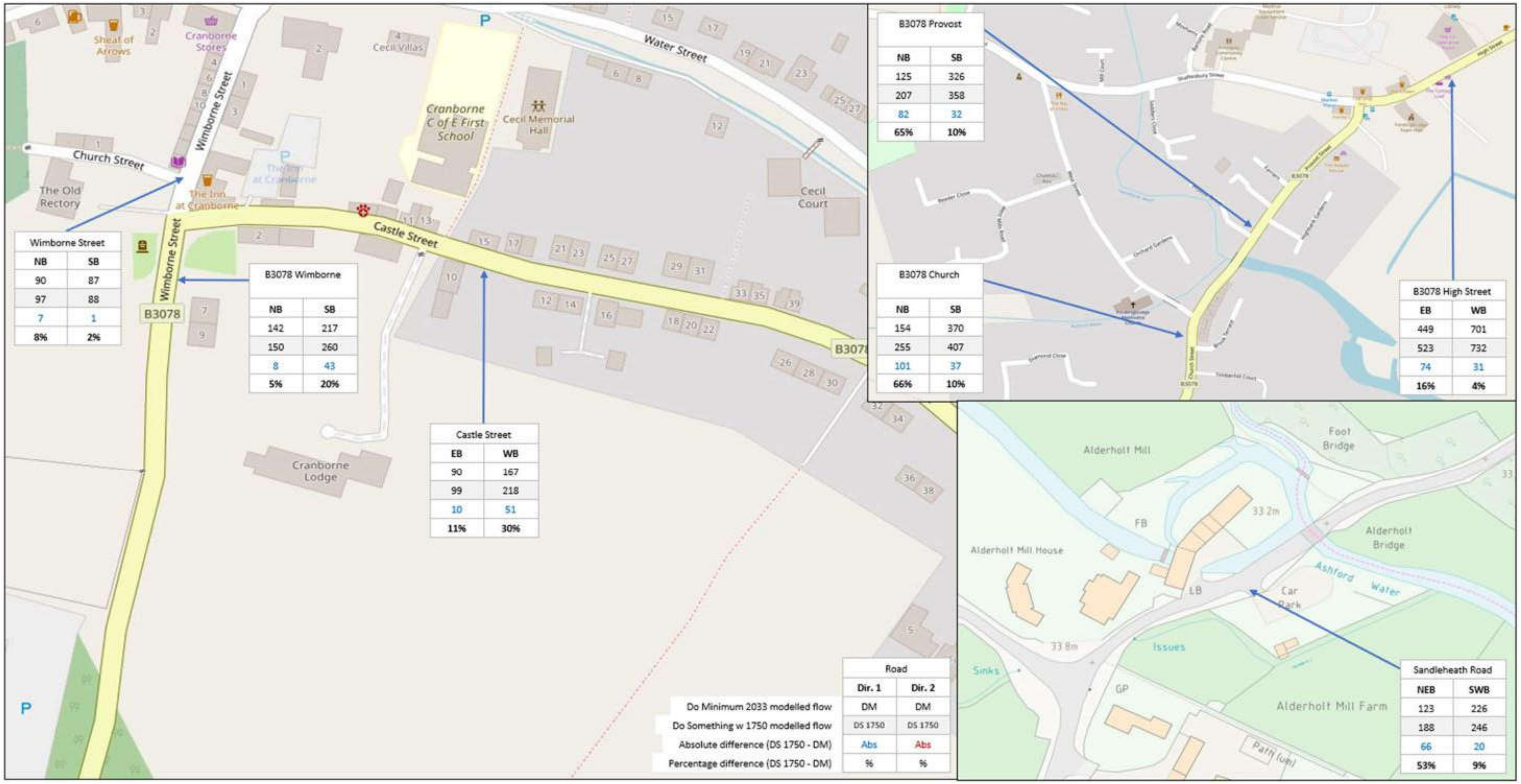


Figure 5.37 – Sub-Model Flows PM (1700-1800) (Do Minimum vs DS 1750 Additional Dwellings)

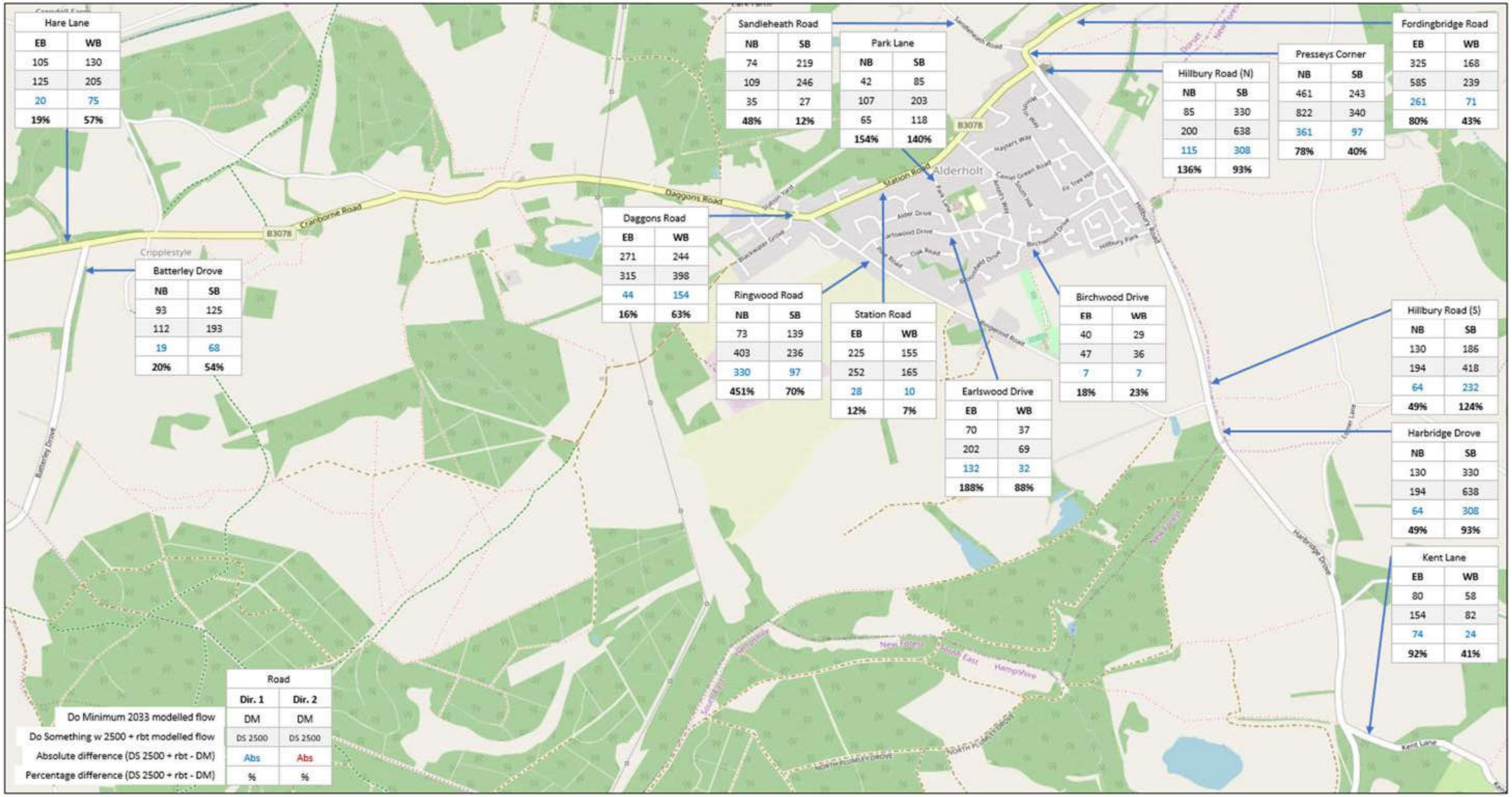


Figure 5.38 – Alderholt Modelled Flows AM (0800-0900) (Do Minimum vs DS 2500 Additional Dwellings)

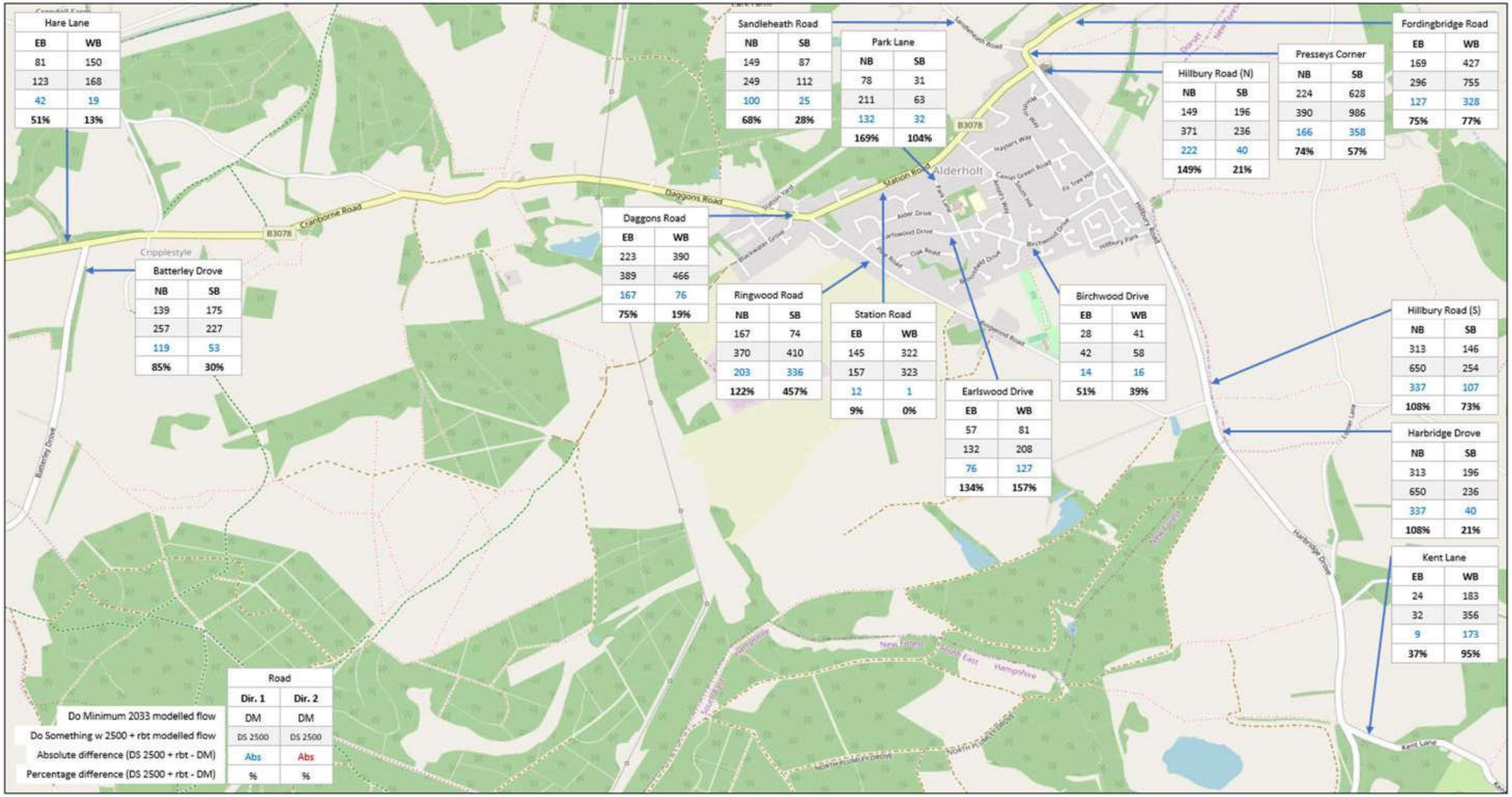


Figure 5.39 – Alderholt Modelled Flows PM (1700-1800) (Do Minimum vs DS 2500 Additional Dwellings)

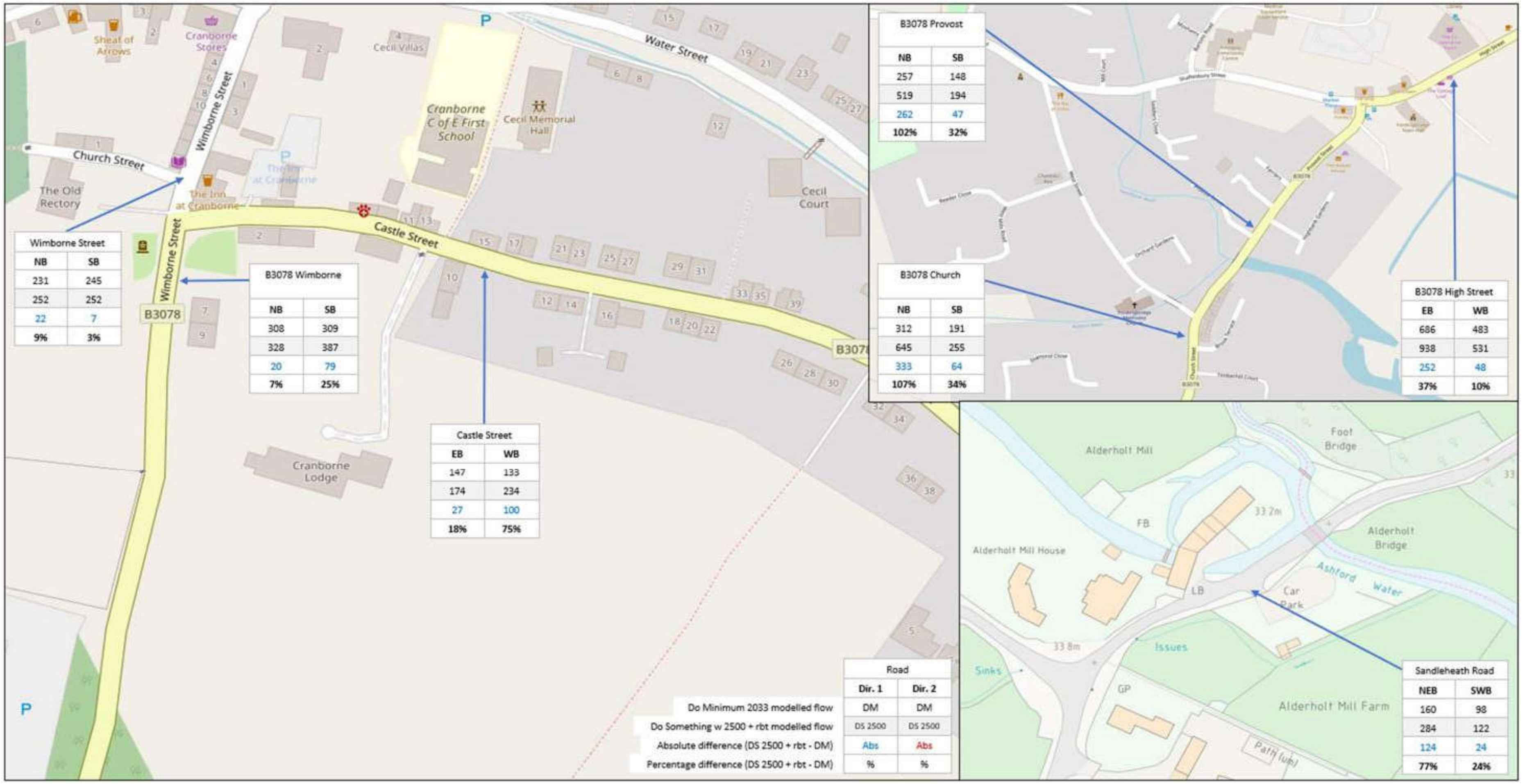


Figure 5.40 – Sub-Model Flows AM (0800-0900) (Do Minimum vs DS 2500 Additional Dwellings)

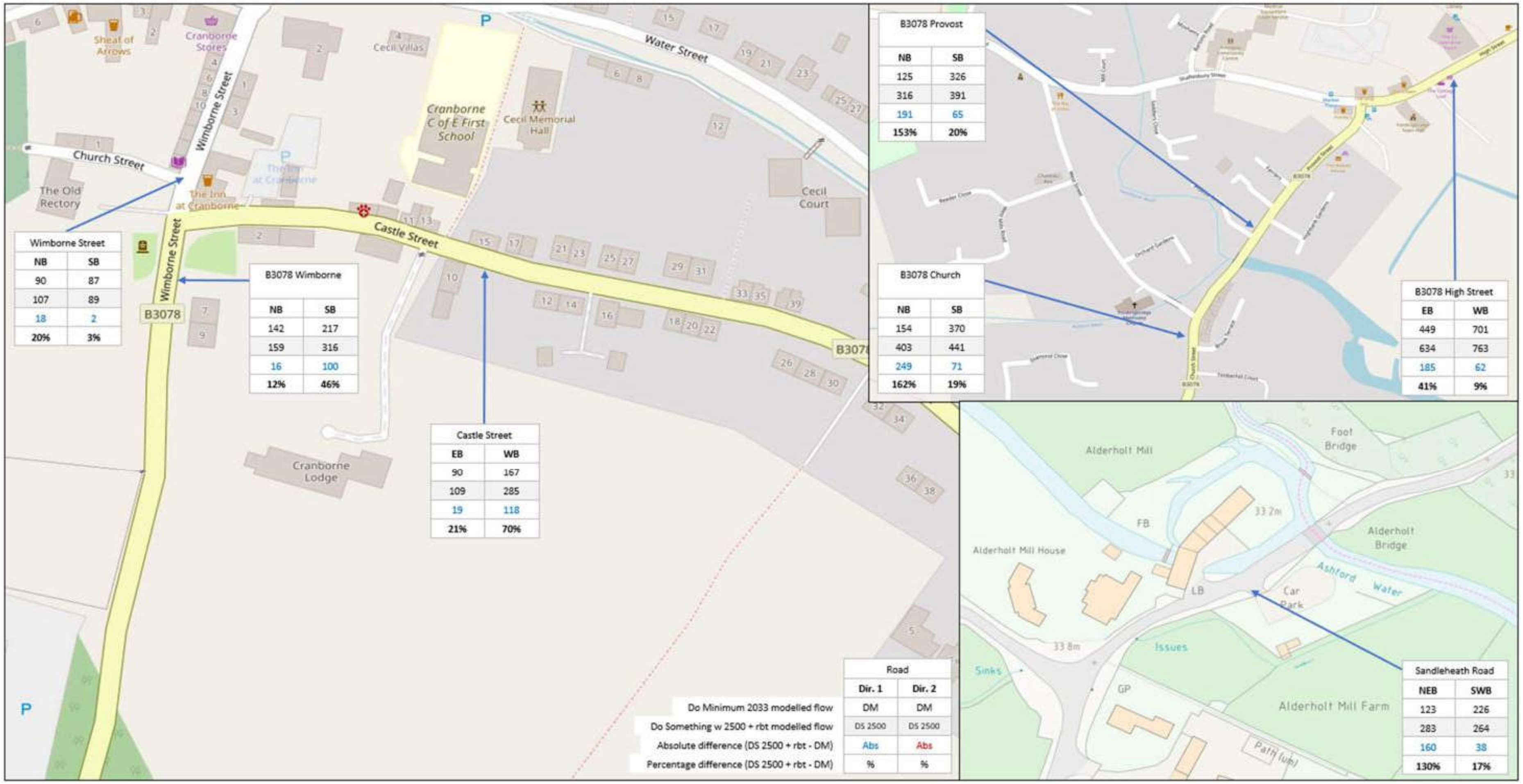


Figure 5.41 – Sub-Model Flows PM (1700-1800) (Do Minimum vs DS 2500 Additional Dwellings)

5.8 The diagrams show that modelled flows increase on most roads from Do Something 500 to Do Something 1000 and then Do Something 2500 2033 scenario. Where there is a decrease of 1 or 2 vehicles this is most likely due to traffic being released in the hour before or after the peak-hour period.

5.9 In the AM and PM peak hours, with 500 additional dwellings, traffic is predicted to increase by further 50 vehicles on B3078 Daggons Road, 35 vehicles on Sandleheath Road, 85 vehicles on B3078 Fordingbridge Road and 100 vehicles on Harbridge Drove.

Journey Times

5.10 The time taken for vehicles to travel along three routes have been extracted from the model. The routes are shown in **Figure 5.42** and listed in **Table 5.2**.

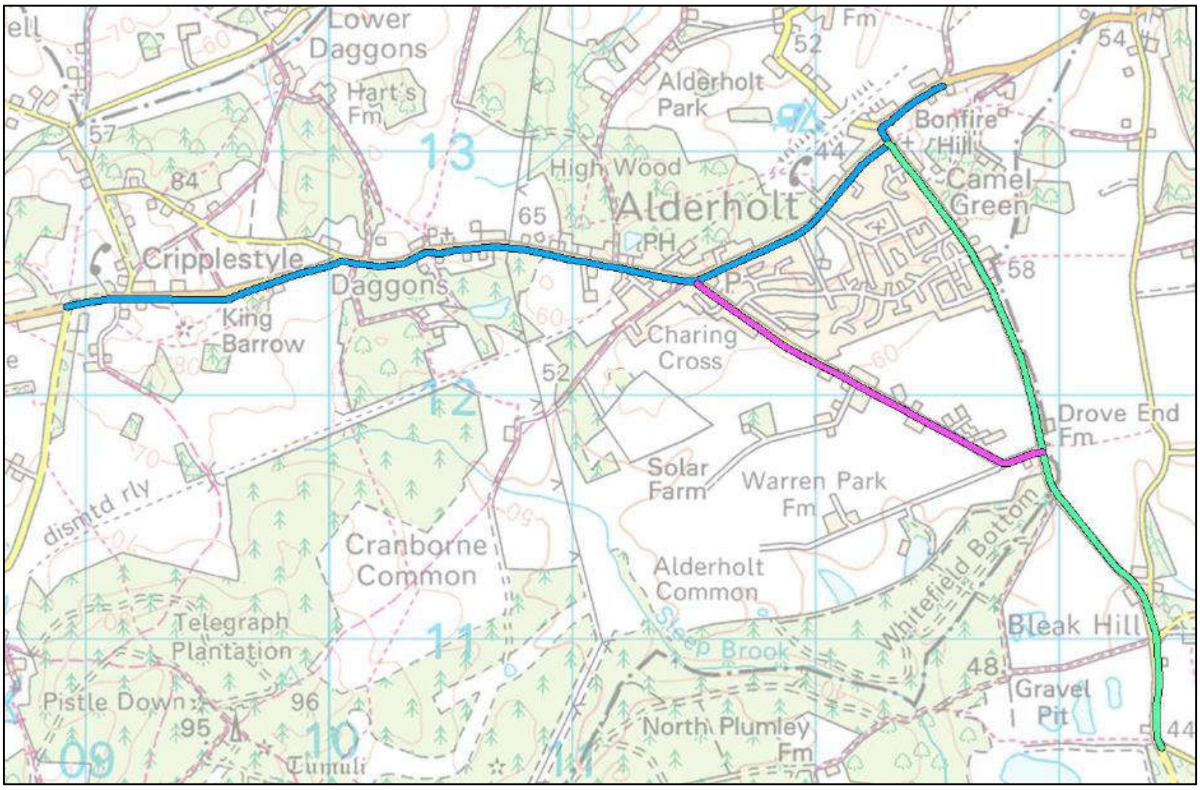


Figure 5.42 – Map of Journey Time Routes

Route	Direction	From	To
1. B3078	Eastbound	Batterley Drove	Fordingbridge Road
	Westbound	Fordingbridge Road	Batterley Drove
2. Ringwood Road	Northbound	Harbridge Drove	B3078
	Southbound	B3078	Harbridge Drove
3. Hillbury Road	Northbound	Kent Lane	B3078
	Southbound	B3078	Kent Lane

Table 5.2 – Journey Time Routes

5.11 Modelled journey times for each route are shown in **Appendix A**.

5.12 In all routes, the quickest journey times were the 2019 Base model and the slowest times were the 2033 Do Something 2500 modelled scenario.

5.13 The 500, 1000 and 1750 Do Something scenarios mostly following a similar profile to the Base.

5.14 For the Do Something 2500 scenario some slowing down at major junctions along the route can be seen.

5.15 For the satellite models, journey times have been extracted between the entry and exit zones. The results are shown in **Table 5.3** for the AM peak and **Table 5.4** for the PM peak.

From Zone	To Zone	Base (s)	2033 DM	2033 DS500	2033 DS1000	2033 DS1750	2033 DS2500
41	42	**59.4**	**62.0**	**65.7**	**74.4**	**70.7**	**468.4**
42	41	**61.5**	**64.8**	**66.5**	**69.3**	**69.7**	**119.3**
43	44	**14.8**	**15.7**	**15.8**	**16.6**	**16.2**	**18.6**
44	43	**13.2**	**13.2**	**13.2**	**13.2**	**13.2**	**13.2**
37	38	**60.6**	**61.1**	**61.3**	**61.4**	**61.3**	**62.9**
38	37	**62.5**	**63.6**	**66.6**	**68.3**	**69.7**	**77.6**

Table 5.3 – Average Journey Times for Satellite Models (AM Peak) in seconds

From Zone	To Zone	Base (s)	2033 DM	2033 DS500	2033 DS1000	2033 DS1750	2033 DS2500
41	42	**56.8**	**58.6**	**60.8**	**63.9**	**63.2**	**78.7**
42	41	**59.1**	**59.6**	**60.8**	**61.6**	**60.9**	**63.2**
43	44	**14.4**	**14.8**	**15.6**	**16.0**	**15.9**	**18.3**
44	43	**13.2**	**13.2**	**13.2**	**13.2**	**13.2**	**13.2**
37	38	**60.3**	**60.6**	**60.8**	**61.4**	**60.9**	**62.1**
38	37	**61.2**	**63.8**	**65.7**	**69.1**	**68.8**	**75.7**

Table 5.4 – Average Journey Times for Satellite Models (PM Peak) in seconds

5.16 The journey times are generally faster in the AM peak across scenarios and get slower as the number of proposed dwellings increases. The main issue appears to be along Provost Street in Fordingbridge in both directions, particularly in the AM peak.

6.0 SUMMARY

6.1 Dorset Council's Transportation Modelling Team have developed the Alderholt traffic model using Paramics Discovery Software.

6.2 The model has been built following guidelines contained within the Department for Transport's TAG Unit M3.1 – Highway Assignment Modelling, and the Microsimulation Consultancy Good Practice Guide.

6.3 Four forecast scenarios were modelled for the year 2033. The Do Minimum scenario shows the predicted background growth and three further scenarios including an additional 500, 1000, 1750, and 2500 potential dwellings.

6.4 The network used was the same for the Do Minimum, Do Something 500, Do Something 1000, and Do Something 1750. A roundabout was added at the Ringwood Road/Hillbury Road/Harbridge Road in the Do Something 2500 when it was observed that the priority T-junction was over-capacity and couldn't function with the additional flow.

6.5 The results show traffic is predicted to increase by around 24% in the 2033 Do Minimum scenario compared to the 2019 Base matrix and by a further 62-67% if 2500 dwellings were built in Alderholt. (37-42% if 1700 dwellings were built)

6.6 The models highlight the following areas of concern regarding congestion: Pressey's Corner, Ringwood Road/Hillbury Road/Harbridge Drove, and Provost Street in Fordingbridge.

6.7 Overall, journey times are seen to increase slightly as the number of dwellings increases. However, there are significant delays on Ringwood Road southbound direction on the approach to Harbridge Drove/Hillbury Road in both peaks for the 1750 and 2500 dwellings scenarios. The delays begin at the potential entrance to the development site.

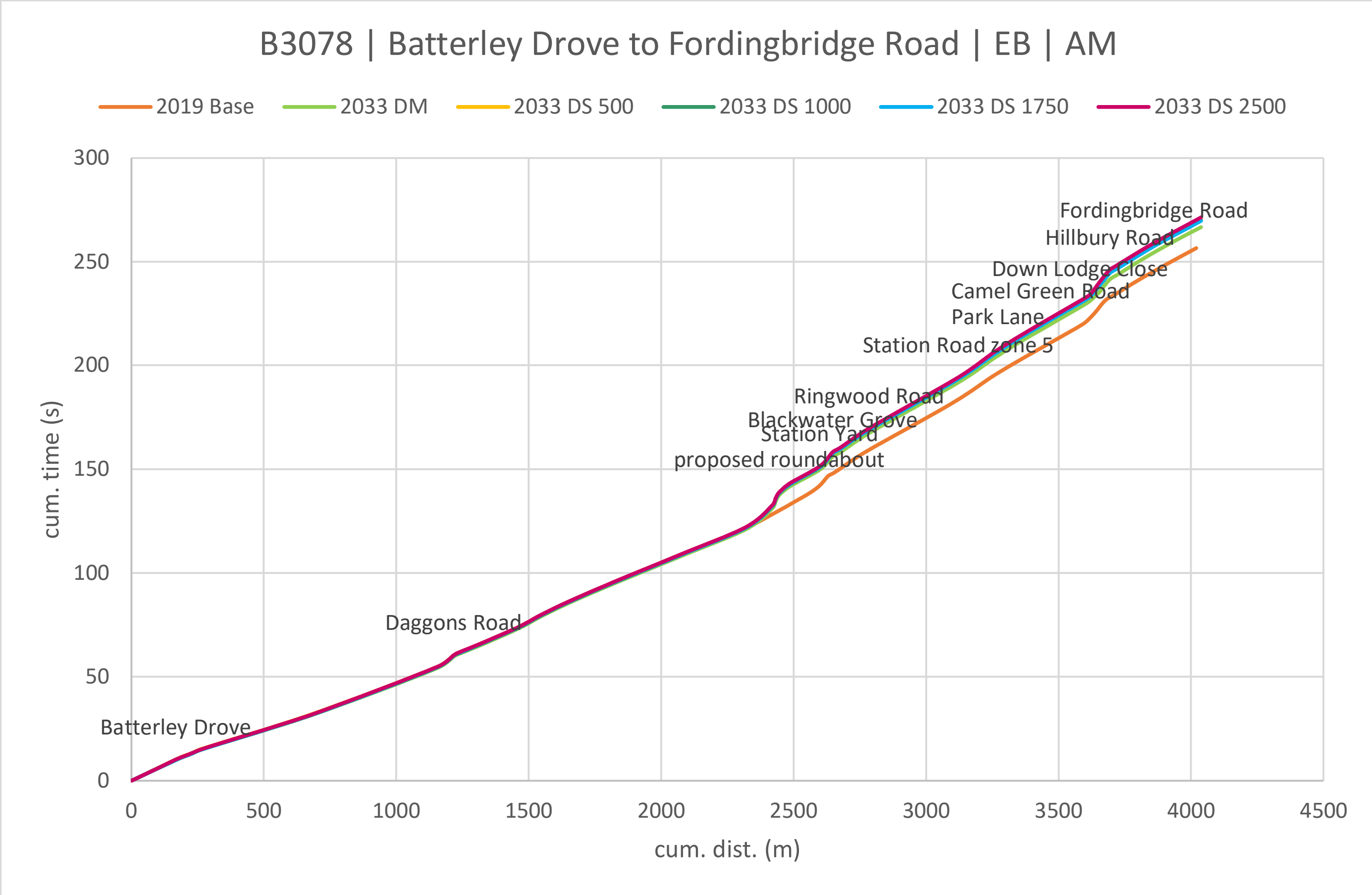
6.8 Delays are also shown on Hillbury Road for the 2500 dwellings scenario both peak and for the 1750 dwelling option southbound in the PM peak.

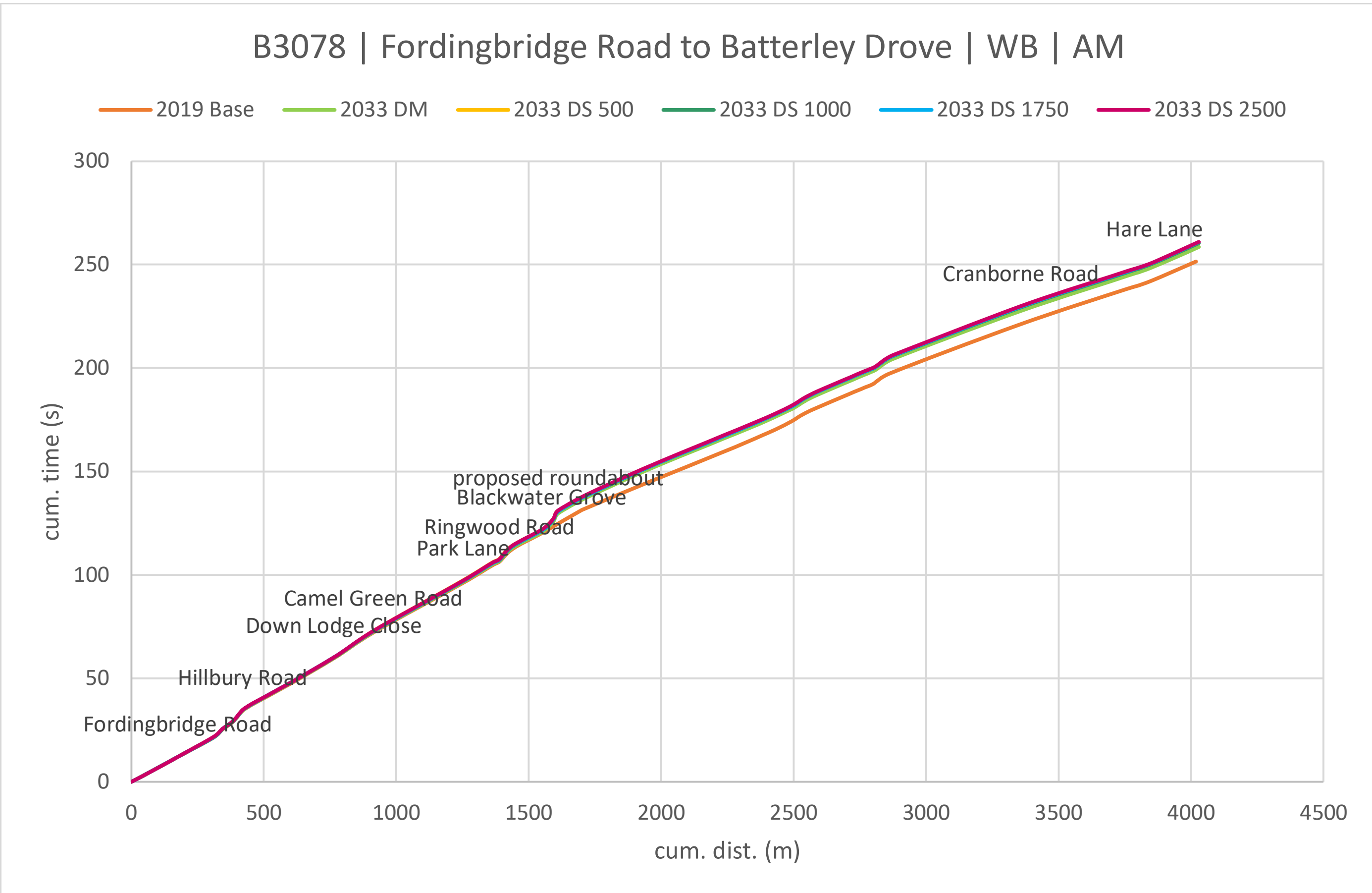
6.9 The 1750 dwellings option does not include the additional mini roundabout, which If included may reduce journey times on Hillbury Road and Ringwood Road in that option.

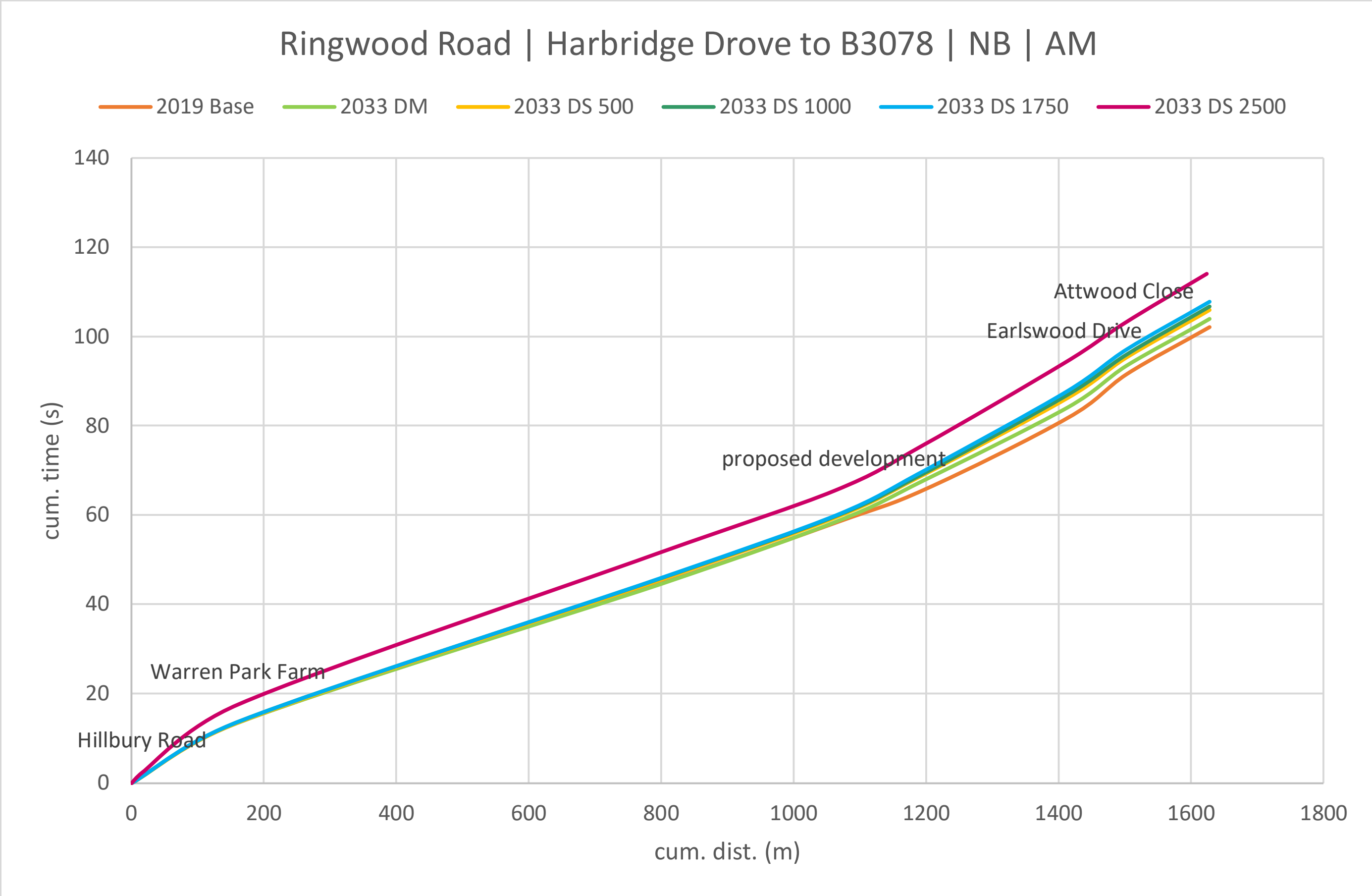
6.10 Average journey times for the satellite models indicate the existing layouts could accommodate potential development up to 1750 dwellings but 2500 dwellings would cause congestion on the network.

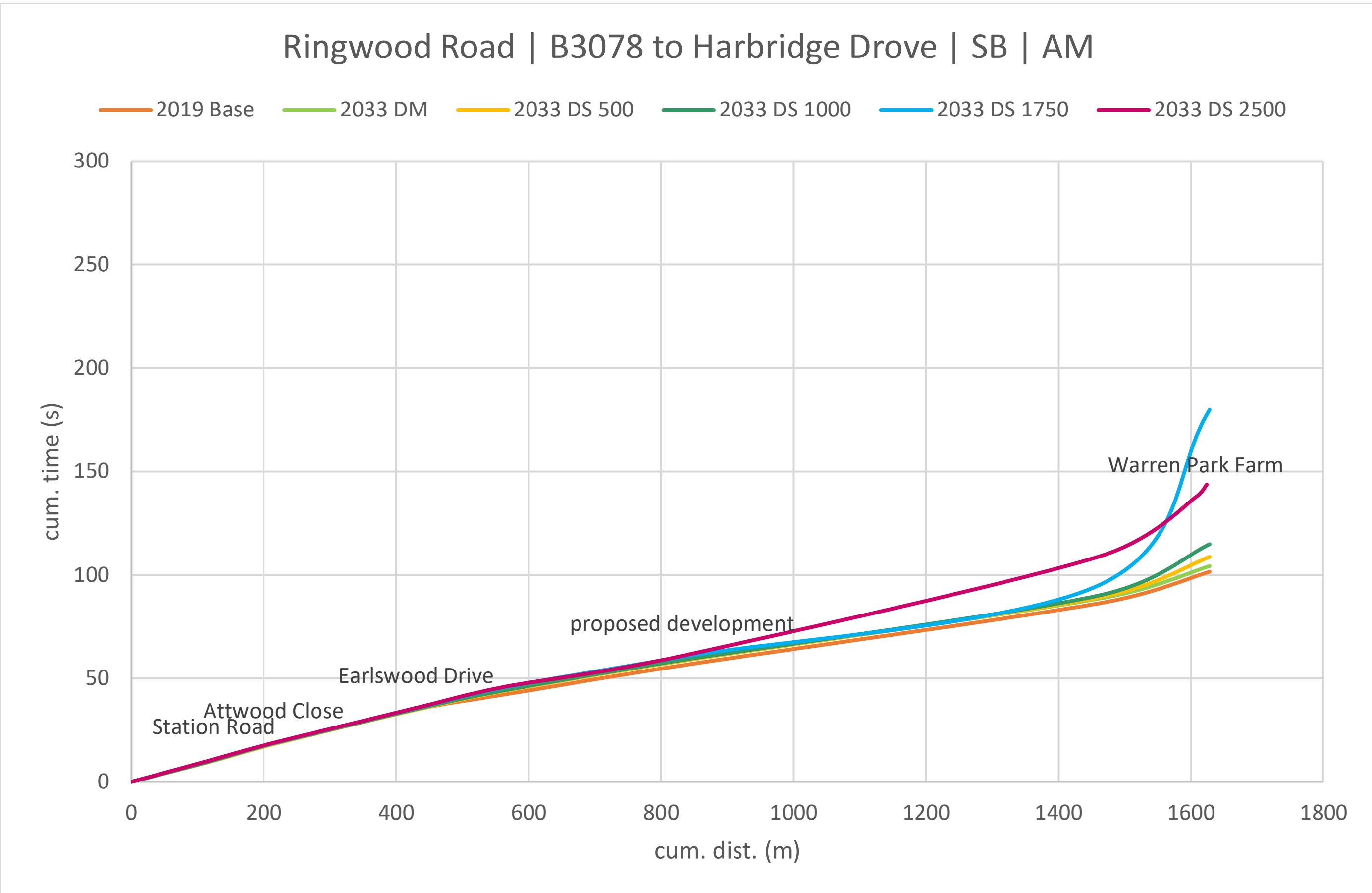
Appendix A

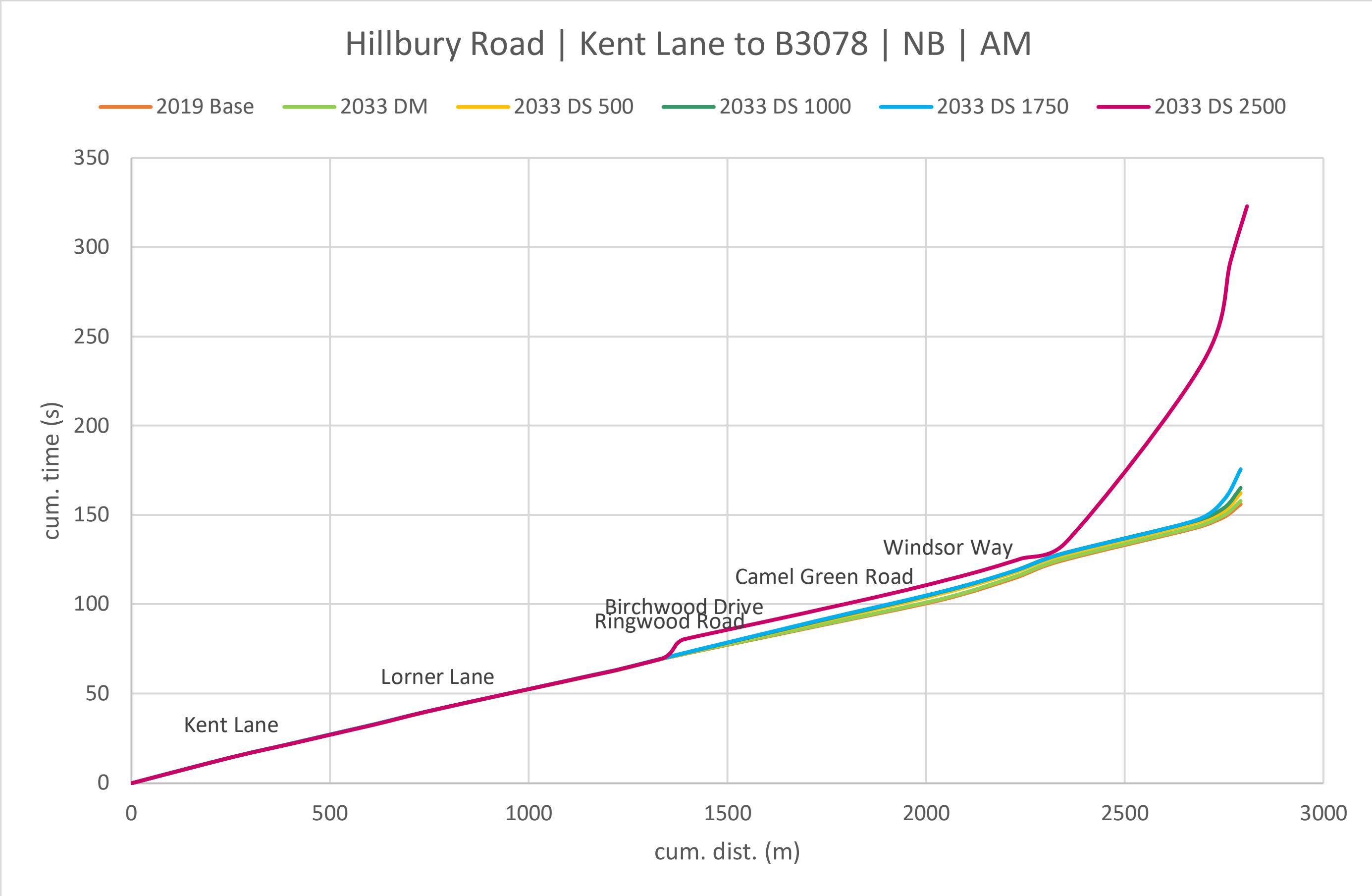
Journey Time Routes
Distance vs. Time
AM & PM Peaks

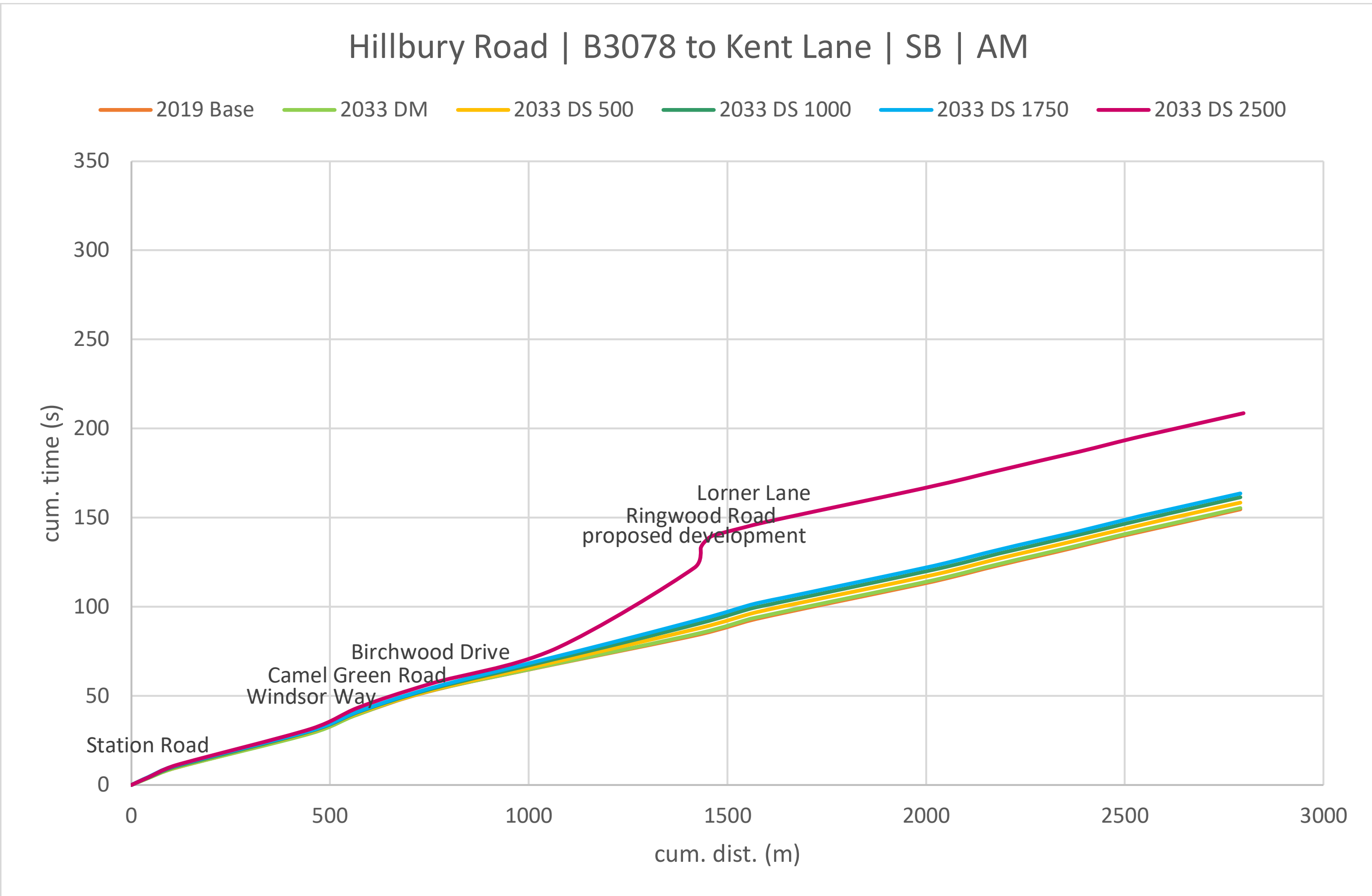

B3078 | Batterley Drove to Fordingbridge Road | EB | AM
2019 Base
2033 DM
2033 DS 500
2033 DS 1000
2033 DS 1750
2033 DS 2500
cum. time (s)
cum. dist. (m)
Batterley Drove
Daggons Road
proposed roundabout
Station Yard
Blackwater Grove
Ringwood Road
Station Road zone 5
Park Lane
Camel Green Road
Down Lodge Close
Hillbury Road
Fordingbridge Road

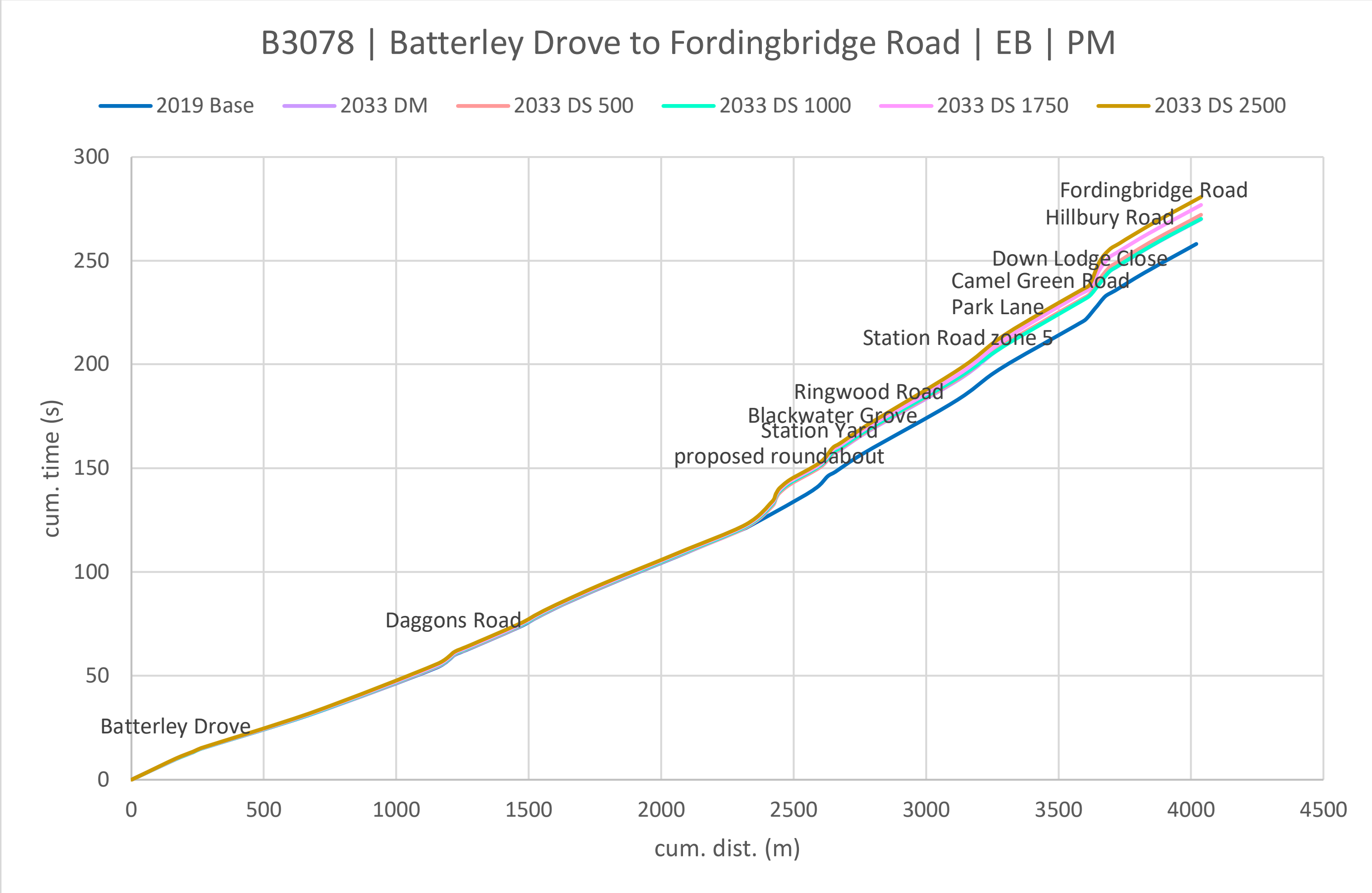

B3078 | Fordingbridge Road to Batterley Drove | WB | AM
2019 Base
2033 DM
2033 DS 500
2033 DS 1000
2033 DS 1750
2033 DS 2500
cum. time (s)
cum. dist. (m)
Fordingbridge Road
Hillbury Road
Down Lodge Close
Camel Green Road
Park Lane
Ringwood Road
Blackwater Grove
proposed roundabout
Cranborne Road
Hare Lane

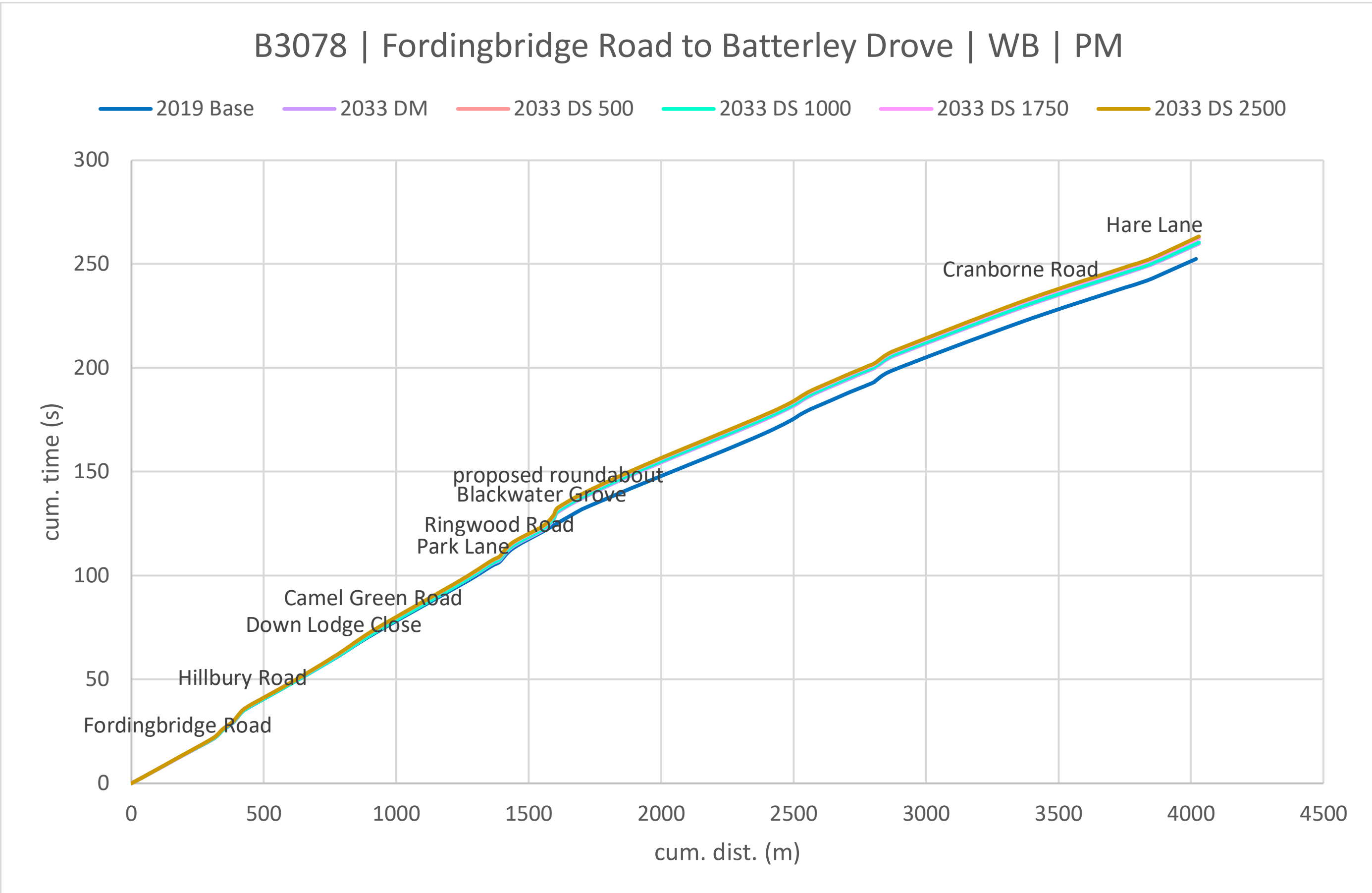

Ringwood Road | Harbridge Drove to B3078 | NB | AM
2019 Base
2033 DM
2033 DS 500
2033 DS 1000
2033 DS 1750
2033 DS 2500
cum. time (s)
cum. dist. (m)
Attwood Close
Earlswood Drive
proposed development
Warren Park Farm
Hillbury Road

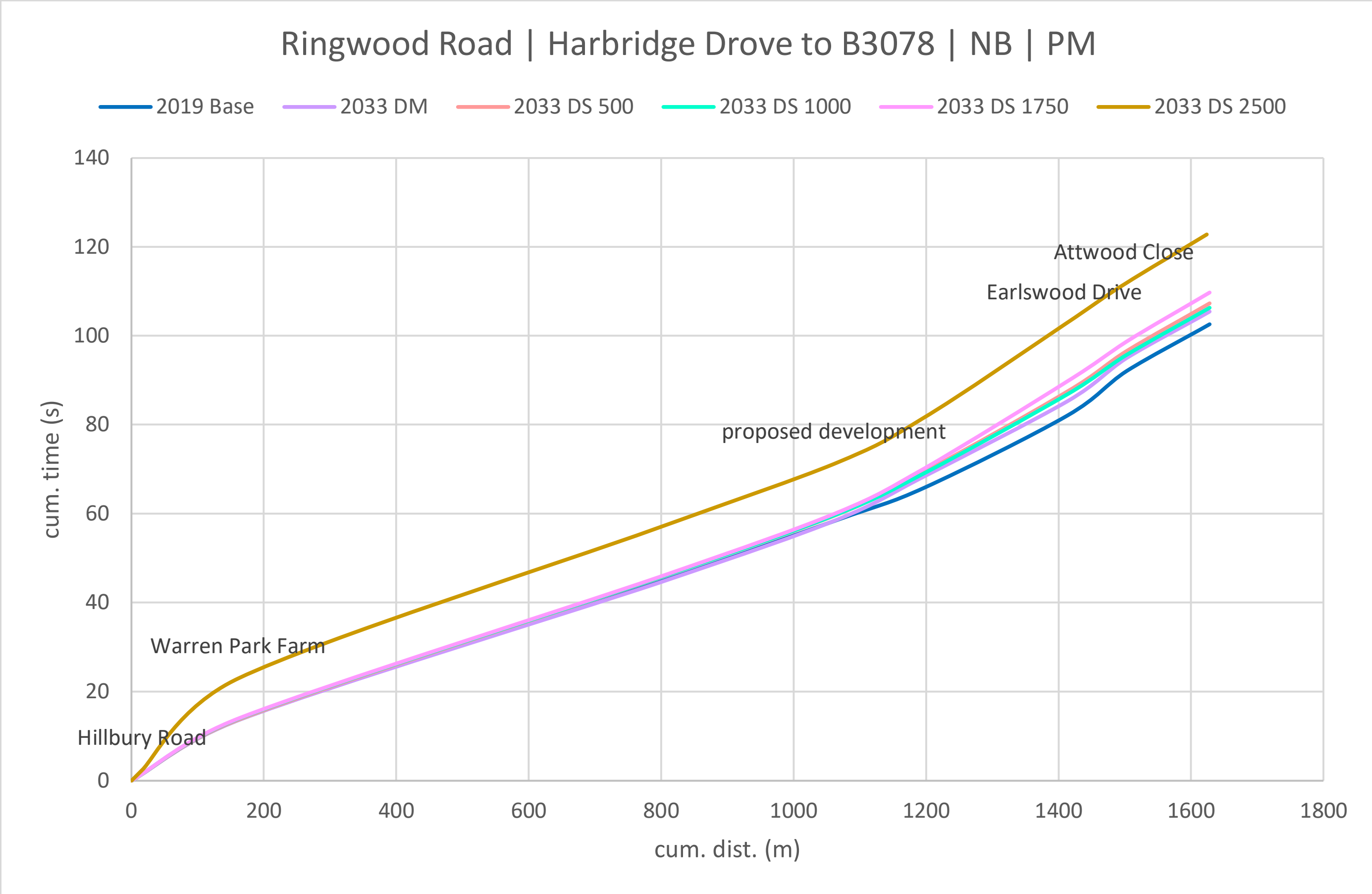

Ringwood Road | B3078 to Harbridge Drove | SB | AM
2019 Base
2033 DM
2033 DS 500
2033 DS 1000
2033 DS 1750
2033 DS 2500
cum. time (s)
cum. dist. (m)
Warren Park Farm
proposed development
Earlswood Drive
Attwood Close
Station Road

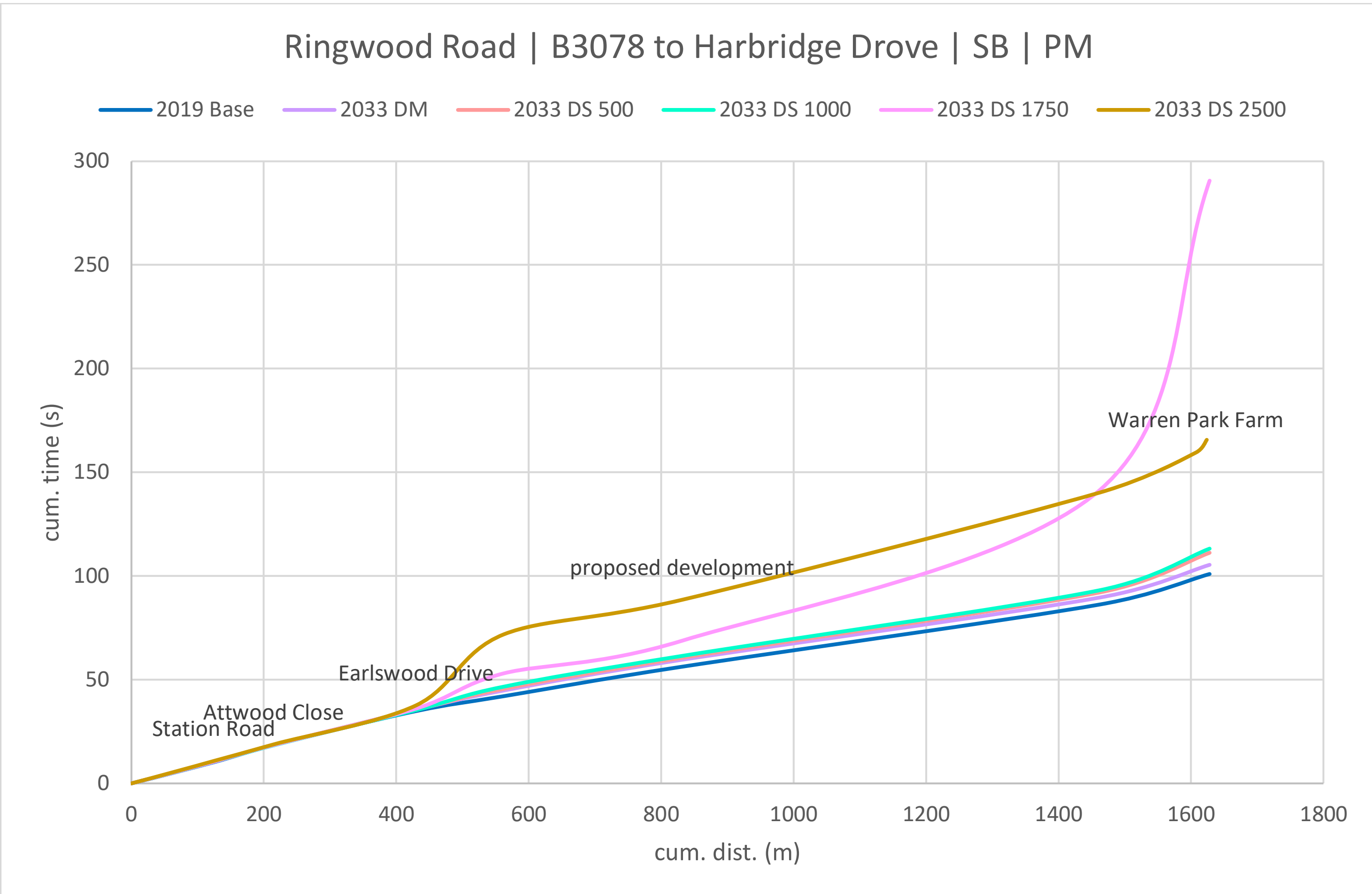

Hillbury Road | Kent Lane to B3078 | NB | AM
2019 Base
2033 DM
2033 DS 500
2033 DS 1000
2033 DS 1750
2033 DS 2500
cum. time (s)
cum. dist. (m)
Kent Lane
Lorner Lane
Birchwood Drive
Ringwood Road
Camel Green Road
Windsor Way

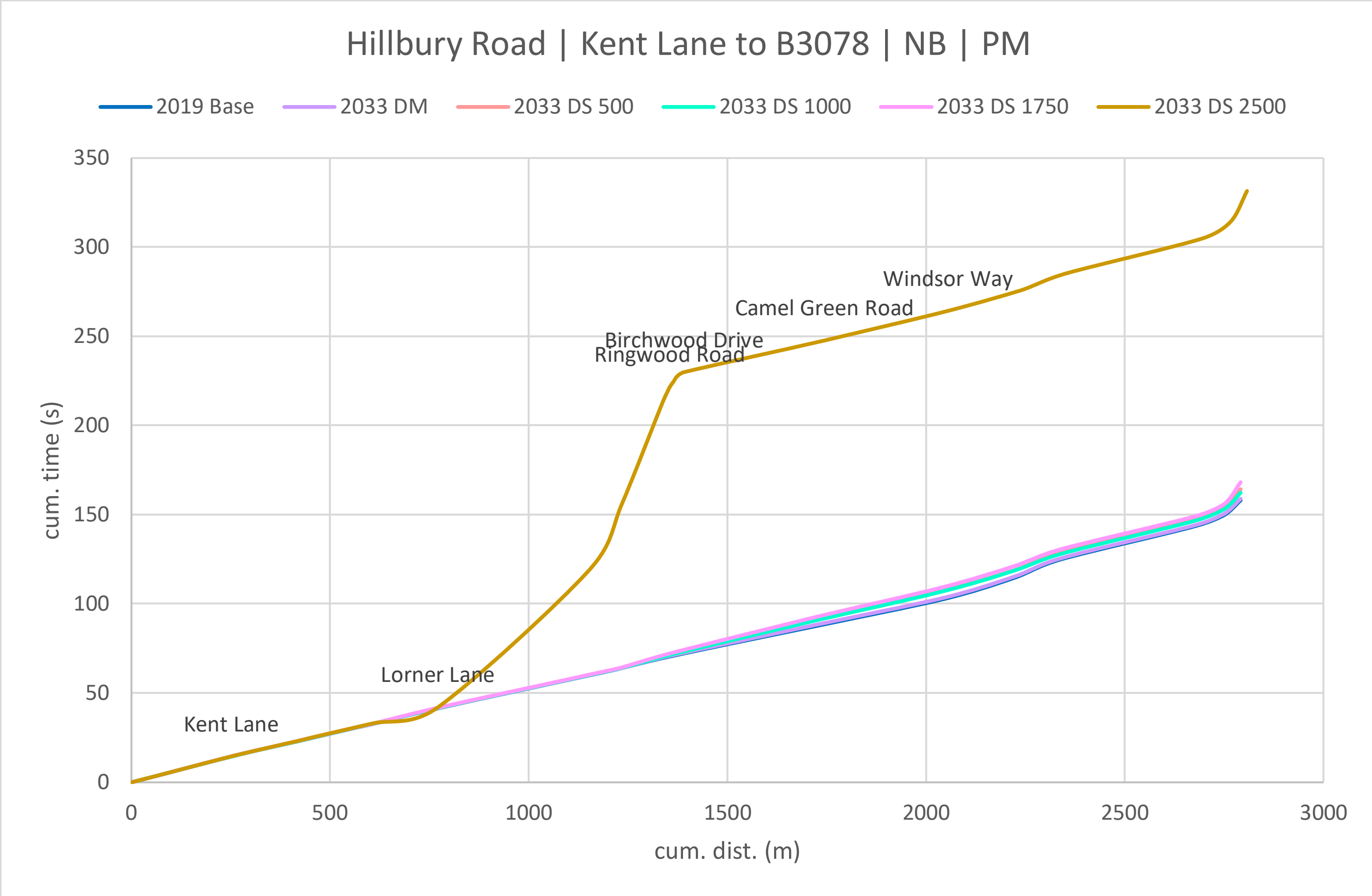

Hillbury Road | B3078 to Kent Lane | SB | AM
2019 Base
2033 DM
2033 DS 500
2033 DS 1000
2033 DS 1750
2033 DS 2500
cum. time (s)
cum. dist. (m)
Station Road
Windsor Way
Camel Green Road
Birchwood Drive
Lorner Lane
Ringwood Road
proposed development

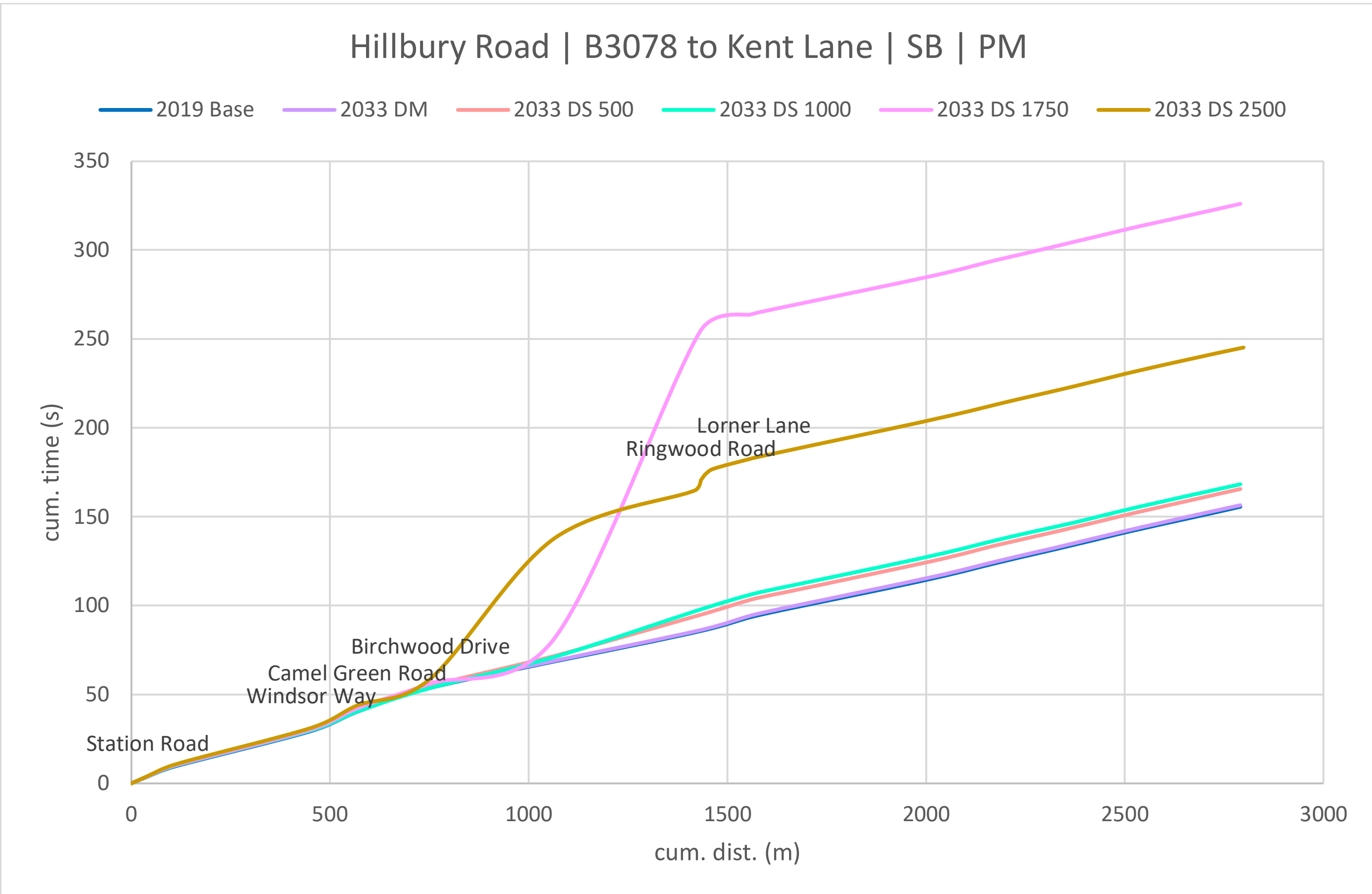

B3078 | Batterley Drove to Fordingbridge Road | EB | PM
2019 Base
2033 DM
2033 DS 500
2033 DS 1000
2033 DS 1750
2033 DS 2500
cum. time (s)
cum. dist. (m)
Batterley Drove
Daggons Road
proposed roundabout
Station Yard
Blackwater Grove
Ringwood Road
Station Road zone 5
Park Lane
Camel Green Road
Down Lodge Close
Hillbury Road
Fordingbridge Road


B3078 | Fordingbridge Road to Batterley Drove | WB | PM
2019 Base
2033 DM
2033 DS 500
2033 DS 1000
2033 DS 1750
2033 DS 2500
cum. time (s)
cum. dist. (m)
Fordingbridge Road
Hillbury Road
Down Lodge Close
Camel Green Road
Park Lane
Ringwood Road
Blackwater Grove
proposed roundabout
Cranborne Road
Hare Lane


Ringwood Road | Harbridge Drove to B3078 | NB | PM
2019 Base
2033 DM
2033 DS 500
2033 DS 1000
2033 DS 1750
2033 DS 2500
cum. time (s)
cum. dist. (m)
Attwood Close
Earlswood Drive
proposed development
Warren Park Farm
Hillbury Road


Ringwood Road | B3078 to Harbridge Drove | SB | PM
2019 Base
2033 DM
2033 DS 500
2033 DS 1000
2033 DS 1750
2033 DS 2500
cum. time (s)
cum. dist. (m)
Warren Park Farm
proposed development
Earlswood Drive
Attwood Close
Station Road


Hillbury Road | Kent Lane to B3078 | NB | PM
2019 Base
2033 DM
2033 DS 500
2033 DS 1000
2033 DS 1750
2033 DS 2500
cum. time (s)
cum. dist. (m)
Kent Lane
Lorner Lane
Birchwood Drive
Ringwood Road
Camel Green Road
Windsor Way


Hillbury Road | B3078 to Kent Lane | SB | PM
2019 Base
2033 DM
2033 DS 500
2033 DS 1000
2033 DS 1750
2033 DS 2500
cum. time (s)
cum. dist. (m)
Station Road
Windsor Way
Camel Green Road
Birchwood Drive
Ringwood Road
Lorner Lane

Appendix P

Junctions 9

ARCADY 9 - Roundabout Module

Filename: Site Access Hillbury Road Rbout.j9
Path: W:\Projects\Fareham\130-139\132 Intelligent Land\132.0001 South Alderholt Strategic Sites\Modelling\2022 Modelling\JUNE,JULY 2022\Site Access Hillbury Road R.bout
Report generation date: 27-Oct-22 2:17:35 PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2027 (Sensitivity 500 units)							
Arm 1	0.1	2.93	0.11	A	0.3	3.41	0.20	A
Arm 2	0.4	4.73	0.29	A	0.2	3.95	0.14	A
Arm 3	0.2	3.04	0.14	A	0.2	3.00	0.17	A
Arm 4	0.0	0.00	0.00	A	0.0	0.00	0.00	A
	2033 + Dev							
Arm 1	0.2	3.12	0.14	A	0.4	4.06	0.31	A
Arm 2	0.5	5.19	0.35	A	0.5	5.11	0.33	A
Arm 3	0.2	3.34	0.19	A	0.3	3.34	0.22	A
Arm 4	0.0	0.00	0.00	A	0.0	0.00	0.00	A

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

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	06-Jul-22
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	PC-PBASH-KAREN\Paul B
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2027 (Sensitivity 500 units)	AM	ONE HOUR	08:00	09:30	15	✓
D2	2027 (Sensitivity 500 units)	PM	ONE HOUR	17:00	18:30	15	✓
D3	2033 + Dev	AM	ONE HOUR	08:00	09:30	15	✓
D4	2033 + Dev	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

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

2027 (Sensitivity 500 units), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - 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	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	3.82	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Hillbury Road S	
2	New Spine Road	
3	Hillbury Road N	
4	Internal Spine Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.38	6.00	10.0	42.0	30.0	16.5	
2	3.25	6.00	2.5	20.0	30.0	13.5	
3	3.00	5.60	38.0	20.0	30.0	15.0	
4	5.00	6.80	4.0	10.0	30.0	15.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.652	1560
2	0.581	1236
3	0.661	1636
4	0.668	1744

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2027 (Sensitivity 500 units)	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	138	100.000
2		ONE HOUR	✓	289	100.000
3		ONE HOUR	✓	182	100.000
4		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	69	69	0
	2	143	0	146	0
	3	128	54	0	0
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.11	2.93	0.1	A	127	190
2	0.29	4.73	0.4	A	265	398
3	0.14	3.04	0.2	A	167	251
4	0.00	0.00	0.0	A	0	0

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	104	26	41	1392	0.075	104	203	0.0	0.1	2.794	A
2	218	54	52	1094	0.199	217	92	0.0	0.2	4.101	A
3	137	34	107	1417	0.097	137	161	0.0	0.1	2.812	A
4	0	0	244	1423	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	124	31	49	1387	0.089	124	243	0.1	0.1	2.850	A
2	260	65	62	1088	0.239	260	111	0.2	0.3	4.346	A
3	164	41	128	1403	0.117	164	193	0.1	0.1	2.904	A
4	0	0	292	1390	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	152	38	59	1380	0.110	152	298	0.1	0.1	2.931	A
2	318	80	76	1080	0.295	318	135	0.3	0.4	4.724	A
3	200	50	157	1384	0.145	200	236	0.1	0.2	3.041	A
4	0	0	357	1347	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	152	38	59	1380	0.110	152	298	0.1	0.1	2.931	A
2	318	80	76	1080	0.295	318	135	0.4	0.4	4.727	A
3	200	50	157	1383	0.145	200	237	0.2	0.2	3.042	A
4	0	0	358	1346	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	124	31	49	1387	0.089	124	244	0.1	0.1	2.850	A
2	260	65	62	1088	0.239	260	111	0.4	0.3	4.352	A
3	164	41	129	1402	0.117	164	194	0.2	0.1	2.908	A
4	0	0	293	1390	0.000	0	0	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	104	26	41	1392	0.075	104	204	0.1	0.1	2.796	A
2	218	54	52	1093	0.199	218	93	0.3	0.2	4.112	A
3	137	34	108	1416	0.097	137	162	0.1	0.1	2.816	A
4	0	0	245	1422	0.000	0	0	0.0	0.0	0.000	A

2027 (Sensitivity 500 units), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - 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	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	3.37	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2027 (Sensitivity 500 units)	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	241	100.000
2		ONE HOUR	✓	131	100.000
3		ONE HOUR	✓	221	100.000
4		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	135	106	0
	2	61	0	70	0
	3	86	135	0	0
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.20	3.41	0.3	A	221	332
2	0.14	3.95	0.2	A	120	180
3	0.17	3.00	0.2	A	203	304
4	0.00	0.00	0.0	A	0	0

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	181	45	101	1352	0.134	181	110	0.0	0.2	3.071	A
2	99	25	80	1077	0.092	98	203	0.0	0.1	3.673	A
3	166	42	46	1457	0.114	166	132	0.0	0.1	2.786	A
4	0	0	212	1444	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	217	54	121	1339	0.162	217	132	0.2	0.2	3.205	A
2	118	29	95	1068	0.110	118	243	0.1	0.1	3.786	A
3	199	50	55	1451	0.137	199	158	0.1	0.2	2.873	A
4	0	0	253	1416	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	265	66	149	1322	0.201	265	162	0.2	0.3	3.407	A
2	144	36	117	1056	0.137	144	297	0.1	0.2	3.948	A
3	243	61	67	1443	0.169	243	194	0.2	0.2	2.999	A
4	0	0	310	1378	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	265	66	149	1322	0.201	265	162	0.3	0.3	3.407	A
2	144	36	117	1056	0.137	144	297	0.2	0.2	3.948	A
3	243	61	67	1443	0.169	243	194	0.2	0.2	2.999	A
4	0	0	310	1378	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	217	54	121	1339	0.162	217	132	0.3	0.2	3.207	A
2	118	29	95	1068	0.110	118	243	0.2	0.1	3.787	A
3	199	50	55	1451	0.137	199	158	0.2	0.2	2.876	A
4	0	0	254	1416	0.000	0	0	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	181	45	102	1352	0.134	182	111	0.2	0.2	3.075	A
2	99	25	80	1077	0.092	99	203	0.1	0.1	3.681	A
3	166	42	46	1457	0.114	166	133	0.2	0.1	2.789	A
4	0	0	212	1444	0.000	0	0	0.0	0.0	0.000	A

2033 + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - 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	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	4.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2033 + Dev	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	172	100.000
2		ONE HOUR	✓	341	100.000
3		ONE HOUR	✓	237	100.000
4		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	86	86	0
	2	203	0	138	0
	3	132	105	0	0
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.14	3.12	0.2	A	158	237
2	0.35	5.19	0.5	A	313	469
3	0.19	3.34	0.2	A	217	326
4	0.00	0.00	0.0	A	0	0

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	129	32	79	1367	0.095	129	251	0.0	0.1	2.908	A
2	257	64	65	1086	0.236	255	143	0.0	0.3	4.327	A
3	178	45	152	1387	0.129	178	168	0.0	0.1	2.975	A
4	0	0	330	1365	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	155	39	94	1357	0.114	155	301	0.1	0.1	2.993	A
2	307	77	77	1079	0.284	306	172	0.3	0.4	4.657	A
3	213	53	182	1367	0.156	213	201	0.1	0.2	3.119	A
4	0	0	395	1322	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	189	47	116	1343	0.141	189	368	0.1	0.2	3.119	A
2	375	94	95	1069	0.351	375	210	0.4	0.5	5.184	A
3	261	65	223	1340	0.195	261	246	0.2	0.2	3.335	A
4	0	0	484	1262	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	189	47	116	1343	0.141	189	369	0.2	0.2	3.119	A
2	375	94	95	1069	0.351	375	210	0.5	0.5	5.192	A
3	261	65	224	1340	0.195	261	247	0.2	0.2	3.336	A
4	0	0	484	1262	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	155	39	94	1357	0.114	155	302	0.2	0.1	2.994	A
2	307	77	77	1079	0.284	307	172	0.5	0.4	4.668	A
3	213	53	183	1367	0.156	213	202	0.2	0.2	3.123	A
4	0	0	396	1321	0.000	0	0	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	129	32	79	1367	0.095	130	252	0.1	0.1	2.911	A
2	257	64	65	1086	0.236	257	144	0.4	0.3	4.345	A
3	178	45	153	1386	0.129	179	169	0.2	0.1	2.980	A
4	0	0	332	1364	0.000	0	0	0.0	0.0	0.000	A

2033 + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - 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	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	4.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2033 + Dev	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	361	100.000
2		ONE HOUR	✓	317	100.000
3		ONE HOUR	✓	276	100.000
4		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	252	109	0
	2	147	0	170	0
	3	88	188	0	0
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.31	4.06	0.4	A	331	497
2	0.33	5.11	0.5	A	291	436
3	0.22	3.34	0.3	A	253	380
4	0.00	0.00	0.0	A	0	0

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	272	68	141	1327	0.205	271	176	0.0	0.3	3.406	A
2	239	60	82	1076	0.222	238	330	0.0	0.3	4.287	A
3	208	52	110	1415	0.147	207	209	0.0	0.2	2.979	A
4	0	0	317	1374	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	325	81	169	1308	0.248	324	211	0.3	0.3	3.658	A
2	285	71	98	1067	0.267	285	395	0.3	0.4	4.600	A
3	248	62	132	1400	0.177	248	251	0.2	0.2	3.123	A
4	0	0	380	1332	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	397	99	207	1284	0.310	397	258	0.3	0.4	4.058	A
2	349	87	120	1054	0.331	349	484	0.4	0.5	5.099	A
3	304	76	162	1381	0.220	304	307	0.2	0.3	3.342	A
4	0	0	465	1275	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	397	99	207	1284	0.310	397	259	0.4	0.4	4.062	A
2	349	87	120	1054	0.331	349	484	0.5	0.5	5.106	A
3	304	76	162	1381	0.220	304	307	0.3	0.3	3.342	A
4	0	0	466	1274	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	325	81	169	1308	0.248	325	212	0.4	0.3	3.662	A
2	285	71	98	1067	0.267	285	396	0.5	0.4	4.612	A
3	248	62	132	1400	0.177	248	251	0.3	0.2	3.126	A
4	0	0	381	1331	0.000	0	0	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	272	68	142	1326	0.205	272	177	0.3	0.3	3.418	A
2	239	60	82	1076	0.222	239	332	0.4	0.3	4.304	A
3	208	52	111	1414	0.147	208	210	0.2	0.2	2.986	A
4	0	0	319	1373	0.000	0	0	0.0	0.0	0.000	A

Appendix Q

Junctions 9

PICADY 9 - Priority Intersection Module

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk

Filename: Ringwood Road Station Road (B3078).j9
Path: W:\Projects\Fareham\130-139\132 Intelligent Land\132.0001 South Alderholt Strategic Sites\Modelling\2022 Modelling\JUNE,JULY 2022\Ringwood Road Station Road Daggons Road
Report generation date: 12-Jul-22 9:40:58 AM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2021 Baseline							
Stream B-C	0.2	7.42	0.14	A	0.1	7.17	0.13	A
Stream B-A	0.1	11.11	0.10	B	0.1	10.72	0.07	B
Stream C-AB	0.2	6.86	0.13	A	0.1	6.59	0.07	A
	2027 Forecast							
Stream B-C	0.2	7.49	0.14	A	0.1	7.22	0.13	A
Stream B-A	0.1	11.22	0.10	B	0.1	10.79	0.07	B
Stream C-AB	0.2	6.90	0.14	A	0.1	6.60	0.08	A
	2027 Forecast + Sensitivity							
Stream B-C	0.2	7.83	0.15	A	0.2	7.38	0.13	A
Stream B-A	0.1	12.01	0.11	B	0.1	11.40	0.08	B
Stream C-AB	0.2	7.11	0.14	A	0.1	6.64	0.08	A
	2033 Forecast							
Stream B-C	0.2	7.55	0.15	A	0.2	7.25	0.13	A
Stream B-A	0.1	11.33	0.11	B	0.1	10.87	0.07	B
Stream C-AB	0.2	6.93	0.14	A	0.1	6.63	0.08	A
	2033 Forecast + Dev							
Stream B-C	0.5	10.27	0.33	B	0.3	8.82	0.23	A
Stream B-A	0.3	14.32	0.24	B	0.2	14.70	0.16	B
Stream C-AB	0.1	6.81	0.11	A	0.5	8.54	0.31	A

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

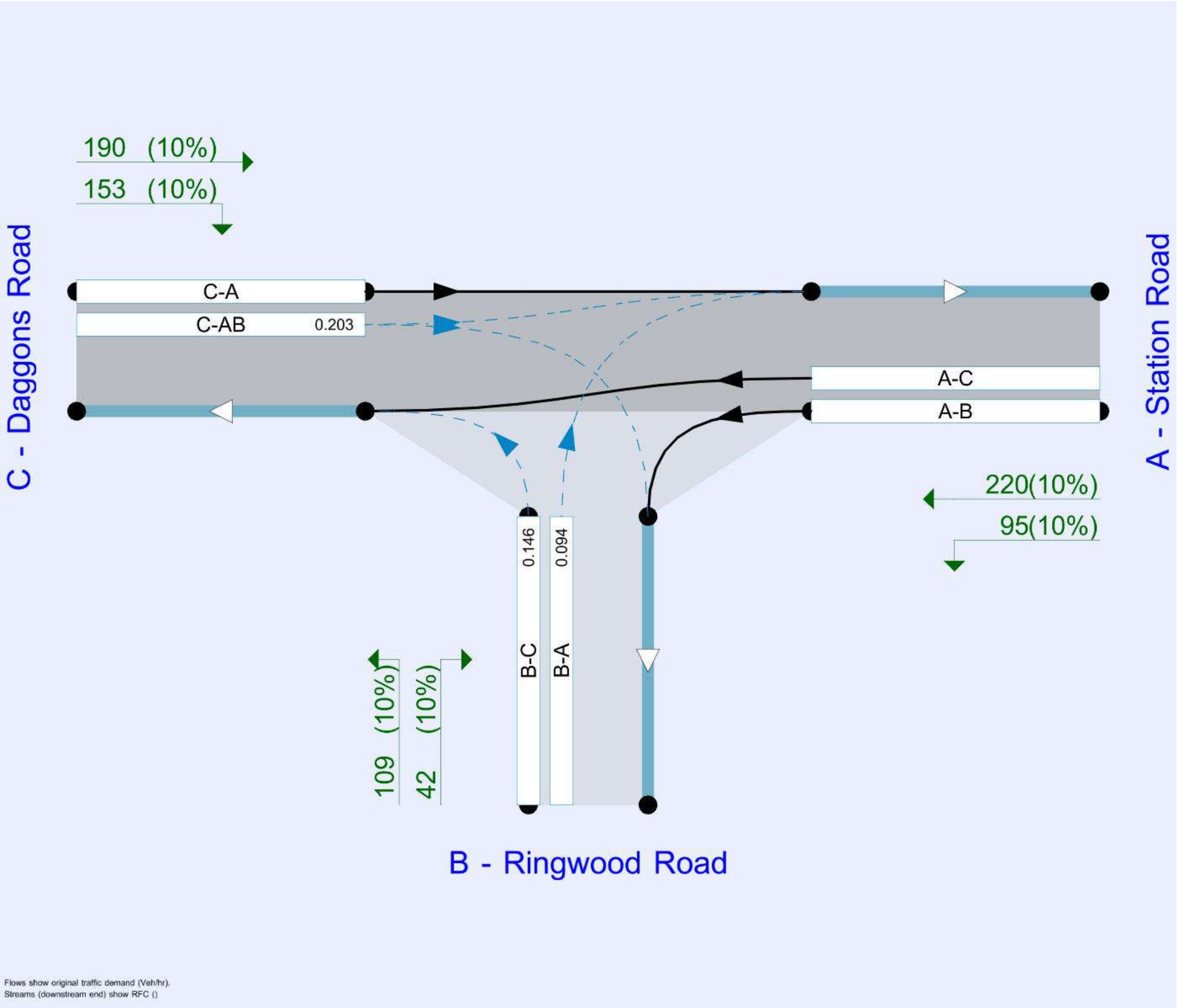
File summary

File Description

Title	Ringwood Road/ Station Road (B3078)
Location	Alderholt
Site number	
Date	14-Aug-18
Version	
Status	Preliminary
Identifier	
Client	
Jobnumber	132.0001
Enumerator	PC-PBASH-MODEL\Cad PC
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 Baseline	AM	ONE HOUR	07:45	09:15	15
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15
D3	2027 Forecast	AM	ONE HOUR	07:45	09:15	15
D4	2027 Forecast	PM	ONE HOUR	16:45	18:15	15
D5	2027 Forecast + Sensitivity	AM	ONE HOUR	07:45	09:15	15
D6	2027 Forecast + Sensitivity	PM	ONE HOUR	16:45	18:15	15
D7	2033 Forecast	AM	ONE HOUR	07:45	09:15	15
D8	2033 Forecast	PM	ONE HOUR	16:45	18:15	15
D9	2033 Forecast + Dev	AM	ONE HOUR	07:45	09:15	15
D10	2033 Forecast + Dev	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2021 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Ringwood Road/Station Road (B3078)	T-Junction	Two-way	2.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Station Road		Major
B	Ringwood Road		Minor
C	Daggons Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Daggons Road	7.50			200.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	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 - Ringwood Road	One lane plus flare	5.25	5.25	3.00	3.00	3.00		1.00	140	67

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	483	0.082	0.208	0.131	0.297
1	B-C	682	0.098	0.247	-	-
1	C-B	690	0.250	0.250	-	-

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

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

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

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Station Road		✓	169	100.000
B - Ringwood Road		✓	104	100.000
C - Daggons Road		✓	209	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Station Road	B - Ringwood Road	C - Daggons Road
From	A - Station Road	0	31	138
	B - Ringwood Road	33	0	71
	C - Daggons Road	139	70	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Station Road	B - Ringwood Road	C - Daggons Road
From	A - Station Road	10	10	10
	B - Ringwood Road	10	10	10
	C - Daggons Road	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.14	7.42	0.2	A
B-A	0.10	11.11	0.1	B
C-AB	0.13	6.86	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	53	582	0.092	53	0.1	6.802	A
B-A	25	386	0.064	25	0.1	9.961	A
C-AB	54	607	0.089	53	0.1	6.500	A
C-A	104			104			
A-B	23			23			
A-C	104			104			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	64	574	0.111	64	0.1	7.054	A
B-A	30	375	0.079	30	0.1	10.412	B
C-AB	65	605	0.107	65	0.1	6.655	A
C-A	123			123			
A-B	28			28			
A-C	124			124			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	78	563	0.139	78	0.2	7.419	A
B-A	36	360	0.101	36	0.1	11.099	B
C-AB	80	605	0.133	80	0.2	6.857	A
C-A	150			150			
A-B	34			34			
A-C	152			152			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	78	563	0.139	78	0.2	7.423	A
B-A	36	360	0.101	36	0.1	11.106	B
C-AB	80	605	0.133	80	0.2	6.860	A
C-A	150			150			
A-B	34			34			
A-C	152			152			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	64	574	0.111	64	0.1	7.062	A
B-A	30	375	0.079	30	0.1	10.424	B
C-AB	65	605	0.107	65	0.1	6.659	A
C-A	123			123			
A-B	28			28			
A-C	124			124			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	53	582	0.092	54	0.1	6.816	A
B-A	25	386	0.064	25	0.1	9.979	A
C-AB	54	607	0.089	54	0.1	6.512	A
C-A	104			104			
A-B	23			23			
A-C	104			104			

2021 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Ringwood Road/Station Road (B3078)	T-Junction	Two-way	2.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Station Road		✓	176	100.000
B - Ringwood Road		✓	89	100.000
C - Daggons Road		✓	154	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Station Road	B - Ringwood Road	C - Daggons Road
From	A - Station Road	0	42	134
	B - Ringwood Road	23	0	66
	C - Daggons Road	115	39	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Station Road	B - Ringwood Road	C - Daggons Road
From	A - Station Road	10	10	10
	B - Ringwood Road	10	10	10
	C - Daggons Road	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.13	7.17	0.1	A
B-A	0.07	10.72	0.1	B
C-AB	0.07	6.59	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	50	592	0.084	49	0.1	6.630	A
B-A	17	381	0.045	17	0.0	9.890	A
C-AB	30	600	0.049	29	0.1	6.313	A
C-A	86			86			
A-B	32			32			
A-C	101			101			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	59	585	0.101	59	0.1	6.850	A
B-A	21	373	0.055	21	0.1	10.225	B
C-AB	36	596	0.060	35	0.1	6.427	A
C-A	103			103			
A-B	38			38			
A-C	120			120			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	73	575	0.126	73	0.1	7.163	A
B-A	25	361	0.070	25	0.1	10.719	B
C-AB	44	591	0.074	44	0.1	6.583	A
C-A	126			126			
A-B	46			46			
A-C	148			148			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	73	575	0.126	73	0.1	7.167	A
B-A	25	361	0.070	25	0.1	10.724	B
C-AB	44	591	0.074	44	0.1	6.586	A
C-A	126			126			
A-B	46			46			
A-C	148			148			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	59	585	0.101	59	0.1	6.854	A
B-A	21	373	0.055	21	0.1	10.231	B
C-AB	36	596	0.060	36	0.1	6.432	A
C-A	103			103			
A-B	38			38			
A-C	120			120			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	50	592	0.084	50	0.1	6.645	A
B-A	17	381	0.045	17	0.0	9.898	A
C-AB	30	600	0.049	30	0.1	6.319	A
C-A	86			86			
A-B	32			32			
A-C	101			101			

2027 Forecast, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Ringwood Road/Station Road (B3078)	T-Junction	Two-way	2.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2027 Forecast	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Station Road		✓	174	100.000
B - Ringwood Road		✓	107	100.000
C - Daggons Road		✓	215	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Station Road	B - Ringwood Road	C - Daggons Road
From	A - Station Road	0	32	142
	B - Ringwood Road	34	0	73
	C - Daggons Road	143	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Station Road	B - Ringwood Road	C - Daggons Road
From	A - Station Road	10	10	10
	B - Ringwood Road	10	10	10
	C - Daggons Road	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.14	7.49	0.2	A
B-A	0.10	11.22	0.1	B
C-AB	0.14	6.90	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	55	581	0.095	55	0.1	6.841	A
B-A	26	384	0.067	25	0.1	10.029	B
C-AB	55	607	0.091	55	0.1	6.522	A
C-A	107			107			
A-B	24			24			
A-C	107			107			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	66	573	0.115	66	0.1	7.096	A
B-A	31	373	0.082	30	0.1	10.495	B
C-AB	67	605	0.110	67	0.1	6.682	A
C-A	127			127			
A-B	29			29			
A-C	128			128			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	80	561	0.143	80	0.2	7.482	A
B-A	37	358	0.105	37	0.1	11.215	B
C-AB	83	605	0.137	83	0.2	6.889	A
C-A	154			154			
A-B	35			35			
A-C	156			156			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	80	561	0.143	80	0.2	7.486	A
B-A	37	358	0.105	37	0.1	11.222	B
C-AB	83	605	0.137	83	0.2	6.895	A
C-A	154			154			
A-B	35			35			
A-C	156			156			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	66	572	0.115	66	0.1	7.108	A
B-A	31	373	0.082	31	0.1	10.506	B
C-AB	67	605	0.110	67	0.1	6.689	A
C-A	127			127			
A-B	29			29			
A-C	128			128			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	55	581	0.095	55	0.1	6.851	A
B-A	26	384	0.067	26	0.1	10.038	B
C-AB	55	607	0.091	55	0.1	6.535	A
C-A	107			107			
A-B	24			24			
A-C	107			107			

2027 Forecast, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Ringwood Road/Station Road (B3078)	T-Junction	Two-way	2.37	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2027 Forecast	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Station Road		✓	180	100.000
B - Ringwood Road		✓	92	100.000
C - Daggons Road		✓	158	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Station Road	B - Ringwood Road	C - Daggons Road
From	A - Station Road	0	43	137
	B - Ringwood Road	24	0	68
	C - Daggons Road	118	40	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Station Road	B - Ringwood Road	C - Daggons Road
From	A - Station Road	10	10	10
	B - Ringwood Road	10	10	10
	C - Daggons Road	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.13	7.22	0.1	A
B-A	0.07	10.79	0.1	B
C-AB	0.08	6.60	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	51	591	0.087	51	0.1	6.663	A
B-A	18	380	0.047	18	0.0	9.923	A
C-AB	30	599	0.051	30	0.1	6.326	A
C-A	89			89			
A-B	32			32			
A-C	103			103			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	61	583	0.105	61	0.1	6.892	A
B-A	22	372	0.058	22	0.1	10.271	B
C-AB	36	595	0.061	36	0.1	6.444	A
C-A	106			106			
A-B	39			39			
A-C	123			123			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	75	573	0.131	75	0.1	7.220	A
B-A	26	360	0.073	26	0.1	10.788	B
C-AB	45	590	0.076	45	0.1	6.603	A
C-A	129			129			
A-B	47			47			
A-C	151			151			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	75	573	0.131	75	0.1	7.224	A
B-A	26	360	0.073	26	0.1	10.792	B
C-AB	45	590	0.076	45	0.1	6.603	A
C-A	129			129			
A-B	47			47			
A-C	151			151			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	61	583	0.105	61	0.1	6.897	A
B-A	22	372	0.058	22	0.1	10.278	B
C-AB	36	595	0.061	37	0.1	6.446	A
C-A	106			106			
A-B	39			39			
A-C	123			123			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	51	591	0.087	51	0.1	6.679	A
B-A	18	381	0.047	18	0.1	9.933	A
C-AB	30	599	0.051	30	0.1	6.330	A
C-A	89			89			
A-B	32			32			
A-C	103			103			

2027 Forecast + Sensitivity , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Ringwood Road/Station Road (B3078)	T-Junction	Two-way	2.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2027 Forecast + Sensitivity	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Station Road		✓	249	100.000
B - Ringwood Road		✓	107	100.000
C - Daggons Road		✓	241	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Station Road	B - Ringwood Road	C - Daggons Road
From	A - Station Road	0	32	217
	B - Ringwood Road	34	0	73
	C - Daggons Road	169	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Station Road	B - Ringwood Road	C - Daggons Road
From	A - Station Road	10	10	10
	B - Ringwood Road	10	10	10
	C - Daggons Road	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.15	7.83	0.2	A
B-A	0.11	12.01	0.1	B
C-AB	0.14	7.11	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	55	567	0.097	55	0.1	7.023	A
B-A	26	370	0.069	25	0.1	10.437	B
C-AB	56	595	0.093	55	0.1	6.665	A
C-A	126			126			
A-B	24			24			
A-C	163			163			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	66	556	0.118	66	0.1	7.341	A
B-A	31	356	0.086	30	0.1	11.045	B
C-AB	67	592	0.113	67	0.1	6.855	A
C-A	150			150			
A-B	29			29			
A-C	195			195			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	80	540	0.149	80	0.2	7.821	A
B-A	37	337	0.111	37	0.1	11.998	B
C-AB	84	590	0.142	84	0.2	7.105	A
C-A	182			182			
A-B	35			35			
A-C	239			239			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	80	540	0.149	80	0.2	7.827	A
B-A	37	337	0.111	37	0.1	12.007	B
C-AB	84	590	0.142	84	0.2	7.112	A
C-A	182			182			
A-B	35			35			
A-C	239			239			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	66	556	0.118	66	0.1	7.354	A
B-A	31	356	0.086	31	0.1	11.059	B
C-AB	67	592	0.113	67	0.1	6.863	A
C-A	150			150			
A-B	29			29			
A-C	195			195			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	55	566	0.097	55	0.1	7.041	A
B-A	26	370	0.069	26	0.1	10.456	B
C-AB	56	595	0.093	56	0.1	6.678	A
C-A	126			126			
A-B	24			24			
A-C	163			163			

2027 Forecast + Sensitivity , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Ringwood Road/Station Road (B3078)	T-Junction	Two-way	1.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2027 Forecast + Sensitivity	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Station Road		✓	217	100.000
B - Ringwood Road		✓	92	100.000
C - Daggons Road		✓	227	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Station Road	B - Ringwood Road	C - Daggons Road
From	A - Station Road	0	43	174
	B - Ringwood Road	24	0	68
	C - Daggons Road	187	40	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Station Road	B - Ringwood Road	C - Daggons Road
From	A - Station Road	10	10	10
	B - Ringwood Road	10	10	10
	C - Daggons Road	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.13	7.38	0.2	A
B-A	0.08	11.40	0.1	B
C-AB	0.08	6.64	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	51	584	0.088	51	0.1	6.753	A
B-A	18	368	0.049	18	0.1	10.267	B
C-AB	31	596	0.051	30	0.1	6.366	A
C-A	140			140			
A-B	32			32			
A-C	131			131			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	61	575	0.106	61	0.1	7.007	A
B-A	22	357	0.060	22	0.1	10.714	B
C-AB	37	592	0.062	37	0.1	6.485	A
C-A	167			167			
A-B	39			39			
A-C	156			156			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	75	563	0.133	75	0.2	7.377	A
B-A	26	342	0.077	26	0.1	11.395	B
C-AB	46	588	0.078	46	0.1	6.641	A
C-A	204			204			
A-B	47			47			
A-C	192			192			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	75	563	0.133	75	0.2	7.381	A
B-A	26	342	0.077	26	0.1	11.399	B
C-AB	46	588	0.078	46	0.1	6.644	A
C-A	204			204			
A-B	47			47			
A-C	192			192			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	61	575	0.106	61	0.1	7.015	A
B-A	22	358	0.060	22	0.1	10.722	B
C-AB	37	592	0.062	37	0.1	6.487	A
C-A	167			167			
A-B	39			39			
A-C	156			156			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	51	583	0.088	51	0.1	6.766	A
B-A	18	368	0.049	18	0.1	10.276	B
C-AB	31	596	0.051	31	0.1	6.370	A
C-A	140			140			
A-B	32			32			
A-C	131			131			

2033 Forecast, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Ringwood Road/Station Road (B3078)	T-Junction	Two-way	2.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2033 Forecast	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Station Road		✓	178	100.000
B - Ringwood Road		✓	110	100.000
C - Daggons Road		✓	220	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Station Road	B - Ringwood Road	C - Daggons Road
From	A - Station Road	0	33	145
	B - Ringwood Road	35	0	75
	C - Daggons Road	146	74	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Station Road	B - Ringwood Road	C - Daggons Road
From	A - Station Road	10	10	10
	B - Ringwood Road	10	10	10
	C - Daggons Road	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.15	7.55	0.2	A
B-A	0.11	11.33	0.1	B
C-AB	0.14	6.93	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	56	580	0.097	56	0.1	6.867	A
B-A	26	383	0.069	26	0.1	10.076	B
C-AB	57	606	0.094	56	0.1	6.543	A
C-A	109			109			
A-B	25			25			
A-C	109			109			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	67	571	0.118	67	0.1	7.139	A
B-A	31	372	0.085	31	0.1	10.568	B
C-AB	69	605	0.113	68	0.1	6.707	A
C-A	129			129			
A-B	30			30			
A-C	130			130			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	83	560	0.148	82	0.2	7.541	A
B-A	39	356	0.108	38	0.1	11.320	B
C-AB	85	605	0.141	85	0.2	6.920	A
C-A	157			157			
A-B	36			36			
A-C	160			160			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	83	560	0.148	83	0.2	7.546	A
B-A	39	356	0.108	39	0.1	11.327	B
C-AB	85	605	0.141	85	0.2	6.926	A
C-A	157			157			
A-B	36			36			
A-C	160			160			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	67	571	0.118	68	0.1	7.148	A
B-A	31	372	0.085	32	0.1	10.578	B
C-AB	69	605	0.113	69	0.1	6.714	A
C-A	129			129			
A-B	30			30			
A-C	130			130			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	56	579	0.097	57	0.1	6.887	A
B-A	26	383	0.069	26	0.1	10.096	B
C-AB	57	606	0.094	57	0.1	6.553	A
C-A	109			109			
A-B	25			25			
A-C	109			109			

2033 Forecast, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Ringwood Road/Station Road (B3078)	T-Junction	Two-way	2.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2033 Forecast	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Station Road		✓	185	100.000
B - Ringwood Road		✓	93	100.000
C - Daggons Road		✓	162	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Station Road	B - Ringwood Road	C - Daggons Road
From	A - Station Road	0	44	141
	B - Ringwood Road	24	0	69
	C - Daggons Road	121	41	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Station Road	B - Ringwood Road	C - Daggons Road
From	A - Station Road	10	10	10
	B - Ringwood Road	10	10	10
	C - Daggons Road	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.13	7.25	0.2	A
B-A	0.07	10.87	0.1	B
C-AB	0.08	6.63	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	52	590	0.088	52	0.1	6.679	A
B-A	18	379	0.048	18	0.0	9.973	A
C-AB	31	598	0.052	31	0.1	6.343	A
C-A	91			91			
A-B	33			33			
A-C	106			106			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	62	583	0.106	62	0.1	6.913	A
B-A	22	370	0.058	22	0.1	10.332	B
C-AB	37	594	0.063	37	0.1	6.463	A
C-A	108			108			
A-B	40			40			
A-C	127			127			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	76	572	0.133	76	0.2	7.250	A
B-A	26	358	0.074	26	0.1	10.866	B
C-AB	46	589	0.078	46	0.1	6.626	A
C-A	132			132			
A-B	48			48			
A-C	155			155			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	76	572	0.133	76	0.2	7.253	A
B-A	26	358	0.074	26	0.1	10.869	B
C-AB	46	589	0.078	46	0.1	6.627	A
C-A	132			132			
A-B	48			48			
A-C	155			155			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	62	583	0.106	62	0.1	6.918	A
B-A	22	370	0.058	22	0.1	10.337	B
C-AB	37	594	0.063	37	0.1	6.465	A
C-A	108			108			
A-B	40			40			
A-C	127			127			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	52	590	0.088	52	0.1	6.692	A
B-A	18	379	0.048	18	0.1	9.984	A
C-AB	31	598	0.052	31	0.1	6.348	A
C-A	91			91			
A-B	33			33			
A-C	106			106			

2033 Forecast + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Ringwood Road/Station Road (B3078)	T-Junction	Two-way	4.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2033 Forecast + Dev	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Station Road		✓	223	100.000
B - Ringwood Road		✓	225	100.000
C - Daggons Road		✓	262	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Station Road	B - Ringwood Road	C - Daggons Road
From	A - Station Road	0	26	197
	B - Ringwood Road	71	0	154
	C - Daggons Road	203	59	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Station Road	B - Ringwood Road	C - Daggons Road
From	A - Station Road	10	10	10
	B - Ringwood Road	10	10	10
	C - Daggons Road	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.33	10.27	0.5	B
B-A	0.24	14.32	0.3	B
C-AB	0.11	6.81	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	116	558	0.208	115	0.3	8.112	A
B-A	53	369	0.145	53	0.2	11.357	B
C-AB	46	600	0.076	45	0.1	6.489	A
C-A	152			152			
A-B	20			20			
A-C	148			148			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	138	543	0.255	138	0.3	8.887	A
B-A	64	353	0.181	64	0.2	12.412	B
C-AB	55	598	0.092	55	0.1	6.630	A
C-A	181			181			
A-B	23			23			
A-C	177			177			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	170	520	0.326	169	0.5	10.228	B
B-A	78	330	0.237	78	0.3	14.270	B
C-AB	69	597	0.115	68	0.1	6.811	A
C-A	220			220			
A-B	29			29			
A-C	217			217			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	170	520	0.326	170	0.5	10.269	B
B-A	78	330	0.237	78	0.3	14.316	B
C-AB	69	597	0.115	69	0.1	6.812	A
C-A	220			220			
A-B	29			29			
A-C	217			217			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	138	542	0.255	139	0.3	8.933	A
B-A	64	353	0.181	64	0.2	12.462	B
C-AB	55	598	0.092	55	0.1	6.636	A
C-A	181			181			
A-B	23			23			
A-C	177			177			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	116	557	0.208	116	0.3	8.173	A
B-A	53	369	0.145	54	0.2	11.423	B
C-AB	46	600	0.076	46	0.1	6.498	A
C-A	152			152			
A-B	20			20			
A-C	148			148			

2033 Forecast + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Ringwood Road/Station Road (B3078)	T-Junction	Two-way	3.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2033 Forecast + Dev	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Station Road		✓	315	100.000
B - Ringwood Road		✓	151	100.000
C - Daggons Road		✓	343	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Station Road	B - Ringwood Road	C - Daggons Road
From	A - Station Road	0	95	220
	B - Ringwood Road	42	0	109
	C - Daggons Road	190	153	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Station Road	B - Ringwood Road	C - Daggons Road
From	A - Station Road	10	10	10
	B - Ringwood Road	10	10	10
	C - Daggons Road	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.23	8.82	0.3	A
B-A	0.16	14.70	0.2	B
C-AB	0.31	8.54	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	82	562	0.146	81	0.2	7.478	A
B-A	32	336	0.094	31	0.1	11.784	B
C-AB	122	601	0.203	121	0.3	7.479	A
C-A	136			136			
A-B	72			72			
A-C	166			166			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	98	548	0.179	98	0.2	7.986	A
B-A	38	318	0.119	38	0.1	12.854	B
C-AB	149	604	0.247	149	0.4	7.906	A
C-A	159			159			
A-B	85			85			
A-C	198			198			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	120	528	0.227	120	0.3	8.801	A
B-A	46	291	0.159	46	0.2	14.671	B
C-AB	191	613	0.312	190	0.5	8.517	A
C-A	187			187			
A-B	105			105			
A-C	242			242			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	120	528	0.227	120	0.3	8.817	A
B-A	46	291	0.159	46	0.2	14.701	B
C-AB	191	613	0.312	191	0.5	8.542	A
C-A	187			187			
A-B	105			105			
A-C	242			242			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	98	548	0.179	98	0.2	8.009	A
B-A	38	317	0.119	38	0.1	12.891	B
C-AB	149	604	0.247	150	0.4	7.939	A
C-A	159			159			
A-B	85			85			
A-C	198			198			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	82	562	0.146	82	0.2	7.511	A
B-A	32	336	0.094	32	0.1	11.831	B
C-AB	122	601	0.203	122	0.3	7.521	A
C-A	136			136			
A-B	72			72			
A-C	166			166			

Appendix R

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Hillbury Road B3078 Station Road Model (with flare).j9
Path: W:\Projects\Fareham\130-139\132 Intelligent Land\132.0001 South Alderholt Strategic Sites\Modelling\2022 Modelling\JUNE,JULY 2022\Presseys Corner
Report generation date: 01-Aug-22 2:12:36 PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2021 Baseline							
Stream B-C	0.1	9.16	0.05	A	0.1	8.49	0.06	A
Stream B-A	0.5	13.53	0.34	B	0.2	11.04	0.16	B
Stream C-AB	0.0	7.33	0.05	A	0.1	8.03	0.05	A
	2027 Forecast							
Stream B-C	0.1	9.27	0.06	A	0.1	8.53	0.06	A
Stream B-A	0.5	13.83	0.35	B	0.2	11.18	0.16	B
Stream C-AB	0.1	7.35	0.05	A	0.1	8.08	0.05	A
	2027 Forecast + Sensitivity							
Stream B-C	0.4	14.58	0.30	B	0.2	9.40	0.15	A
Stream B-A	1.4	23.45	0.58	C	0.4	13.79	0.28	B
Stream C-AB	0.1	7.66	0.11	A	0.3	9.72	0.23	A
	2033 Forecast							
Stream B-C	0.1	9.37	0.06	A	0.1	8.64	0.06	A
Stream B-A	0.5	14.15	0.36	B	0.2	11.33	0.17	B
Stream C-AB	0.1	7.37	0.05	A	0.1	8.12	0.06	A
	2033 Forecast + Dev							
Stream B-C	0.4	17.27	0.28	C	0.5	14.51	0.32	B
Stream B-A	1.9	30.04	0.66	D	1.0	22.90	0.51	C
Stream C-AB	0.2	7.95	0.18	A	0.4	10.39	0.25	B

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.

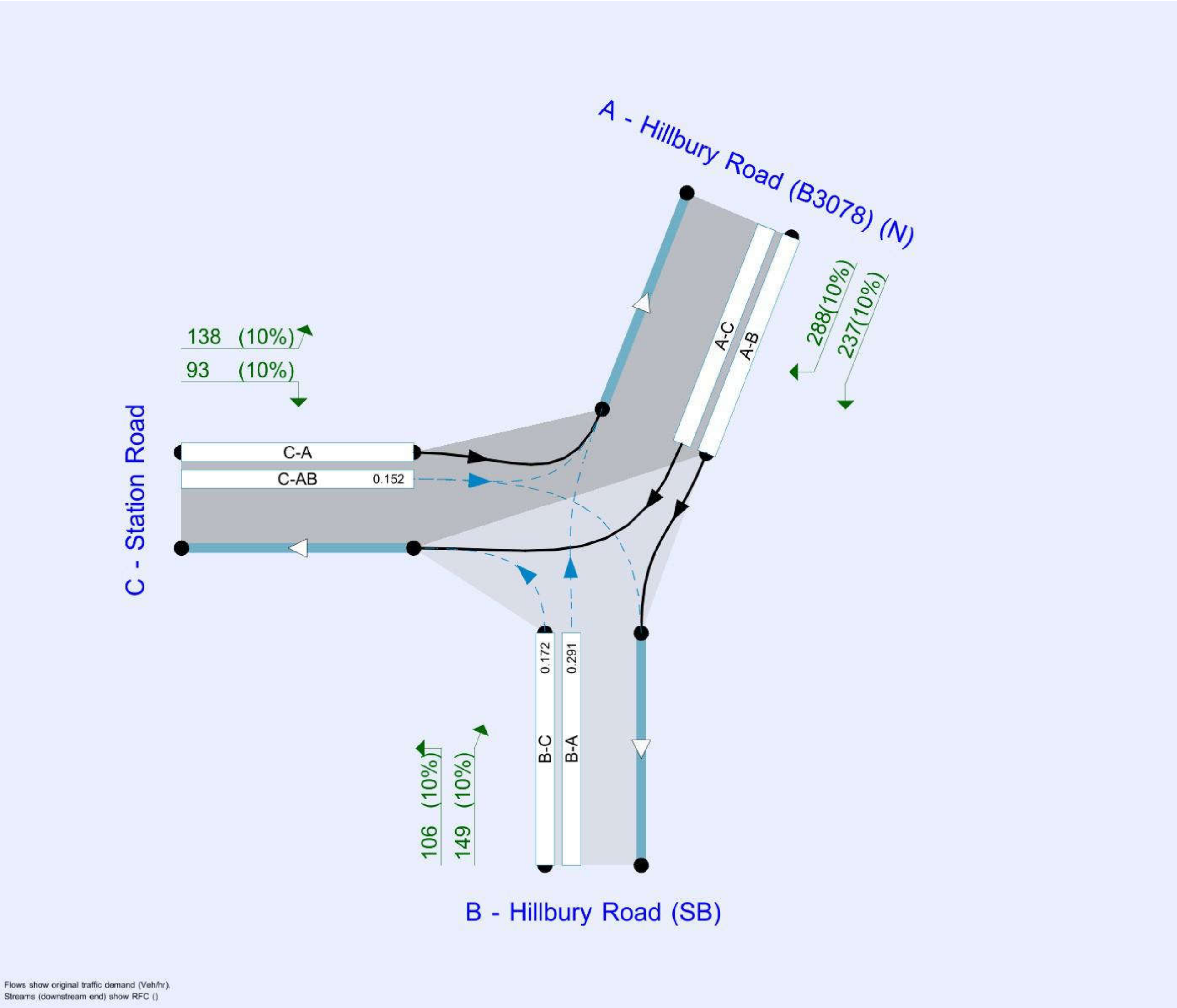
File summary

File Description

Title	Hillbury Road/Hillbury Road (B3078) (250 Units)
Location	Alderholt
Site number	
Date	14-Aug-18
Version	
Status	PRELIMINARY
Identifier	
Client	
Jobnumber	132.0001
Enumerator	PC-PBASH-MODEL\Cad PC
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2021 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D3	2027 Forecast	AM	ONE HOUR	07:45	09:15	15	✓
D4	2027 Forecast	PM	ONE HOUR	16:45	18:15	15	✓
D5	2027 Forecast + Sensitivity	AM	ONE HOUR	07:45	09:15	15	✓
D6	2027 Forecast + Sensitivity	PM	ONE HOUR	16:45	18:15	15	✓
D7	2033 Forecast	AM	ONE HOUR	07:45	09:15	15	✓
D8	2033 Forecast	PM	ONE HOUR	16:45	18:15	15	✓
D9	2033 Forecast + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D10	2033 Forecast + Dev	PM	ONE HOUR	16:45	18:15	15	✓

2021 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Hillbury Road (SB) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Hillbury Road/Station Road	T-Junction	Two-way	3.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Hillbury Road (B3078) (N)		Major
B	Hillbury Road (SB)		Minor
C	Station Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Station Road	6.00			60.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	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 - Hillbury Road (SB)	One lane plus flare	6.50	4.00	3.50	3.00	2.50	✓	1.00	22	60

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	545	0.099	0.251	0.158	0.358
1	B-C	562	0.086	0.218	-	-
1	C-B	609	0.236	0.236	-	-

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

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

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

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Hillbury Road (B3078) (N)		ONE HOUR	✓	211	100.000
B - Hillbury Road (SB)		ONE HOUR	✓	142	100.000
C - Station Road		ONE HOUR	✓	258	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Hillbury Road (B3078) (N)	B - Hillbury Road (SB)	C - Station Road
From	A - Hillbury Road (B3078) (N)	0	79	132
	B - Hillbury Road (SB)	122	0	20
	C - Station Road	237	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Hillbury Road (B3078) (N)	B - Hillbury Road (SB)	C - Station Road
From	A - Hillbury Road (B3078) (N)	10	10	10
	B - Hillbury Road (SB)	10	10	10
	C - Station Road	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.05	9.16	0.1	A	18	28
B-A	0.34	13.53	0.5	B	112	168
C-AB	0.05	7.33	0.0	A	20	30
C-A					217	326
A-B					72	109
A-C					121	182

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	15	4	454	0.033	15	0.0	0.0	8.197	A
B-A	92	23	431	0.213	91	0.0	0.3	10.560	B
C-AB	16	4	523	0.031	16	0.0	0.0	7.091	A
C-A	178	45			178				
A-B	59	15			59				
A-C	99	25			99				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	18	4	439	0.041	18	0.0	0.0	8.551	A
B-A	110	27	418	0.262	109	0.3	0.3	11.651	B
C-AB	19	5	519	0.037	19	0.0	0.0	7.198	A
C-A	213	53			213				
A-B	71	18			71				
A-C	119	30			119				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	22	6	415	0.053	22	0.0	0.1	9.153	A
B-A	134	34	400	0.335	134	0.3	0.5	13.470	B
C-AB	24	6	515	0.046	24	0.0	0.0	7.335	A
C-A	260	65			260				
A-B	87	22			87				
A-C	145	36			145				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	22	6	415	0.053	22	0.1	0.1	9.164	A
B-A	134	34	400	0.335	134	0.5	0.5	13.527	B
C-AB	24	6	515	0.046	24	0.0	0.0	7.335	A
C-A	260	65			260				
A-B	87	22			87				
A-C	145	36			145				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	18	4	438	0.041	18	0.1	0.0	8.564	A
B-A	110	27	418	0.262	110	0.5	0.4	11.719	B
C-AB	19	5	519	0.037	19	0.0	0.0	7.202	A
C-A	213	53			213				
A-B	71	18			71				
A-C	119	30			119				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	15	4	453	0.033	15	0.0	0.0	8.216	A
B-A	92	23	431	0.213	92	0.4	0.3	10.648	B
C-AB	16	4	523	0.031	16	0.0	0.0	7.098	A
C-A	178	45			178				
A-B	59	15			59				
A-C	99	25			99				

2021 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Hillbury Road (SB) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Hillbury Road/Station Road	T-Junction	Two-way	1.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Hillbury Road (B3078) (N)		Major
B	Hillbury Road (SB)		Minor
C	Station Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Station Road	6.00			60.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	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 - Hillbury Road (SB)	One lane plus flare	6.50	4.00	3.50	3.00	2.50	✓	1.00	22	60

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	540	0.098	0.249	0.156	0.355
1	B-C	596	0.091	0.231	-	-
1	C-B	609	0.236	0.236	-	-

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

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

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

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Hillbury Road (B3078) (N)		ONE HOUR	✓	343	100.000
B - Hillbury Road (SB)		ONE HOUR	✓	81	100.000
C - Station Road		ONE HOUR	✓	136	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Hillbury Road (B3078) (N)	B - Hillbury Road (SB)	C - Station Road
From	A - Hillbury Road (B3078) (N)	0	117	226
	B - Hillbury Road (SB)	56	0	25
	C - Station Road	114	22	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Hillbury Road (B3078) (N)	B - Hillbury Road (SB)	C - Station Road
From	A - Hillbury Road (B3078) (N)	10	10	10
	B - Hillbury Road (SB)	10	10	10
	C - Station Road	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.06	8.49	0.1	A	23	34
B-A	0.16	11.04	0.2	B	51	77
C-AB	0.05	8.03	0.1	A	20	31
C-A					104	157
A-B					107	161
A-C					207	311

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	19	5	481	0.039	19	0.0	0.0	7.777	A
B-A	42	11	420	0.100	42	0.0	0.1	9.496	A
C-AB	17	4	496	0.034	17	0.0	0.0	7.500	A
C-A	86	21			86				
A-B	88	22			88				
A-C	170	43			170				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	22	6	469	0.048	22	0.0	0.0	8.063	A
B-A	50	13	407	0.124	50	0.1	0.1	10.096	B
C-AB	20	5	486	0.041	20	0.0	0.0	7.720	A
C-A	102	26			102				
A-B	105	26			105				
A-C	203	51			203				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	28	7	451	0.061	27	0.0	0.1	8.490	A
B-A	62	15	388	0.159	61	0.1	0.2	11.027	B
C-AB	25	6	473	0.052	25	0.0	0.1	8.030	A
C-A	125	31			125				
A-B	129	32			129				
A-C	249	62			249				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	28	7	451	0.061	28	0.1	0.1	8.495	A
B-A	62	15	388	0.159	62	0.2	0.2	11.041	B
C-AB	25	6	473	0.052	25	0.1	0.1	8.033	A
C-A	125	31			125				
A-B	129	32			129				
A-C	249	62			249				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	22	6	469	0.048	23	0.1	0.1	8.069	A
B-A	50	13	407	0.124	51	0.2	0.1	10.114	B
C-AB	20	5	486	0.041	20	0.1	0.0	7.723	A
C-A	102	26			102				
A-B	105	26			105				
A-C	203	51			203				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	19	5	481	0.039	19	0.1	0.0	7.789	A
B-A	42	11	420	0.100	42	0.1	0.1	9.525	A
C-AB	17	4	496	0.034	17	0.0	0.0	7.507	A
C-A	86	21			86				
A-B	88	22			88				
A-C	170	43			170				

2027 Forecast, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Hillbury Road (SB) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Hillbury Road/Station Road	T-Junction	Two-way	3.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Hillbury Road (B3078) (N)		Major
B	Hillbury Road (SB)		Minor
C	Station Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Station Road	6.00			60.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	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 - Hillbury Road (SB)	One lane plus flare	6.50	4.00	3.50	3.00	2.50	✓	1.00	22	60

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	545	0.099	0.251	0.158	0.358
1	B-C	562	0.086	0.218	-	-
1	C-B	609	0.236	0.236	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2027 Forecast	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Hillbury Road (B3078) (N)		ONE HOUR	✓	216	100.000
B - Hillbury Road (SB)		ONE HOUR	✓	146	100.000
C - Station Road		ONE HOUR	✓	265	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Hillbury Road (B3078) (N)	B - Hillbury Road (SB)	C - Station Road
From	A - Hillbury Road (B3078) (N)	0	81	135
	B - Hillbury Road (SB)	125	0	21
	C - Station Road	243	22	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Hillbury Road (B3078) (N)	B - Hillbury Road (SB)	C - Station Road
From	A - Hillbury Road (B3078) (N)	10	10	10
	B - Hillbury Road (SB)	10	10	10
	C - Station Road	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.06	9.27	0.1	A	19	29
B-A	0.35	13.83	0.5	B	115	172
C-AB	0.05	7.35	0.1	A	21	31
C-A					222	334
A-B					74	111
A-C					124	186

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	16	4	452	0.035	16	0.0	0.0	8.243	A
B-A	94	24	429	0.219	93	0.0	0.3	10.681	B
C-AB	17	4	523	0.032	17	0.0	0.0	7.107	A
C-A	183	46			183				
A-B	61	15			61				
A-C	102	25			102				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	19	5	437	0.043	19	0.0	0.0	8.617	A
B-A	112	28	416	0.270	112	0.3	0.4	11.831	B
C-AB	20	5	519	0.039	20	0.0	0.0	7.216	A
C-A	218	55			218				
A-B	73	18			73				
A-C	121	30			121				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	23	6	412	0.056	23	0.0	0.1	9.263	A
B-A	138	34	398	0.346	137	0.4	0.5	13.767	B
C-AB	25	6	514	0.049	25	0.0	0.1	7.355	A
C-A	267	67			267				
A-B	89	22			89				
A-C	149	37			149				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	23	6	411	0.056	23	0.1	0.1	9.274	A
B-A	138	34	398	0.346	138	0.5	0.5	13.831	B
C-AB	25	6	514	0.049	25	0.1	0.1	7.355	A
C-A	267	67			267				
A-B	89	22			89				
A-C	149	37			149				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	19	5	436	0.043	19	0.1	0.0	8.630	A
B-A	112	28	416	0.270	113	0.5	0.4	11.906	B
C-AB	20	5	519	0.039	20	0.1	0.0	7.220	A
C-A	218	55			218				
A-B	73	18			73				
A-C	121	30			121				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	16	4	452	0.035	16	0.0	0.0	8.262	A
B-A	94	24	429	0.219	94	0.4	0.3	10.778	B
C-AB	17	4	523	0.032	17	0.0	0.0	7.114	A
C-A	183	46			183				
A-B	61	15			61				
A-C	102	25			102				

2027 Forecast, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Hillbury Road (SB) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Hillbury Road/Station Road	T-Junction	Two-way	1.82	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Hillbury Road (B3078) (N)		Major
B	Hillbury Road (SB)		Minor
C	Station Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Station Road	6.00			60.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	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 - Hillbury Road (SB)	One lane plus flare	6.50	4.00	3.50	3.00	2.50	✓	1.00	22	60

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	539	0.098	0.248	0.156	0.355
1	B-C	598	0.092	0.232	-	-
1	C-B	609	0.236	0.236	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2027 Forecast	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Hillbury Road (B3078) (N)		ONE HOUR	✓	351	100.000
B - Hillbury Road (SB)		ONE HOUR	✓	83	100.000
C - Station Road		ONE HOUR	✓	140	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Hillbury Road (B3078) (N)	B - Hillbury Road (SB)	C - Station Road
From	A - Hillbury Road (B3078) (N)	0	120	231
	B - Hillbury Road (SB)	57	0	26
	C - Station Road	117	23	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Hillbury Road (B3078) (N)	B - Hillbury Road (SB)	C - Station Road
From	A - Hillbury Road (B3078) (N)	10	10	10
	B - Hillbury Road (SB)	10	10	10
	C - Station Road	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.06	8.53	0.1	A	24	36
B-A	0.16	11.18	0.2	B	52	78
C-AB	0.05	8.08	0.1	A	21	32
C-A					107	161
A-B					110	165
A-C					212	318

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	20	5	482	0.041	19	0.0	0.0	7.785	A
B-A	43	11	418	0.103	42	0.0	0.1	9.564	A
C-AB	17	4	495	0.035	17	0.0	0.0	7.530	A
C-A	88	22			88				
A-B	90	23			90				
A-C	174	43			174				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	23	6	469	0.050	23	0.0	0.1	8.081	A
B-A	51	13	404	0.127	51	0.1	0.1	10.189	B
C-AB	21	5	485	0.043	21	0.0	0.0	7.757	A
C-A	105	26			105				
A-B	108	27			108				
A-C	208	52			208				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	29	7	451	0.064	29	0.1	0.1	8.525	A
B-A	63	16	385	0.163	63	0.1	0.2	11.163	B
C-AB	26	6	471	0.055	26	0.0	0.1	8.077	A
C-A	128	32			128				
A-B	132	33			132				
A-C	254	64			254				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	29	7	451	0.064	29	0.1	0.1	8.530	A
B-A	63	16	385	0.163	63	0.2	0.2	11.176	B
C-AB	26	6	471	0.055	26	0.1	0.1	8.078	A
C-A	128	32			128				
A-B	132	33			132				
A-C	254	64			254				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	23	6	469	0.050	23	0.1	0.1	8.090	A
B-A	51	13	404	0.127	51	0.2	0.1	10.208	B
C-AB	21	5	485	0.043	21	0.1	0.0	7.759	A
C-A	105	26			105				
A-B	108	27			108				
A-C	208	52			208				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	20	5	481	0.041	20	0.1	0.0	7.800	A
B-A	43	11	418	0.103	43	0.1	0.1	9.596	A
C-AB	17	4	495	0.035	17	0.0	0.0	7.534	A
C-A	88	22			88				
A-B	90	23			90				
A-C	174	43			174				

2027 Forecast + Sensitivity, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Hillbury Road (SB) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Hillbury Road/Station Road	T-Junction	Two-way	7.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Hillbury Road (B3078) (N)		Major
B	Hillbury Road (SB)		Minor
C	Station Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Station Road	6.00			60.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	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 - Hillbury Road (SB)	One lane plus flare	6.50	4.00	3.50	3.00	2.50	✓	1.00	22	60

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	538	0.098	0.248	0.156	0.354
1	B-C	606	0.093	0.235	-	-
1	C-B	609	0.236	0.236	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2027 Forecast + Sensitivity	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Hillbury Road (B3078) (N)		ONE HOUR	✓	240	100.000
B - Hillbury Road (SB)		ONE HOUR	✓	290	100.000
C - Station Road		ONE HOUR	✓	291	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Hillbury Road (B3078) (N)	B - Hillbury Road (SB)	C - Station Road
From	A - Hillbury Road (B3078) (N)	0	105	135
	B - Hillbury Road (SB)	194	0	96
	C - Station Road	243	48	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Hillbury Road (B3078) (N)	B - Hillbury Road (SB)	C - Station Road
From	A - Hillbury Road (B3078) (N)	10	10	10
	B - Hillbury Road (SB)	10	10	10
	C - Station Road	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.30	14.58	0.4	B	88	132
B-A	0.58	23.45	1.4	C	178	267
C-AB	0.11	7.66	0.1	A	46	70
C-A					221	331
A-B					96	145
A-C					124	186

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	72	18	453	0.160	72	0.0	0.2	9.425	A
B-A	146	37	411	0.355	144	0.0	0.5	13.376	B
C-AB	37	9	527	0.071	37	0.0	0.1	7.338	A
C-A	182	45			182				
A-B	79	20			79				
A-C	102	25			102				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	86	22	418	0.207	86	0.2	0.3	10.843	B
B-A	174	44	394	0.443	173	0.5	0.8	16.267	C
C-AB	45	11	526	0.086	45	0.1	0.1	7.486	A
C-A	216	54			216				
A-B	94	24			94				
A-C	121	30			121				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	106	26	356	0.297	105	0.3	0.4	14.338	B
B-A	214	53	367	0.582	211	0.8	1.3	22.818	C
C-AB	57	14	526	0.108	57	0.1	0.1	7.663	A
C-A	264	66			264				
A-B	116	29			116				
A-C	149	37			149				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	106	26	352	0.300	106	0.4	0.4	14.582	B
B-A	214	53	367	0.583	213	1.3	1.4	23.445	C
C-AB	57	14	526	0.108	57	0.1	0.1	7.664	A
C-A	264	66			264				
A-B	116	29			116				
A-C	149	37			149				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	86	22	414	0.208	87	0.4	0.3	11.018	B
B-A	174	44	393	0.443	177	1.4	0.8	16.754	C
C-AB	45	11	526	0.086	45	0.1	0.1	7.494	A
C-A	216	54			216				
A-B	94	24			94				
A-C	121	30			121				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	72	18	450	0.161	73	0.3	0.2	9.550	A
B-A	146	37	411	0.355	147	0.8	0.6	13.688	B
C-AB	37	9	527	0.071	37	0.1	0.1	7.352	A
C-A	182	45			182				
A-B	79	20			79				
A-C	102	25			102				

2027 Forecast + Sensitivity, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Hillbury Road (SB) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Hillbury Road/Station Road	T-Junction	Two-way	3.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Hillbury Road (B3078) (N)		Major
B	Hillbury Road (SB)		Minor
C	Station Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Station Road	6.00			60.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	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 - Hillbury Road (SB)	One lane plus flare	6.50	4.00	3.50	3.00	2.50	✓	1.00	22	60

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	559	0.102	0.257	0.162	0.367
1	B-C	637	0.098	0.247	-	-
1	C-B	609	0.236	0.236	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2027 Forecast + Sensitivity	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Hillbury Road (B3078) (N)		ONE HOUR	✓	414	100.000
B - Hillbury Road (SB)		ONE HOUR	✓	153	100.000
C - Station Road		ONE HOUR	✓	209	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Hillbury Road (B3078) (N)	B - Hillbury Road (SB)	C - Station Road
From	A - Hillbury Road (B3078) (N)	0	183	231
	B - Hillbury Road (SB)	91	0	62
	C - Station Road	117	92	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Hillbury Road (B3078) (N)	B - Hillbury Road (SB)	C - Station Road
From	A - Hillbury Road (B3078) (N)	10	10	10
	B - Hillbury Road (SB)	10	10	10
	C - Station Road	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.15	9.40	0.2	A	57	85
B-A	0.28	13.79	0.4	B	84	125
C-AB	0.23	9.72	0.3	A	89	133
C-A					103	154
A-B					168	252
A-C					212	318

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	47	12	499	0.094	46	0.0	0.1	7.952	A
B-A	69	17	409	0.168	68	0.0	0.2	10.532	B
C-AB	71	18	495	0.144	71	0.0	0.2	8.486	A
C-A	86	21			86				
A-B	138	34			138				
A-C	174	43			174				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	56	14	480	0.116	56	0.1	0.1	8.485	A
B-A	82	20	389	0.210	82	0.2	0.3	11.701	B
C-AB	87	22	487	0.178	86	0.2	0.2	8.973	A
C-A	101	25			101				
A-B	165	41			165				
A-C	208	52			208				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	68	17	452	0.151	68	0.1	0.2	9.381	A
B-A	100	25	361	0.277	100	0.3	0.4	13.741	B
C-AB	109	27	479	0.227	109	0.2	0.3	9.704	A
C-A	121	30			121				
A-B	201	50			201				
A-C	254	64			254				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	68	17	451	0.151	68	0.2	0.2	9.401	A
B-A	100	25	361	0.277	100	0.4	0.4	13.790	B
C-AB	109	27	479	0.227	109	0.3	0.3	9.722	A
C-A	121	30			121				
A-B	201	50			201				
A-C	254	64			254				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	56	14	479	0.116	56	0.2	0.1	8.508	A
B-A	82	20	389	0.210	82	0.4	0.3	11.754	B
C-AB	87	22	487	0.178	87	0.3	0.2	8.998	A
C-A	101	25			101				
A-B	165	41			165				
A-C	208	52			208				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	47	12	498	0.094	47	0.1	0.1	7.986	A
B-A	69	17	409	0.168	69	0.3	0.2	10.599	B
C-AB	71	18	495	0.144	72	0.2	0.2	8.508	A
C-A	86	21			86				
A-B	138	34			138				
A-C	174	43			174				

2033 Forecast, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Hillbury Road (SB) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Hillbury Road/Station Road	T-Junction	Two-way	3.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Hillbury Road (B3078) (N)		Major
B	Hillbury Road (SB)		Minor
C	Station Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Station Road	6.00			60.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	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 - Hillbury Road (SB)	One lane plus flare	6.50	4.00	3.50	3.00	2.50	✓	1.00	22	60

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	545	0.099	0.251	0.158	0.358
1	B-C	562	0.086	0.218	-	-
1	C-B	609	0.236	0.236	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2033 Forecast	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Hillbury Road (B3078) (N)		ONE HOUR	✓	222	100.000
B - Hillbury Road (SB)		ONE HOUR	✓	149	100.000
C - Station Road		ONE HOUR	✓	272	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Hillbury Road (B3078) (N)	B - Hillbury Road (SB)	C - Station Road
From	A - Hillbury Road (B3078) (N)	0	83	139
	B - Hillbury Road (SB)	128	0	21
	C - Station Road	250	22	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Hillbury Road (B3078) (N)	B - Hillbury Road (SB)	C - Station Road
From	A - Hillbury Road (B3078) (N)	10	10	10
	B - Hillbury Road (SB)	10	10	10
	C - Station Road	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.06	9.37	0.1	A	19	29
B-A	0.36	14.15	0.5	B	117	176
C-AB	0.05	7.37	0.1	A	21	31
C-A					229	343
A-B					76	114
A-C					128	191

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	16	4	450	0.035	16	0.0	0.0	8.279	A
B-A	96	24	427	0.226	95	0.0	0.3	10.808	B
C-AB	17	4	522	0.032	17	0.0	0.0	7.119	A
C-A	188	47			188				
A-B	62	16			62				
A-C	105	26			105				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	19	5	434	0.044	19	0.0	0.0	8.671	A
B-A	115	29	414	0.278	115	0.3	0.4	12.020	B
C-AB	20	5	518	0.039	20	0.0	0.0	7.230	A
C-A	224	56			224				
A-B	75	19			75				
A-C	125	31			125				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	23	6	408	0.057	23	0.0	0.1	9.357	A
B-A	141	35	395	0.357	140	0.4	0.5	14.079	B
C-AB	25	6	513	0.049	25	0.0	0.1	7.371	A
C-A	274	69			274				
A-B	91	23			91				
A-C	153	38			153				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	23	6	407	0.057	23	0.1	0.1	9.370	A
B-A	141	35	395	0.357	141	0.5	0.5	14.151	B
C-AB	25	6	513	0.049	25	0.1	0.1	7.374	A
C-A	274	69			274				
A-B	91	23			91				
A-C	153	38			153				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	19	5	433	0.044	19	0.1	0.0	8.685	A
B-A	115	29	414	0.278	116	0.5	0.4	12.103	B
C-AB	20	5	518	0.039	20	0.1	0.0	7.234	A
C-A	224	56			224				
A-B	75	19			75				
A-C	125	31			125				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	16	4	450	0.035	16	0.0	0.0	8.299	A
B-A	96	24	427	0.226	97	0.4	0.3	10.910	B
C-AB	17	4	522	0.032	17	0.0	0.0	7.125	A
C-A	188	47			188				
A-B	62	16			62				
A-C	105	26			105				

2033 Forecast, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Hillbury Road (SB) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Hillbury Road/Station Road	T-Junction	Two-way	1.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Hillbury Road (B3078) (N)		Major
B	Hillbury Road (SB)		Minor
C	Station Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Station Road	6.00			60.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	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 - Hillbury Road (SB)	One lane plus flare	6.50	4.00	3.50	3.00	2.50	✓	1.00	22	60

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	540	0.098	0.249	0.156	0.355
1	B-C	595	0.091	0.230	-	-
1	C-B	609	0.236	0.236	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2033 Forecast	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Hillbury Road (B3078) (N)		ONE HOUR	✓	360	100.000
B - Hillbury Road (SB)		ONE HOUR	✓	85	100.000
C - Station Road		ONE HOUR	✓	143	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Hillbury Road (B3078) (N)	B - Hillbury Road (SB)	C - Station Road
From	A - Hillbury Road (B3078) (N)	0	123	237
	B - Hillbury Road (SB)	59	0	26
	C - Station Road	120	23	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Hillbury Road (B3078) (N)	B - Hillbury Road (SB)	C - Station Road
From	A - Hillbury Road (B3078) (N)	10	10	10
	B - Hillbury Road (SB)	10	10	10
	C - Station Road	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.06	8.64	0.1	A	24	36
B-A	0.17	11.33	0.2	B	54	81
C-AB	0.06	8.12	0.1	A	21	32
C-A					110	165
A-B					113	169
A-C					217	326

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	20	5	477	0.041	19	0.0	0.0	7.859	A
B-A	44	11	417	0.107	44	0.0	0.1	9.637	A
C-AB	17	4	494	0.035	17	0.0	0.0	7.554	A
C-A	90	23			90				
A-B	93	23			93				
A-C	178	45			178				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	23	6	464	0.050	23	0.0	0.1	8.167	A
B-A	53	13	403	0.132	53	0.1	0.1	10.290	B
C-AB	21	5	483	0.043	21	0.0	0.0	7.786	A
C-A	108	27			108				
A-B	111	28			111				
A-C	213	53			213				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	29	7	446	0.064	29	0.1	0.1	8.631	A
B-A	65	16	383	0.170	65	0.1	0.2	11.316	B
C-AB	26	6	469	0.055	26	0.0	0.1	8.115	A
C-A	132	33			132				
A-B	135	34			135				
A-C	261	65			261				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	29	7	445	0.064	29	0.1	0.1	8.636	A
B-A	65	16	383	0.170	65	0.2	0.2	11.330	B
C-AB	26	6	469	0.055	26	0.1	0.1	8.118	A
C-A	132	33			132				
A-B	135	34			135				
A-C	261	65			261				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	23	6	464	0.050	23	0.1	0.1	8.174	A
B-A	53	13	403	0.132	53	0.2	0.2	10.308	B
C-AB	21	5	483	0.043	21	0.1	0.0	7.789	A
C-A	108	27			108				
A-B	111	28			111				
A-C	213	53			213				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	20	5	477	0.041	20	0.1	0.0	7.872	A
B-A	44	11	417	0.107	45	0.2	0.1	9.669	A
C-AB	17	4	494	0.035	18	0.0	0.0	7.558	A
C-A	90	23			90				
A-B	93	23			93				
A-C	178	45			178				

2033 Forecast + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Hillbury Road (SB) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Hillbury Road/Station Road	T-Junction	Two-way	9.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Hillbury Road (B3078) (N)		Major
B	Hillbury Road (SB)		Minor
C	Station Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Station Road	6.00			60.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	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 - Hillbury Road (SB)	One lane plus flare	6.50	4.00	3.50	3.00	2.50	✓	1.00	22	60

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	543	0.099	0.250	0.157	0.357
1	B-C	573	0.088	0.222	-	-
1	C-B	609	0.236	0.236	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2033 Forecast + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Hillbury Road (B3078) (N)		ONE HOUR	✓	260	100.000
B - Hillbury Road (SB)		ONE HOUR	✓	285	100.000
C - Station Road		ONE HOUR	✓	365	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Hillbury Road (B3078) (N)	B - Hillbury Road (SB)	C - Station Road
From	A - Hillbury Road (B3078) (N)	0	128	132
	B - Hillbury Road (SB)	212	0	73
	C - Station Road	286	79	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Hillbury Road (B3078) (N)	B - Hillbury Road (SB)	C - Station Road
From	A - Hillbury Road (B3078) (N)	10	10	10
	B - Hillbury Road (SB)	10	10	10
	C - Station Road	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.28	17.27	0.4	C	67	100
B-A	0.66	30.04	1.9	D	195	292
C-AB	0.18	7.95	0.2	A	80	120
C-A					255	383
A-B					117	176
A-C					121	182

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	55	14	416	0.132	54	0.0	0.2	9.950	A
B-A	160	40	402	0.397	157	0.0	0.6	14.568	B
C-AB	63	16	538	0.117	63	0.0	0.1	7.566	A
C-A	212	53			212				
A-B	96	24			96				
A-C	99	25			99				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	66	16	373	0.176	65	0.2	0.2	11.670	B
B-A	191	48	382	0.499	189	0.6	1.0	18.567	C
C-AB	77	19	542	0.143	77	0.1	0.2	7.742	A
C-A	251	63			251				
A-B	115	29			115				
A-C	119	30			119				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	80	20	294	0.273	80	0.2	0.4	16.737	C
B-A	233	58	353	0.662	230	1.0	1.8	28.602	D
C-AB	99	25	552	0.179	99	0.2	0.2	7.942	A
C-A	303	76			303				
A-B	141	35			141				
A-C	145	36			145				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	80	20	289	0.278	80	0.4	0.4	17.265	C
B-A	233	58	352	0.663	233	1.8	1.9	30.040	D
C-AB	99	25	552	0.179	99	0.2	0.2	7.950	A
C-A	303	76			303				
A-B	141	35			141				
A-C	145	36			145				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	66	16	368	0.179	66	0.4	0.2	11.971	B
B-A	191	48	382	0.500	194	1.9	1.0	19.516	C
C-AB	77	19	542	0.143	78	0.2	0.2	7.756	A
C-A	251	63			251				
A-B	115	29			115				
A-C	119	30			119				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	55	14	412	0.133	55	0.2	0.2	10.104	B
B-A	160	40	401	0.398	161	1.0	0.7	15.069	C
C-AB	63	16	538	0.117	63	0.2	0.1	7.587	A
C-A	212	53			212				
A-B	96	24			96				
A-C	99	25			99				

2033 Forecast + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Hillbury Road (SB) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Hillbury Road/Station Road	T-Junction	Two-way	5.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Hillbury Road (B3078) (N)		Major
B	Hillbury Road (SB)		Minor
C	Station Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Station Road	6.00			60.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	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 - Hillbury Road (SB)	One lane plus flare	6.50	4.00	3.50	3.00	2.50	✓	1.00	22	60

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	555	0.101	0.256	0.161	0.365
1	B-C	642	0.098	0.249	-	-
1	C-B	609	0.236	0.236	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2033 Forecast + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Hillbury Road (B3078) (N)		ONE HOUR	✓	525	100.000
B - Hillbury Road (SB)		ONE HOUR	✓	255	100.000
C - Station Road		ONE HOUR	✓	231	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Hillbury Road (B3078) (N)	B - Hillbury Road (SB)	C - Station Road
From	A - Hillbury Road (B3078) (N)	0	237	288
	B - Hillbury Road (SB)	149	0	106
	C - Station Road	138	93	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Hillbury Road (B3078) (N)	B - Hillbury Road (SB)	C - Station Road
From	A - Hillbury Road (B3078) (N)	10	10	10
	B - Hillbury Road (SB)	10	10	10
	C - Station Road	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.32	14.51	0.5	B	97	146
B-A	0.51	22.90	1.0	C	137	205
C-AB	0.25	10.39	0.4	B	91	137
C-A					120	181
A-B					217	326
A-C					264	396

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	80	20	463	0.172	79	0.0	0.2	9.358	A
B-A	112	28	385	0.291	111	0.0	0.4	13.025	B
C-AB	73	18	479	0.152	72	0.0	0.2	8.836	A
C-A	101	25			101				
A-B	178	45			178				
A-C	217	54			217				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	95	24	428	0.223	95	0.2	0.3	10.806	B
B-A	134	33	360	0.372	133	0.4	0.6	15.847	C
C-AB	89	22	469	0.189	89	0.2	0.2	9.449	A
C-A	119	30			119				
A-B	213	53			213				
A-C	259	65			259				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	117	29	367	0.318	116	0.3	0.5	14.302	B
B-A	164	41	321	0.511	162	0.6	1.0	22.425	C
C-AB	113	28	459	0.246	112	0.2	0.4	10.366	B
C-A	142	35			142				
A-B	261	65			261				
A-C	317	79			317				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	117	29	365	0.320	117	0.5	0.5	14.506	B
B-A	164	41	321	0.511	164	1.0	1.0	22.898	C
C-AB	113	28	459	0.246	113	0.4	0.4	10.391	B
C-A	142	35			142				
A-B	261	65			261				
A-C	317	79			317				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	95	24	425	0.224	96	0.5	0.3	10.955	B
B-A	134	33	360	0.373	136	1.0	0.6	16.191	C
C-AB	89	22	469	0.189	89	0.4	0.3	9.484	A
C-A	119	30			119				
A-B	213	53			213				
A-C	259	65			259				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	80	20	461	0.173	80	0.3	0.2	9.466	A
B-A	112	28	385	0.291	113	0.6	0.4	13.259	B
C-AB	73	18	479	0.152	73	0.3	0.2	8.879	A
C-A	101	25			101				
A-B	178	45			178				
A-C	217	54			217				

Appendix S

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Provost Street Shaftesbury Street B3078 Junction with Capacity reduction.j9
Path: W:\Projects\Fareham\130-139\132 Intelligent Land\132.0001 South Alderholt Strategic Sites\Modelling\2022 Modelling\JUNE,JULY 2022\Provost Street
Report generation date: 19-Aug-22 1:26:09 PM

Generated on 19-Aug-22 1:26:29 PM using Junctions 9 (9.0.2.5947)

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	Existing - 2021 Baseline							
Stream B-AC	4.8	88.37	0.87	F	0.7	21.82	0.42	C
Stream C-AB	0.1	8.45	0.10	A	0.2	9.16	0.14	A
	Existing - 2027 Forecast							
Stream B-AC	6.1	106.93	0.91	F	0.8	22.66	0.44	C
Stream C-AB	0.1	8.49	0.10	A	0.2	9.23	0.14	A
	Existing - 2027 Forecast + Sensitivity							
Stream B-AC	24.7	329.73	1.16	F	1.2	31.02	0.56	D
Stream C-AB	0.1	8.57	0.10	A	0.2	9.47	0.15	A
	Existing - 2033 Forecast							
Stream B-AC	7.8	132.72	0.95	F	0.8	24.04	0.46	C
Stream C-AB	0.1	8.55	0.11	A	0.2	9.33	0.15	A
	Existing - 2033 Forecast + Dev							
Stream B-AC	53.0	733.54	1.41	F	4.8	93.52	0.87	F
Stream C-AB	0.1	8.66	0.11	A	0.2	9.98	0.16	A

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	Mitigation - 2033 Forecast + Dev							
Stream B-C	0.3	13.54	0.25	B	0.2	11.22	0.17	B
Stream B-A	7.1	124.24	0.93	F	1.2	32.96	0.55	D
Stream C-AB	0.1	8.66	0.11	A	0.2	9.98	0.16	A

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

File summary

File Description

Title	Provost Street/Shaftesbury Street/B3078
Location	Fordinbridge
Site number	
Date	09-Mar-22
Version	
Status	Preliminary
Identifier	
Client	
Jobnumber	132.0001
Enumerator	Paul Basham
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2021 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D3	2027 Forecast	AM	ONE HOUR	07:45	09:15	15	✓
D4	2027 Forecast	PM	ONE HOUR	16:45	18:15	15	✓
D5	2027 Forecast + Sensitivity	AM	ONE HOUR	07:45	09:15	15	✓
D6	2027 Forecast + Sensitivity	PM	ONE HOUR	16:45	18:15	15	✓
D7	2033 Forecast	AM	ONE HOUR	07:45	09:15	15	✓
D8	2033 Forecast	PM	ONE HOUR	16:45	18:15	15	✓
D9	2033 Forecast + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D10	2033 Forecast + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Existing - 2021 Baseline, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Provost Street/Shaftesbury Street/B3078	T-Junction	Two-way	17.92	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B3078		Major
B	Provost Street		Minor
C	Shaftesbury Street		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Shaftesbury Street	6.00			70.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Provost Street	One lane	4.00	13	90

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream intercept adjustment	Use adjustment	Reason	Direct intercept adjustment (PCU/hr)
B-AC	✓	To reflect observed queues	-160

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	578	0.105	0.266	0.168	0.380
1	B-C	749	0.115	0.290	-	-
1	C-B	615	0.238	0.238	-	-

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

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

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

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B3078		ONE HOUR	✓	469	100.000
B - Provost Street		ONE HOUR	✓	195	100.000
C - Shaftesbury Street		ONE HOUR	✓	317	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	0	80	389
	B - Provost Street	120	0	75
	C - Shaftesbury Street	278	39	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	10	10	10
	B - Provost Street	10	10	10
	C - Shaftesbury Street	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.87	88.37	4.8	F	179	268
C-AB	0.10	8.45	0.1	A	38	57
C-A					253	379
A-B					73	110
A-C					357	535

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	147	37	307	0.478	143	0.0	0.9	21.567	C
C-AB	30	8	491	0.062	30	0.0	0.1	7.803	A
C-A	208	52			208				
A-B	60	15			60				
A-C	293	73			293				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	175	44	282	0.621	173	0.9	1.5	32.103	D
C-AB	37	9	482	0.077	37	0.1	0.1	8.078	A
C-A	248	62			248				
A-B	72	18			72				
A-C	350	87			350				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	215	54	248	0.866	204	1.5	4.1	69.825	F
C-AB	47	12	473	0.099	46	0.1	0.1	8.440	A
C-A	302	76			302				
A-B	88	22			88				
A-C	428	107			428				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	215	54	248	0.866	212	4.1	4.8	88.373	F
C-AB	47	12	473	0.099	47	0.1	0.1	8.446	A
C-A	302	76			302				
A-B	88	22			88				
A-C	428	107			428				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	175	44	282	0.621	188	4.8	1.8	41.700	E
C-AB	37	9	482	0.077	37	0.1	0.1	8.085	A
C-A	248	62			248				
A-B	72	18			72				
A-C	350	87			350				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	147	37	307	0.478	150	1.8	1.0	23.423	C
C-AB	30	8	491	0.062	30	0.1	0.1	7.814	A
C-A	208	52			208				
A-B	60	15			60				
A-C	293	73			293				

Existing - 2021 Baseline, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Provost Street/Shaftesbury Street/B3078	T-Junction	Two-way	3.40	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B3078		Major
B	Provost Street		Minor
C	Shaftesbury Street		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Shaftesbury Street	6.00			70.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Provost Street	One lane	4.00	13	90

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream intercept adjustment	Use adjustment	Reason	Direct intercept adjustment (PCU/hr)
B-AC	✓	To reflect observed queues	-160

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	578	0.105	0.266	0.168	0.380
1	B-C	749	0.115	0.290	-	-
1	C-B	615	0.238	0.238	-	-

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

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

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

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B3078		ONE HOUR	✓	512	100.000
B - Provost Street		ONE HOUR	✓	109	100.000
C - Shaftesbury Street		ONE HOUR	✓	231	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	0	168	344
	B - Provost Street	53	0	56
	C - Shaftesbury Street	177	54	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	10	10	10
	B - Provost Street	10	10	10
	C - Shaftesbury Street	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.42	21.82	0.7	C	100	150
C-AB	0.14	9.16	0.2	A	52	78
C-A					160	240
A-B					154	231
A-C					316	473

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	82	21	338	0.243	81	0.0	0.3	13.924	B
C-AB	42	10	481	0.087	42	0.0	0.1	8.179	A
C-A	132	33			132				
A-B	126	32			126				
A-C	259	65			259				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	98	24	316	0.310	97	0.3	0.4	16.444	C
C-AB	51	13	470	0.108	51	0.1	0.1	8.582	A
C-A	157	39			157				
A-B	151	38			151				
A-C	309	77			309				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	120	30	285	0.421	119	0.4	0.7	21.563	C
C-AB	64	16	457	0.140	64	0.1	0.2	9.153	A
C-A	190	48			190				
A-B	185	46			185				
A-C	379	95			379				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	120	30	285	0.421	120	0.7	0.7	21.824	C
C-AB	64	16	457	0.140	64	0.2	0.2	9.160	A
C-A	190	48			190				
A-B	185	46			185				
A-C	379	95			379				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	98	24	316	0.310	99	0.7	0.5	16.683	C
C-AB	51	13	470	0.108	51	0.2	0.1	8.594	A
C-A	157	39			157				
A-B	151	38			151				
A-C	309	77			309				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	82	21	338	0.243	83	0.5	0.3	14.125	B
C-AB	42	10	481	0.087	42	0.1	0.1	8.196	A
C-A	132	33			132				
A-B	126	32			126				
A-C	259	65			259				

Existing - 2027 Forecast, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Provost Street/Shaftesbury Street/B3078	T-Junction	Two-way	21.62	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B3078		Major
B	Provost Street		Minor
C	Shaftesbury Street		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Shaftesbury Street	6.00			70.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Provost Street	One lane	4.00	13	90

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream intercept adjustment	Use adjustment	Reason	Direct intercept adjustment (PCU/hr)
B-AC	✓	To reflect observed queues	-160

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	578	0.105	0.266	0.168	0.380
1	B-C	749	0.115	0.290	-	-
1	C-B	615	0.238	0.238	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2027 Forecast	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B3078		ONE HOUR	✓	481	100.000
B - Provost Street		ONE HOUR	✓	200	100.000
C - Shaftesbury Street		ONE HOUR	✓	325	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	0	82	399
	B - Provost Street	123	0	77
	C - Shaftesbury Street	285	40	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	10	10	10
	B - Provost Street	10	10	10
	C - Shaftesbury Street	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.91	106.93	6.1	F	184	275
C-AB	0.10	8.49	0.1	A	39	59
C-A					259	389
A-B					75	113
A-C					366	549

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	151	38	304	0.496	147	0.0	0.9	22.444	C
C-AB	31	8	490	0.064	31	0.0	0.1	7.840	A
C-A	213	53			213				
A-B	62	15			62				
A-C	300	75			300				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	180	45	278	0.646	177	0.9	1.7	34.444	D
C-AB	38	9	481	0.079	38	0.1	0.1	8.121	A
C-A	254	64			254				
A-B	74	18			74				
A-C	359	90			359				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	220	55	243	0.906	207	1.7	4.9	80.139	F
C-AB	48	12	472	0.102	48	0.1	0.1	8.490	A
C-A	310	77			310				
A-B	90	23			90				
A-C	439	110			439				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	220	55	243	0.906	216	4.9	6.1	106.929	F
C-AB	48	12	472	0.102	48	0.1	0.1	8.495	A
C-A	310	77			310				
A-B	90	23			90				
A-C	439	110			439				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	180	45	278	0.646	196	6.1	2.0	49.486	E
C-AB	38	9	481	0.079	38	0.1	0.1	8.129	A
C-A	254	64			254				
A-B	74	18			74				
A-C	359	90			359				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	151	38	304	0.496	155	2.0	1.0	24.726	C
C-AB	31	8	490	0.064	31	0.1	0.1	7.851	A
C-A	213	53			213				
A-B	62	15			62				
A-C	300	75			300				

Existing - 2027 Forecast, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Provost Street/Shaftesbury Street/B3078	T-Junction	Two-way	3.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B3078		Major
B	Provost Street		Minor
C	Shaftesbury Street		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Shaftesbury Street	6.00			70.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Provost Street	One lane	4.00	13	90

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream intercept adjustment	Use adjustment	Reason	Direct intercept adjustment (PCU/hr)
B-AC	✓	To reflect observed queues	-160

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	578	0.105	0.266	0.168	0.380
1	B-C	749	0.115	0.290	-	-
1	C-B	615	0.238	0.238	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2027 Forecast	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B3078		ONE HOUR	✓	524	100.000
B - Provost Street		ONE HOUR	✓	111	100.000
C - Shaftesbury Street		ONE HOUR	✓	236	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	0	172	352
	B - Provost Street	54	0	57
	C - Shaftesbury Street	181	55	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	10	10	10
	B - Provost Street	10	10	10
	C - Shaftesbury Street	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.44	22.66	0.8	C	102	153
C-AB	0.14	9.23	0.2	A	53	80
C-A					163	245
A-B					158	237
A-C					323	485

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	84	21	336	0.249	82	0.0	0.3	14.145	B
C-AB	43	11	480	0.089	42	0.0	0.1	8.223	A
C-A	135	34			135				
A-B	129	32			129				
A-C	265	66			265				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	100	25	313	0.319	99	0.3	0.5	16.822	C
C-AB	52	13	468	0.111	52	0.1	0.1	8.637	A
C-A	160	40			160				
A-B	155	39			155				
A-C	316	79			316				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	122	31	281	0.435	121	0.5	0.7	22.364	C
C-AB	65	16	455	0.144	65	0.1	0.2	9.228	A
C-A	194	49			194				
A-B	189	47			189				
A-C	388	97			388				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	122	31	281	0.435	122	0.7	0.8	22.664	C
C-AB	65	16	455	0.144	65	0.2	0.2	9.232	A
C-A	194	49			194				
A-B	189	47			189				
A-C	388	97			388				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	100	25	313	0.319	101	0.8	0.5	17.089	C
C-AB	52	13	468	0.111	52	0.2	0.1	8.649	A
C-A	160	40			160				
A-B	155	39			155				
A-C	316	79			316				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	84	21	335	0.249	84	0.5	0.3	14.360	B
C-AB	43	11	480	0.089	43	0.1	0.1	8.241	A
C-A	135	34			135				
A-B	129	32			129				
A-C	265	66			265				

Existing - 2027 Forecast + Sensitivity, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Provost Street/Shaftesbury Street/B3078	T-Junction	Two-way	75.41	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B3078		Major
B	Provost Street		Minor
C	Shaftesbury Street		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Shaftesbury Street	6.00			70.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Provost Street	One lane	4.00	13	90

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream intercept adjustment	Use adjustment	Reason	Direct intercept adjustment (PCU/hr)
B-AC	✓	To reflect observed queues	-160

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	578	0.105	0.266	0.168	0.380
1	B-C	749	0.115	0.290	-	-
1	C-B	615	0.238	0.238	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2027 Forecast + Sensitivity	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B3078		ONE HOUR	✓	496	100.000
B - Provost Street		ONE HOUR	✓	242	100.000
C - Shaftesbury Street		ONE HOUR	✓	325	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	0	97	399
	B - Provost Street	165	0	77
	C - Shaftesbury Street	285	40	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	10	10	10
	B - Provost Street	10	10	10
	C - Shaftesbury Street	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.16	329.73	24.7	F	222	333
C-AB	0.10	8.57	0.1	A	39	59
C-A					259	389
A-B					89	134
A-C					366	549

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	182	46	291	0.625	176	0.0	1.5	29.854	D
C-AB	31	8	487	0.064	31	0.0	0.1	7.881	A
C-A	213	53			213				
A-B	73	18			73				
A-C	300	75			300				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	218	54	266	0.819	210	1.5	3.4	57.995	F
C-AB	38	9	478	0.079	38	0.1	0.1	8.177	A
C-A	254	64			254				
A-B	87	22			87				
A-C	359	90			359				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	266	67	230	1.160	221	3.4	14.8	180.336	F
C-AB	48	12	468	0.103	48	0.1	0.1	8.564	A
C-A	310	77			310				
A-B	107	27			107				
A-C	439	110			439				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	266	67	230	1.161	227	14.8	24.7	329.731	F
C-AB	48	12	468	0.103	48	0.1	0.1	8.571	A
C-A	310	77			310				
A-B	107	27			107				
A-C	439	110			439				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	218	54	266	0.819	255	24.7	15.2	284.945	F
C-AB	38	9	478	0.079	38	0.1	0.1	8.186	A
C-A	254	64			254				
A-B	87	22			87				
A-C	359	90			359				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	182	46	291	0.625	235	15.2	1.9	92.372	F
C-AB	31	8	487	0.064	31	0.1	0.1	7.896	A
C-A	213	53			213				
A-B	73	18			73				
A-C	300	75			300				

Existing - 2027 Forecast + Sensitivity, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Provost Street/Shaftesbury Street/B3078	T-Junction	Two-way	4.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B3078		Major
B	Provost Street		Minor
C	Shaftesbury Street		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Shaftesbury Street	6.00			70.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Provost Street	One lane	4.00	13	90

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream intercept adjustment	Use adjustment	Reason	Direct intercept adjustment (PCU/hr)
B-AC	✓	To reflect observed queues	-160

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	578	0.105	0.266	0.168	0.380
1	B-C	749	0.115	0.290	-	-
1	C-B	615	0.238	0.238	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2027 Forecast + Sensitivity	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B3078		ONE HOUR	✓	563	100.000
B - Provost Street		ONE HOUR	✓	132	100.000
C - Shaftesbury Street		ONE HOUR	✓	236	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	0	211	352
	B - Provost Street	75	0	57
	C - Shaftesbury Street	181	55	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	10	10	10
	B - Provost Street	10	10	10
	C - Shaftesbury Street	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.56	31.02	1.2	D	121	182
C-AB	0.15	9.47	0.2	A	53	80
C-A					163	245
A-B					194	290
A-C					323	485

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	99	25	318	0.313	98	0.0	0.4	16.219	C
C-AB	43	11	473	0.090	42	0.0	0.1	8.351	A
C-A	135	34			135				
A-B	159	40			159				
A-C	265	66			265				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	119	30	294	0.404	118	0.4	0.7	20.325	C
C-AB	52	13	461	0.113	52	0.1	0.1	8.807	A
C-A	160	40			160				
A-B	190	47			190				
A-C	316	79			316				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	145	36	261	0.557	143	0.7	1.2	30.068	D
C-AB	66	16	446	0.147	65	0.1	0.2	9.458	A
C-A	194	49			194				
A-B	232	58			232				
A-C	388	97			388				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	145	36	261	0.557	145	1.2	1.2	31.021	D
C-AB	66	16	446	0.147	66	0.2	0.2	9.470	A
C-A	194	49			194				
A-B	232	58			232				
A-C	388	97			388				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	119	30	294	0.404	121	1.2	0.7	21.015	C
C-AB	52	13	461	0.113	52	0.2	0.1	8.822	A
C-A	160	40			160				
A-B	190	47			190				
A-C	316	79			316				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	99	25	318	0.313	100	0.7	0.5	16.630	C
C-AB	43	11	473	0.090	43	0.1	0.1	8.373	A
C-A	135	34			135				
A-B	159	40			159				
A-C	265	66			265				

Existing - 2033 Forecast, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Provost Street/Shaftesbury Street/B3078	T-Junction	Two-way	26.70	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B3078		Major
B	Provost Street		Minor
C	Shaftesbury Street		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Shaftesbury Street	6.00			70.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Provost Street	One lane	4.00	13	90

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream intercept adjustment	Use adjustment	Reason	Direct intercept adjustment (PCU/hr)
B-AC	✓	To reflect observed queues	-160

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	578	0.105	0.266	0.168	0.380
1	B-C	749	0.115	0.290	-	-
1	C-B	615	0.238	0.238	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2033 Forecast	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B3078		ONE HOUR	✓	494	100.000
B - Provost Street		ONE HOUR	✓	205	100.000
C - Shaftesbury Street		ONE HOUR	✓	334	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	0	84	410
	B - Provost Street	126	0	79
	C - Shaftesbury Street	293	41	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	10	10	10
	B - Provost Street	10	10	10
	C - Shaftesbury Street	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.95	132.72	7.8	F	188	282
C-AB	0.11	8.55	0.1	A	40	60
C-A					266	399
A-B					77	116
A-C					376	564

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	154	39	300	0.514	150	0.0	1.0	23.430	C
C-AB	32	8	489	0.066	32	0.0	0.1	7.875	A
C-A	219	55			219				
A-B	63	16			63				
A-C	309	77			309				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	184	46	274	0.672	181	1.0	1.8	37.243	E
C-AB	39	10	480	0.081	39	0.1	0.1	8.165	A
C-A	261	65			261				
A-B	76	19			76				
A-C	369	92			369				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	226	56	238	0.949	209	1.8	6.0	93.116	F
C-AB	50	12	471	0.105	49	0.1	0.1	8.542	A
C-A	318	80			318				
A-B	92	23			92				
A-C	451	113			451				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	226	56	238	0.949	218	6.0	7.8	132.722	F
C-AB	50	12	471	0.105	50	0.1	0.1	8.546	A
C-A	318	80			318				
A-B	92	23			92				
A-C	451	113			451				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	184	46	274	0.672	206	7.8	2.3	62.588	F
C-AB	39	10	480	0.081	39	0.1	0.1	8.174	A
C-A	261	65			261				
A-B	76	19			76				
A-C	369	92			369				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	154	39	300	0.514	159	2.3	1.1	26.325	D
C-AB	32	8	489	0.066	32	0.1	0.1	7.888	A
C-A	219	55			219				
A-B	63	16			63				
A-C	309	77			309				

Existing - 2033 Forecast, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Provost Street/Shaftesbury Street/B3078	T-Junction	Two-way	3.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B3078		Major
B	Provost Street		Minor
C	Shaftesbury Street		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Shaftesbury Street	6.00			70.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Provost Street	One lane	4.00	13	90

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream intercept adjustment	Use adjustment	Reason	Direct intercept adjustment (PCU/hr)
B-AC	✓	To reflect observed queues	-160

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	578	0.105	0.266	0.168	0.380
1	B-C	749	0.115	0.290	-	-
1	C-B	615	0.238	0.238	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2033 Forecast	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B3078		ONE HOUR	✓	537	100.000
B - Provost Street		ONE HOUR	✓	115	100.000
C - Shaftesbury Street		ONE HOUR	✓	243	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	0	176	361
	B - Provost Street	56	0	59
	C - Shaftesbury Street	186	57	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	10	10	10
	B - Provost Street	10	10	10
	C - Shaftesbury Street	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.46	24.04	0.8	C	106	158
C-AB	0.15	9.33	0.2	A	56	83
C-A					167	251
A-B					162	242
A-C					331	497

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	87	22	332	0.261	85	0.0	0.3	14.490	B
C-AB	44	11	479	0.093	44	0.0	0.1	8.278	A
C-A	139	35			139				
A-B	133	33			133				
A-C	272	68			272				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	103	26	309	0.335	103	0.3	0.5	17.418	C
C-AB	54	13	467	0.115	54	0.1	0.1	8.707	A
C-A	164	41			164				
A-B	158	40			158				
A-C	325	81			325				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	127	32	276	0.459	125	0.5	0.8	23.665	C
C-AB	68	17	454	0.150	68	0.1	0.2	9.314	A
C-A	199	50			199				
A-B	194	48			194				
A-C	397	99			397				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	127	32	276	0.459	127	0.8	0.8	24.043	C
C-AB	68	17	454	0.150	68	0.2	0.2	9.326	A
C-A	199	50			199				
A-B	194	48			194				
A-C	397	99			397				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	103	26	309	0.335	105	0.8	0.5	17.739	C
C-AB	54	13	467	0.115	54	0.2	0.1	8.721	A
C-A	164	41			164				
A-B	158	40			158				
A-C	325	81			325				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	87	22	332	0.261	87	0.5	0.4	14.731	B
C-AB	44	11	479	0.093	45	0.1	0.1	8.299	A
C-A	139	35			139				
A-B	133	33			133				
A-C	272	68			272				

Existing - 2033 Forecast + Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Provost Street/Shaftesbury Street/B3078	T-Junction	Two-way	181.45	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B3078		Major
B	Provost Street		Minor
C	Shaftesbury Street		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Shaftesbury Street	6.00			70.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Provost Street	One lane	4.00	13	90

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream intercept adjustment	Use adjustment	Reason	Direct intercept adjustment (PCU/hr)
B-AC	✓	To reflect observed queues	-160

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	578	0.105	0.266	0.168	0.380
1	B-C	749	0.115	0.290	-	-
1	C-B	615	0.238	0.238	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2033 Forecast + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B3078		ONE HOUR	✓	517	100.000
B - Provost Street		ONE HOUR	✓	279	100.000
C - Shaftesbury Street		ONE HOUR	✓	334	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	0	107	410
	B - Provost Street	200	0	79
	C - Shaftesbury Street	293	41	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	10	10	10
	B - Provost Street	10	10	10
	C - Shaftesbury Street	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.41	733.54	53.0	F	256	384
C-AB	0.11	8.66	0.1	A	40	60
C-A					266	399
A-B					98	147
A-C					376	564

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	210	53	282	0.746	200	0.0	2.5	40.506	E
C-AB	32	8	485	0.066	32	0.0	0.1	7.945	A
C-A	219	55			219				
A-B	81	20			81				
A-C	309	77			309				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	251	63	255	0.984	231	2.5	7.5	104.717	F
C-AB	39	10	475	0.082	39	0.1	0.1	8.253	A
C-A	261	65			261				
A-B	96	24			96				
A-C	369	92			369				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	307	77	217	1.413	215	7.5	30.4	347.266	F
C-AB	50	12	465	0.107	50	0.1	0.1	8.657	A
C-A	318	80			318				
A-B	118	29			118				
A-C	451	113			451				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	307	77	217	1.413	217	30.4	53.0	669.831	F
C-AB	50	12	465	0.107	50	0.1	0.1	8.662	A
C-A	318	80			318				
A-B	118	29			118				
A-C	451	113			451				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	251	63	255	0.985	251	53.0	53.0	733.544	F
C-AB	39	10	475	0.082	39	0.1	0.1	8.261	A
C-A	261	65			261				
A-B	96	24			96				
A-C	369	92			369				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	210	53	281	0.746	276	53.0	36.4	586.194	F
C-AB	32	8	485	0.066	32	0.1	0.1	7.957	A
C-A	219	55			219				
A-B	81	20			81				
A-C	309	77			309				

Existing - 2033 Forecast + Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Provost Street/Shaftesbury Street/B3078	T-Junction	Two-way	16.50	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B3078		Major
B	Provost Street		Minor
C	Shaftesbury Street		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Shaftesbury Street	6.00			70.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Provost Street	One lane	4.00	13	90

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream intercept adjustment	Use adjustment	Reason	Direct intercept adjustment (PCU/hr)
B-AC	✓	To reflect observed queues	-160

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	578	0.105	0.266	0.168	0.380
1	B-C	749	0.115	0.290	-	-
1	C-B	615	0.238	0.238	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2033 Forecast + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B3078		ONE HOUR	✓	639	100.000
B - Provost Street		ONE HOUR	✓	181	100.000
C - Shaftesbury Street		ONE HOUR	✓	243	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	0	278	361
	B - Provost Street	122	0	59
	C - Shaftesbury Street	186	57	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	10	10	10
	B - Provost Street	10	10	10
	C - Shaftesbury Street	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.87	93.52	4.8	F	166	249
C-AB	0.16	9.98	0.2	A	56	84
C-A					167	251
A-B					255	383
A-C					331	497

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	136	34	292	0.467	133	0.0	0.8	22.190	C
C-AB	45	11	461	0.097	44	0.0	0.1	8.630	A
C-A	138	35			138				
A-B	209	52			209				
A-C	272	68			272				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	163	41	266	0.611	160	0.8	1.4	33.199	D
C-AB	54	14	446	0.121	54	0.1	0.1	9.174	A
C-A	164	41			164				
A-B	250	62			250				
A-C	325	81			325				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	199	50	230	0.865	189	1.4	4.0	73.458	F
C-AB	69	17	430	0.160	69	0.1	0.2	9.963	A
C-A	199	50			199				
A-B	306	77			306				
A-C	397	99			397				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	199	50	230	0.866	196	4.0	4.8	93.523	F
C-AB	69	17	430	0.160	69	0.2	0.2	9.976	A
C-A	199	50			199				
A-B	306	77			306				
A-C	397	99			397				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	163	41	266	0.611	175	4.8	1.7	43.369	E
C-AB	54	14	446	0.121	54	0.2	0.1	9.192	A
C-A	164	41			164				
A-B	250	62			250				
A-C	325	81			325				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	136	34	292	0.467	140	1.7	0.9	24.085	C
C-AB	45	11	461	0.097	45	0.1	0.1	8.655	A
C-A	138	35			138				
A-B	209	52			209				
A-C	272	68			272				

Mitigation - 2033 Forecast + Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Mitigation	✓	✓	D9,D10	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Provost Street/Shaftesbury Street/B3078	T-Junction	Two-way	23.27	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B3078		Major
B	Provost Street		Minor
C	Shaftesbury Street		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Shaftesbury Street	6.00			70.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane Width (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B - Provost Street	Two lanes	3.50	3.50	20	90

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream intercept adjustment	Use adjustment	Reason	Direct intercept adjustment (PCU/hr)
B-A	✓	To be consistent with baseline	-80
B-C	✓	To be consistent with baseline	-80

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	555	0.101	0.255	0.161	0.365
1	B-C	715	0.110	0.277	-	-
1	C-B	615	0.238	0.238	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2033 Forecast + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B3078		ONE HOUR	✓	517	100.000
B - Provost Street		ONE HOUR	✓	279	100.000
C - Shaftesbury Street		ONE HOUR	✓	334	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	0	107	410
	B - Provost Street	200	0	79
	C - Shaftesbury Street	293	41	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	10	10	10
	B - Provost Street	10	10	10
	C - Shaftesbury Street	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.25	13.54	0.3	B	72	109
B-A	0.93	124.24	7.1	F	184	275
C-AB	0.11	8.66	0.1	A	40	60
C-A					266	399
A-B					98	147
A-C					376	564

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	59	15	434	0.137	59	0.0	0.2	9.591	A
B-A	151	38	298	0.506	147	0.0	1.0	23.282	C
C-AB	32	8	485	0.066	32	0.0	0.1	7.945	A
C-A	219	55			219				
A-B	81	20			81				
A-C	309	77			309				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	71	18	402	0.176	71	0.2	0.2	10.848	B
B-A	180	45	272	0.662	177	1.0	1.8	36.623	E
C-AB	39	10	475	0.082	39	0.1	0.1	8.253	A
C-A	261	65			261				
A-B	96	24			96				
A-C	369	92			369				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	87	22	358	0.243	87	0.2	0.3	13.232	B
B-A	220	55	236	0.934	205	1.8	5.6	89.237	F
C-AB	50	12	465	0.107	50	0.1	0.1	8.657	A
C-A	318	80			318				
A-B	118	29			118				
A-C	451	113			451				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	87	22	353	0.247	87	0.3	0.3	13.539	B
B-A	220	55	236	0.934	214	5.6	7.1	124.240	F
C-AB	50	12	465	0.107	50	0.1	0.1	8.662	A
C-A	318	80			318				
A-B	118	29			118				
A-C	451	113			451				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	71	18	394	0.180	71	0.3	0.2	11.166	B
B-A	180	45	272	0.662	199	7.1	2.2	57.967	F
C-AB	39	10	475	0.082	39	0.1	0.1	8.262	A
C-A	261	65			261				
A-B	96	24			96				
A-C	369	92			369				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	59	15	431	0.138	60	0.2	0.2	9.711	A
B-A	151	38	298	0.506	155	2.2	1.1	25.980	D
C-AB	32	8	485	0.066	32	0.1	0.1	7.957	A
C-A	219	55			219				
A-B	81	20			81				
A-C	309	77			309				

Mitigation - 2033 Forecast + Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Mitigation	✓	✓	D9,D10	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Provost Street/Shaftesbury Street/B3078	T-Junction	Two-way	4.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B3078		Major
B	Provost Street		Minor
C	Shaftesbury Street		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Shaftesbury Street	6.00			70.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane Width (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B - Provost Street	Two lanes	3.50	3.50	20	90

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream intercept adjustment	Use adjustment	Reason	Direct intercept adjustment (PCU/hr)
B-A	✓	To be consistent with baseline	-80
B-C	✓	To be consistent with baseline	-80

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	555	0.101	0.255	0.161	0.365
1	B-C	715	0.110	0.277	-	-
1	C-B	615	0.238	0.238	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2033 Forecast + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B3078		ONE HOUR	✓	639	100.000
B - Provost Street		ONE HOUR	✓	181	100.000
C - Shaftesbury Street		ONE HOUR	✓	243	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	0	278	361
	B - Provost Street	122	0	59
	C - Shaftesbury Street	186	57	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B3078	B - Provost Street	C - Shaftesbury Street
From	A - B3078	10	10	10
	B - Provost Street	10	10	10
	C - Shaftesbury Street	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.17	11.22	0.2	B	54	81
B-A	0.55	32.96	1.2	D	112	168
C-AB	0.16	9.98	0.2	A	56	84
C-A					167	251
A-B					255	383
A-C					331	497

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	44	11	450	0.099	44	0.0	0.1	8.869	A
B-A	92	23	303	0.303	90	0.0	0.4	16.805	C
C-AB	45	11	461	0.097	44	0.0	0.1	8.630	A
C-A	138	35			138				
A-B	209	52			209				
A-C	272	68			272				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	53	13	423	0.125	53	0.1	0.1	9.719	A
B-A	110	27	278	0.395	109	0.4	0.6	21.221	C
C-AB	54	14	446	0.121	54	0.1	0.1	9.174	A
C-A	164	41			164				
A-B	250	62			250				
A-C	325	81			325				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	65	16	386	0.168	65	0.1	0.2	11.182	B
B-A	134	34	243	0.553	132	0.6	1.1	31.887	D
C-AB	69	17	430	0.160	69	0.1	0.2	9.963	A
C-A	199	50			199				
A-B	306	77			306				
A-C	397	99			397				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	65	16	386	0.168	65	0.2	0.2	11.223	B
B-A	134	34	243	0.553	134	1.1	1.2	32.958	D
C-AB	69	17	430	0.160	69	0.2	0.2	9.976	A
C-A	199	50			199				
A-B	306	77			306				
A-C	397	99			397				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	53	13	422	0.126	53	0.2	0.1	9.763	A
B-A	110	27	277	0.395	112	1.2	0.7	21.971	C
C-AB	54	14	446	0.121	54	0.2	0.1	9.190	A
C-A	164	41			164				
A-B	250	62			250				
A-C	325	81			325				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	44	11	449	0.099	45	0.1	0.1	8.913	A
B-A	92	23	303	0.304	93	0.7	0.4	17.236	C
C-AB	45	11	461	0.097	45	0.1	0.1	8.655	A
C-A	138	35			138				
A-B	209	52			209				
A-C	272	68			272				

Appendix T

GENERAL NOTES

1. THIS DRAWING IS INTENDED TO BE VIEWED IN COMBINATION WITH ALL RELEVANT ARCHITECTS, ENGINEERS, SERVICES AND SPECIALIST DRAWINGS AND SPECIFICATION.
2. ANY VARIATIONS OR DISCREPANCIES BETWEEN THESE DRAWINGS IN TERMS OF DIMENSIONS OR DETAILS SHOULD BE DRAWN TO THE ATTENTION OF THE ARCHITECT AND/OR THE ENGINEER FOR CLARIFICATION.
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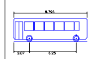
VEHICLE PROFILE



Single Deck Bus	
Overall Length	9.795m
Overall Width	2.500m
Overall Body Height	3.070m
Min Body Ground Clearance	0.306m
Track Width	2.322m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	10.111m

NORTH

Rev	Description	Date	By	Chkd
-	-	--.--.--	--	--

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Client: Intelligent Land

Project Name: LAND AT ALDERHOLT FORDINGBRIDGE

Title: PROVOST STREET PROPOSED MITIGATION DESIGN

Project Phase: PRELIMINARY

Checked By	Checked Date	Drawn By	Drawn Date
JR	19.08.22	TP	05.08.22

Client Drawing No.:

Scale: 1:250 (AT A2 SIZE)

PBA Drawing No.: 132.0001.016

Revision: -

Appendix U

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.0.2.5947 © Copyright TRL Limited, 2017
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk
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Filename: Verwood Road B3081 Junction Modelling.j9
Path: W:\Projects\Fareham\130-139\132 Intelligent Land\132.0001 South Alderholt Strategic Sites\Modelling\2022 Modelling\JUNE,JULY 2022\Verwood Road B3081 Junction
Report generation date: 12-Jul-22 1:22:13 PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2021 Baseline							
Stream B-C	1.8	21.33	0.65	C	64.9	565.97	1.38	F
Stream B-AD	0.5	42.88	0.36	E	10.5	655.89	1.29	F
Stream A-BCD	13.1	62.32	0.91	F	31.0	126.41	1.01	F
Stream D-ABC	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream C-ABD	0.0	7.67	0.02	A	0.0	0.00	0.00	A
	2027 Forecast							
Stream B-C	2.1	24.66	0.69	C	83.8	719.08	1.48	F
Stream B-AD	0.6	52.05	0.41	F	12.9	804.80	1.40	F
Stream A-BCD	19.4	98.23	0.96	F	40.2	163.17	1.05	F
Stream D-ABC	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream C-ABD	0.0	7.68	0.02	A	0.0	0.00	0.00	A
	2027 Forecast + Sensitivity							
Stream B-C	3.0	34.38	0.77	D	141.3	1264.50	1.76	F
Stream B-AD	1.0	80.66	0.53	F	19.2	1354.35	1.67	F
Stream A-BCD	30.7	161.40	1.04	F	54.5	215.88	1.11	F
Stream D-ABC	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream C-ABD	0.0	7.76	0.02	A	0.0	0.00	0.00	A
	2033 Forecast							
Stream B-C	2.6	30.78	0.74	D	132.1	1278.91	1.78	F
Stream B-AD	0.9	68.88	0.50	F	20.0	1364.12	1.70	F
Stream A-BCD	27.3	141.88	1.02	F	73.1	302.25	1.18	F
Stream D-ABC	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream C-ABD	0.0	7.76	0.02	A	0.0	0.00	0.00	A
	2033 Forecast + Dev							
Stream B-C	8.5	84.73	0.97	F	299.9	3246.06	2.51	F
Stream B-AD	2.9	221.11	0.92	F	35.9	3349.75	2.44	F
Stream A-BCD	55.8	289.96	1.16	F	106.7	445.43	1.28	F
Stream D-ABC	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream C-ABD	0.0	8.06	0.02	A	0.0	0.00	0.00	A

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

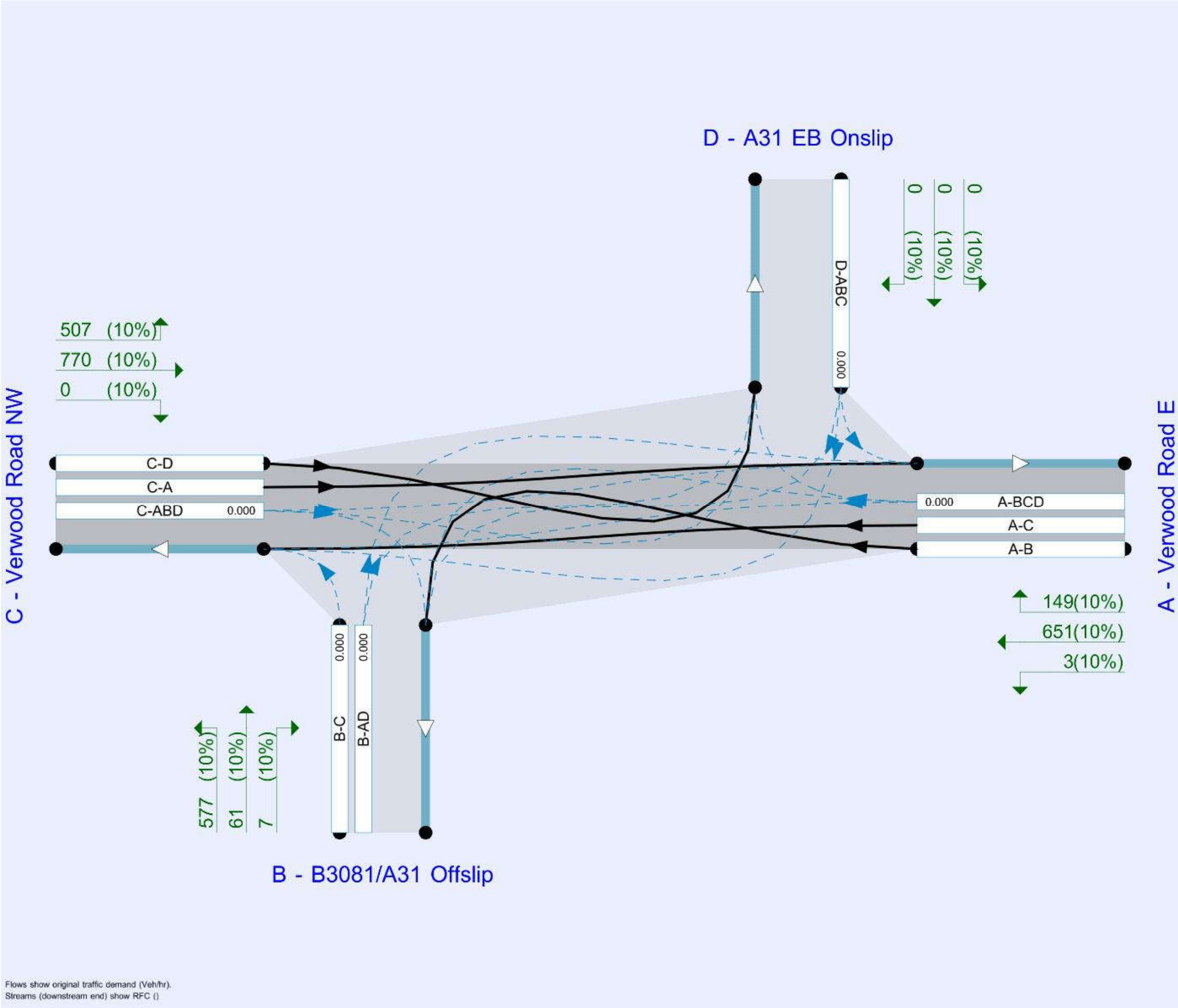
File summary

File Description

Title	Verwood Road/B3081 (250 Units)
Location	Alderholt
Site number	
Date	22-Aug-18
Version	
Status	Preliminary
Identifier	
Client	
Jobnumber	132.0001
Enumerator	PC-PBASH-MODEL\Cad PC
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2021 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D2	2021 Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D3	2027 Forecast	AM	ONE HOUR	07:45	09:15	15	✓
D4	2027 Forecast	PM	ONE HOUR	16:45	18:15	15	✓
D5	2027 Forecast + Sensitivity	AM	ONE HOUR	07:45	09:15	15	✓
D6	2027 Forecast + Sensitivity	PM	ONE HOUR	16:45	18:15	15	✓
D7	2033 Forecast	AM	ONE HOUR	07:45	09:15	15	✓
D8	2033 Forecast	PM	ONE HOUR	16:45	18:15	15	✓
D9	2033 Forecast + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D10	2033 Forecast + Dev	PM	ONE HOUR	16:45	18:15	15	✓

2021 Baseline, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Verwood Road/B3081	Right-Left Stagger	Two-way	15.57	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Verwood Road E		Major
B	B3081/A31 Offslip		Minor
C	Verwood Road NW		Major
D	A31 EB Onslip		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Verwood Road E	7.00			0.0	✓	0.00
C - Verwood Road NW	7.00			50.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	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 - B3081/A31 Offslip	One lane plus flare		10.00	5.50	4.00	4.00	3.00		1.00	80	50
D - A31 EB Onslip	One lane	4.00								0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	574	-	-	-	0.213	0.213	0.213	-	0.213	-	-
1	B-AD	521	0.091	0.229	-	-	-	0.144	0.328	0.144	0.091	0.229
1	B-C	731	0.107	0.271	-	-	-	-	-	-	0.107	0.271
1	C-B	603	0.223	0.223	-	-	-	-	-	-	0.223	0.223
1	D-A	686	-	-	-	0.254	0.101	0.254	-	0.101	-	-
1	D-BC	526	0.146	0.146	0.331	0.231	0.092	0.231	-	0.092	-	-

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

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

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

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Verwood Road E		ONE HOUR	✓	528	100.000
B - B3081/A31 Offslip		ONE HOUR	✓	323	100.000
C - Verwood Road NW		ONE HOUR	✓	1241	100.000
D - A31 EB Onslip		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Verwood Road E	B - B3081/A31 Offslip	C - Verwood Road NW	D - A31 EB Onslip
From	A - Verwood Road E	0	16	382	130
	B - B3081/A31 Offslip	5	0	281	37
	C - Verwood Road NW	628	7	0	606
	D - A31 EB Onslip	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Verwood Road E	B - B3081/A31 Offslip	C - Verwood Road NW	D - A31 EB Onslip
From	A - Verwood Road E	10	10	10	10
	B - B3081/A31 Offslip	10	10	10	10
	C - Verwood Road NW	10	10	10	10
	D - A31 EB Onslip	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.65	21.33	1.8	C	258	387
B-AD	0.36	42.88	0.5	E	39	58
A-BCD	0.91	62.32	13.1	F	364	546
A-B					5	7
A-C					116	174
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.02	7.67	0.0	A	7	10
C-D					556	834
C-A					576	864

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	212	53	565	0.374	209	0.0	0.6	10.046	B
B-AD	32	8	257	0.123	31	0.0	0.1	15.899	C
A-BCD	211	53	559	0.377	207	0.0	1.0	10.208	B
A-B	7	2			7				
A-C	179	45			179				
D-ABC	0	0	320	0.000	0	0.0	0.0	0.000	A
C-ABD	5	1	496	0.011	5	0.0	0.0	7.330	A
C-D	456	114			456				
C-A	473	118			473				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	253	63	539	0.469	252	0.6	0.9	12.484	B
B-AD	38	9	208	0.181	37	0.1	0.2	21.056	C
A-BCD	313	78	577	0.543	309	1.0	2.2	13.602	B
A-B	6	2			6				
A-C	155	39			155				
D-ABC	0	0	273	0.000	0	0.0	0.0	0.000	A
C-ABD	7	2	490	0.013	7	0.0	0.0	7.449	A
C-D	545	136			545				
C-A	564	141			564				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	309	77	487	0.635	306	0.9	1.6	19.527	C
B-AD	46	12	137	0.338	45	0.2	0.5	38.819	E
A-BCD	538	135	606	0.888	506	2.2	10.1	38.224	E
A-B	2	0.43			2				
A-C	42	10			42				
D-ABC	0	0	203	0.000	0	0.0	0.0	0.000	A
C-ABD	8	2	483	0.017	8	0.0	0.0	7.586	A
C-D	667	167			667				
C-A	691	173			691				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	309	77	477	0.649	309	1.6	1.8	21.335	C
B-AD	46	12	130	0.357	46	0.5	0.5	42.883	E
A-BCD	567	142	627	0.905	555	10.0	13.1	62.315	F
A-B	0.57	0.14			0.57				
A-C	14	3			14				
D-ABC	0	0	196	0.000	0	0.0	0.0	0.000	A
C-ABD	8	2	478	0.017	8	0.0	0.0	7.668	A
C-D	667	167			667				
C-A	691	173			691				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	253	63	526	0.480	256	1.8	0.9	13.493	B
B-AD	38	9	198	0.191	39	0.5	0.2	22.773	C
A-BCD	338	85	607	0.558	380	13.1	2.6	19.728	C
A-B	5	1			5				
A-C	131	33			131				
D-ABC	0	0	264	0.000	0	0.0	0.0	0.000	A
C-ABD	7	2	482	0.014	7	0.0	0.0	7.577	A
C-D	545	136			545				
C-A	564	141			564				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	212	53	563	0.376	213	0.9	0.6	10.332	B
B-AD	32	8	255	0.124	32	0.2	0.1	16.195	C
A-BCD	216	54	564	0.382	222	2.6	1.1	10.804	B
A-B	7	2			7				
A-C	174	44			174				
D-ABC	0	0	318	0.000	0	0.0	0.0	0.000	A
C-ABD	5	1	495	0.011	5	0.0	0.0	7.355	A
C-D	456	114			456				
C-A	473	118			473				

2021 Baseline, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Verwood Road/B3081	Right-Left Stagger	Two-way	157.98	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Verwood Road E		Major
B	B3081/A31 Offslip		Minor
C	Verwood Road NW		Major
D	A31 EB Onslip		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Verwood Road E	7.00			0.0	✓	0.00
C - Verwood Road NW	7.00			50.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	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 - B3081/A31 Offslip	One lane plus flare		10.00	5.50	4.00	4.00	3.00		1.00	80	50
D - A31 EB Onslip	One lane	4.00								0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	574	-	-	-	0.213	0.213	0.213	-	0.213	-	-
1	B-AD	520	0.091	0.229	-	-	-	0.144	0.327	0.144	0.091	0.229
1	B-C	732	0.107	0.271	-	-	-	-	-	-	0.107	0.271
1	C-B	603	0.223	0.223	-	-	-	-	-	-	0.223	0.223
1	D-A	686	-	-	-	0.254	0.101	0.254	-	0.101	-	-
1	D-BC	526	0.146	0.146	0.331	0.231	0.092	0.231	-	0.092	-	-

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

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

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

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Verwood Road E		ONE HOUR	✓	694	100.000
B - B3081/A31 Offslip		ONE HOUR	✓	507	100.000
C - Verwood Road NW		ONE HOUR	✓	1101	100.000
D - A31 EB Onslip		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Verwood Road E	B - B3081/A31 Offslip	C - Verwood Road NW	D - A31 EB Onslip
From	A - Verwood Road E	0	3	549	142
	B - B3081/A31 Offslip	6	0	443	58
	C - Verwood Road NW	664	0	0	437
	D - A31 EB Onslip	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Verwood Road E	B - B3081/A31 Offslip	C - Verwood Road NW	D - A31 EB Onslip
From	A - Verwood Road E	10	10	10	10
	B - B3081/A31 Offslip	10	10	10	10
	C - Verwood Road NW	10	10	10	10
	D - A31 EB Onslip	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	1.38	565.97	64.9	F	407	610
B-AD	1.29	655.89	10.5	F	59	88
A-BCD	1.01	126.41	31.0	F	515	773
A-B					0.66	1
A-C					121	182
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					401	601
C-A					609	914

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	334	83	515	0.648	327	0.0	1.7	18.499	C
B-AD	48	12	197	0.244	47	0.0	0.3	23.758	C
A-BCD	285	71	666	0.427	279	0.0	1.4	9.305	A
A-B	1	0.32			1				
A-C	237	59			237				
D-ABC	0	0	307	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	911	0.000	0	0.0	0.0	0.000	A
C-D	329	82			329				
C-A	500	125			500				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	398	100	464	0.859	387	1.7	4.6	41.652	E
B-AD	58	14	107	0.539	55	0.3	1.0	66.107	F
A-BCD	438	110	707	0.619	431	1.4	3.2	13.293	B
A-B	1	0.25			1				
A-C	185	46			185				
D-ABC	0	0	255	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	873	0.000	0	0.0	0.0	0.000	A
C-D	393	98			393				
C-A	597	149			597				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	488	122	388	1.256	382	4.6	31.0	193.403	F
B-AD	70	18	57	1.233	51	1.0	5.9	324.095	F
A-BCD	764	191	760	1.005	694	3.2	20.9	58.721	F
A-B	0	0			0				
A-C	0	0			0				
D-ABC	0	0	176	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	821	0.000	0	0.0	0.0	0.000	A
C-D	481	120			481				
C-A	731	183			731				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	488	122	354	1.379	353	31.0	64.6	483.216	F
B-AD	70	18	54	1.294	53	5.9	10.4	611.898	F
A-BCD	764	191	755	1.012	724	20.9	31.0	126.410	F
A-B	0	0			0				
A-C	0	0			0				
D-ABC	0	0	157	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	795	0.000	0	0.0	0.0	0.000	A
C-D	481	120			481				
C-A	731	183			731				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	398	100	401	0.992	397	64.6	64.9	565.972	F
B-AD	58	14	60	0.951	57	10.4	10.5	655.887	F
A-BCD	539	135	779	0.691	641	31.0	5.5	50.084	F
A-B	0.46	0.12			0.46				
A-C	85	21			85				
D-ABC	0	0	228	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	830	0.000	0	0.0	0.0	0.000	A
C-D	393	98			393				
C-A	597	149			597				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	334	83	464	0.719	457	64.9	34.1	394.105	F
B-AD	48	12	71	0.682	65	10.5	6.5	491.912	F
A-BCD	301	75	672	0.448	316	5.5	1.7	10.730	B
A-B	1	0.30			1				
A-C	220	55			220				
D-ABC	0	0	299	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	903	0.000	0	0.0	0.0	0.000	A
C-D	329	82			329				
C-A	500	125			500				

2027 Forecast, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Verwood Road/B3081	Right-Left Stagger	Two-way	23.86	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Verwood Road E		Major
B	B3081/A31 Offslip		Minor
C	Verwood Road NW		Major
D	A31 EB Onslip		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Verwood Road E	7.00			0.0	✓	0.00
C - Verwood Road NW	7.00			50.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	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 - B3081/A31 Offslip	One lane plus flare		10.00	5.50	4.00	4.00	3.00		1.00	80	50
D - A31 EB Onslip	One lane	4.00								0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	574	-	-	-	0.213	0.213	0.213	-	0.213	-	-
1	B-AD	521	0.091	0.229	-	-	-	0.144	0.328	0.144	0.091	0.229
1	B-C	731	0.107	0.271	-	-	-	-	-	-	0.107	0.271
1	C-B	603	0.223	0.223	-	-	-	-	-	-	0.223	0.223
1	D-A	686	-	-	-	0.254	0.101	0.254	-	0.101	-	-
1	D-BC	526	0.146	0.146	0.331	0.231	0.092	0.231	-	0.092	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2027 Forecast	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Verwood Road E		ONE HOUR	✓	542	100.000
B - B3081/A31 Offslip		ONE HOUR	✓	331	100.000
C - Verwood Road NW		ONE HOUR	✓	1274	100.000
D - A31 EB Onslip		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Verwood Road E	B - B3081/A31 Offslip	C - Verwood Road NW	D - A31 EB Onslip
From	A - Verwood Road E	0	16	392	134
	B - B3081/A31 Offslip	5	0	288	38
	C - Verwood Road NW	644	8	0	622
	D - A31 EB Onslip	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Verwood Road E	B - B3081/A31 Offslip	C - Verwood Road NW	D - A31 EB Onslip
From	A - Verwood Road E	10	10	10	10
	B - B3081/A31 Offslip	10	10	10	10
	C - Verwood Road NW	10	10	10	10
	D - A31 EB Onslip	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.69	24.66	2.1	C	264	396
B-AD	0.41	52.05	0.6	F	39	59
A-BCD	0.96	98.23	19.4	F	391	586
A-B					4	6
A-C					102	154
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.02	7.68	0.0	A	8	12
C-D					571	856
C-A					591	886

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	217	54	562	0.386	214	0.0	0.6	10.278	B
B-AD	32	8	251	0.129	32	0.0	0.1	16.411	C
A-BCD	223	56	561	0.398	219	0.0	1.1	10.500	B
A-B	7	2			7				
A-C	178	44			178				
D-ABC	0	0	314	0.000	0	0.0	0.0	0.000	A
C-ABD	6	2	497	0.013	6	0.0	0.0	7.330	A
C-D	468	117			468				
C-A	485	121			485				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	259	65	534	0.485	258	0.6	0.9	12.979	B
B-AD	39	10	200	0.193	38	0.1	0.2	22.217	C
A-BCD	334	84	579	0.577	329	1.1	2.5	14.592	B
A-B	6	1			6				
A-C	147	37			147				
D-ABC	0	0	265	0.000	0	0.0	0.0	0.000	A
C-ABD	8	2	491	0.015	8	0.0	0.0	7.441	A
C-D	559	140			559				
C-A	579	145			579				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	317	79	477	0.664	313	0.9	1.9	21.452	C
B-AD	47	12	126	0.375	46	0.2	0.6	44.226	E
A-BCD	585	146	611	0.958	538	2.5	14.2	52.287	F
A-B	0.46	0.12			0.46				
A-C	11	3			11				
D-ABC	0	0	192	0.000	0	0.0	0.0	0.000	A
C-ABD	10	2	486	0.020	10	0.0	0.0	7.561	A
C-D	684	171			684				
C-A	709	177			709				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	317	79	461	0.688	316	1.9	2.1	24.660	C
B-AD	47	12	116	0.410	47	0.6	0.6	52.052	F
A-BCD	597	149	620	0.963	576	14.2	19.4	98.226	F
A-B	0	0			0				
A-C	0	0			0				
D-ABC	0	0	182	0.000	0	0.0	0.0	0.000	A
C-ABD	10	2	478	0.020	10	0.0	0.0	7.682	A
C-D	684	171			684				
C-A	709	177			709				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	259	65	515	0.503	263	2.1	1.0	14.539	B
B-AD	39	10	185	0.209	40	0.6	0.3	25.099	D
A-BCD	376	94	626	0.601	441	19.4	3.2	28.535	D
A-B	4	1			4				
A-C	107	27			107				
D-ABC	0	0	251	0.000	0	0.0	0.0	0.000	A
C-ABD	8	2	479	0.016	8	0.0	0.0	7.633	A
C-D	559	140			559				
C-A	579	145			579				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	217	54	559	0.388	218	1.0	0.6	10.624	B
B-AD	32	8	248	0.131	33	0.3	0.2	16.788	C
A-BCD	229	57	568	0.403	237	3.2	1.3	11.274	B
A-B	7	2			7				
A-C	172	43			172				
D-ABC	0	0	312	0.000	0	0.0	0.0	0.000	A
C-ABD	6	2	495	0.013	6	0.0	0.0	7.361	A
C-D	468	117			468				
C-A	485	121			485				

2027 Forecast, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Verwood Road/B3081	Right-Left Stagger	Two-way	201.82	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Verwood Road E		Major
B	B3081/A31 Offslip		Minor
C	Verwood Road NW		Major
D	A31 EB Onslip		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Verwood Road E	7.00			0.0	✓	0.00
C - Verwood Road NW	7.00			50.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	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 - B3081/A31 Offslip	One lane plus flare		10.00	5.50	4.00	4.00	3.00		1.00	80	50
D - A31 EB Onslip	One lane	4.00								0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	574	-	-	-	0.213	0.213	0.213	-	0.213	-	-
1	B-AD	520	0.091	0.229	-	-	-	0.144	0.327	0.144	0.091	0.229
1	B-C	732	0.107	0.271	-	-	-	-	-	-	0.107	0.271
1	C-B	603	0.223	0.223	-	-	-	-	-	-	0.223	0.223
1	D-A	686	-	-	-	0.254	0.101	0.254	-	0.101	-	-
1	D-BC	526	0.146	0.146	0.331	0.231	0.092	0.231	-	0.092	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2027 Forecast	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Verwood Road E		ONE HOUR	✓	710	100.000
B - B3081/A31 Offslip		ONE HOUR	✓	519	100.000
C - Verwood Road NW		ONE HOUR	✓	1126	100.000
D - A31 EB Onslip		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Verwood Road E	B - B3081/A31 Offslip	C - Verwood Road NW	D - A31 EB Onslip
From	A - Verwood Road E	0	3	562	145
	B - B3081/A31 Offslip	6	0	454	59
	C - Verwood Road NW	679	0	0	447
	D - A31 EB Onslip	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Verwood Road E	B - B3081/A31 Offslip	C - Verwood Road NW	D - A31 EB Onslip
From	A - Verwood Road E	10	10	10	10
	B - B3081/A31 Offslip	10	10	10	10
	C - Verwood Road NW	10	10	10	10
	D - A31 EB Onslip	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	1.48	719.08	83.8	F	417	625
B-AD	1.40	804.80	12.9	F	60	89
A-BCD	1.05	163.17	40.2	F	543	814
A-B					0.58	0.87
A-C					108	162
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					410	615
C-A					623	935

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	342	85	510	0.670	334	0.0	1.9	19.683	C
B-AD	49	12	188	0.261	48	0.0	0.3	25.448	D
A-BCD	299	75	670	0.446	293	0.0	1.5	9.528	A
A-B	1	0.31			1				
A-C	235	59			235				
D-ABC	0	0	302	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	906	0.000	0	0.0	0.0	0.000	A
C-D	337	84			337				
C-A	511	128			511				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	408	102	455	0.896	393	1.9	5.7	48.940	E
B-AD	58	15	92	0.633	54	0.3	1.4	87.567	F
A-BCD	464	116	714	0.650	455	1.5	3.7	14.283	B
A-B	1	0.23			1				
A-C	173	43			173				
D-ABC	0	0	247	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	867	0.000	0	0.0	0.0	0.000	A
C-D	402	100			402				
C-A	610	153			610				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	500	125	378	1.322	374	5.7	37.1	233.734	F
B-AD	72	18	56	1.284	51	1.4	6.6	369.728	F
A-BCD	782	195	748	1.045	695	3.7	25.3	72.467	F
A-B	0	0			0				
A-C	0	0			0				
D-ABC	0	0	165	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	814	0.000	0	0.0	0.0	0.000	A
C-D	492	123			492				
C-A	748	187			748				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	500	125	339	1.476	338	37.1	77.5	595.605	F
B-AD	72	18	51	1.399	50	6.6	12.0	721.701	F
A-BCD	782	195	742	1.053	722	25.3	40.2	163.167	F
A-B	0	0			0				
A-C	0	0			0				
D-ABC	0	0	142	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	782	0.000	0	0.0	0.0	0.000	A
C-D	492	123			492				
C-A	748	187			748				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	408	102	384	1.064	383	77.5	83.8	719.084	F
B-AD	58	15	57	1.028	55	12.0	12.9	804.800	F
A-BCD	608	152	809	0.751	735	40.2	8.4	92.636	F
A-B	0.16	0.04			0.16				
A-C	30	8			30				
D-ABC	0	0	212	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	812	0.000	0	0.0	0.0	0.000	A
C-D	402	100			402				
C-A	610	153			610				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	342	85	454	0.753	449	83.8	57.0	567.171	F
B-AD	49	12	67	0.727	62	12.9	9.5	654.884	F
A-BCD	323	81	683	0.472	349	8.4	1.9	11.849	B
A-B	1	0.28			1				
A-C	211	53			211				
D-ABC	0	0	290	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	894	0.000	0	0.0	0.0	0.000	A
C-D	337	84			337				
C-A	511	128			511				

2027 Forecast + Sensitivity, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Verwood Road/B3081	Right-Left Stagger	Two-way	38.46	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Verwood Road E		Major
B	B3081/A31 Offslip		Minor
C	Verwood Road NW		Major
D	A31 EB Onslip		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Verwood Road E	7.00			0.0	✓	0.00
C - Verwood Road NW	7.00			50.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	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 - B3081/A31 Offslip	One lane plus flare		10.00	5.50	4.00	4.00	3.00		1.00	80	50
D - A31 EB Onslip	One lane	4.00								0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	574	-	-	-	0.213	0.213	0.213	-	0.213	-	-
1	B-AD	520	0.091	0.229	-	-	-	0.144	0.327	0.144	0.091	0.229
1	B-C	732	0.107	0.271	-	-	-	-	-	-	0.107	0.271
1	C-B	603	0.223	0.223	-	-	-	-	-	-	0.223	0.223
1	D-A	686	-	-	-	0.254	0.101	0.254	-	0.101	-	-
1	D-BC	526	0.146	0.146	0.331	0.231	0.092	0.231	-	0.092	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2027 Forecast + Sensitivity	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Verwood Road E		ONE HOUR	✓	553	100.000
B - B3081/A31 Offslip		ONE HOUR	✓	347	100.000
C - Verwood Road NW		ONE HOUR	✓	1351	100.000
D - A31 EB Onslip		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Verwood Road E	B - B3081/A31 Offslip	C - Verwood Road NW	D - A31 EB Onslip
From	A - Verwood Road E	0	16	403	134
	B - B3081/A31 Offslip	5	0	304	38
	C - Verwood Road NW	691	8	0	652
	D - A31 EB Onslip	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Verwood Road E	B - B3081/A31 Offslip	C - Verwood Road NW	D - A31 EB Onslip
From	A - Verwood Road E	10	10	10	10
	B - B3081/A31 Offslip	10	10	10	10
	C - Verwood Road NW	10	10	10	10
	D - A31 EB Onslip	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.77	34.38	3.0	D	279	418
B-AD	0.53	80.66	1.0	F	39	59
A-BCD	1.04	161.40	30.7	F	413	619
A-B					4	5
A-C					91	137
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.02	7.76	0.0	A	8	12
C-D					598	897
C-A					634	951

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	229	57	559	0.409	226	0.0	0.7	10.726	B
B-AD	32	8	238	0.136	32	0.0	0.2	17.416	C
A-BCD	232	58	557	0.417	227	0.0	1.3	10.888	B
A-B	7	2			7				
A-C	177	44			177				
D-ABC	0	0	301	0.000	0	0.0	0.0	0.000	A
C-ABD	6	2	497	0.013	6	0.0	0.0	7.340	A
C-D	491	123			491				
C-A	520	130			520				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	273	68	528	0.517	272	0.7	1.0	13.948	B
B-AD	39	10	184	0.210	38	0.2	0.3	24.596	C
A-BCD	355	89	577	0.615	348	1.3	3.0	16.051	C
A-B	5	1			5				
A-C	137	34			137				
D-ABC	0	0	249	0.000	0	0.0	0.0	0.000	A
C-ABD	8	2	491	0.016	8	0.0	0.0	7.451	A
C-D	586	146			586				
C-A	621	155			621				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	335	84	462	0.724	329	1.0	2.4	26.042	D
B-AD	47	12	106	0.447	45	0.3	0.7	57.935	F
A-BCD	609	152	588	1.036	538	3.0	20.6	76.427	F
A-B	0	0			0				
A-C	0	0			0				
D-ABC	0	0	170	0.000	0	0.0	0.0	0.000	A
C-ABD	10	2	485	0.020	10	0.0	0.0	7.568	A
C-D	717	179			717				
C-A	760	190			760				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	335	84	433	0.772	332	2.4	3.0	34.385	D
B-AD	47	12	90	0.528	46	0.7	1.0	80.658	F
A-BCD	609	152	590	1.032	568	20.6	30.7	161.401	F
A-B	0	0			0				
A-C	0	0			0				
D-ABC	0	0	155	0.000	0	0.0	0.0	0.000	A
C-ABD	10	2	474	0.020	10	0.0	0.0	7.751	A
C-D	717	179			717				
C-A	760	190			760				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	273	68	496	0.551	280	3.0	1.3	17.204	C
B-AD	39	10	159	0.242	41	1.0	0.3	31.033	D
A-BCD	431	108	652	0.660	536	30.7	4.5	62.238	F
A-B	3	0.63			3				
A-C	64	16			64				
D-ABC	0	0	227	0.000	0	0.0	0.0	0.000	A
C-ABD	8	2	472	0.016	8	0.0	0.0	7.759	A
C-D	586	146			586				
C-A	621	155			621				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	229	57	554	0.413	231	1.3	0.7	11.213	B
B-AD	32	8	234	0.138	33	0.3	0.2	17.990	C
A-BCD	240	60	568	0.423	253	4.5	1.4	12.047	B
A-B	7	2			7				
A-C	169	42			169				
D-ABC	0	0	298	0.000	0	0.0	0.0	0.000	A
C-ABD	6	2	494	0.013	6	0.0	0.0	7.383	A
C-D	491	123			491				
C-A	520	130			520				

2027 Forecast + Sensitivity , PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Verwood Road/B3081	Right-Left Stagger	Two-way	345.73	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Verwood Road E		Major
B	B3081/A31 Offslip		Minor
C	Verwood Road NW		Major
D	A31 EB Onslip		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Verwood Road E	7.00			0.0	✓	0.00
C - Verwood Road NW	7.00			50.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	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 - B3081/A31 Offslip	One lane plus flare		10.00	5.50	4.00	4.00	3.00		1.00	80	50
D - A31 EB Onslip	One lane	4.00								0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	574	-	-	-	0.213	0.213	0.213	-	0.213	-	-
1	B-AD	519	0.090	0.228	-	-	-	0.144	0.326	0.144	0.090	0.228
1	B-C	732	0.107	0.271	-	-	-	-	-	-	0.107	0.271
1	C-B	603	0.223	0.223	-	-	-	-	-	-	0.223	0.223
1	D-A	686	-	-	-	0.254	0.101	0.254	-	0.101	-	-
1	D-BC	526	0.146	0.146	0.331	0.231	0.092	0.231	-	0.092	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2027 Forecast + Sensitivity	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Verwood Road E		ONE HOUR	✓	739	100.000
B - B3081/A31 Offslip		ONE HOUR	✓	561	100.000
C - Verwood Road NW		ONE HOUR	✓	1164	100.000
D - A31 EB Onslip		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Verwood Road E	B - B3081/A31 Offslip	C - Verwood Road NW	D - A31 EB Onslip
From	A - Verwood Road E	0	3	591	145
	B - B3081/A31 Offslip	6	0	496	59
	C - Verwood Road NW	702	0	0	462
	D - A31 EB Onslip	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Verwood Road E	B - B3081/A31 Offslip	C - Verwood Road NW	D - A31 EB Onslip
From	A - Verwood Road E	10	10	10	10
	B - B3081/A31 Offslip	10	10	10	10
	C - Verwood Road NW	10	10	10	10
	D - A31 EB Onslip	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	1.76	1264.50	141.3	F	455	683
B-AD	1.67	1354.35	19.2	F	60	89
A-BCD	1.11	215.88	54.5	F	581	871
A-B					0.49	0.74
A-C					97	145
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					424	636
C-A					644	966

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	373	93	502	0.744	363	0.0	2.6	24.389	C
B-AD	49	12	159	0.308	47	0.0	0.4	31.739	D
A-BCD	316	79	683	0.462	309	0.0	1.7	9.623	A
A-B	1	0.30			1				
A-C	239	60			239				
D-ABC	0	0	293	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	896	0.000	0	0.0	0.0	0.000	A
C-D	348	87			348				
C-A	529	132			529				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	446	111	442	1.008	413	2.6	11.0	80.423	F
B-AD	58	15	58	1.003	46	0.4	3.4	221.139	F
A-BCD	499	125	731	0.683	489	1.7	4.3	15.325	C
A-B	0.83	0.21			0.83				
A-C	164	41			164				
D-ABC	0	0	236	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	856	0.000	0	0.0	0.0	0.000	A
C-D	415	104			415				
C-A	631	158			631				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	546	137	357	1.529	356	11.0	58.5	391.304	F
B-AD	72	18	52	1.385	49	3.4	9.0	582.174	F
A-BCD	814	203	743	1.095	702	4.3	32.2	92.203	F
A-B	0	0			0				
A-C	0	0			0				
D-ABC	0	0	147	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	798	0.000	0	0.0	0.0	0.000	A
C-D	509	127			509				
C-A	773	193			773				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	546	137	310	1.762	310	58.5	117.6	962.507	F
B-AD	72	18	43	1.674	42	9.0	16.3	1095.699	F
A-BCD	814	203	736	1.105	725	32.2	54.5	215.883	F
A-B	0	0			0				
A-C	0	0			0				
D-ABC	0	0	117	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	758	0.000	0	0.0	0.0	0.000	A
C-D	509	127			509				
C-A	773	193			773				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	446	111	351	1.270	351	117.6	141.3	1264.499	F
B-AD	58	15	47	1.232	47	16.3	19.2	1354.352	F
A-BCD	664	166	826	0.804	792	54.5	22.6	166.143	F
A-B	0	0			0				
A-C	0	0			0				
D-ABC	0	0	186	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	779	0.000	0	0.0	0.0	0.000	A
C-D	415	104			415				
C-A	631	158			631				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	373	93	425	0.878	422	141.3	129.1	1153.397	F
B-AD	49	12	57	0.859	54	19.2	17.9	1236.509	F
A-BCD	379	95	730	0.518	460	22.6	2.3	18.627	C
A-B	0.90	0.22			0.90				
A-C	177	44			177				
D-ABC	0	0	268	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	864	0.000	0	0.0	0.0	0.000	A
C-D	348	87			348				
C-A	529	132			529				

2033 Forecast, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Verwood Road/B3081	Right-Left Stagger	Two-way	34.53	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Verwood Road E		Major
B	B3081/A31 Offslip		Minor
C	Verwood Road NW		Major
D	A31 EB Onslip		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Verwood Road E	7.00			0.0	✓	0.00
C - Verwood Road NW	7.00			50.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	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 - B3081/A31 Offslip	One lane plus flare		10.00	5.50	4.00	4.00	3.00		1.00	80	50
D - A31 EB Onslip	One lane	4.00								0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	574	-	-	-	0.213	0.213	0.213	-	0.213	-	-
1	B-AD	521	0.091	0.230	-	-	-	0.144	0.328	0.144	0.091	0.230
1	B-C	731	0.107	0.271	-	-	-	-	-	-	0.107	0.271
1	C-B	603	0.223	0.223	-	-	-	-	-	-	0.223	0.223
1	D-A	686	-	-	-	0.254	0.101	0.254	-	0.101	-	-
1	D-BC	526	0.146	0.146	0.331	0.231	0.092	0.231	-	0.092	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2033 Forecast	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Verwood Road E		ONE HOUR	✓	556	100.000
B - B3081/A31 Offslip		ONE HOUR	✓	341	100.000
C - Verwood Road NW		ONE HOUR	✓	1307	100.000
D - A31 EB Onslip		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Verwood Road E	B - B3081/A31 Offslip	C - Verwood Road NW	D - A31 EB Onslip
From	A - Verwood Road E	0	17	402	137
	B - B3081/A31 Offslip	6	0	296	39
	C - Verwood Road NW	661	8	0	638
	D - A31 EB Onslip	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Verwood Road E	B - B3081/A31 Offslip	C - Verwood Road NW	D - A31 EB Onslip
From	A - Verwood Road E	10	10	10	10
	B - B3081/A31 Offslip	10	10	10	10
	C - Verwood Road NW	10	10	10	10
	D - A31 EB Onslip	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.74	30.78	2.6	D	272	407
B-AD	0.50	68.88	0.9	F	41	62
A-BCD	1.02	141.88	27.3	F	413	619
A-B					4	6
A-C					93	140
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.02	7.76	0.0	A	8	12
C-D					585	878
C-A					606	909

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	223	56	558	0.399	220	0.0	0.7	10.571	B
B-AD	34	8	244	0.139	33	0.0	0.2	17.020	C
A-BCD	235	59	563	0.417	230	0.0	1.2	10.785	B
A-B	7	2			7				
A-C	177	44			177				
D-ABC	0	0	308	0.000	0	0.0	0.0	0.000	A
C-ABD	6	2	496	0.013	6	0.0	0.0	7.350	A
C-D	480	120			480				
C-A	498	124			498				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	266	67	528	0.504	265	0.7	1.0	13.618	B
B-AD	40	10	192	0.211	40	0.2	0.3	23.682	C
A-BCD	355	89	583	0.610	349	1.2	2.9	15.676	C
A-B	6	1			6				
A-C	139	35			139				
D-ABC	0	0	256	0.000	0	0.0	0.0	0.000	A
C-ABD	8	2	490	0.016	8	0.0	0.0	7.464	A
C-D	573	143			573				
C-A	594	149			594				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	326	81	464	0.703	321	1.0	2.2	24.485	C
B-AD	50	12	115	0.432	48	0.3	0.7	52.582	F
A-BCD	612	153	603	1.016	548	2.9	18.9	69.111	F
A-B	0	0			0				
A-C	0	0			0				
D-ABC	0	0	180	0.000	0	0.0	0.0	0.000	A
C-ABD	10	2	484	0.020	10	0.0	0.0	7.588	A
C-D	702	176			702				
C-A	727	182			727				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	326	81	438	0.744	324	2.2	2.6	30.784	D
B-AD	50	12	100	0.495	49	0.7	0.9	68.877	F
A-BCD	612	153	605	1.013	578	18.9	27.3	141.876	F
A-B	0	0			0				
A-C	0	0			0				
D-ABC	0	0	166	0.000	0	0.0	0.0	0.000	A
C-ABD	10	2	474	0.020	10	0.0	0.0	7.757	A
C-D	702	176			702				
C-A	727	182			727				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	266	67	499	0.533	272	2.6	1.2	16.214	C
B-AD	40	10	170	0.238	43	0.9	0.3	28.718	D
A-BCD	421	105	649	0.648	514	27.3	4.1	49.452	E
A-B	3	0.80			3				
A-C	76	19			76				
D-ABC	0	0	237	0.000	0	0.0	0.0	0.000	A
C-ABD	8	2	473	0.016	8	0.0	0.0	7.738	A
C-D	573	143			573				
C-A	594	149			594				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	223	56	554	0.402	225	1.2	0.7	11.005	B
B-AD	34	8	240	0.141	35	0.3	0.2	17.528	C
A-BCD	242	61	572	0.423	253	4.1	1.4	11.832	B
A-B	7	2			7				
A-C	169	42			169				
D-ABC	0	0	305	0.000	0	0.0	0.0	0.000	A
C-ABD	6	2	493	0.013	6	0.0	0.0	7.388	A
C-D	480	120			480				
C-A	498	124			498				

2033 Forecast, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Verwood Road/B3081	Right-Left Stagger	Two-way	352.58	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Verwood Road E		Major
B	B3081/A31 Offslip		Minor
C	Verwood Road NW		Major
D	A31 EB Onslip		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Verwood Road E	7.00			0.0	✓	0.00
C - Verwood Road NW	7.00			50.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	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 - B3081/A31 Offslip	One lane plus flare		10.00	5.50	4.00	4.00	3.00		1.00	80	50
D - A31 EB Onslip	One lane	4.00								0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	574	-	-	-	0.213	0.213	0.213	-	0.213	-	-
1	B-AD	521	0.091	0.229	-	-	-	0.144	0.327	0.144	0.091	0.229
1	B-C	732	0.107	0.271	-	-	-	-	-	-	0.107	0.271
1	C-B	603	0.223	0.223	-	-	-	-	-	-	0.223	0.223
1	D-A	686	-	-	-	0.254	0.101	0.254	-	0.101	-	-
1	D-BC	526	0.146	0.146	0.331	0.231	0.092	0.231	-	0.092	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2033 Forecast	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Verwood Road E		ONE HOUR	✓	728	100.000
B - B3081/A31 Offslip		ONE HOUR	✓	533	100.000
C - Verwood Road NW		ONE HOUR	✓	1244	100.000
D - A31 EB Onslip		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Verwood Road E	B - B3081/A31 Offslip	C - Verwood Road NW	D - A31 EB Onslip
From	A - Verwood Road E	0	3	576	149
	B - B3081/A31 Offslip	7	0	465	61
	C - Verwood Road NW	696	0	0	548
	D - A31 EB Onslip	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Verwood Road E	B - B3081/A31 Offslip	C - Verwood Road NW	D - A31 EB Onslip
From	A - Verwood Road E	10	10	10	10
	B - B3081/A31 Offslip	10	10	10	10
	C - Verwood Road NW	10	10	10	10
	D - A31 EB Onslip	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	1.78	1278.91	132.1	F	427	640
B-AD	1.70	1364.12	20.0	F	62	94
A-BCD	1.18	302.25	73.1	F	594	891
A-B					0.38	0.57
A-C					73	110
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					503	754
C-A					639	958

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	350	88	501	0.699	342	0.0	2.1	21.545	C
B-AD	51	13	170	0.301	50	0.0	0.4	29.550	D
A-BCD	326	82	665	0.491	319	0.0	1.9	10.407	B
A-B	1	0.29			1				
A-C	221	55			221				
D-ABC	0	0	288	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	901	0.000	0	0.0	0.0	0.000	A
C-D	413	103			413				
C-A	524	131			524				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	418	105	434	0.962	394	2.1	8.2	65.730	F
B-AD	61	15	69	0.889	52	0.4	2.8	166.017	F
A-BCD	521	130	709	0.735	507	1.9	5.3	18.521	C
A-B	0.69	0.17			0.69				
A-C	133	33			133				
D-ABC	0	0	229	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	861	0.000	0	0.0	0.0	0.000	A
C-D	493	123			493				
C-A	626	156			626				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	512	128	342	1.496	341	8.2	51.1	356.010	F
B-AD	75	19	54	1.387	51	2.8	8.7	525.022	F
A-BCD	802	200	687	1.167	659	5.3	40.9	127.310	F
A-B	0	0			0				
A-C	0	0			0				
D-ABC	0	0	137	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	804	0.000	0	0.0	0.0	0.000	A
C-D	603	151			603				
C-A	766	192			766				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	512	128	287	1.783	287	51.1	107.3	946.126	F
B-AD	75	19	44	1.704	43	8.7	16.5	1072.986	F
A-BCD	802	200	678	1.182	673	40.9	73.1	302.248	F
A-B	0	0			0				
A-C	0	0			0				
D-ABC	0	0	98	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	753	0.000	0	0.0	0.0	0.000	A
C-D	603	151			603				
C-A	766	192			766				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	418	105	319	1.310	319	107.3	132.1	1278.914	F
B-AD	61	15	48	1.275	48	16.5	20.0	1364.119	F
A-BCD	654	164	779	0.840	756	73.1	47.8	277.602	F
A-B	0	0			0				
A-C	0	0			0				
D-ABC	0	0	161	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	760	0.000	0	0.0	0.0	0.000	A
C-D	493	123			493				
C-A	626	156			626				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	350	88	392	0.893	389	132.1	122.3	1176.682	F
B-AD	51	13	59	0.875	56	20.0	18.8	1255.451	F
A-BCD	462	115	777	0.594	640	47.8	3.3	72.374	F
A-B	0.45	0.11			0.45				
A-C	86	22			86				
D-ABC	0	0	244	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	833	0.000	0	0.0	0.0	0.000	A
C-D	413	103			413				
C-A	524	131			524				

2033 Forecast + Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Verwood Road/B3081	Right-Left Stagger	Two-way	75.69	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Verwood Road E		Major
B	B3081/A31 Offslip		Minor
C	Verwood Road NW		Major
D	A31 EB Onslip		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Verwood Road E	7.00			0.0	✓	0.00
C - Verwood Road NW	7.00			50.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	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 - B3081/A31 Offslip	One lane plus flare		10.00	5.50	4.00	4.00	3.00		1.00	80	50
D - A31 EB Onslip	One lane	4.00								0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	574	-	-	-	0.213	0.213	0.213	-	0.213	-	-
1	B-AD	520	0.091	0.229	-	-	-	0.144	0.327	0.144	0.091	0.229
1	B-C	732	0.107	0.271	-	-	-	-	-	-	0.107	0.271
1	C-B	603	0.223	0.223	-	-	-	-	-	-	0.223	0.223
1	D-A	686	-	-	-	0.254	0.101	0.254	-	0.101	-	-
1	D-BC	526	0.146	0.146	0.331	0.231	0.092	0.231	-	0.092	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2033 Forecast + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Verwood Road E		ONE HOUR	✓	573	100.000
B - B3081/A31 Offslip		ONE HOUR	✓	366	100.000
C - Verwood Road NW		ONE HOUR	✓	1442	100.000
D - A31 EB Onslip		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Verwood Road E	B - B3081/A31 Offslip	C - Verwood Road NW	D - A31 EB Onslip
From	A - Verwood Road E	0	17	419	137
	B - B3081/A31 Offslip	6	0	321	39
	C - Verwood Road NW	742	8	0	692
	D - A31 EB Onslip	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Verwood Road E	B - B3081/A31 Offslip	C - Verwood Road NW	D - A31 EB Onslip
From	A - Verwood Road E	10	10	10	10
	B - B3081/A31 Offslip	10	10	10	10
	C - Verwood Road NW	10	10	10	10
	D - A31 EB Onslip	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.97	84.73	8.5	F	295	442
B-AD	0.92	221.11	2.9	F	41	62
A-BCD	1.16	289.96	55.8	F	453	679
A-B					3	4
A-C					70	106
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.02	8.06	0.0	A	8	12
C-D					635	952
C-A					681	1021

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	242	60	553	0.437	239	0.0	0.8	11.347	B
B-AD	34	8	223	0.152	33	0.0	0.2	18.926	C
A-BCD	252	63	556	0.453	246	0.0	1.5	11.591	B
A-B	7	2			7				
A-C	173	43			173				
D-ABC	0	0	286	0.000	0	0.0	0.0	0.000	A
C-ABD	6	2	495	0.013	6	0.0	0.0	7.363	A
C-D	521	130			521				
C-A	558	140			558				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	289	72	518	0.557	287	0.8	1.2	15.459	C
B-AD	40	10	165	0.245	40	0.2	0.3	28.635	D
A-BCD	395	99	577	0.685	385	1.5	4.0	19.314	C
A-B	5	1			5				
A-C	115	29			115				
D-ABC	0	0	229	0.000	0	0.0	0.0	0.000	A
C-ABD	8	2	489	0.016	8	0.0	0.0	7.475	A
C-D	622	155			622				
C-A	667	167			667				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	353	88	430	0.822	343	1.2	3.7	37.908	E
B-AD	50	12	80	0.616	46	0.3	1.3	95.790	F
A-BCD	631	158	544	1.160	517	4.0	32.6	128.494	F
A-B	0	0			0				
A-C	0	0			0				
D-ABC	0	0	142	0.000	0	0.0	0.0	0.000	A
C-ABD	10	2	484	0.020	10	0.0	0.0	7.595	A
C-D	761	190			761				
C-A	816	204			816				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	353	88	364	0.971	334	3.7	8.5	84.732	F
B-AD	50	12	54	0.919	43	1.3	2.9	221.112	F
A-BCD	631	158	545	1.159	538	32.6	55.8	289.961	F
A-B	0	0			0				
A-C	0	0			0				
D-ABC	0	0	114	0.000	0	0.0	0.0	0.000	A
C-ABD	10	2	466	0.021	10	0.0	0.0	7.893	A
C-D	761	190			761				
C-A	816	204			816				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	289	72	438	0.659	314	8.5	2.1	33.788	D
B-AD	40	10	111	0.364	50	2.9	0.6	65.141	F
A-BCD	515	129	677	0.760	652	55.8	21.7	206.539	F
A-B	0	0			0				
A-C	0	0			0				
D-ABC	0	0	184	0.000	0	0.0	0.0	0.000	A
C-ABD	8	2	454	0.017	8	0.0	0.0	8.062	A
C-D	622	155			622				
C-A	667	167			667				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	242	60	531	0.455	247	2.1	0.9	12.850	B
B-AD	34	8	205	0.165	36	0.6	0.2	21.418	C
A-BCD	292	73	610	0.478	371	21.7	1.8	21.640	C
A-B	5	1			5				
A-C	134	34			134				
D-ABC	0	0	271	0.000	0	0.0	0.0	0.000	A
C-ABD	6	2	481	0.013	6	0.0	0.0	7.583	A
C-D	521	130			521				
C-A	558	140			558				

2033 Forecast + Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Verwood Road/B3081	Right-Left Stagger	Two-way	891.97	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Verwood Road E		Major
B	B3081/A31 Offslip		Minor
C	Verwood Road NW		Major
D	A31 EB Onslip		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Verwood Road E	7.00			0.0	✓	0.00
C - Verwood Road NW	7.00			50.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	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 - B3081/A31 Offslip	One lane plus flare		10.00	5.50	4.00	4.00	3.00		1.00	80	50
D - A31 EB Onslip	One lane	4.00								0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	574	-	-	-	0.213	0.213	0.213	-	0.213	-	-
1	B-AD	517	0.090	0.228	-	-	-	0.143	0.325	0.143	0.090	0.228
1	B-C	733	0.107	0.272	-	-	-	-	-	-	0.107	0.272
1	C-B	603	0.223	0.223	-	-	-	-	-	-	0.223	0.223
1	D-A	686	-	-	-	0.254	0.101	0.254	-	0.101	-	-
1	D-BC	526	0.146	0.146	0.331	0.231	0.092	0.231	-	0.092	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2033 Forecast + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Verwood Road E		ONE HOUR	✓	803	100.000
B - B3081/A31 Offslip		ONE HOUR	✓	645	100.000
C - Verwood Road NW		ONE HOUR	✓	1277	100.000
D - A31 EB Onslip		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Verwood Road E	B - B3081/A31 Offslip	C - Verwood Road NW	D - A31 EB Onslip
From	A - Verwood Road E	0	3	651	149
	B - B3081/A31 Offslip	7	0	577	61
	C - Verwood Road NW	770	0	0	507
	D - A31 EB Onslip	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Verwood Road E	B - B3081/A31 Offslip	C - Verwood Road NW	D - A31 EB Onslip
From	A - Verwood Road E	10	10	10	10
	B - B3081/A31 Offslip	10	10	10	10
	C - Verwood Road NW	10	10	10	10
	D - A31 EB Onslip	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	2.51	3246.06	299.9	F	529	794
B-AD	2.44	3349.75	35.9	F	62	94
A-BCD	1.28	445.43	106.7	F	680	1019
A-B					0.26	0.39
A-C					57	86
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					465	698
C-A					707	1060

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	434	109	478	0.908	410	0.0	6.0	43.753	E
B-AD	51	13	91	0.564	47	0.0	1.1	76.572	F
A-BCD	370	93	707	0.524	361	0.0	2.3	10.436	B
A-B	1	0.27			1				
A-C	233	58			233				
D-ABC	0	0	268	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	876	0.000	0	0.0	0.0	0.000	A
C-D	382	95			382				
C-A	580	145			580				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	519	130	420	1.235	414	6.0	32.1	200.721	F
B-AD	61	15	51	1.208	44	1.1	5.2	361.761	F
A-BCD	613	153	762	0.804	591	2.3	7.7	22.324	C
A-B	0.50	0.13			0.50				
A-C	109	27			109				
D-ABC	0	0	204	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	831	0.000	0	0.0	0.0	0.000	A
C-D	456	114			456				
C-A	692	173			692				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	635	159	307	2.068	307	32.1	114.1	970.004	F
B-AD	75	19	39	1.943	38	5.2	14.5	1183.906	F
A-BCD	884	221	704	1.255	686	7.7	57.2	173.496	F
A-B	0	0			0				
A-C	0	0			0				
D-ABC	0	0	95	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	764	0.000	0	0.0	0.0	0.000	A
C-D	558	140			558				
C-A	848	212			848				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	635	159	253	2.513	253	114.1	209.8	2323.273	F
B-AD	75	19	31	2.435	31	14.5	25.5	2479.659	F
A-BCD	884	221	689	1.284	686	57.2	106.7	419.067	F
A-B	0	0			0				
A-C	0	0			0				
D-ABC	0	0	31	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	691	0.000	0	0.0	0.0	0.000	A
C-D	558	140			558				
C-A	848	212			848				

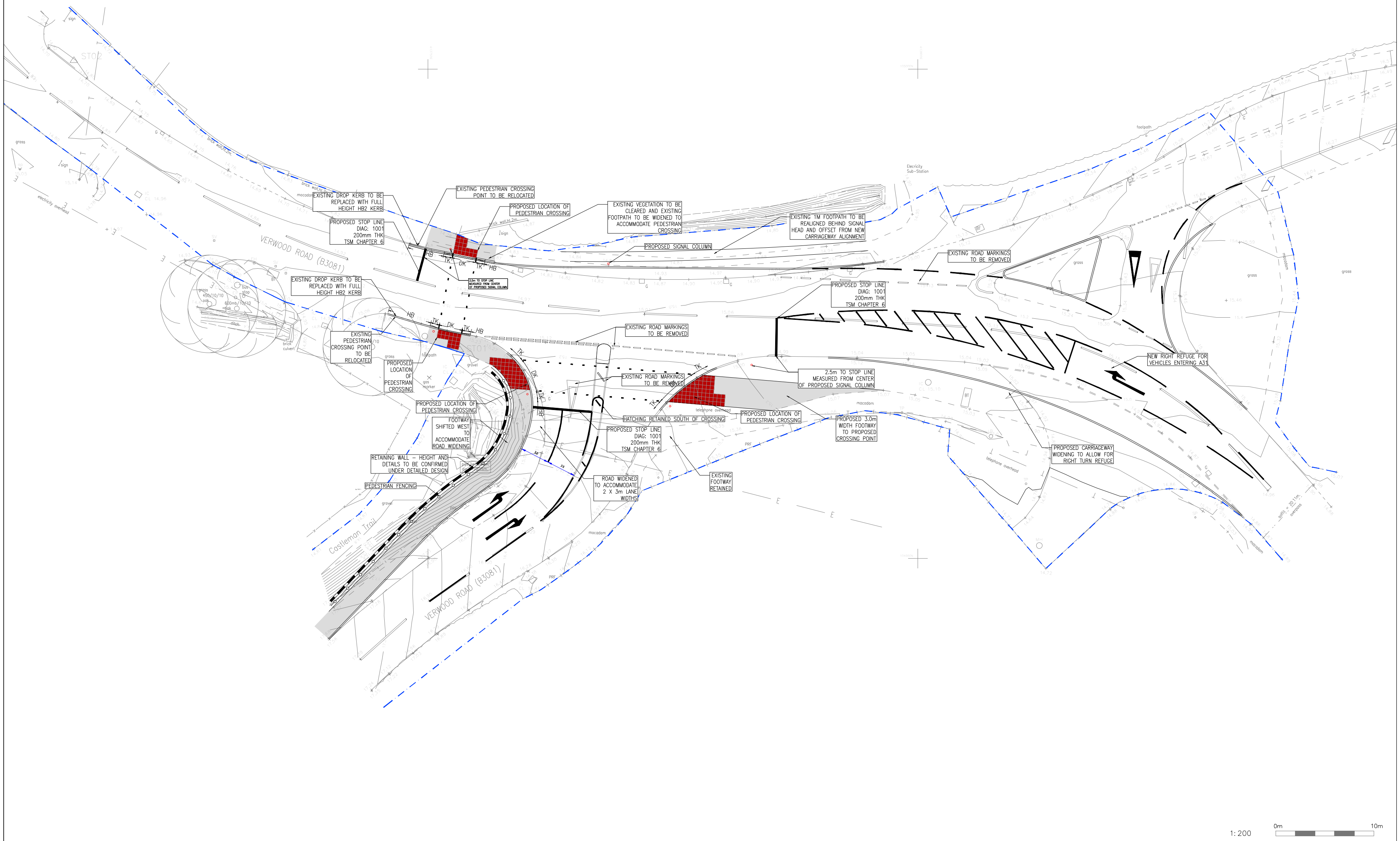
17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	519	130	275	1.886	275	209.8	270.7	2856.348	F
B-AD	61	15	33	1.848	33	25.5	32.6	2977.572	F
A-BCD	722	180	793	0.911	775	106.7	93.4	445.428	F
A-B	0	0			0				
A-C	0	0			0				
D-ABC	0	0	91	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	678	0.000	0	0.0	0.0	0.000	A
C-D	456	114			456				
C-A	692	173			692				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	434	109	318	1.368	318	270.7	299.9	3246.063	F
B-AD	51	13	38	1.347	38	32.6	35.9	3349.746	F
A-BCD	605	151	859	0.703	838	93.4	35.0	268.781	F
A-B	0	0			0				
A-C	0	0			0				
D-ABC	0	0	178	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	740	0.000	0	0.0	0.0	0.000	A
C-D	382	95			382				
C-A	580	145			580				

Appendix V



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LEGEND

- INDICATIVE HIGHWAY BOUNDARY BASED ON DORSET COUNCIL VERWOOD ROAD MAP REF: 85/7 DATED: 03/11/2020
- PROPOSED FOOTWAY
- PROPOSED 400x400 TACTILE (RED)
- PROPOSED SIGNALS
- HB 125 x 255 HB PRECAST CONCRETE KERB
- DK 125 x 150 BN PRECAST CONCRETE KERB (FLUSH)
- 125 x 150 BN PRECAST CONCRETE DROPPER KERB

Rev	Description	Date	By	Chkd
-	-	--.--.--	-	-

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Client: Intelligent Land

Project Name: SOUTH ALDERHOLT STRATEGIC SITES

Title: PRELIMINARY MITIGATION DESIGN VERWOOD ROAD

Project Phase: PRELIMINARY

Checked By	Checked Date	Drawn By	Drawn Date
JR	19.08.22	TP	19.08.22

Client Drawing No.	Scale
-	1:200 (AT A1 SIZE)

PBA Drawing No.	Revision
132.0001.017	-

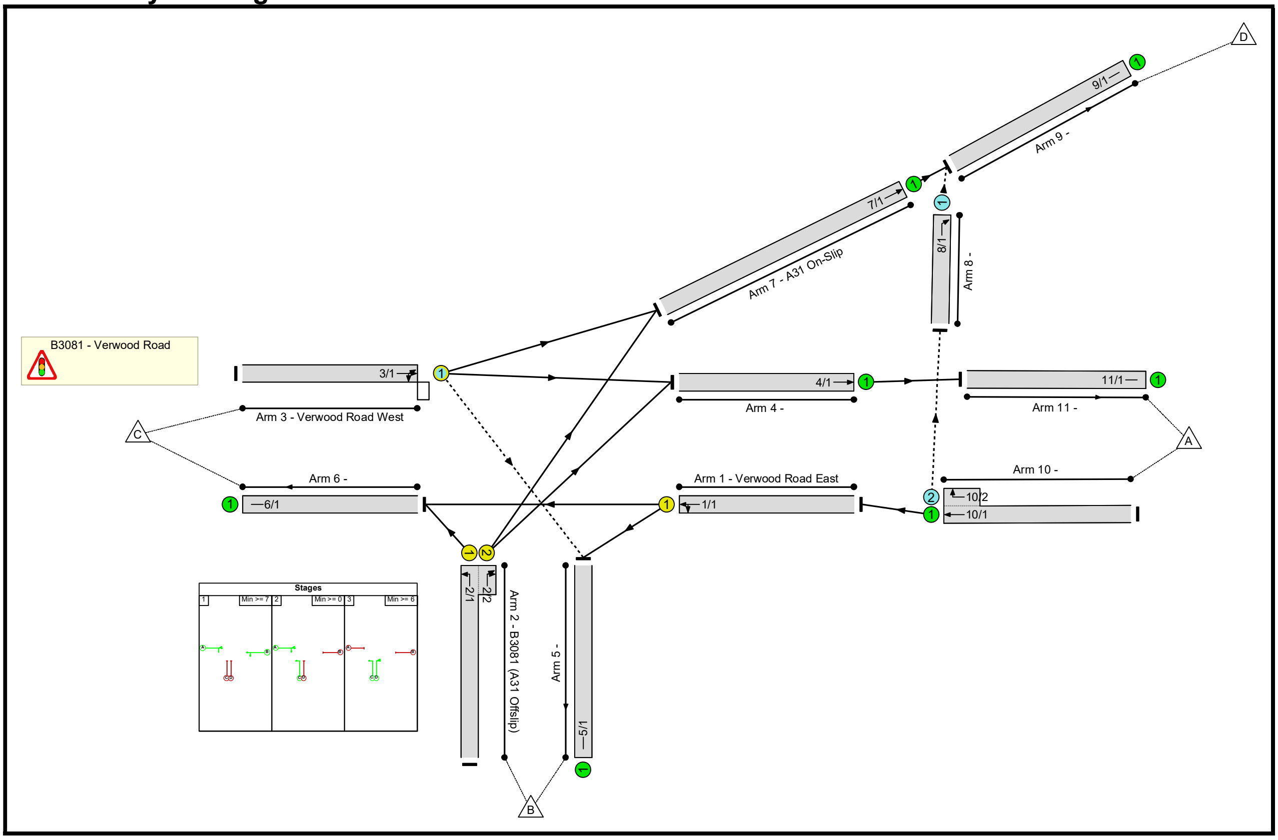
Appendix W

Full Input Data And Results

User and Project Details

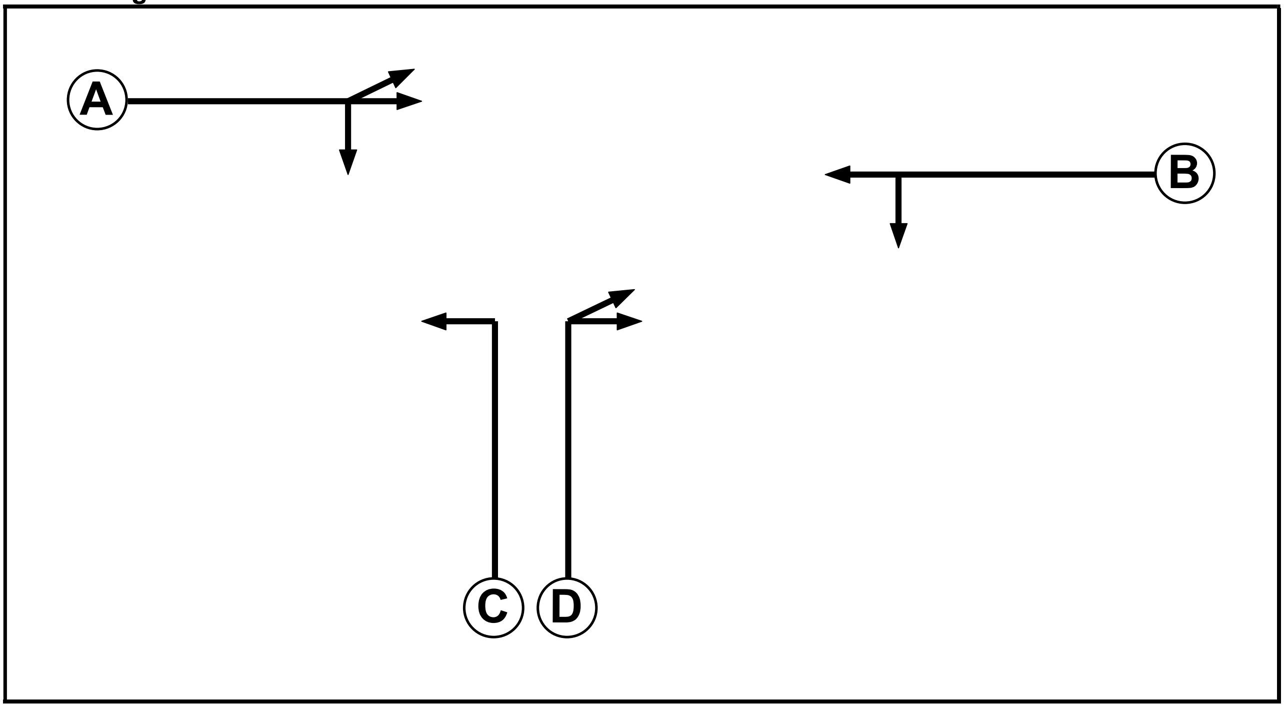
Project:	
Title:	
Location:	
Additional detail:	
File name:	B3081-Verwood Road - A31 Offslip (Mitigation) (4 arm).lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7

Phase Intergreens Matrix

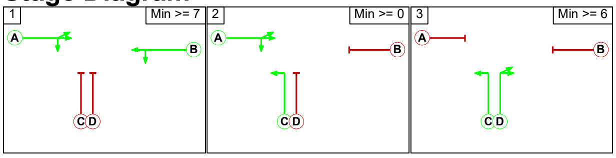
		Starting Phase			
		A	B	C	D
Terminating Phase	A		-	-	5
	B	-		7	6
	C	-	5		-
	D	5	5	-	

Phases in Stage

Stage No.	Phases in Stage
1	A B
2	A C
3	C D

Full Input Data And Results

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

		To Stage		
		1	2	3
From Stage	1		7	7
	2	5		5
	3	5	5	

Give-Way Lane Input Data

Junction: B3081 - Verwood Road											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
3/1 (Verwood Road West)	5/1 (Right)	1439	0	1/1	1.09	All	1.00	1.00	0.50	1	2.00
8/1	9/1 (Right)	1439	0	7/1	1.09	All	-	-	-	-	-
10/2	8/1 (Right)	1439	0	4/1	1.09	All	-	-	-	-	-

Full Input Data And Results

Lane Input Data

Junction: B3081 - Verwood Road												
Lane	**Lane Type**	**Phases**	**Start Disp.**	**End Disp.**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
1/1 (Verwood Road East)	U	B	2	3	4.9	Geom	-	3.25	0.00	Y	Arm 5 Left	15.00
											Arm 6 Ahead	Inf
2/1 (B3081 (A31 Offslip))	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 6 Left	10.00
2/2 (B3081 (A31 Offslip))	U	D	2	3	2.5	Geom	-	3.00	0.00	Y	Arm 4 Right	8.00
											Arm 7 Right	Inf
3/1 (Verwood Road West)	O	A	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 4 Ahead	Inf
											Arm 5 Right	10.00
											Arm 7 Ahead	Inf
4/1	U		2	3	5.2	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (A31 On-Slip)	U		2	3	3.5	Inf	-	-	-	-	-	-
8/1	O		2	3	60.0	Geom	-	3.50	0.00	Y	Arm 9 Right	Inf
9/1	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1	U		2	3	60.0	Geom	-	3.50	0.00	Y	Arm 1 Ahead	Inf
10/2	O		2	3	3.1	Geom	-	3.50	0.00	Y	Arm 8 Right	10.00
11/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2033 Forecast Plus Dev 2022 Flows AM'	08:00	09:00	01:00	
2: '2033 Forecast Plus Dev 2022 Flows PM'	17:00	18:00	01:00	

Full Input Data And Results

Scenario 1: '2033 Forecast Plus Dev 2022 Flows AM' (FG1: '2033 Forecast Plus Dev 2022 Flows AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	17	440	144	601
	B	6	0	336	41	383
	C	776	0	0	725	1501
	D	0	0	0	0	0
	Tot.	782	17	776	910	2485

Traffic Lane Flows

Lane	Scenario 1: 2033 Forecast Plus Dev 2022 Flows AM
Junction: B3081 - Verwood Road	
1/1	457
2/1 (with short)	383(In) 336(Out)
2/2 (short)	47
3/1	1501
4/1	782
5/1	17
6/1	776
7/1	766
8/1	144
9/1	910
10/1 (with short)	601(In) 457(Out)
10/2 (short)	144
11/1	782

Full Input Data And Results

Lane Saturation Flows

Junction: B3081 - Verwood Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Verwood Road East)	3.25	0.00	Y	Arm 5 Left	15.00	3.7 %	1933	1933
				Arm 6 Ahead	Inf	96.3 %		
2/1 (B3081 (A31 Offslip))	3.00	0.00	Y	Arm 6 Left	10.00	100.0 %	1665	1665
2/2 (B3081 (A31 Offslip))	3.00	0.00	Y	Arm 4 Right	8.00	12.8 %	1870	1870
				Arm 7 Right	Inf	87.2 %		
3/1 (Verwood Road West)	3.25	0.00	Y	Arm 4 Ahead	Inf	51.7 %	1940	1940
				Arm 5 Right	10.00	0.0 %		
				Arm 7 Ahead	Inf	48.3 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (A31 On-Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	3.50	0.00	Y	Arm 9 Right	Inf	100.0 %	1965	1965
9/1	Infinite Saturation Flow						Inf	Inf
10/1	3.50	0.00	Y	Arm 1 Ahead	Inf	100.0 %	1965	1965
10/2	3.50	0.00	Y	Arm 8 Right	10.00	100.0 %	1709	1709
11/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2033 Forecast Plus Dev 2022 Flows PM' (FG2: '2033 Forecast Plus Dev 2022 Flows PM', Plan 2: 'Copy of Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	3	683	157	843
	B	6	0	603	64	673
	C	809	0	0	533	1342
	D	0	0	0	0	0
	Tot.	815	3	1286	754	2858

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2033 Forecast Plus Dev 2022 Flows PM
Junction: B3081 - Verwood Road	
1/1	686
2/1 (with short)	673(In) 603(Out)
2/2 (short)	70
3/1	1342
4/1	815
5/1	3
6/1	1286
7/1	597
8/1	157
9/1	754
10/1 (with short)	843(In) 686(Out)
10/2 (short)	157
11/1	815

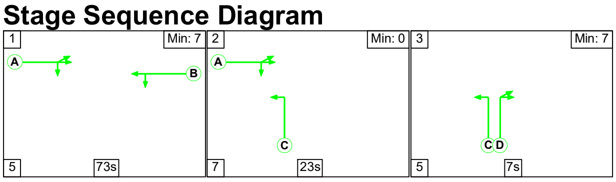
Full Input Data And Results

Lane Saturation Flows

Junction: B3081 - Verwood Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Verwood Road East)	3.25	0.00	Y	Arm 5 Left	15.00	0.4 %	1939	1939
				Arm 6 Ahead	Inf	99.6 %		
2/1 (B3081 (A31 Offslip))	3.00	0.00	Y	Arm 6 Left	10.00	100.0 %	1665	1665
2/2 (B3081 (A31 Offslip))	3.00	0.00	Y	Arm 4 Right	8.00	8.6 %	1885	1885
				Arm 7 Right	Inf	91.4 %		
3/1 (Verwood Road West)	3.25	0.00	Y	Arm 4 Ahead	Inf	60.3 %	1940	1940
				Arm 5 Right	10.00	0.0 %		
				Arm 7 Ahead	Inf	39.7 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (A31 On-Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	3.50	0.00	Y	Arm 9 Right	Inf	100.0 %	1965	1965
9/1	Infinite Saturation Flow						Inf	Inf
10/1	3.50	0.00	Y	Arm 1 Ahead	Inf	100.0 %	1965	1965
10/2	3.50	0.00	Y	Arm 8 Right	10.00	100.0 %	1709	1709
11/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2033 Forecast Plus Dev 2022 Flows AM' (FG1: '2033 Forecast Plus Dev 2022 Flows AM', Plan 1: 'Network Control Plan 1')

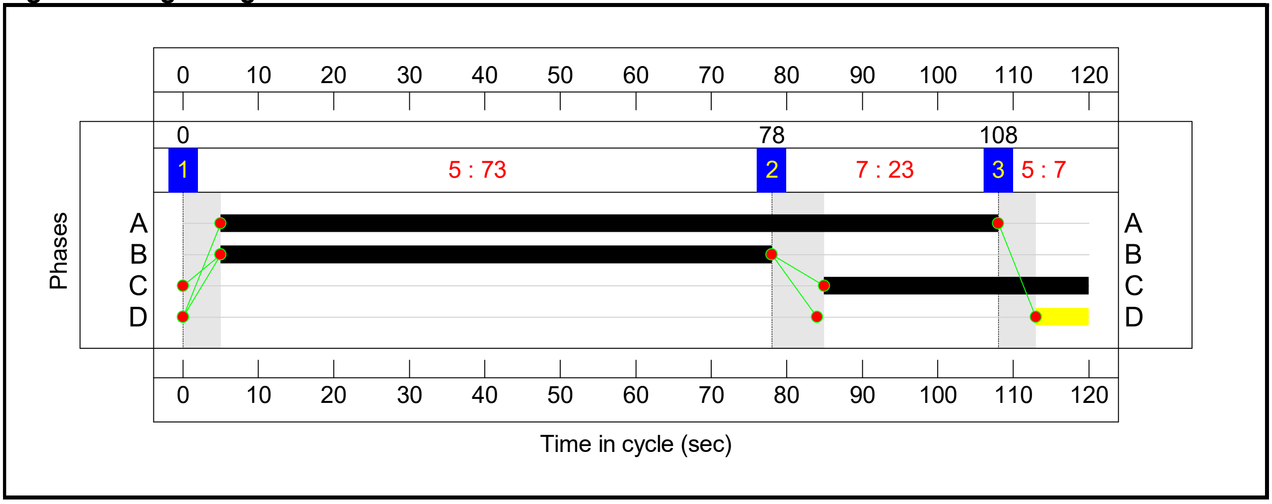
Stage Sequence Diagram



Stage Timings

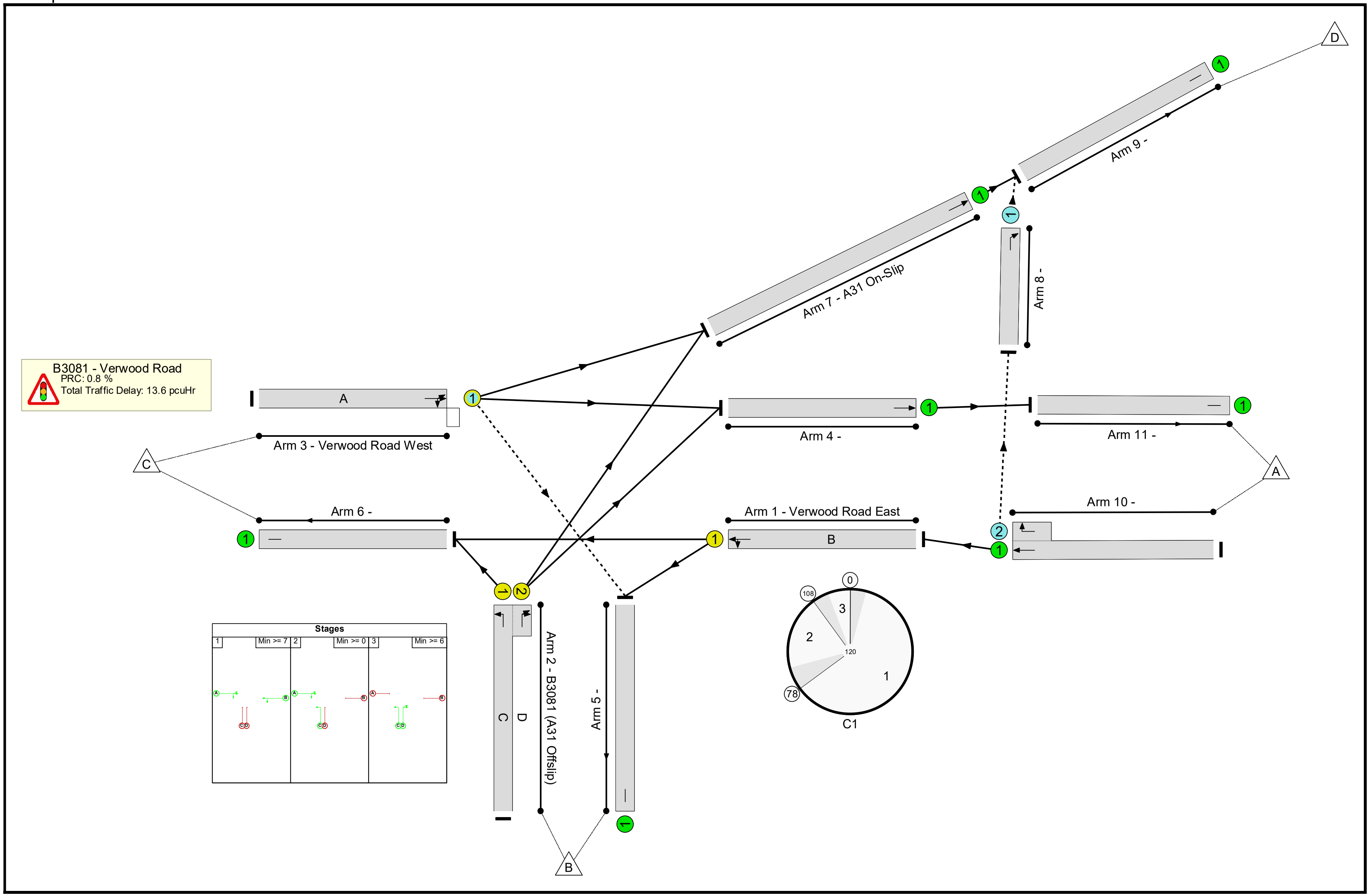
Stage	**1**	**2**	**3**
Duration	73	23	7
Change Point	0	78	108

Signal Timings Diagram



Network Layout Diagram

Full Input Data And Results



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**89.3%**
B3081 - Verwood Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**89.3%**
1/1	Verwood Road East Left Ahead	U	N/A	N/A	B		1	73	-	457	1933	1192	38.3%
2/1+2/2	B3081 (A31 Offslip) Right Left Right2	U	N/A	N/A	C D		1	35:7	-	383	1665:1870	464+65	72.4 : 72.4%
3/1	Verwood Road West Ahead Right Ahead2	O	N/A	N/A	A		1	103	-	1501	1940	1681	89.3%
4/1	Ahead	U	N/A	N/A	-		-	-	-	782	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	17	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	776	Inf	Inf	0.0%
7/1	A31 On-Slip Ahead	U	N/A	N/A	-		-	-	-	766	Inf	Inf	0.0%
8/1	Right	O	N/A	N/A	-		-	-	-	144	1965	604	23.8%
9/1		U	N/A	N/A	-		-	-	-	910	Inf	Inf	0.0%
10/1+10/2	Ahead Right	U+O	N/A	N/A	-		-	-	-	601	1965:1709	1442+455	31.7 : 31.7%
11/1		U	N/A	N/A	-		-	-	-	782	Inf	Inf	0.0%

Full Input Data And Results

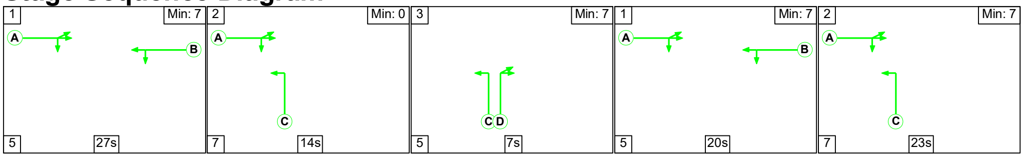
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**288**	**0**	**0**	**7.6**	**6.0**	**0.0**	**13.6**	**-**	**-**	**-**	**-**
B3081 - Verwood Road	**-**	**-**	**288**	**0**	**0**	**7.6**	**6.0**	**0.0**	**13.6**	**-**	**-**	**-**	**-**
1/1	457	457	-	-	-	1.5	0.3	-	1.8	14.0	7.6	0.3	7.9
2/1+2/2	383	383	-	-	-	4.2	1.3	-	5.4	51.2	10.9	1.3	12.2
3/1	1501	1501	0	0	0	2.0	4.0	0.0	6.0	14.3	29.2	4.0	33.2
4/1	782	782	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	17	17	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	776	776	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	766	766	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	144	144	144	0	0	0.0	0.2	-	0.2	3.9	0.0	0.2	0.2
9/1	910	910	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1+10/2	601	601	144	0	0	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2
11/1	782	782	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 0.8 Total Delay for Signalled Lanes (pcuHr): 13.17 Cycle Time (s): 120
PRC Over All Lanes (%): 0.8 Total Delay Over All Lanes(pcuHr): 13.56

Full Input Data And Results

Scenario 2: '2033 Forecast Plus Dev 2022 Flows PM' (FG2: '2033 Forecast Plus Dev 2022 Flows PM', Plan 2: 'Copy of Network Control Plan 1')

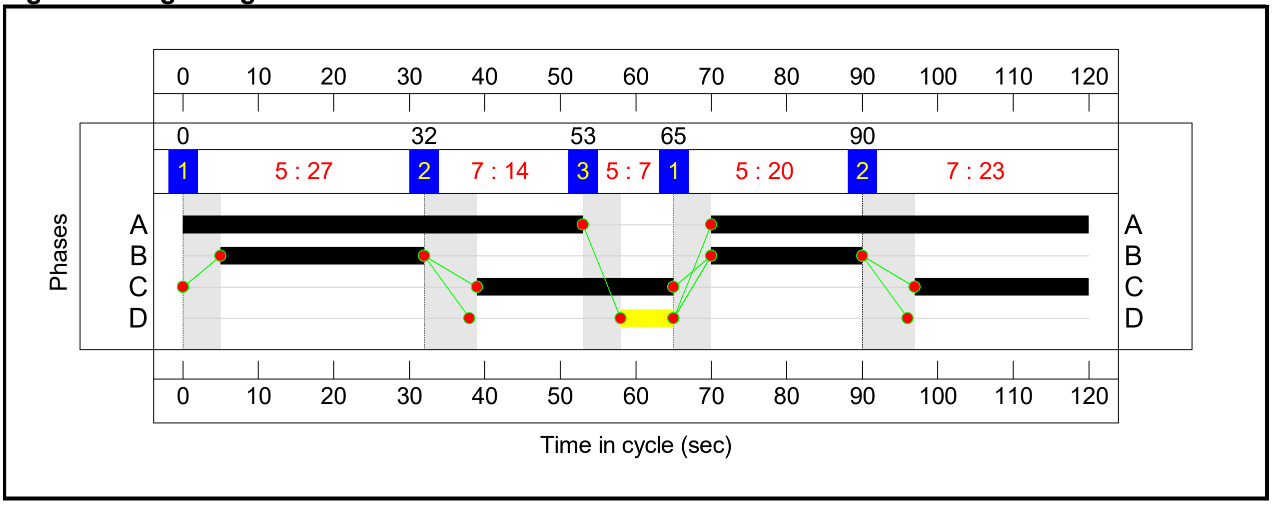
Stage Sequence Diagram



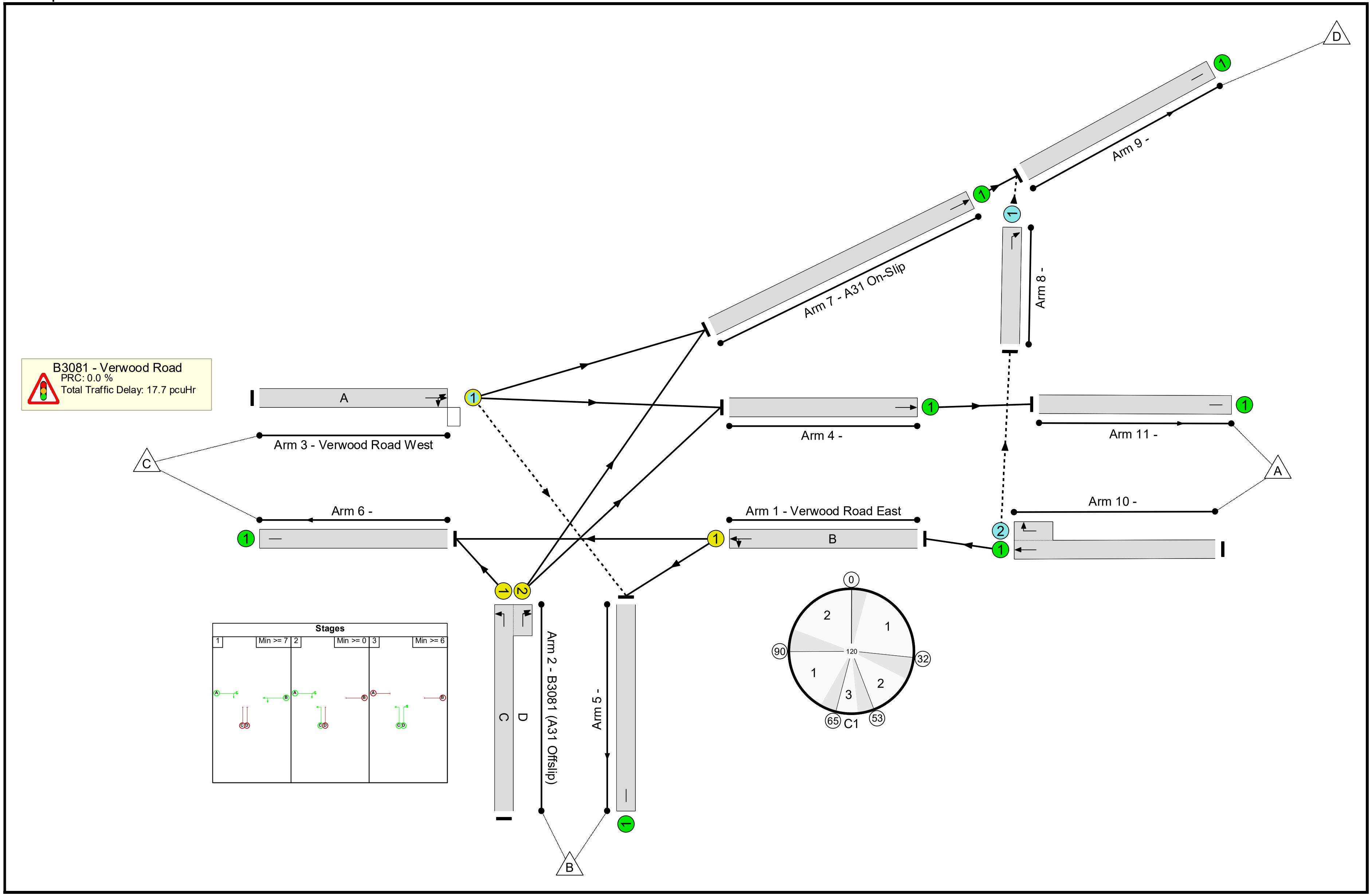
Stage Timings

Stage	1	2	3	1	2
Duration	27	14	7	20	23
Change Point	0	32	53	65	90

Signal Timings Diagram



Network Layout Diagram


B3081 - Verwood Road
PRC: 0.0 %
Total Traffic Delay: 17.7 pcuHr
Arm 1 - Verwood Road East
Arm 2 - B3081 (A31 Offslip)
Arm 3 - Verwood Road West
Arm 4 -
Arm 5 -
Arm 6 -
Arm 7 - A31 On-Slip
Arm 8 -
Arm 9 -
Arm 10 -
Arm 11 -
A
B
C
D
C1
120
0
32
53
65
90
Stages
Min >= 7
Min >= 0
Min >= 6

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**90.0%**
B3081 - Verwood Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**90.0%**
1/1	Verwood Road East Left Ahead	U	N/A	N/A	B		2	47	-	686	1939	792	86.6%
2/1+2/2	B3081 (A31 Offslip) Right Left Right2	U	N/A	N/A	C D		2:1	49:7	-	673	1665:1885	670+78	90.0 : 90.0%
3/1	Verwood Road West Ahead Right Ahead2	O	N/A	N/A	A		1	103	-	1342	1940	1681	79.8%
4/1	Ahead	U	N/A	N/A	-		-	-	-	815	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	3	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1286	Inf	Inf	0.0%
7/1	A31 On-Slip Ahead	U	N/A	N/A	-		-	-	-	597	Inf	Inf	0.0%
8/1	Right	O	N/A	N/A	-		-	-	-	157	1965	791	19.9%
9/1		U	N/A	N/A	-		-	-	-	754	Inf	Inf	0.0%
10/1+10/2	Ahead Right	U+O	N/A	N/A	-		-	-	-	843	1965:1709	1556+356	44.1 : 44.1%
11/1		U	N/A	N/A	-		-	-	-	815	Inf	Inf	0.0%

Full Input Data And Results

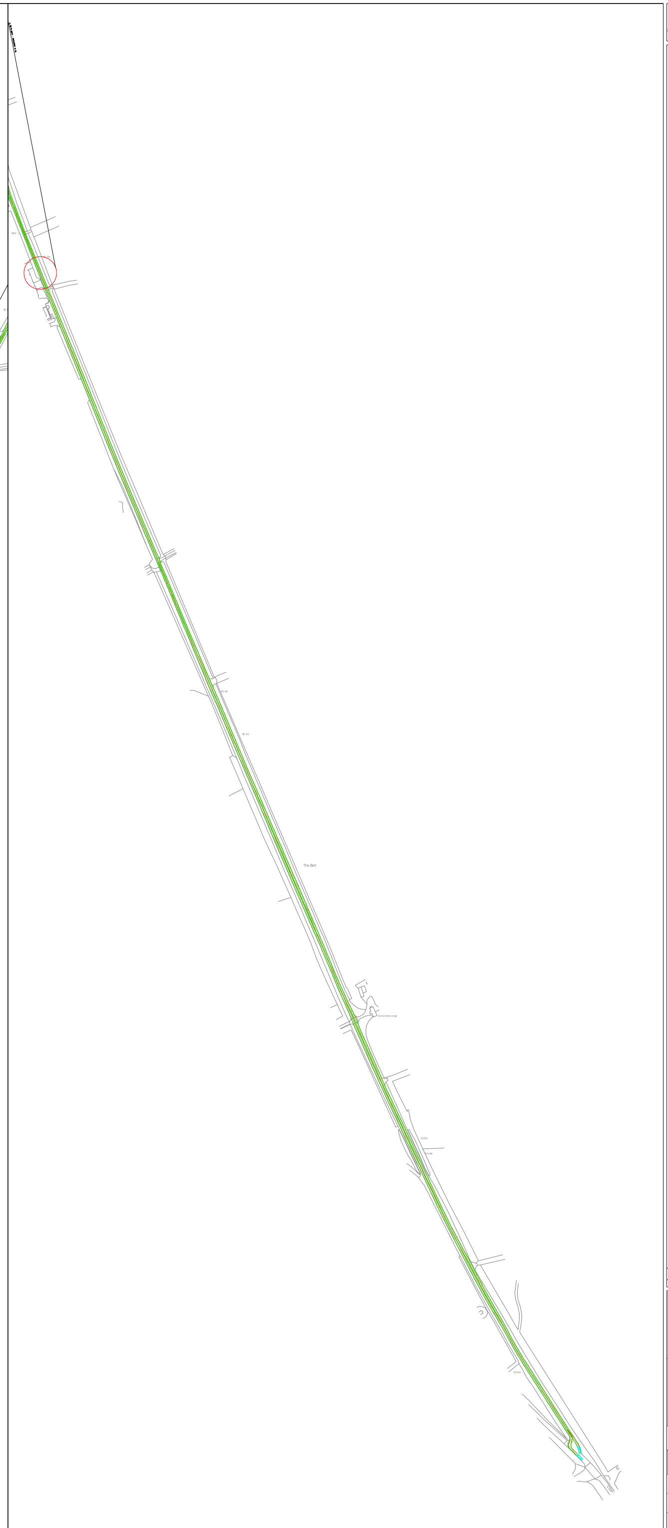
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**314**	**0**	**0**	**8.1**	**9.6**	**0.0**	**17.7**	**-**	**-**	**-**	**-**
B3081 - Verwood Road	**-**	**-**	**314**	**0**	**0**	**8.1**	**9.6**	**0.0**	**17.7**	**-**	**-**	**-**	**-**
1/1	686	686	-	-	-	3.1	3.1	-	6.2	32.4	10.9	3.1	13.9
2/1+2/2	673	673	-	-	-	3.7	4.0	-	7.8	41.5	10.9	4.0	15.0
3/1	1342	1342	0	0	0	1.3	2.0	0.0	3.2	8.7	19.0	2.0	21.0
4/1	815	815	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	3	3	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1286	1286	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	597	597	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	157	157	157	0	0	0.0	0.1	-	0.1	2.9	0.1	0.1	0.3
9/1	754	754	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1+10/2	843	843	157	0	0	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
11/1	815	815	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 0.0 Total Delay for Signalled Lanes (pcuHr): 17.16 Cycle Time (s): 120
PRC Over All Lanes (%): 0.0 Total Delay Over All Lanes(pcuHr): 17.68

Appendix Y

VEHICLE TRACKING OVERVIEW OF ROUTE TO ALDERHOLT SOUTH ALONG HARBRIDGE DROVE NORTHERN PART (SCALE: 1:3000)

VEHICLE TRACKING OVERVIEW OF ROUTE TO ALDERHOLT SOUTH ALONG HARBRIDGE DROVE MIDDLE PART (SCALE: 1:3000)

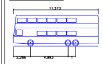


VEHICLE TRACKING OVERVIEW OF ROUTE TO ALDERHOLT SOUTH ALONG HARBRIDGE DROVE SOUTHERN PART (SCALE: 1:3000)

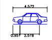
GENERAL NOTES

1. THIS DRAWING IS INTENDED TO BE VIEWED IN COMBINATION WITH ALL RELEVANT ARCHITECTS, ENGINEERS, SERVICES AND SPECIALIST DRAWINGS AND SPECIFICATION.
2. ANY VARIATIONS OR DISCREPANCIES BETWEEN THESE DRAWINGS IN TERMS OF DIMENSIONS OR DETAILS SHOULD BE DRAWN TO THE ATTENTION OF THE ARCHITECT AND/OR THE ENGINEER FOR CLARIFICATION.
3. PAUL BASHAM ASSOCIATES ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF BACKGROUND INFORMATION PRODUCED BY THIRD PARTIES - THIS MUST BE TREATED AS INDICATIVE ONLY.
4. ALL DIMENSIONS AND LEVELS ARE IN METRES. DO NOT SCALE THIS DRAWING, PRINT, PLOT OR DISK.
5. THIS DRAWING SHOULD ONLY BE USED FOR CONSTRUCTION IF THE PROJECT PHASE IN THE TITLE FRAME BELOW IS SHOWN AS "CONSTRUCTION". PAUL BASHAM ASSOCIATES TAKE NO RESPONSIBILITY FOR CONSTRUCTION WORKS UNDERTAKEN TO DRAWINGS WHICH ARE NOT MARKED UNDER THIS PHASE.
6. THIS DRAWING IS BASED ON OS MAPPING WHICH IS RECOGNISED AS OFTEN HAVING A RELATIVE ACCURACY OF +/- 1.1M AT THE 99% CONFIDENCE LEVEL. THEREFORE, THE OS DATA HAS BEEN SUPPLEMENTED AS APPROPRIATELY ON-SITE OBSERVATIONS AND USE OF GOOGLE MAPS.
7. THIS STRETCH OF OS IN PARTICULAR APPEARS TO BE INACCURATE WITH LARGE AREAS OF CARRIAGEWAY MEASURING AT C. 4M DESPITE ON-SITE MEASUREMENTS EQUATING TO 5M OR MORE IN WIDTH. THIS IS NOTED ON THE DRAWING AS APPROPRIATE.

VEHICLE PROFILE



Trident II - 11.30m 3-Axle	
Overall Length	11.273m
Overall Width	2.496m
Overall Body Height	4.140m
Min Body Ground Clearance	0.311m
Track Width	2.363m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	8.535m



Skoda Octavia	
Overall Length	4.572m
Overall Width	1.769m
Overall Body Height	1.488m
Min Body Ground Clearance	0.249m
Max Track Width	1.713m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.100m

KEY

INDICATIVE HIGHWAY IMPROVEMENTS (SUBJECT TO TOPO CONFIRMING NECESSITY)

NORTH

Rev	Description	Date	By	Chkd
-	-	--.--.--	-	-

Paul Basham Associates Ltd
The Bothy, Cams Hall Estate, Fareham, PO16 8UT
01329 711000
info@paulbashamassociates.com www.paulbashamassociates.com

Client: Intelligent Land

Project Name: ALDERHOLT MEADOWS ALDERHOLT

Title: LINK ROAD REVIEW - ALDERHOLT SOUTH (HARBRIDGE DROVE)

Project Phase: PRELIMINARY

Checked By	Checked Date	Drawn By	Drawn Date
HC	27.10.22	TP	27.10.22

Client Drawing No.: -

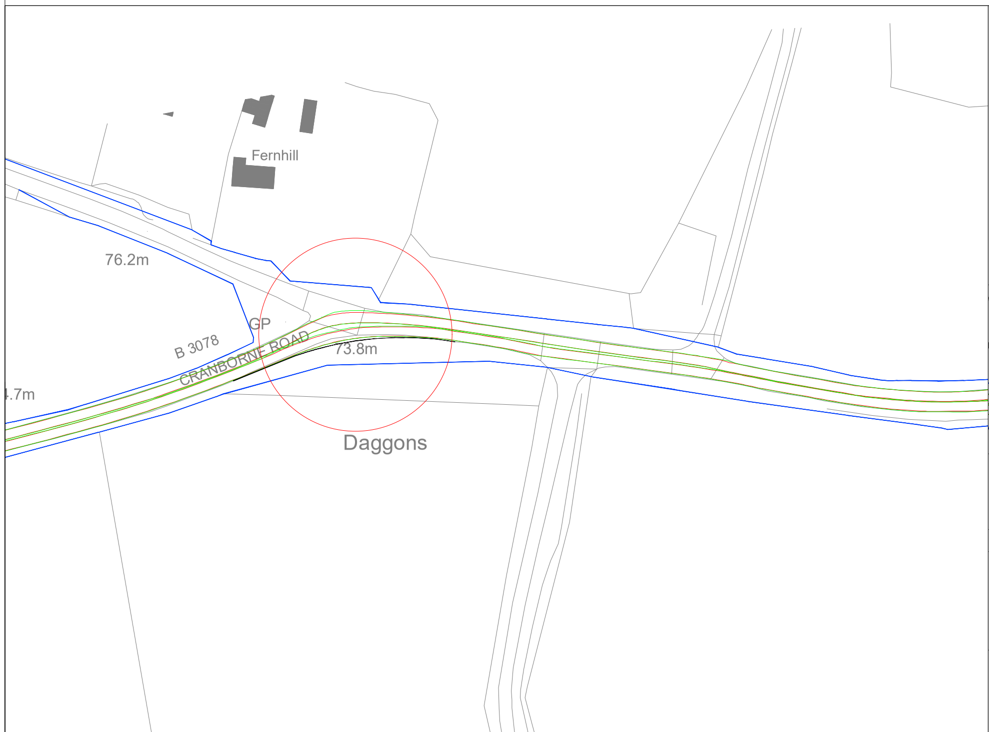
Scale: AS SHOWN (AT A0 SIZE)

PBA Drawing No.: 132.0001.013

Revision: -

Appendix Z

VEHICLE TRACKING OVERVIEW OF ROUTE TO BATTERLEY DROVE FROM ALDERHOLT (SCALE: 1:2000)



INSERT 1 (SCALE 1:500)

INSERT 2 (SCALE 1:500)

GENERAL NOTES

1. THIS DRAWING IS INTENDED TO BE VIEWED IN COMBINATION WITH ALL RELEVANT ARCHITECTS, ENGINEERS, SERVICES AND SPECIALIST DRAWINGS AND SPECIFICATION.
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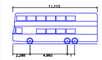
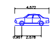
3. PAUL BASHAM ASSOCIATES ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF BACKGROUND INFORMATION PRODUCED BY THIRD PARTIES – THIS MUST BE TREATED AS INDICATIVE ONLY.
4. ALL DIMENSIONS AND LEVELS ARE IN METRES. DO NOT SCALE THIS DRAWING, PRINT, PLOT OR DISK.
5. THIS DRAWING SHOULD ONLY BE USED FOR CONSTRUCTION IF THE PROJECT PHASE IN THE TITLE FRAME BELOW IS SHOWN AS "CONSTRUCTION". PAUL BASHAM ASSOCIATES TAKE NO RESPONSIBILITY FOR CONSTRUCTION WORKS UNDERTAKEN TO DRAWINGS WHICH ARE NOT MARKED UNDER THIS PHASE.
6. THIS DRAWING IS BASED ON OS MAPPING WHICH IS RECOGNISED AS OFTEN HAVING A RELATIVE ACCURACY OF +/- 1.1M AT THE 99% CONFIDENCE LEVEL. THEREFORE, THE OS DATA HAS BEEN SUPPLEMENTED AS APPROPRIATELY ON-SITE OBSERVATIONS AND USE OF GOOGLE MAPS.

VEHICLE PROFILE



Trident II – 11.30m 3-Axle	
Overall Length	11.273m
Overall Width	2.496m
Overall Body Height	4.140m
Min Body Ground Clearance	0.311m
Track Width	2.363m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	8.535m



Skoda Octavia	
Overall Length	4.572m
Overall Width	1.769m
Overall Body Height	1.488m
Min Body Ground Clearance	0.249m
Max Track Width	1.713m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.100m

KEY

HIGHWAY BOUNDARY (SUPPLIED BY DORSET COUNCIL)

INDICATIVE HIGHWAY IMPROVEMENTS (SUBJECT TO TOPO CONFIRMING NECESSITY)

NORTH

Rev	Description	Date	By	Chkd
-	-	--.--.--	-	-

Paul Basham Associates Ltd
The Bothy, Cams Hall Estate, Fareham, PO16 8UT
01329 711000
info@paulbashamassociates.com www.paulbashamassociates.com

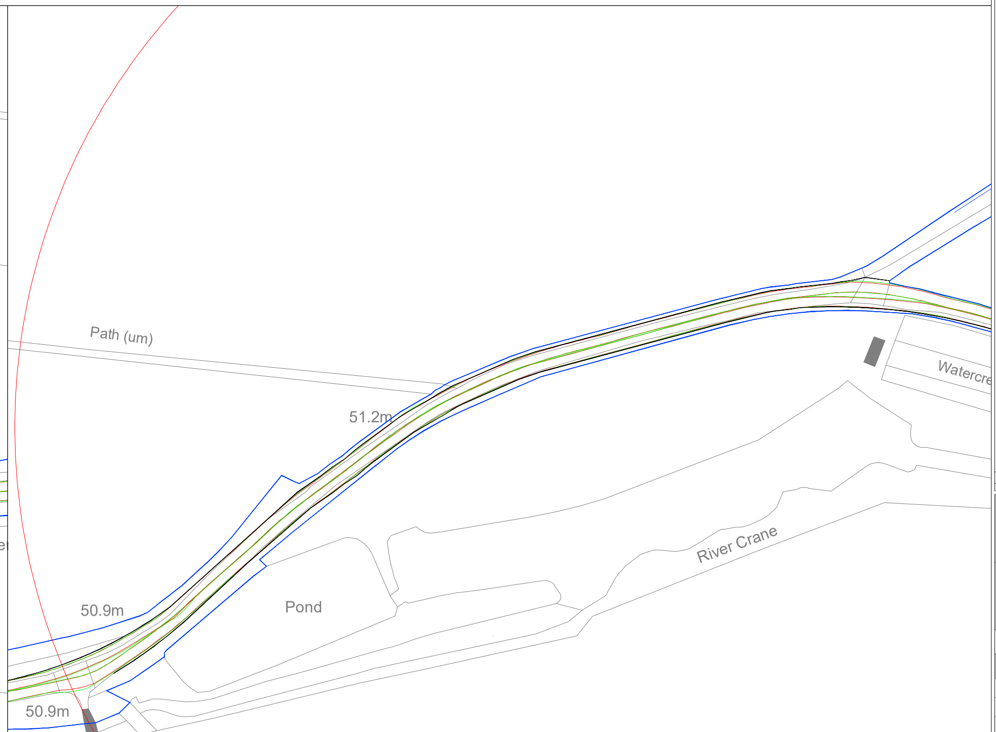
Client: Intelligent Land

Project Name	ALDERHOLT MEADOWS ALDERHOLT
Title	LINK ROAD REVIEW - CRANBORNE TO ALDERHOLT 1
Project Phase	PRELIMINARY
Checked By	HC
Checked Date	27.10.22
Drawn By	TP
Drawn Date	27.10.22
Client Drawing No.	-
Scale	AS SHOWN (AT A0 SIZE)
PBA Drawing No.	132.0001.010
Revision	-

Appendix AA

VEHICLE TRACKING OVERVIEW OF ROUTE TO CRANBORNE FROM ALDERHOLT (SCALE: 1:3000)

INSERT 1 (SCALE 1:500)

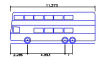


INSERT 2 (SCALE: 1:500)

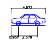
GENERAL NOTES

1. THIS DRAWING IS INTENDED TO BE VIEWED IN COMBINATION WITH ALL RELEVANT ARCHITECTS, ENGINEERS, SERVICES AND SPECIALIST DRAWINGS AND SPECIFICATION.
2. ANY VARIATIONS OR DISCREPANCIES BETWEEN THESE DRAWINGS IN TERMS OF DIMENSIONS OR DETAILS SHOULD BE DRAWN TO THE ATTENTION OF THE ARCHITECT AND/OR THE ENGINEER FOR CLARIFICATION.
3. PAUL BASHAM ASSOCIATES ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF BACKGROUND INFORMATION PRODUCED BY THIRD PARTIES - THIS MUST BE TREATED AS INDICATIVE ONLY.
4. ALL DIMENSIONS AND LEVELS ARE IN METRES. DO NOT SCALE THIS DRAWING, PRINT, PLOT OR DISK.
5. THIS DRAWING SHOULD ONLY BE USED FOR CONSTRUCTION IF THE PROJECT PHASE IN THE TITLE FRAME BELOW IS SHOWN AS "CONSTRUCTION". PAUL BASHAM ASSOCIATES TAKE NO RESPONSIBILITY FOR CONSTRUCTION WORKS UNDERTAKEN TO DRAWINGS WHICH ARE NOT MARKED UNDER THIS PHASE.
6. THIS DRAWING IS BASED ON OS MAPPING WHICH IS RECOGNISED AS OFTEN HAVING A RELATIVE ACCURACY OF +/- 1.1M AT THE 99% CONFIDENCE LEVEL. THEREFORE, THE OS DATA HAS BEEN SUPPLEMENTED AS APPROPRIATELY ON-SITE OBSERVATIONS AND USE OF GOOGLE MAPS.

VEHICLE PROFILE



Trident II - 11.30m 3-Axle	
Overall Length	11.273m
Overall Width	2.496m
Overall Body Height	4.140m
Min Body Ground Clearance	0.311m
Track Width	2.363m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	8.535m



Skoda Octavia	
Overall Length	4.572m
Overall Width	1.769m
Overall Body Height	1.488m
Min Body Ground Clearance	0.249m
Max Track Width	1.713m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.100m

KEY

HIGHWAY BOUNDARY (SUPPLIED BY DORSET COUNCIL)

INDICATIVE HIGHWAY IMPROVEMENTS (SUBJECT TO TOPO CONFIRMING NECESSITY)

NORTH

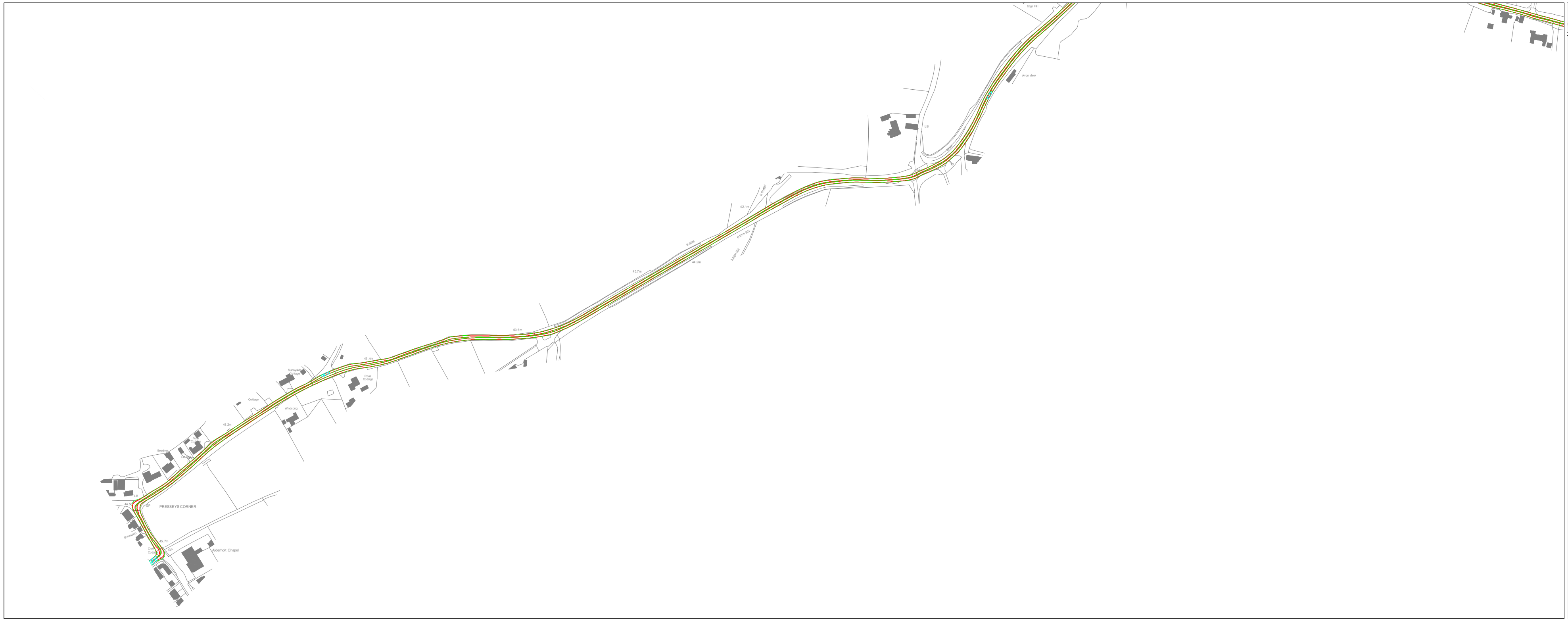
Rev	Description	Date	By	Chkd
-	-	--.--.--	-	-

Paul Basham Associates Ltd
The Bothy, Cams Hall Estate, Fareham, PO16 8UT
01329 711000
info@paulbashamassociates.com www.paulbashamassociates.com

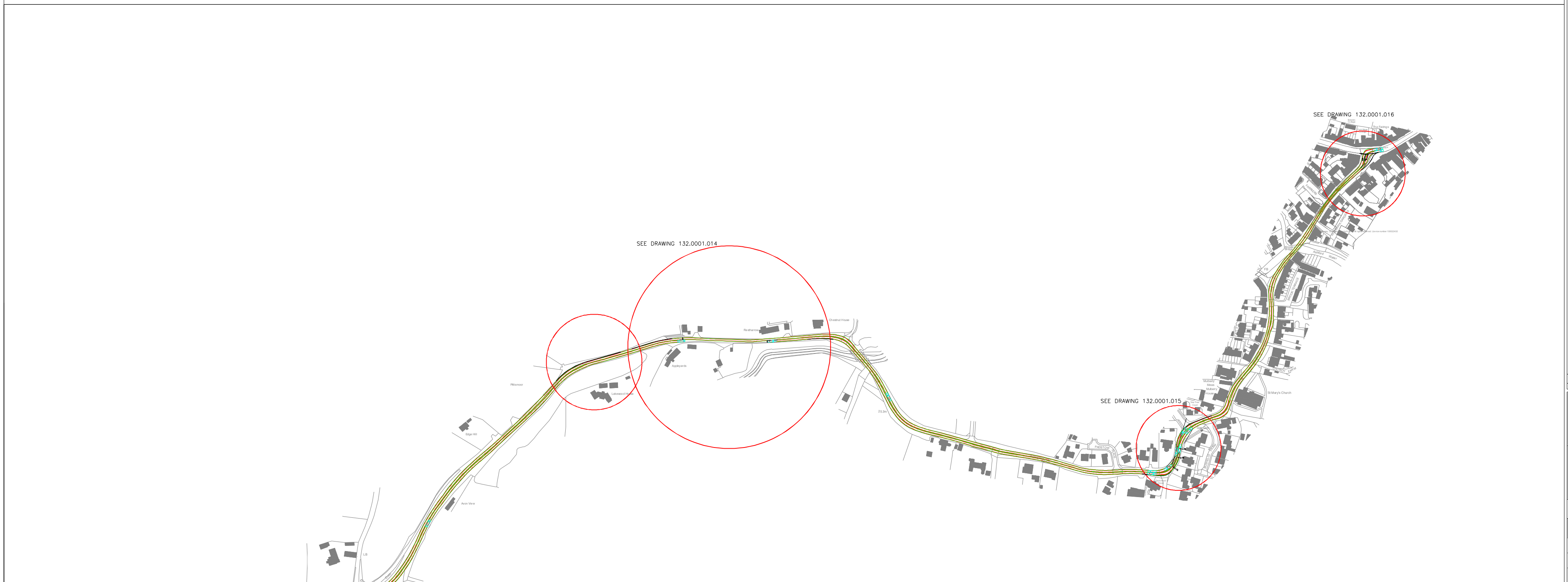
Client: Intelligent Land

Project Name	ALDERHOLT MEADOWS ALDERHOLT
Title	LINK ROAD REVIEW - CRANBORNE TO ALDERHOLT 2
Project Phase	PRELIMINARY
Checked By	HC
Checked Date	27.10.22
Drawn By	TP
Drawn Date	27.10.22
Client Drawing No.	-
Scale	AS SHOWN (AT A0 SIZE)
PBA Drawing No.	132.0001.011
Revision	-

Appendix AB



VEHICLE TRACKING OVERVIEW OF ROUTE TO FORDINGBRIDGE FROM ALDERHOLT (WESTERN PART) (SCALE: 1:2000)



VEHICLE TRACKING OVERVIEW OF ROUTE TO FORDINGBRIDGE FROM ALDERHOLT (EASTERN PART) (SCALE: 1:2000)

GENERAL NOTES

1. THIS DRAWING IS INTENDED TO BE VIEWED IN COMBINATION WITH ALL RELEVANT ARCHITECTS, ENGINEERS, SERVICES AND SPECIALIST DRAWINGS AND SPECIFICATION.
2. ANY VARIATIONS OR DISCREPANCIES BETWEEN THESE DRAWINGS IN TERMS OF DIMENSIONS OR DETAILS SHOULD BE DRAWN TO THE ATTENTION OF THE ARCHITECT AND/OR THE ENGINEER FOR CLARIFICATION.
3. PAUL BASHAM ASSOCIATES ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF BACKGROUND INFORMATION PRODUCED BY THIRD PARTIES - THIS MUST BE TREATED AS INDICATIVE ONLY.
4. ALL DIMENSIONS AND LEVELS ARE IN METRES. DO NOT SCALE THIS DRAWING, PRINT, PLOT OR DISK.
5. THIS DRAWING SHOULD ONLY BE USED FOR CONSTRUCTION IF THE PROJECT PHASE IN THE TITLE FRAME BELOW IS SHOWN AS "CONSTRUCTION". PAUL BASHAM ASSOCIATES TAKE NO RESPONSIBILITY FOR CONSTRUCTION WORKS UNDERTAKEN TO DRAWINGS WHICH ARE NOT MARKED UNDER THIS PHASE.
6. THIS DRAWING IS BASED ON OS MAPPING WHICH IS RECOGNISED AS OFTEN HAVING A RELATIVE ACCURACY OF +/- 1.1M AT THE 99% CONFIDENCE LEVEL. THEREFORE, THE OS DATA HAS BEEN SUPPLEMENTED AS APPROPRIATELY ON-SITE OBSERVATIONS AND USE OF GOOGLE MAPS.

VEHICLE PROFILE

11.273
2.286 4.993 1

Trident II - 11.30m 3-Axle	
Overall Length	11.273m
Overall Width	2.496m
Overall Body Height	4.140m
Min Body Ground Clearance	0.311m
Track Width	2.363m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	8.535m

4.572
0.957 2.578

Skoda Octavia	
Overall Length	4.572m
Overall Width	1.769m
Overall Body Height	1.488m
Min Body Ground Clearance	0.249m
Max Track Width	1.713m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.100m

KEY

INDICATIVE HIGHWAY IMPROVEMENTS (SUBJECT TO TOPO CONFIRMING NECESSITY)

NORTH

Rev	Description	Date	By	Chkd
-	-	--.--.--	-	-

Paul Basham Associates Ltd
The Bothy, Cams Hall Estate, Fareham, PO16 8UT
01329 711000
info@paulbashamassociates.com www.paulbashamassociates.com

Client: Intelligent Land

Project Name	ALDERHOLT MEADOWS ALDERHOLT		
Title	LINK REVIEW ALDERHOLT TO FORDINGBRIDGE		
Project Phase	PRELIMINARY		
Checked By: HC	Checked Date: 27.10.22	Drawn By: TP	Drawn Date: 27.10.22
Client Drawing No.: -		Scale: AS SHOWN (AT A0 SIZE)	
PBA Drawing No.: 132.0001.012			Revision: -

Appendix AC

PROPOSED PRIORITY WORKING ARRANGEMENT

FORWARD VISIBILITY THROUGH PRIORITY WORKING ARRANGEMENT

GENERAL NOTES

1. THIS DRAWING IS INTENDED TO BE VIEWED IN COMBINATION WITH ALL RELEVANT ARCHITECTS, ENGINEERS, SERVICES AND SPECIALIST DRAWINGS AND SPECIFICATION.
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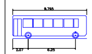
VEHICLE PROFILE



Single Deck Bus	
Overall Length	9.795m
Overall Width	2.500m
Overall Body Height	3.070m
Min Body Ground Clearance	0.306m
Track Width	2.322m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	10.111m

NORTH

Rev	Description	Date	By	Chkd
-	-	--.--.--	--	--

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Client
Intelligent Land

Project Name
LAND AT ALDERHOLT
FORDINGBRIDGE

Title
FORDINGBRIDGE ROAD
PROPOSED MITIGATION DESIGN

Project Phase
PRELIMINARY

Checked By	Checked Date	Drawn By	Drawn Date
HC	27.10.22	TP	27.10.22

Client Drawing No.

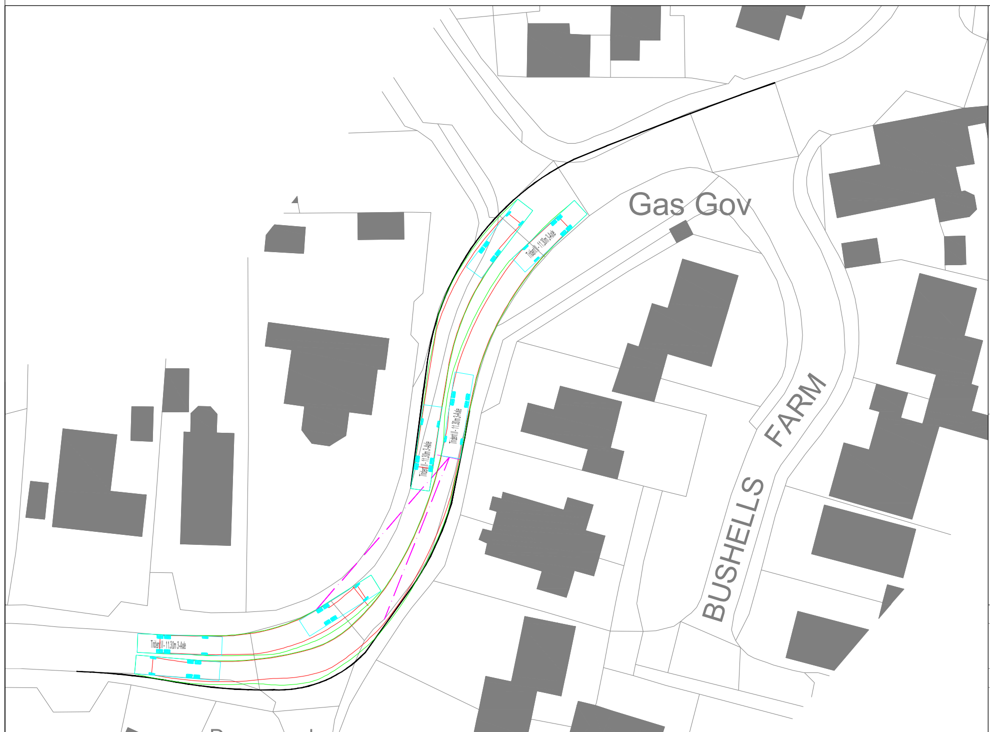
Scale
1:500 (AT A2 SIZE)

PBA Drawing No.
132.0001.014

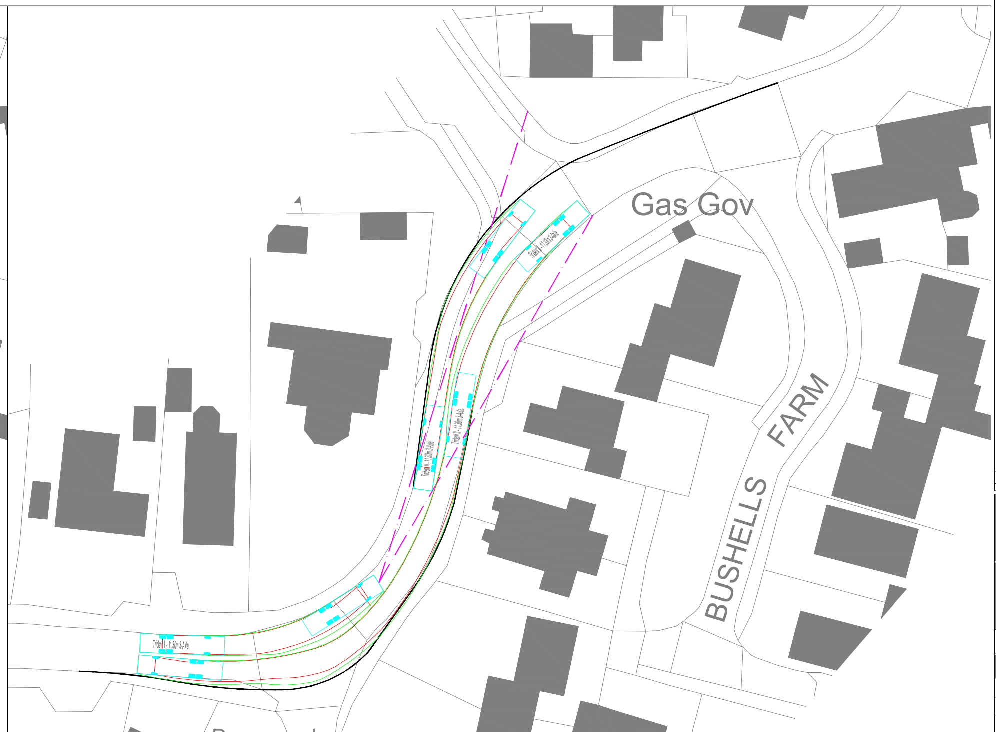
Revision
-

Appendix AD

LOCALISED ISSUE ON ROUTE TO FORDINGBRIDGE FROM ALDERHOLT (SCALE: 1:250)



FORWARD VISIBILITY ROUTING SOUTH WEST (SCALE 1:250)



FORWARD VISIBILITY ROUTING NORTH EAST(SCALE 1:250)

GENERAL NOTES

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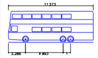
VEHICLE PROFILE



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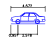

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Overall Width	1.769m
Overall Body Height	1.488m
Min Body Ground Clearance	0.249m
Max Track Width	1.713m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.100m

NORTH

Rev	Description	Date	By	Chkd
-	-	--.--.--	-	-

Paul Basham Associates Ltd
The Bothy, Cams Hall Estate, Fareham, PO16 8UT
01329 711000
info@paulbashamassociates.com www.paulbashamassociates.com

Client: Intelligent Land

Project Name: ALDERHOLT MEADOWS ALDERHOLT

Title: B3078 FORDINGBRIDGE 'S' BEND INDICATIVE IMPROVEMENTS

Project Phase: PRELIMINARY

Checked By	Checked Date	Drawn By	Drawn Date
HC	27.10.22	TP	27.10

Client Drawing No.	Scale
-	22 (AT A0 SIZE)

PBA Drawing No.	Revision
132.0001.015	-