

Church Farm,
St Athan,
Vale of Glamorgan



Transport Assessment

BDW South Wales Ltd

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2025

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1 Introduction

1.1 Background

- 1.1.1 Lime Transport has been commissioned by BDW South Wales Ltd to produce a Transport Assessment in support of a planning application for a development of 232 dwellings and a 20,000 square foot supermarket (1859m²) to the east of Gileston Road, St Athan. The site is an allocated site MG2(3) within the current Vale of Glamorgan Local Plan (2011-2026).
- 1.1.2 There is provision for a future phase (phase 2) for approximately 300 dwellings, to the east of phase 1, however this site is subject to LDP promotion and has no formal planning status.
- 1.1.3 The location of the proposed development is shown in **Figure 1.1** below.

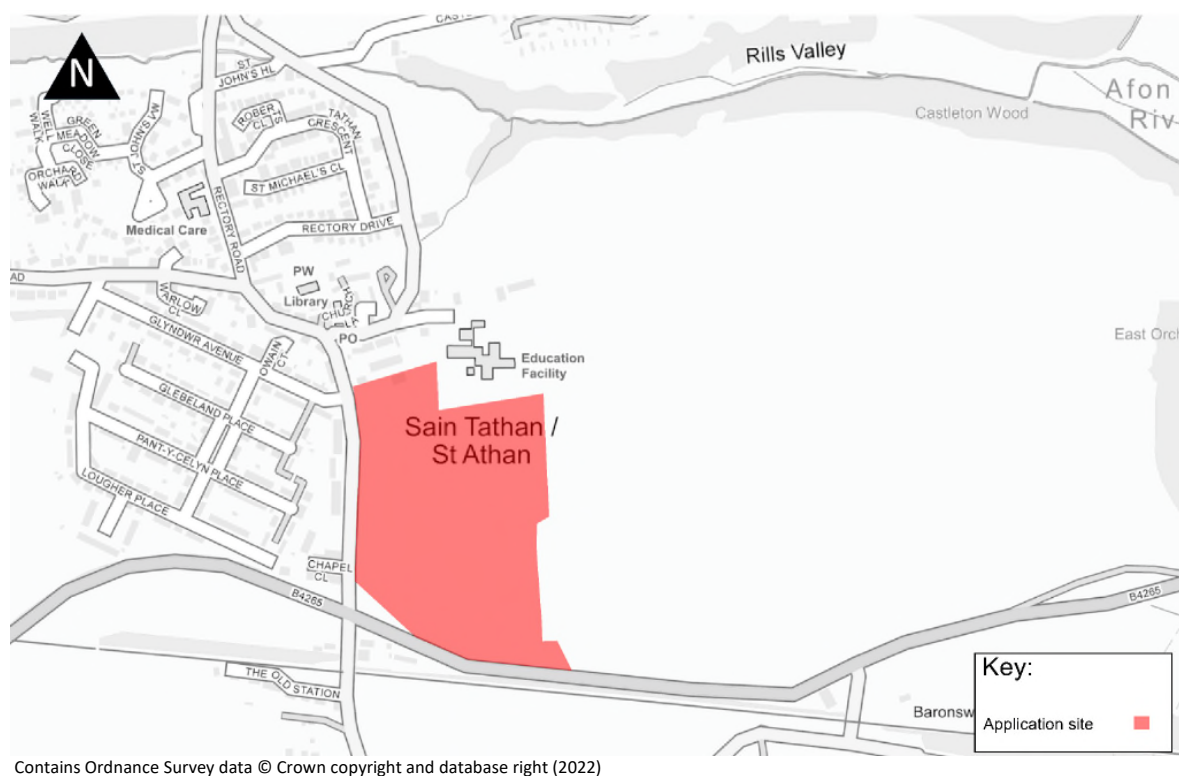


Figure 1.1 Site location

1.2 Development proposals

- 1.2.1 As part of the development, it is proposed to provide 232 residential dwellings and a 1800 – 2000m² A1 retail store on land east of Gileston Road in St Athan including on-site car and cycle parking, open space, landscaping and associated infrastructure.
- 1.2.2 It is anticipated that the site will be accessed onto Gileston Road (to the west of the site).

1.3 Purpose and scope of Transport Assessment

1.3.1 The scope of this Transport Assessment has been discussed with the Local Highway Authority (see **Appendix A**) and includes an assessment of the impact on the following junctions:

- Cowbridge Road/B4270/B4265 roundabout
- B4265/Llanmaes Road/Tyle House Close linked traffic signal-controlled junctions
- B4265/Northern Access Road roundabout
- B4265/Boverton Road/Eglwys Brewis Road linked traffic signal-controlled junctions
- B4265/Llantwit Road priority junction
- B4265/Gileston Road crossroads
- Cowbridge Road/ Eglwys Brewis Road/St Athan Road roundabout
- East Aberthaw priority junction
- B4265/Tredogan Road/A4226 roundabout
- Port Road roundabout
- Waycock Cross Roundabout (Waycock Road/ A4226/ B4266 roundabout)
- Site access onto Gileston Road

1.3.2 The local Highway Authority has also requested:

- Significant improvements to the pedestrian and cycle (Active Travel) infrastructure along both Gileston Road and the B4265. It is noted that the Active Travel link along Gileston Road (Vale SPR Future 003J) and the B4265 (Vale SPR Future 003I) are part of wider Active Travel proposals of the Vale of Glamorgan Council;
- Improvements to the Gileston Road cross roads; and,
- Improvements to public transport infrastructure including enhancements to passenger waiting facilities (bus stops) along Gileston Road, and the potential to divert buses through the development.

1.4 Structure of the report

1.4.1 The purpose of this Transport Assessment is to detail the likely transport characteristics of the proposed residential and retail development in order to identify the potential impact on the surrounding transport network, and to detail any mitigation measures should these be required.

1.4.2 Following this introductory section, the report is structured as follows:

- Section 2 sets out the policy context for the development;
- Section 3 identifies the accessibility of the site and reviews personal injury collision data within the study area;
- Section 4 describes the development proposals, including access to the site by all modes;
- Section 5 predicts the likely travel characteristics of the development;

- Section 6 assesses the impact of development generated traffic flows on the surrounding highway network;
- Section 7 outlines the Transport Implementation Strategy; and,
- Section 8 summarises the findings of the report.

2 Policy context

2.1 Introduction

- 2.1.1 Current transport policies at the national, regional and local level are built around the central themes of long-term sustainable development, sustained investment in transport and improved accessibility at all levels. These policies promote continued economic growth through the provision of an efficient and reliable transport system, a reduction in traffic congestion, improvements in highway safety, and enhancements to the accessibility of sustainable modes of travel.
- 2.1.2 This section of the report reviews the relevant national, regional and local planning policies relating to transport, and includes:
- Future Wales – The National Plan 2040;
 - Planning Policy Wales – Edition 12;
 - Technical Advice Note 18: Transport;
 - One Wales: Connecting the Nation;
 - Wales Active Travel Act; and,
 - Vale of Glamorgan Local Development Plan.

2.2 Future Wales – The National Plan 2040

- 2.2.1 Future Wales – The National Plan was adopted in February 2021. The document sets out a framework and direction for development in Wales up to 2040. Future Wales is a spatial plan, which means it sets a direction for investment in infrastructure and development. It aims to ensure that new infrastructure and development are complementary rather than competing priorities, ensuring that opportunities are maximised and multiple benefits are achieved. The document also sets out opportunities for each region within Wales.
- 2.2.2 For the south-east region (Blaenau Gwent, Bridgend, Caerphilly, Cardiff, Merthyr Tydfil, Monmouthshire, Newport, Rhondda Cynon Taf, Torfaen and The Vale of Glamorgan), the key focus is for strategic economic and housing growth, essential services and facilities, advanced manufacturing, transport and digital infrastructure.
- 2.2.3 Future Wales sets out a number of outcomes, including creating a place where people live:
- *‘and work in connected, inclusive and healthy places*
 - *in vibrant rural places with access to homes, jobs and services*
 - *in distinctive regions that tackle health and socio-economic inequality through sustainable growth*
 - *in places with a thriving Welsh Language*
 - *and work in towns and cities which are a focus and springboard for sustainable growth*
 - *in places where prosperity, innovation and culture are promoted*

- in places where sustainable travel is sustainable
- in places with world-class digital infrastructure
- in places that sustainably manage their natural resources and reduce pollution
- in places with biodiverse, resilient and connected ecosystems
- in places which are decarbonised and climate-resilient'

Travelling in Wales

2.2.4 Future Wales states that:

'The Welsh Government's aim is to reduce the need to travel, particularly by private vehicles, and support a modal shift to walking, cycling and public transport. The sustainable transport hierarchy in Planning Policy Wales, which prioritises active travel and public transport, is a fundamental Welsh Government principle that underpins Future Wales.'

2.2.5 Future Wales also states that:

'Transport in Wales is currently dominated by the car. Our reliance on travelling by car is limiting the opportunity for physical activity and social contact to be built into people's everyday lives and is exacerbating air and noise pollution, particularly along major routes and at busy destinations.'

Policy 12 - Regional connectivity

2.2.6 Future Wales states that in order to support growth and regeneration in urban areas, the priority is to improve and better integrate active travel and public transport, and in rural areas the priority is to increase the uptake of ultra-low emission vehicles and diversifying and sustaining local bus services.

2.2.7 In terms of car parking the document states that:

'Planning authorities must act to reduce levels of car parking in urban areas, including supporting car-free developments in accessible locations and developments with car parking spaces that allow them to be converted to other uses over time.'

2.2.8 And,

'Planning authorities should also challenge perceptions that housing needs to be built with parking on plots, which promotes car-dominated developments, and promote different ways of dealing with cars that encourage a reduction in car use and increase active travel and use of public transport.'

2.3 Planning Policy Wales – Edition 12

2.3.1 Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Assembly Government. It is supplemented by a series of Technical Advice Notes (TANs) and procedural advice is given in circulars and policy clarification letters.

2.3.2 PPW states:

‘The planning system should enable people to access jobs and services through shorter, more efficient and sustainable journeys, by walking, cycling and public transport. By influencing the location, scale, density, mix of uses and design of new development, the planning system can improve choice in transport and secure accessibility in a way which supports sustainable development, increases physical activity, improves health and helps to tackle the causes of climate change and airborne pollution by:

- *Enabling More Sustainable Travel Choices – measures to increase walking, cycling and public transport, reduce dependency on the car for daily travel;*
- *Network Management – measures to make best use of the available capacity, supported by targeted new infrastructure; and*
- *Demand Management – the application of strategies and policies to reduce travel demand, specifically that of single-occupancy private vehicles.’*

Movement

2.3.3 At paragraph 3.12, PPW states that *‘Good design is about avoiding the creation of car-based developments. It contributes to minimising the need to travel and reliance on the car, whilst maximising opportunities for people to make sustainable and healthy travel choices for their daily journeys. Achieving these objectives requires the selection of sites which can be made easily accessible by sustainable modes as well as incorporating appropriate, safe and sustainable links (including active travel networks) within and between developments using legal agreements where appropriate’.*

2.3.4 At paragraph 3.49, PPW states that *‘spatial strategies should support the objectives of minimising the need to travel, reducing reliance on the private car and increasing walking, cycling and use of public transport.’*

2.3.5 At paragraph 4.1.1, PPW states that *‘the planning system should enable people to access jobs and services through shorter, more efficient and sustainable journeys, by walking, cycling and public transport. By influencing the location, scale, density, mix of uses and design of new development, the planning system can improve choice in transport and secure accessibility in a way which supports sustainable development, increases physical activity, improves health and helps to tackle the causes of climate change and airborne pollution.’*

2.3.6 At paragraph 4.1.4, PPW states that *‘Land use and transport planning must be integrated. The planning system must ensure it enables integration:*

- within and between different types of transport;
- between transport measures and land use planning;
- between transport measures and policies to protect and improve the environment; and,
- between transport measures and policies for education, health, social inclusion and wealth creation.'

Sustainable transport

- 2.3.7 At paragraph 4.1.8, PPW states that 'The Welsh Government is committed to reducing reliance on the private car and supporting a modal shift to walking, cycling and public transport. Delivering this objective will make an important contribution to decarbonisation, improving air quality, increasing physical activity, improving the health of the nation and realising the goals of the well-being of Future Generations Act.'
- 2.3.8 At paragraph 4.1.12, PPW states that 'it is Welsh Government policy to require the use of a sustainable transport hierarchy in relation to new development, which prioritises walking, cycling and public transport ahead of private motor vehicles. The transport hierarchy recognises that Ultra Low Emission Vehicles also have an important role to play in the decarbonisation of transport, particularly in rural areas with limited public transport services.'
- 2.3.9 Finally, at paragraph 4.1.13, PPW states that 'The sustainable transport hierarchy [see **Figure 2.1** below] should be used to reduce the need to travel, prevent car-dependent developments in unsustainable locations, and support the delivery of schemes located, designed and supported by infrastructure which prioritises access and movement by active and sustainable transport.'

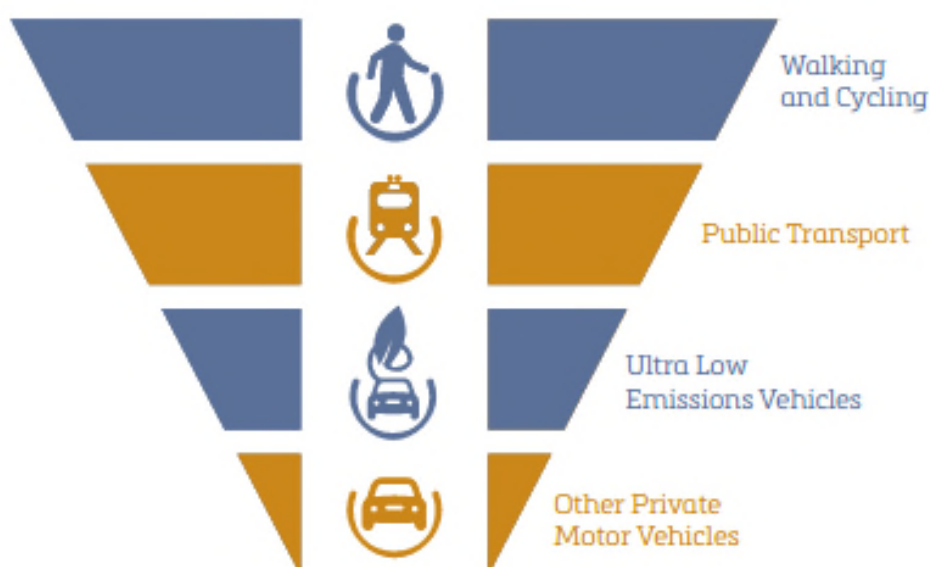


Figure 2.1 The sustainable transport hierarchy for planning

Parking

- 2.3.10 At paragraph 4.1.50, PPW 12 states *‘Car parking provision is a major influence on how people choose to travel and the pattern of development. Where and how cars are parked can in turn be a major factor in the quality of a place’.*
- 2.3.11 It is important to recognise that *‘a design-led approach to the provision of car parking should be taken, which ensures an appropriate level of car parking is integrated in a way which does not dominate the development’.*
- 2.3.12 PPW highlights that parking provision should take into consideration the site location and access to local facilities (paragraph 4.1.5), *‘Parking provision should be informed by the local context, including public transport accessibility, urban design principles and the objective of reducing reliance on the private car and supporting a modal shift to walking, cycling and public transport’.* PPW encourages that *‘Planning authorities must support schemes which keep parking levels down, especially off-street parking, when well designed’.*
- 2.3.13 At paragraph 4.1.53, PPW 12 states *‘Local authorities will need to ensure that their parking standards reflect local transport provision, are adopted by individual authorities as supplementary planning guidance, and are kept under review. Parking standards should be applied flexibly and allow for the provision of lower levels of parking and the creation of high quality places’.*

2.4 One Wales: Connecting the Nation

- 2.4.1 National transport policy for Wales is outlined within the Wales Transport Strategy, One Wales: Connecting the Nation, which is supplemented by a series of Technical Advice Notes (TANs).
- 2.4.2 The goal of One Wales: Connecting the Nation is to:

‘Promote sustainable transport networks that safeguard the environment while strengthening our country’s economic and social life. The transport strategy identifies a series of high-level outcomes and sets out the steps to their delivery. The One Wales programme is working to achieve a nation with access for all, where travelling between communities and accessing services, jobs and facilities in different parts of Wales is both easy and sustainable, and which support the growth of our economy.’
- 2.4.3 The policy aims to promote active travel (walking and cycling) for short journeys to promote healthy lifestyle. In addition to active travel, the use of public transport is also promoted.

2.5 Technical Advice Note 18: Transport

2.5.1 Technical Advice Note (TAN) 18 identifies that Planning Policy Wales and the Wales Transport Strategy both aim to secure the provision of transport infrastructure and services, which improve accessibility, build a stronger economy, improve road safety and foster more sustainable communities.

2.5.2 To achieve this and the core objectives, the following initiatives relevant to the proposed development are:

- Reducing the need to travel;
- Promoting walking and cycling;
- Managing parking provision; and,
- Encouraging the location of development near other related uses to encourage multi-purpose trips.

2.6 Welsh Government's announcement

2.6.1 In September 2020, the Welsh Government announced that its long-term ambition is to see 30% of Welsh workers working from home or near to home, including after the threat of Covid-19 lessens. It states that working from home would provide the choice to work in a way, which benefits productivity and work-life balance, whilst reducing road congestion, pollution and the use of the private car and potential, drive regeneration and economic activity in communities.

2.6.2 It is considered that this could also drive more innovative housing design as well as community-based remote working hubs, within easy walk or cycle distance.

2.7 Wales Active Travel Act 2013

2.7.1 The Active Travel Act (2013) encourages local authorities to promote active travel, such as walking and cycling, and to improve active travel routes in regard to the needs of walkers and cyclists. The Act also encourages local authorities to improve the highway to enhance the provision for cyclists and pedestrians.

2.7.2 The Active Travel Act makes provision for:

- Approved maps of existing active travel routes and related facilities in the local authority's area;
- Approved integrated network maps of the new and improved active travel routes and related facilities needed to create integrated networks of active travel routes and related facilities in a local authority's area;
- Requiring local authorities to have regard to integrated network maps in preparing transport policies and to ensure that there are new and improved active travel routes and related facilities;
- Requiring the Welsh Ministers to report on active travel in Wales;

- Requiring the Welsh Ministers and local authorities, in the performance of functions under the Highways Act 1980, to take reasonable steps to enhance the provision made for walkers and cyclists and to have regard to the needs of walkers and cyclists in the exercise of certain other functions; and,
- Requiring the Welsh Ministers and local authorities to exercise their functions under the Act so as to promote active travel journeys and secure new and improved active travel routes and related facilities.

2.8 Vale of Glamorgan Local Development Plan (LDP)

2.8.1 The Vale of Glamorgan Local Development Plan (LDP) 2011-2026 was adopted in June 2017 and forms the statutory development plan for the Council.

2.8.2 The Plan provides a framework for sustainable development within the Vale of Glamorgan and identifies the infrastructure needs of communities in terms of employment, facilities and services needed to support that growth.

2.8.3 Strategic objective three of the LDP is to reduce the need for Vale of Glamorgan residents to travel to meet their daily needs and enabling them greater access to sustainable forms of transport. It goes on to explain that:

‘The LDP will seek to increase the use of sustainable transport and reduce congestion by concentrating new development within the South East Zone and the settlements identified within the sustainable settlement hierarchy which are, or can be, well served by public transport or by walking or cycling. The LDP will also seek to ensure that appropriate local infrastructure is provided as part of development proposals to enhance the opportunities for the adoption of sustainable travel patterns.’

2.8.4 Land at Church Farm (phase 1 adjacent to Gileston Road) has been allocated as a site for residential development (for up to 250 dwellings) within the current LDP. See extract from the LDP (**Figure 2.2**).

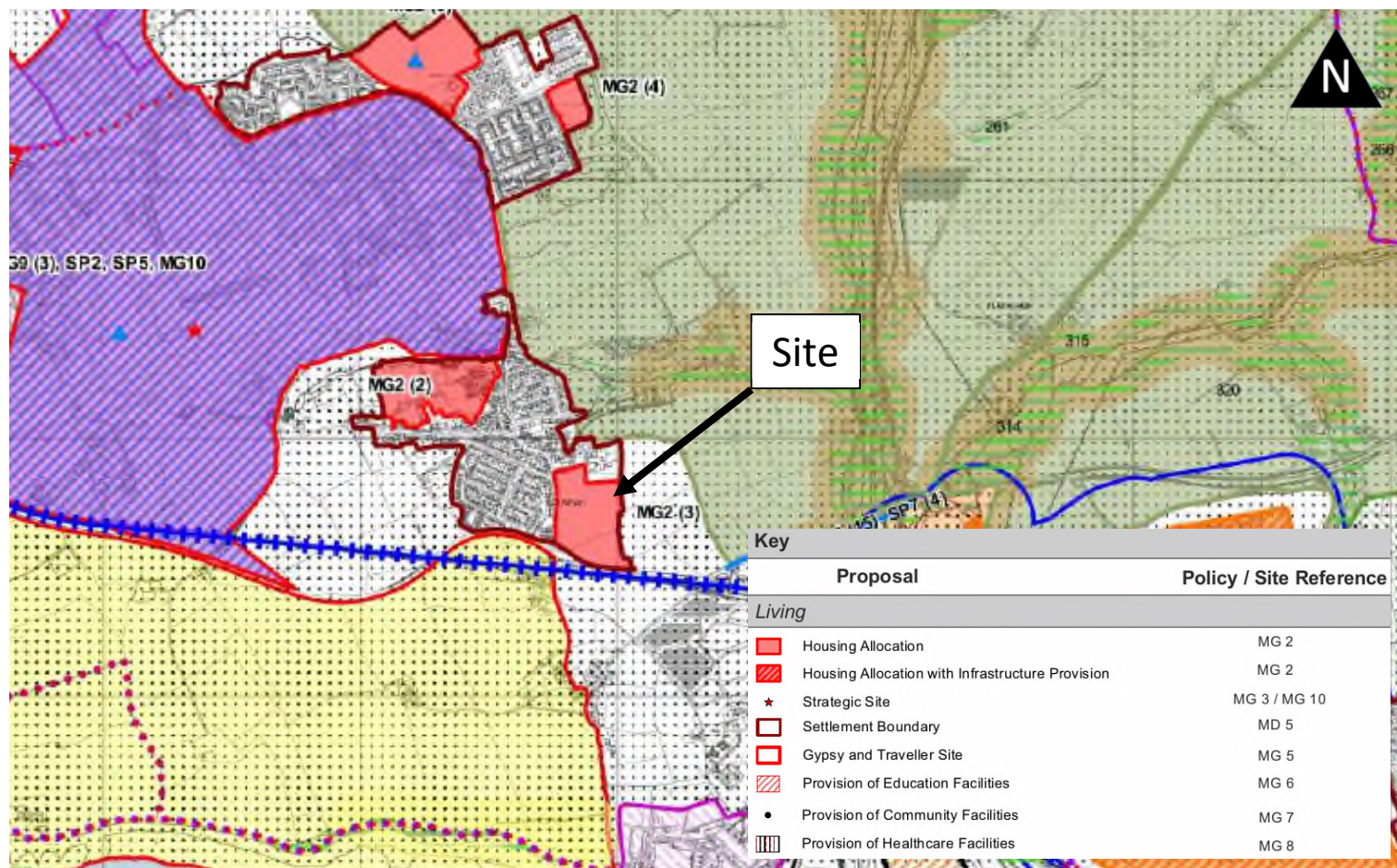


Figure 2.2 Allocated site location (extract from the LDP)

2.8.5 The land to the east of the allocated is being promoted through the replacement LDP which the Vale of Glamorgan is currently progressing.

2.9 Vale of Glamorgan Local Transport Plan 2015-2030

2.9.1 The Local Transport Plan (2015-2030) identifies the sustainable transport measures required to ensure the Vale of Glamorgan Council adheres to current requirements and good practices to allow for a sustainable transport environment for 2015-2030.

2.9.2 The Capital Region comprises a population of over 1.4 million and extends beyond the administrative boundary of Cardiff to include the following unitary authorities - Blaenau Gwent, Bridgend, Caerphilly, Merthyr Tydfil, Monmouthshire, Newport, Rhondda Cynon Taf, Torfaen and the Vale of Glamorgan.

- 2.9.3 All local authorities in the Capital region are committed to the delivery of the vision of making travel more sustainable. The LTP seeks ways to secure better conditions for pedestrians, cyclists and public transport users and to encourage a change in travel choices away from the single occupancy car.

2.10 Summary

- 2.10.1 It is considered that the proposed development of 232 residential dwellings and retail facility on land east of Gileston Road in St Athan, complies with relevant national and local land use and transport policies, as it:

- Promotes and improves accessibility by walking, cycling and public transport by providing improved pedestrian and cycle infrastructure along Gileston Road and B4265;
- Proposes development within close proximity to the local centre and retail facilities, minimising the need to travel and reliance on the car;
- Ensures that transport is accessible to all, taking into account the needs of disabled and other less mobile people;
- Promotes the use existing public transport infrastructure and services by improving passenger waiting facilities for bus stops on Gileston Road; and,
- Supports necessary infrastructure improvements.

3 Existing situation

3.1 Introduction

3.1.1 This section of the Transport Assessment summarises the travel characteristics of the existing population using Census data and describes the existing transport network within the vicinity of the site, detailing accessibility by walking, cycling, public transport and the local highway network. It also reviews collision data in the vicinity of the site over the most recent five-year period.

3.1.2 As outlined above, the development is located to the south-east of St Athan, which has a current population of approximately 4,200 people and is bounded by:

- St Athan Primary School, Church Farm farmhouse and farmyard, and a small number of residential properties fronting Rock Road to the north;
- Agricultural land to the east;
- The B4265 to the south; and,
- Gileston Road to the west.

3.1.3 The location of the proposed development within the local highway network is shown in **Figure 3.1** below.

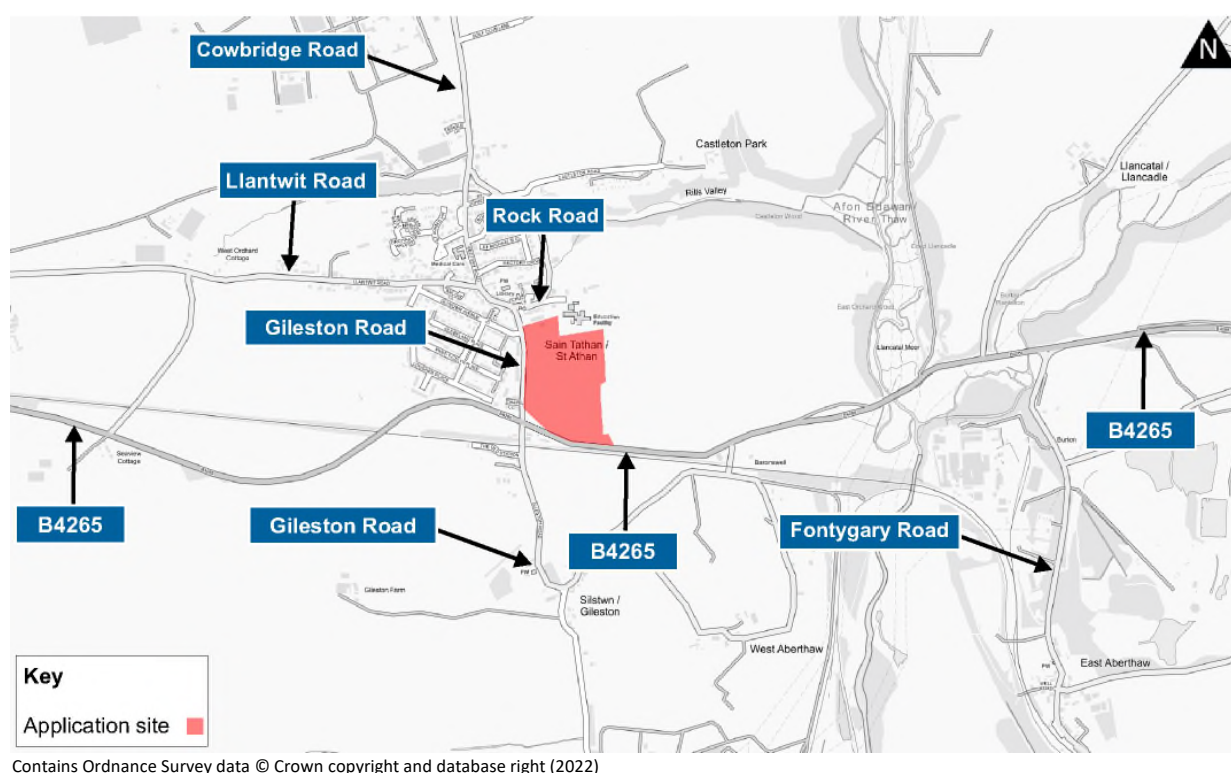


Figure 3.1 Local highway network

3.2 Travel characteristics

- 3.2.1 Travel to work data from the 2011 Census has been used to establish the mode of travel to work for existing residents in the area.
- 3.2.2 It should be noted that whilst 2021 Census 'Method of Travel to Work' data is available, the Office for National Statistics (ONS) has issued a warning that care should be taken when interpreting the results. This is because the 2021 Census was undertaken during the Covid-19 pandemic, when a large proportion of the population worked from home and people were discouraged from using public transport.
- 3.2.3 Lower Super Output Areas are geographical areas built from contiguous output areas, which are consistent in population size. Between four to six output areas make up Lower Super Output Areas (LSOA), and between four to six LSOA make up Middle Super Output Areas (MSOA).
- 3.2.4 **Table 3.1** below shows the travel to work mode split for the Lower Super Output Area (LSOA 0014E) and the Middle Super Output Area (MSOA 0014), in which the site is located, and the Vale of Glamorgan district as a whole. It should be noted that this data excludes those not in employment and those that work from home.

Table 3.1 *Mode split for journey to work based on 2011 Census data*

Mode	Mode split (%)		
	LSOA 014E	MSOA 014	Vale of Glamorgan
Train	2	4	6
Bus, minibuss or coach	5	3	3
Motorcycle	1	1	1
Driving a car or van	74	70	72
Passenger in a car or van	6	5	6
Cycle	1	3	2
On foot	8	13	9
Other	1	1	1
Total	100%		

- 3.2.5 It can be seen from the table above that 74% of the existing residents in the LSOA in which the site is located travel to work by car, with a further 6% travelling as a passenger. This is higher than both the MSOA (at 70%) and the Vale of Glamorgan district as a whole (at 72%) and reflects the relatively rural location of the existing settlement.
- 3.2.6 It can also be seen that within the LSOA, 16% of the population travel to work by sustainable modes, including walking (8%), cycling (1%) and public transport (7%).
- 3.2.7 It should be noted that approximately 62% of the population live and work within The Vale of Glamorgan, 28% work in Cardiff, 6% work in Bridgend and the remainder work in Newport, Rhondda Cynon Taff, Torfaen and Neath Port Talbot.

- 3.2.8 It should also be noted that 22% of the population live and work within the MSOA (014), which includes large employment areas at St Athan, Boverton, West Aberthaw, East Aberthaw, Font-Y-Gary and the western side of Rhoose.

Car ownership

- 3.2.9 Car ownership from the 2021 Census has been used to establish the local car ownership rates for existing residents.
- 3.2.10 In the LSOA in which the site is located, car ownership is 1.41 cars/vans per household. This is lower than the MSOA at 1.49, but higher than the Vale of Glamorgan district as a whole (at 1.35 cars/vans per household).
- 3.2.11 Based on National Travel Survey (NTS), which provides car ownership data for the whole of the UK (2018):
- 44% of residents of privately owned properties have access to one car, 35% have access to two cars and 10% have access to three or more cars; and,
 - 36% of residents of socially rented properties have access to one car and 7% have access to two cars.
- 3.2.12 The proposed development of 232 dwellings will comprise 65% privately owned properties and 35% affordable properties, therefore the likely car ownership for the site will be approximately 1.11 cars per household.
- 3.2.13 It is, therefore, considered that the predicted car ownership for the site, based on Census data is considered robust since it is higher compared to the NTS data and Census data takes into account different locations.

3.3 Connectivity

- 3.3.1 It is considered that the proposed development is accessible by walking, cycling and public transport, as described in the following paragraphs.

Walking

- 3.3.2 The development is situated to the east of an existing residential area, and the majority of roads within the vicinity of the site have footways on one or both sides of the carriageway.
- 3.3.3 Along the western site frontage, there are footways provided along the western side of Gileston Road.
- 3.3.4 To the north of the site, footways are provided on both sides of Gileston Road/Rectory Road, and at the southern end (of Gileston Road), there is a short section of carriageway with footways on both sides of the carriageway and a pedestrian crossing on the approach to B4265. These footways provide safe and direct pedestrian access from the site to the majority of local facilities and amenities.

- 3.3.5 There is an informal crossing across the B4265 at the Gileston Road crossroads, which provides access to the westbound bus stop along the B4265, as well as a small number of residential properties along the southern edge of the B4265 and along Gileston Road to the south. There is also an informal crossing to the south of Rock Road, which is provided with dropped kerbs and tactile paving. The closest formal crossing to the site is a signalised crossing located on Rectory Road, approximately 60m west of the Rock Road/Rectory Road junction.
- 3.3.6 Rock Road is a quiet, rural road which provides convenient pedestrian access to St Athan primary school. In the vicinity of the school, there are footways provided along the southern and eastern side of the carriageway and dropped kerbs to aid crossing.
- 3.3.7 The Chartered Institution of Highways and Transportation (CIHT) guidelines '*Providing for Journeys on Foot*' indicates that the desirable walking distance for commuting and school journeys is 500m, the acceptable walking distance is 1km and 2km is the preferred maximum.
- 3.3.8 The CIHT guidelines indicate that the desirable walking distance for 'Elsewhere', including local amenities is 400m, the acceptable walking distance is 800m and 1.2km is the preferred maximum.
- 3.3.9 Local amenities and facilities within walking distance of the site include:
- Northbound bus stop on Gileston Road (160m)
 - Eastbound and westbound bus stop along the B4265 (250m)
 - Co-op Food convenience store (200m)
 - Post Office (400m)
 - Surgery (GP) (380m)
 - Convenience Store (370m)
 - Library (430m)
 - Pubs/restaurants/Takeways (440m – 720m)
 - St Athan Community Center and Park (800m)
 - Pharmacy (480m)
 - Hairdresser (480m)
 - St Athan Primary School (515m)
- 3.3.10 As part of the proposals, it is proposed to provide a 1800 – 2000m²) at the north-west corner of the site.
- 3.3.11 Local facilities and amenities within 800m of the site are shown in **Figure 3.2** overleaf.

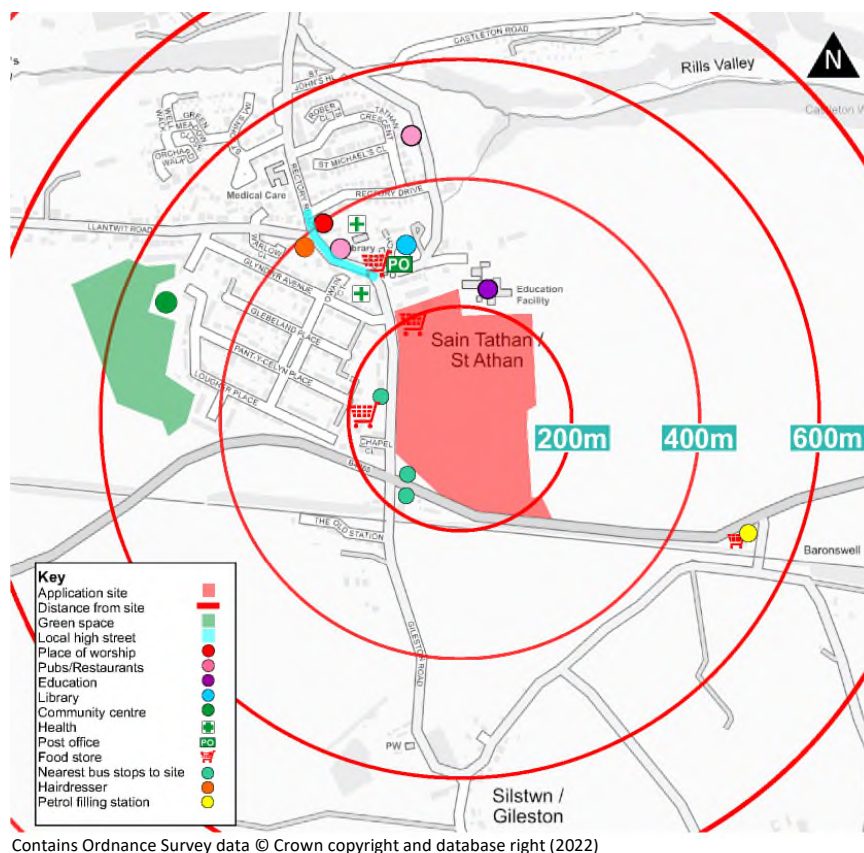
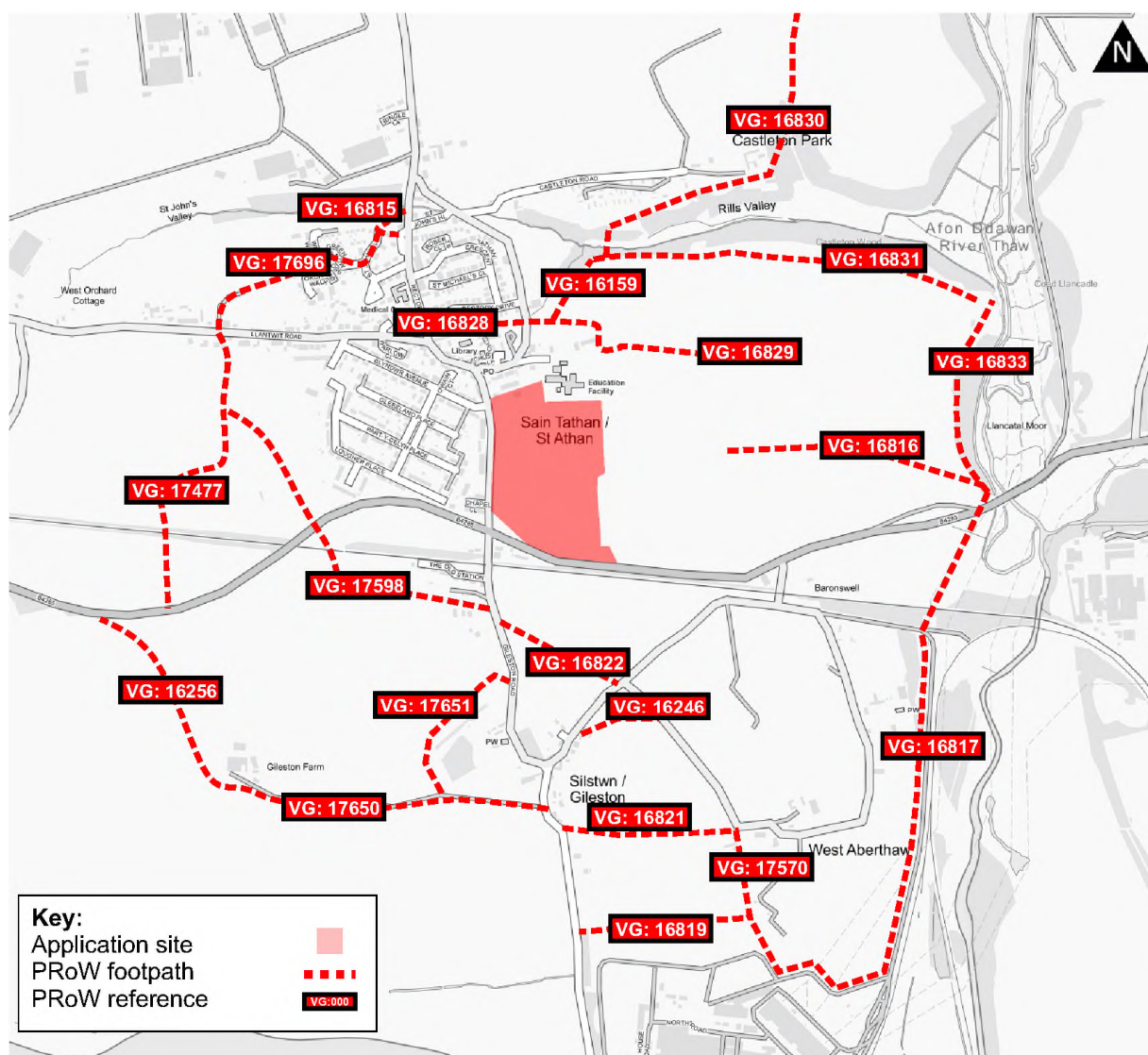


Figure 3.2 Local facilities and amenities in the vicinity of the site

- 3.3.12 Given the proximity of the site to local facilities within St Athan, it is considered that future residents of the development are likely to reach these services using a combination of active and sustainable transport modes, rather than by the use of the private car.

Public Rights of Way

- 3.3.13 There is a wide network of Public Rights of Way (PRoW) within the vicinity of the site, which can be used for leisure purposes and for more convenient access to local amenities and facilities during suitable weather. The PRoW in the vicinity of the site are illustrated in **Figure 3.3** overleaf.



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Figure 3.3 Public Rights of Way in vicinity of the site

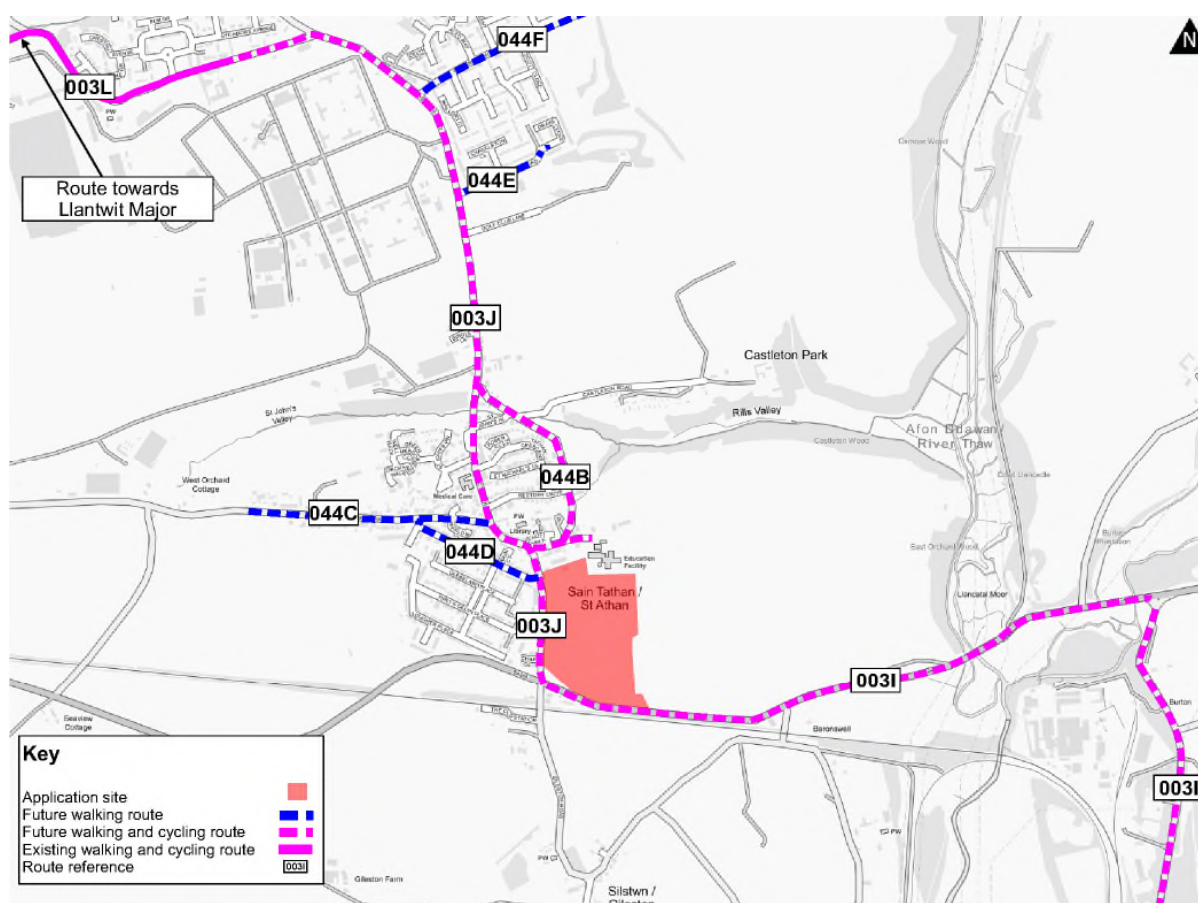
3.3.14 In the immediate vicinity of the site are the following PRoW:

- VG16829 – runs along the northern edge of phase 2 and provides a link to Rock Road and PRoW VG16828.
- VG16816 – runs from the eastern edge of phase 2 to River Thaw, where additional PRoWs VG:16833 and VG:16817 are located.

3.3.15 The PRoWs are generally car-free and, during appropriate weather, provide an alternative car-free walking route between the site and surrounding areas.

Active Travel

- 3.3.16 In line with the Welsh Government's Active Travel (Wales) Act 2013, the Vale of Glamorgan is committed to providing and promoting active travel routes across the region.
- 3.3.17 The Council has produced maps which contain details of the proposed active travel routes that they seek to deliver over a 15-year period (approved by the Welsh Government in February 2018). The routes within the vicinity of the site are shown in **Figure 3.4** below.
- 3.3.18 Future routes include:
- Walking and cycling route running along the B4256, at the southern boundary of the site.
 - Walking and cycling route running along Gileston Road, at the western boundary of the site, this will provide a connection to an existing walking and cycling route along Eglwys Brewis Road (north-west of the site), providing convenient access to Llantwit Major.
 - Walking routes running along Glyndwr Avenue and Llantwit Road to the west of the site.
 - Walking routes along Flemingston Road and Clive Road to the north of the site.



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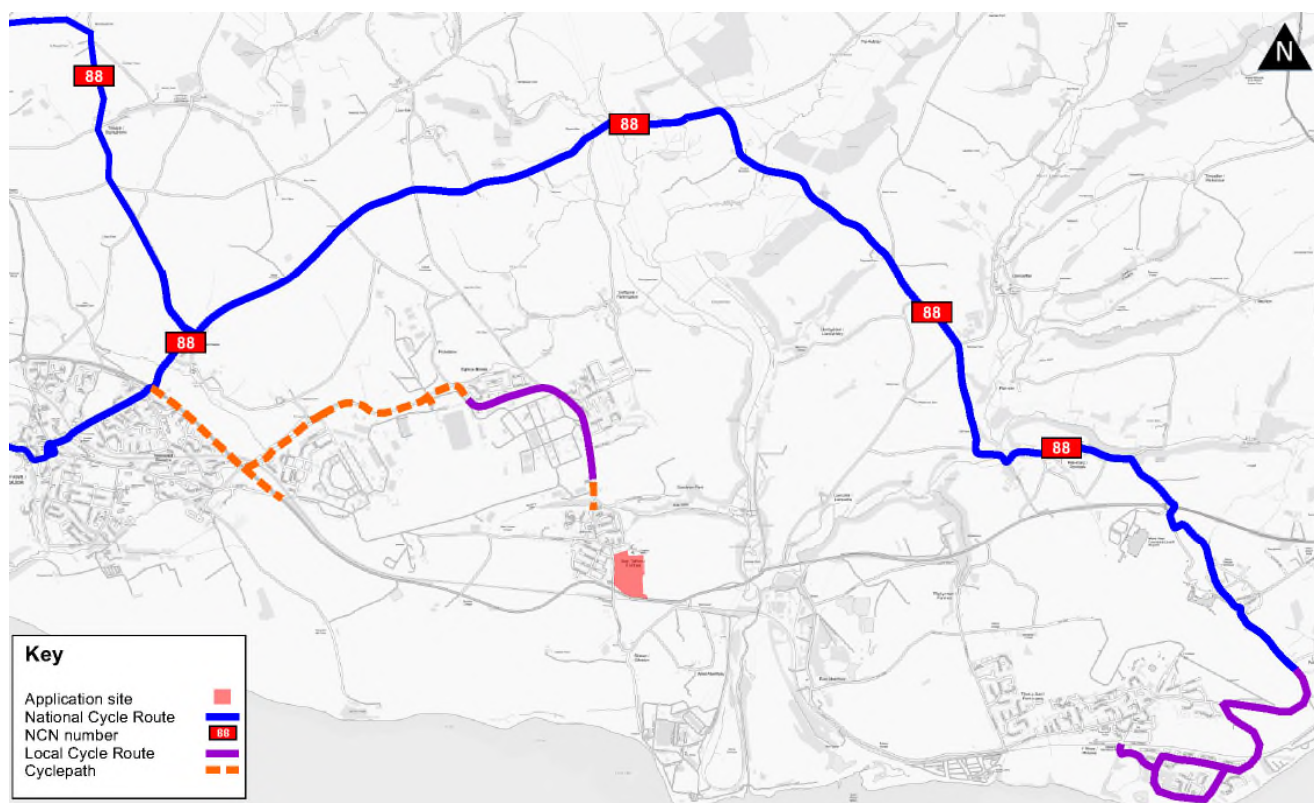
Figure 3.4 Active travel network

Cycling

3.3.19 The nearest route on the National Cycle Network (NCN) is route 88, which can be accessed from Llanmaes Road, approximately 5km west of the site (via Cowbridge Road and the cycleway running along Eglwys Brewis Road to the west). National Route 88 is a proposed coastal route between Newport, Cardiff, Bridgend and Margam Country Park. In the vicinity of the site, this route provides access to Llantwit Major and local villages to the west and Rhoose to the east. In addition, there is a local cycleway provided in Rhoose between Lower Porthkerry and Cardiff Airport.

3.3.20 The Vale of Glamorgan has recently implemented a combined footway/cycleway along the western edge of Gileston Road from the Parc Fferm Wen development (to the north of St Athan) to St John's Hill, close to the village centre. This cycle route provides convenient access to the shared cycleway/footway along Northern Access Road/Eglwys Brewis Road (further to the west) and on the B4265 (to the south-west) to Llantwit Major and Boverton.

3.3.21 The cycle network in the vicinity of St Athan is shown in **Figure 3.5** below.



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Figure 3.5 Local cycle network

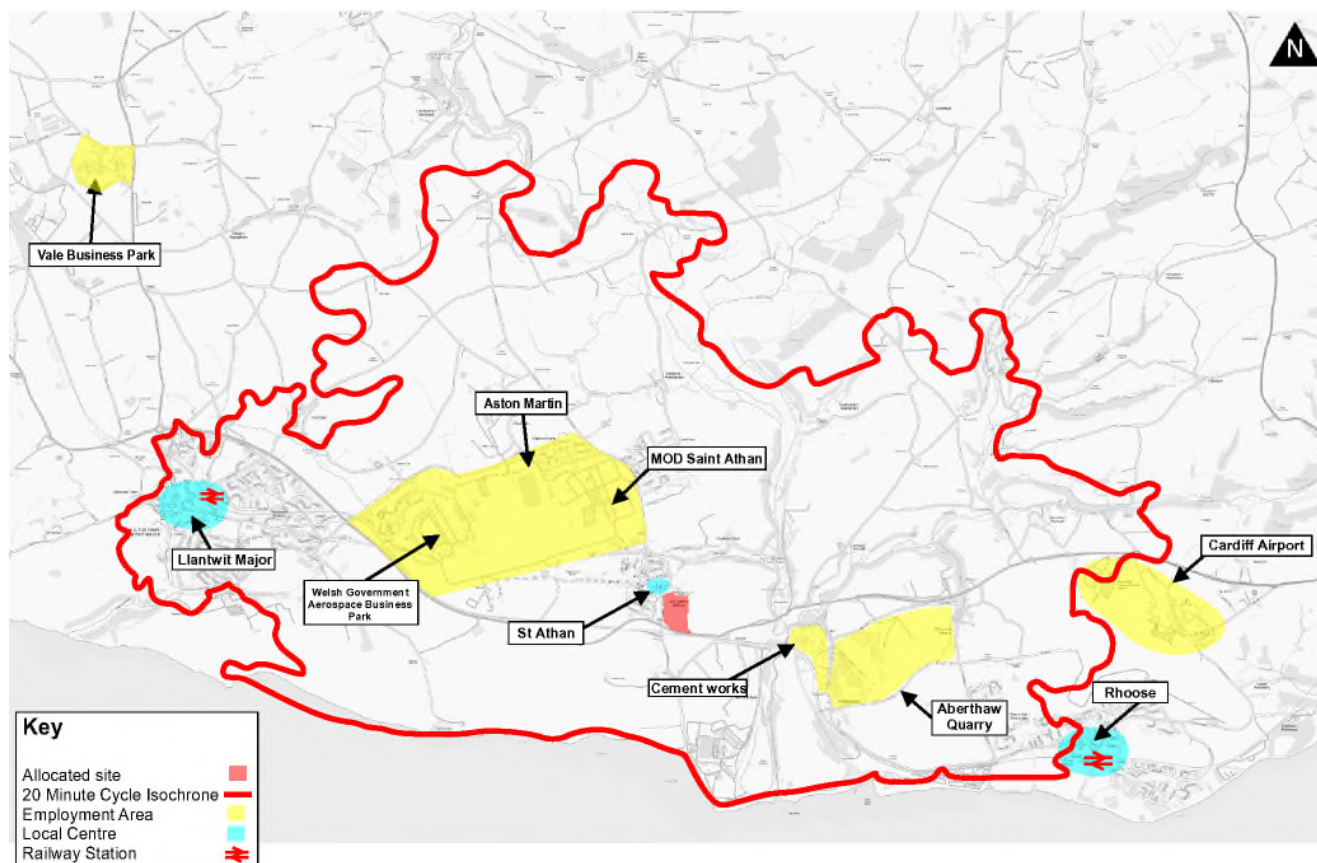
3.3.22 As noted previously, approximately 22% of residents who drive to work, live and work in the same MSOA. There is a range of employment facilities located within a 20-minute cycle journey, including:

- MOD St Athan, Aston Martin, Welsh Government Aerospace Business Park to the north;

- Llantwit Major to the west;
- Rhoose to the east;
- Employment area around Fontygary Road.

3.3.23 It should be noted that there are a number of additional essential facilities in Llantwit Major and Rhoose, and these facilities can be accessed within a 20-minute cycle journey or a 13 to 20-minute bus journey.

3.3.24 Facilities within a 20-minute cycle of the site are shown on **Figure 3.6** below.



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Figure 3.6 Local amenities within 20-minute cycle journey

3.4 Accessibility by public transport

Bus services

- 3.4.1 The nearest bus stop to the site is located on Gileston Road, approximately 150m to the west of the centre of the site, and on the B4265, approximately 260m to the south of the site.
- 3.4.2 The location of the bus stops together with any routes that call at these stops are shown in **Figure 3.7** and the frequency of services that call at these stops is detailed in **Table 3.2** below.

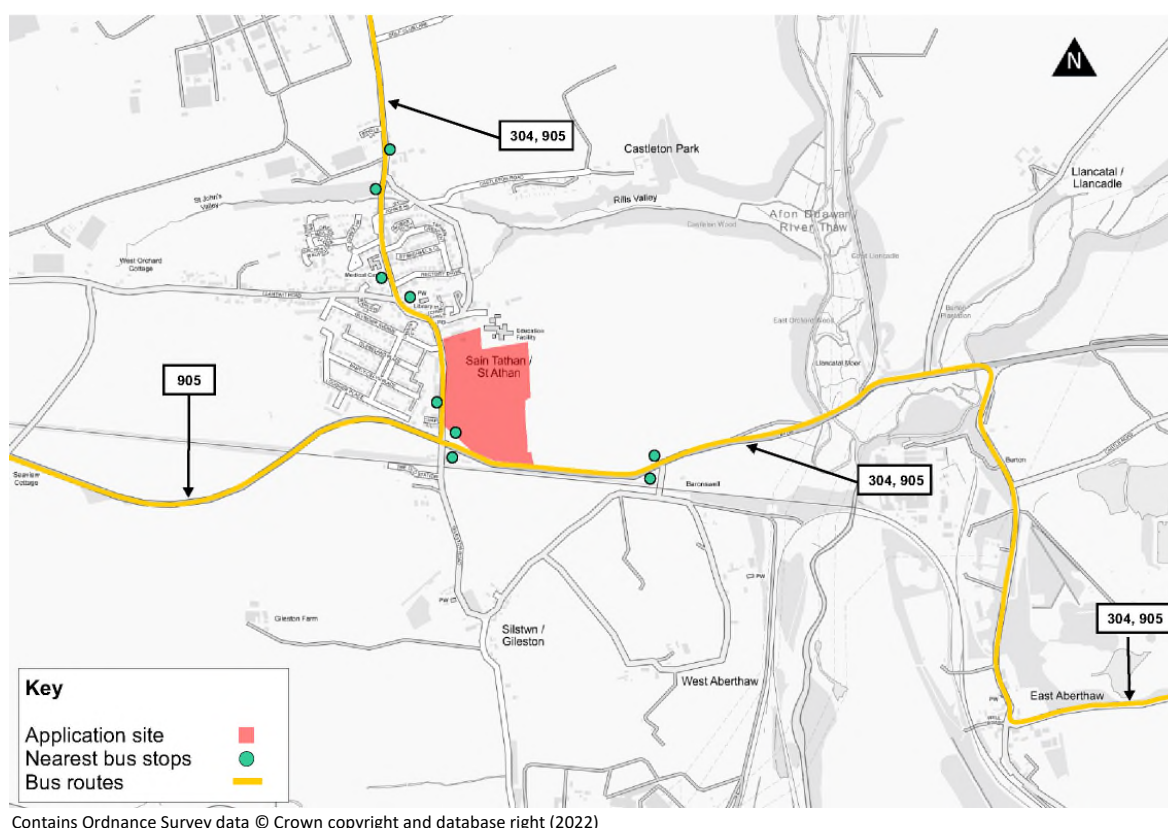


Figure 3.7 Public transport facilities in vicinity of the site

Table 3.2 Summary of bus stops and routes

Route No.	Route	Walk distance (m)	Monday-Friday (excl. Bank Holidays)
St Athan (outside war memorial)			
304	Llantwit Major-Cardiff	160-450	Hourly
	Cardiff-Llantwit Major		Hourly
905	Rhoose Railway Station-	160-450	Hourly
	Boverton - Rhoose Railway Station		

3.4.3 Bus routes 304 and 905 provide access to employment, retail and leisure facilities within:

- Llantwit Major (with a journey time of approximately 18-minutes)
- Rhoose (with a journey time of approximately 16-minutes)
- Cardiff City Centre (with a journey time of approximately 91-minutes)
- Cardiff Airport (with a journey time of approximately 16 minutes)

Rail services

- 3.4.4 The closest railway station, Llantwit Major, is situated approximately 5.6km to the west of the site. This station can be accessed by bicycle (with a 20-minute cycle journey), or by bus route 304 (with a journey time of approximately 18-minutes).
- 3.4.5 Sustrans Design Manual 'Chapter 9: Cycle and Rail Integration' notes that the commuter catchments for railway stations by bicycle can be up to 5 miles (20-minute cycle journey), and it is therefore considered that Llantwit Major railway station is accessible by bicycle from the proposed development.
- 3.4.6 The station is operated by Transport for Wales and is provided on the Vale of Glamorgan Line and provides services to Bridgend and Aberdare (via Cardiff Central). There are hourly services in each direction to Bridgend and Aberdare (via Cardiff Central). The frequency of this services reduces to every two hours on Sundays. There are 10 cycle parking spaces provided at this station (although these are not sheltered), as well as 40 car parking spaces.
- 3.4.7 From Llantwit Major station, Bridgend can be reached within a 17-minute rail journey time, Barry can be reached within a 16-minute rail journey time, Cardiff Central station can be reached within an approximately 38-minute rail journey time. A number of national connections can be made at Cardiff Central Station.
- 3.4.8 Rhoose Railway station is located approximately 6.5km to the west of the site. This station can be accessed by bicycle (with a 25-minute cycle journey), or by bus (route 304) with a journey time of approximately 15-minutes). This station is operated by Transport for Wales and is also located on the Vale of Glamorgan line.
- 3.4.9 It should also be noted that a feasibility study has been commissioned into the provision of a new rail station at St Athan, which is situated on the Vale of Glamorgan line, and will be located approximately 1km west of the site.

3.5 Local highway network

- 3.5.1 A description of the local highway network is outlined in **Table 3.3** below and displayed in Figure 3.1 above.

Table 3.3 *Local highway network*

Description	
Gileston Road	
Description	Single carriageway local distributor road with a footway provided on the western side of the carriageway. The road can be accessed via a crossroad junction with the B4265 (to the south) and via a roundabout junction onto Cowbridge Road/Northern Access Road to the north. Footways are provided on both sides of the carriageway on the approach to the junction with Rock Road to the north and on the approach to the junction with B4265 to the south.
Width	Varies along its length, approximately 6-6.5m
Speed limit	20mph

Street lighting	Yes, lighting is provided on the western side of the carriageway in the vicinity of the site
Crossing facilities	Dropped kerb crossing with tactile paving provided at the Gileston Road/B4265 junction to the south. There is another informal crossing (dropped kerb with tactile paving) provided to the south of the junction with Rock Road. In addition, informal crossings are provided across the majority of residential access junctions along Gileston Road.
Bus route	Yes – routes 304 and 905
On-street parking	On-street parking outside residential dwellings and a layby on the western side of the road.
Character	A semi-urban road with residential dwellings with direct frontage accesses on the western side of the carriageway and agricultural land on the eastern side.

B4265

Description	Single carriageway local district road running along the southern edge of the site. This road provides access to Llantwit Major, local villages and Bridgend to the west and Rhoose and Barry to the east. There is a narrow footway provided on the northern side of the carriageway in the vicinity of the site.
Width	Varies along its length, approximately 6-7m in the vicinity of the site
Speed limit	40mph
Street lighting	Street lighting is provided in the vicinity of the junction with Gileston Road. Lighting is provided to the west of the site (towards Llantwit Major and Bridgend), however, it is more limited to the east (towards Rhoose).
Crossing facilities	Informal crossing with dropped kerbs, tactile paving and a pedestrian refuge island is provided across the A4265 in the vicinity of the Gileston Road crossroad junction.
Bus Route	Yes – routes 304 and 905 to the east of Gileston Road
On-street parking	No
Character	Rural road with limited frontage and predominantly agricultural land on both sides of the carriageway.

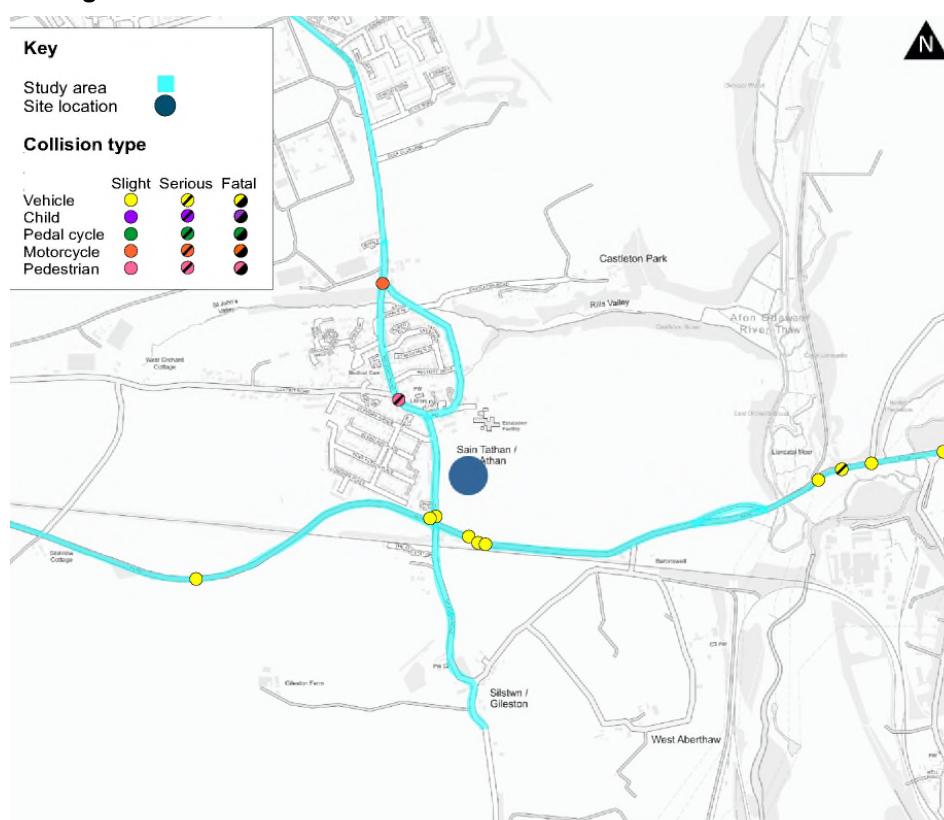
Rock Road

Description	A one-way local access road, with vehicles travelling westbound towards Gileston Road (other than access for agricultural vehicles). This road provides access to residential roads and Gileston Primary School. The road can be accessed via a priority junction with Cowbridge Road and Rectory Drive and the exit is provided onto Gileston Road (via a priority junction). There are limited footways provided on both sides of the carriageway on the southern section of the road.
Width	Varies along its length, (approximately 3.5-5m in the vicinity of the site)
Speed limit	20mph
Street lighting	Limited lighting provided outside residential properties on the southern edge of the carriageway
Crossing facilities	Informal crossing with dropped kerbs and tactile paving provided on approach to Gileston Road (outside the Post Office). An informal crossing is also provided at the junction with Rectory Road at the northern end of St Athan.

Bus Route	No. Albeit the road is used by school buses accessing the school.
On-street parking	Double yellow lines provided on approach to Gileston Road. Some parking is observed on street where the road is wider (outside Rectory Drive)
Character	A semi-urban road which provides access to residential roads. The road is mainly fronted by residential properties at the western end of the road, and agricultural land and hedgerows at the eastern end.

3.6 Collision analysis

- 3.6.1 Personal injury collision data has been obtained for the period 2018 to 2022 (inclusive) for the study area, which includes key routes and junctions surrounding the site. The study area, together with the location and severity of collisions that occurred within it, is shown in **Figure 3.8** below.



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Figure 3.8 Collision data

- 3.6.2 The number and severity of casualties is summarised in **Table 3.4** overleaf.

Table 3.4 Summary of personal injury collision data

Year	No. of collisions resulting in personal injury			Total number of casualties	No. of collisions involving vulnerable users			
	Fatal	Serious	Slight		Cyclist	Child	Motorcycle	Pedestrians
2018	0	0	2	2	0	0	0	0
2019	0	0	4	4	0	0	1	0
2020	0	0	1	1	0	0	0	0
2021	0	1	2	6	0	0	0	1
2022	0	1	1	2	0	0	0	0
Total	0	2	10	15	0	0	1	1

3.6.3 It can be seen from the figure and table above that there has been a total of 12 collisions within the study area over the most recent five-year period, with two collisions (17%) resulting in serious collisions and the remaining 10 collisions (83%) resulting in slight injuries.

3.6.4 It can also be seen that two of the 12 collisions involved vulnerable road users, with:

- One collision involving a motorcyclist, resulting in slight injuries being sustained; and,
- One collision involving a pedestrian, resulting in serious injuries being sustained.

3.6.5 It can be seen from the figure above that the collisions are spread throughout the study area, and there are no significant clusters of collisions that raise significant road safety concerns or require further investigation.

3.7 Traffic surveys

Fully classified turning count surveys

3.7.1 In order to determine the 2022 base traffic flows at key links and junctions within the study area, fully classified turning count surveys were undertaken between 7.30am-9.30am and 4.30pm-6.30pm on Wednesday 12th October 2022. The extent of surveys, which has been agreed with Vale of Glamorgan Highways, included the following junctions:

- B4265/Northern Access Road roundabout
- B4265/Boverton Road/Eglwys Brewis Road linked traffic signal-controlled junctions
- B4265/Llantwit Road priority junction
- B4265/Gileston Road crossroads
- Cowbridge Road/Eglwys Brewis Road/St Athan Road roundabout
- B4265/Tredogan Road/A4226 roundabout.

3.7.2 Fully classified turning count data at the Waycock Cross roundabout and Port Road roundabout has been obtained from the TA produced in support of the proposed development at Rhoose (planning ref. 2022/00733/FUL). This survey was undertaken in April 2022.

3.7.3 Further surveys were also undertaken between 7.00am-10.00am and 3.00pm-7.00pm on Wednesday 20th March 2024. The junctions surveyed include:

- Waycock Cross roundabout (Waycock Road/A4226/B4266 roundabout)
- East Aberthaw priority junction
- B4265/Gileston Road crossroads
- B4265/Llanmaes Road/Tyle House Close linked traffic signal-controlled junctions
- Cowbridge Road/B4270/B4265 roundabout
- B4265/Northern Access Road roundabout

3.7.4 In addition, surveys were undertaken at the B4265/Tredogan Road/A4226 roundabout between 7.30am-9.30am and 4.30pm-7.30pm on Tuesday 25th June 2024.

3.7.5 To account for traffic flow increases at junctions which weren't re-surveyed in 2024, an AM growth factor was estimated by comparing the traffic flows from the 2022 surveys, with those from the 2024 surveys, at the following junctions:

- Port Road roundabout
- B4265/Llantwit Road priority junction
- B4265/Boverton Road/Eglwys Brewis Road linked traffic signal-controlled junctions
- Cowbridge Road/Eglwys Brewis Road/St Athan Road roundabout

3.7.6 The total traffic at each junction during the AM and PM peak periods is outlined in **Table 3.5** below.

Table 3.5 Comparison of base traffic flows in 2022 and 2024

Junction	2022		2024		Growth factor	
	AM	PM	AM	PM	AM	PM
Port Road roundabout	1354	1587	1366	1587	1.009	0
B4265/Llantwit Road priority junction	858	862	866	862	1.009	0
B4265/Boverton Road/Eglwys Brewis Road linked traffic signal-controlled junctions	1069	970	1079	970	1.009	0
Cowbridge Road/Eglwys Brewis Road/St Athan Road roundabout	500	429	505	429	1.009	0

3.7.7 There was a reduction in traffic flows from 2022 to 2024 at both the Gileston Road crossroads and the B4265/Tredogan Road/A4226 roundabout during the 2022 PM peak, therefore a growth factor was not applied to the 2022 PM base traffic flows at the four junctions above.

4 Development proposals

4.1 Introduction

4.1.1 As outlined in Section 1, this Transport Assessment has been produced in support of a planning application for residential development of 232 dwellings and foodstore on allocated land to the east of Gileston Road in St Athan, the Vale of Glamorgan, including:

- 150 private dwellings, as follows:
 - 14 x 2-bedroom
 - 64 x 3-bedroom
 - 72 x 4-bedroom
- 82 affordable dwellings, as follows:
 - 30 x 1-bedroom
 - 23 x 2-bedroom
 - 20 x 3-bedroom
 - 9 x 4-bedroom

4.1.2 The development will also provide:

- Car parking in accordance with adopted parking standards;
- Improvements to pedestrian and cycle infrastructure in the vicinity of the site;
- Improvements to public transport infrastructure in the vicinity of the site;
- Landscaping, formal and informal open space; and,
- Associated infrastructure.

4.1.3 As discussed with the Local Highway Authority, the development will be accessed from Gileston Road (to the west).

4.1.4 **Figure 4.1** overleaf provides a site layout, including the point of access onto Gileston Road.





- 4.2.3 The proposed access has been designed as a priority junction with a ghost-island right-turn lane. In addition, the access has been designed to accommodate the swept path of a maximum legal articulated vehicle accessing the proposed foodstore, which is located at the north-west corner of the development (adjacent to Gileston Road).
- 4.2.4 A swept-path analysis of the range of vehicles likely to access the site (including a 16.5m articulated delivery vehicle, refuse vehicle, fire tender, service/delivery vehicle and a medium sized car) is presented in **Appendix B**.
- 4.2.5 To enable a 16.5m articulated vehicle to manoeuvre safely along Gileston Road localised carriageway widening is required approximately 15m north of Gileston Road crossroads junction. The local widening minimises the impact on the existing hedge. The proposed widening is shown in **Figure 4.3** below and the swept path analysis of an articulated vehicle travelling in both directions on Gileston Road is provided in **Appendix C**.

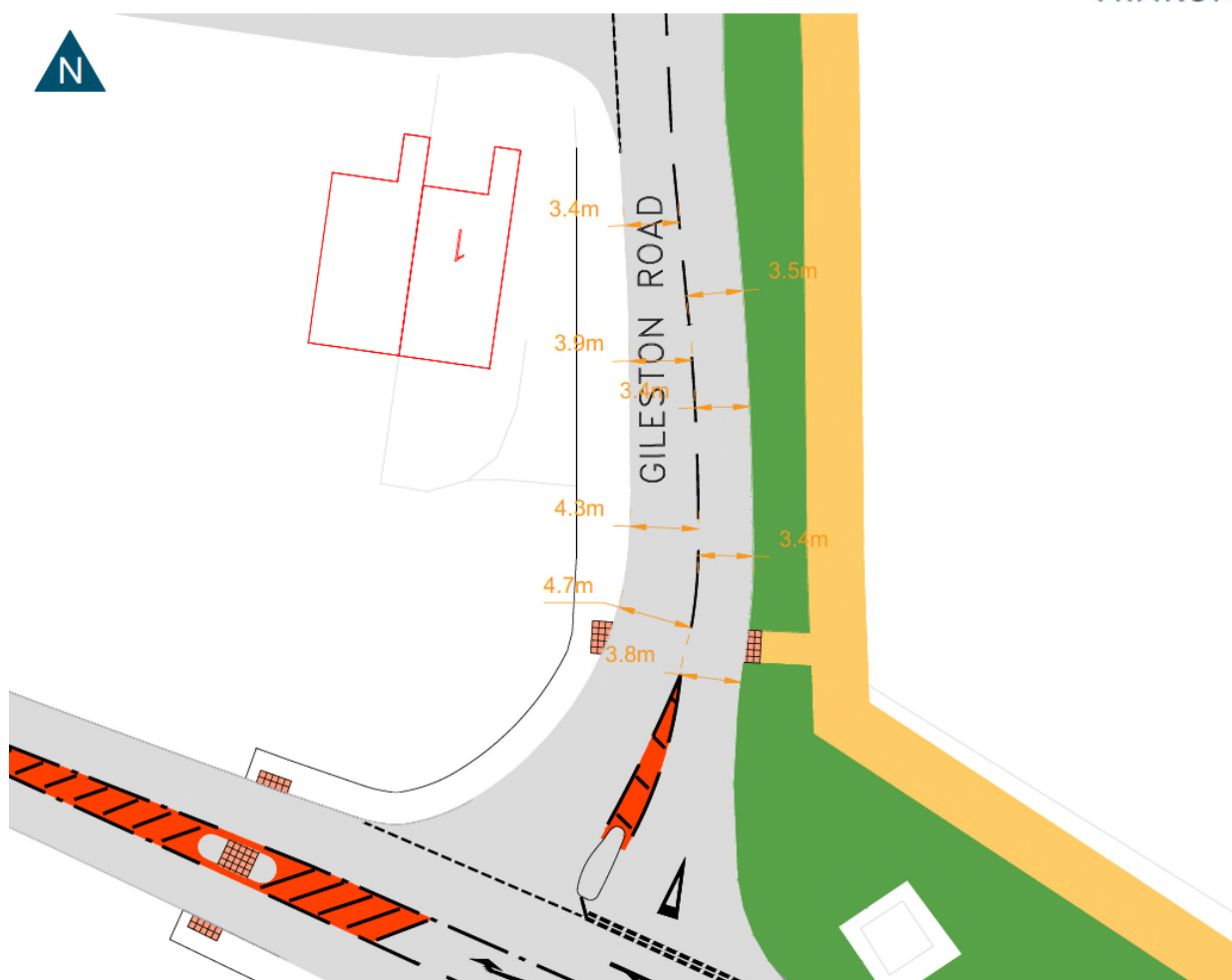


Figure 4.3 Proposed carriageway widening along Gileston Road

Visibility splays

- 4.2.6 The strict application of Design Manual for Roads and Bridges (DMRB) to non-trunk roads is rarely appropriate for highway design in built-up areas, regardless of traffic volume. Manual for Streets 2 (MfS) states:

‘it is recommended as a starting point for any scheme affecting non-trunk roads, designers should start with MfS’

- 4.2.7 Gileston Road is subject to a 20mph speed limit, which results in a stopping sight distance (SSD) of 43m in both directions.
- 4.2.8 The required visibility splay at the site access along Gileston Road is shown in **Appendix D**, and it can be seen from the diagram that the required visibility splays can be achieved within the land owned by the application or within highway land.

Pedestrian access

- 4.2.9 The internal pedestrian network will be designed to ensure multiple, direct and convenient access points to the surrounding network of footways and footpaths (including Public Rights of Way).
- 4.2.10 There will be 2.0m footways along both sides of the carriageway throughout the site (with the exception of the shared surface streets), which connect to the existing pedestrian network on Gileston Road.
- 4.2.11 In addition, a 3.5m wide combined cycleway/footway will be provided on the western side of the site, parallel to Gileston Road and along the southern edge of the site parallel to the B4265. The combined cycleway/footway along Gileston Road will be located behind the existing hedgerow but will include a number of access points through the hedge, to connect with the wider area.
- 4.2.12 Convenient access will be provided to local facilities and amenities including:
- Co-op;
 - Bus stops on Gileston Road and the B4265; and,
 - The surrounding residential streets.
- 4.2.13 As part of the development, it is also proposed to provide informal crossing points across Gileston Road (including parallel pedestrian/cycle crossing) to the north and south of the site access.
- 4.2.14 The proposed pedestrian and cycle facilities, with dimensions, are shown in **Figure 4.4** below.

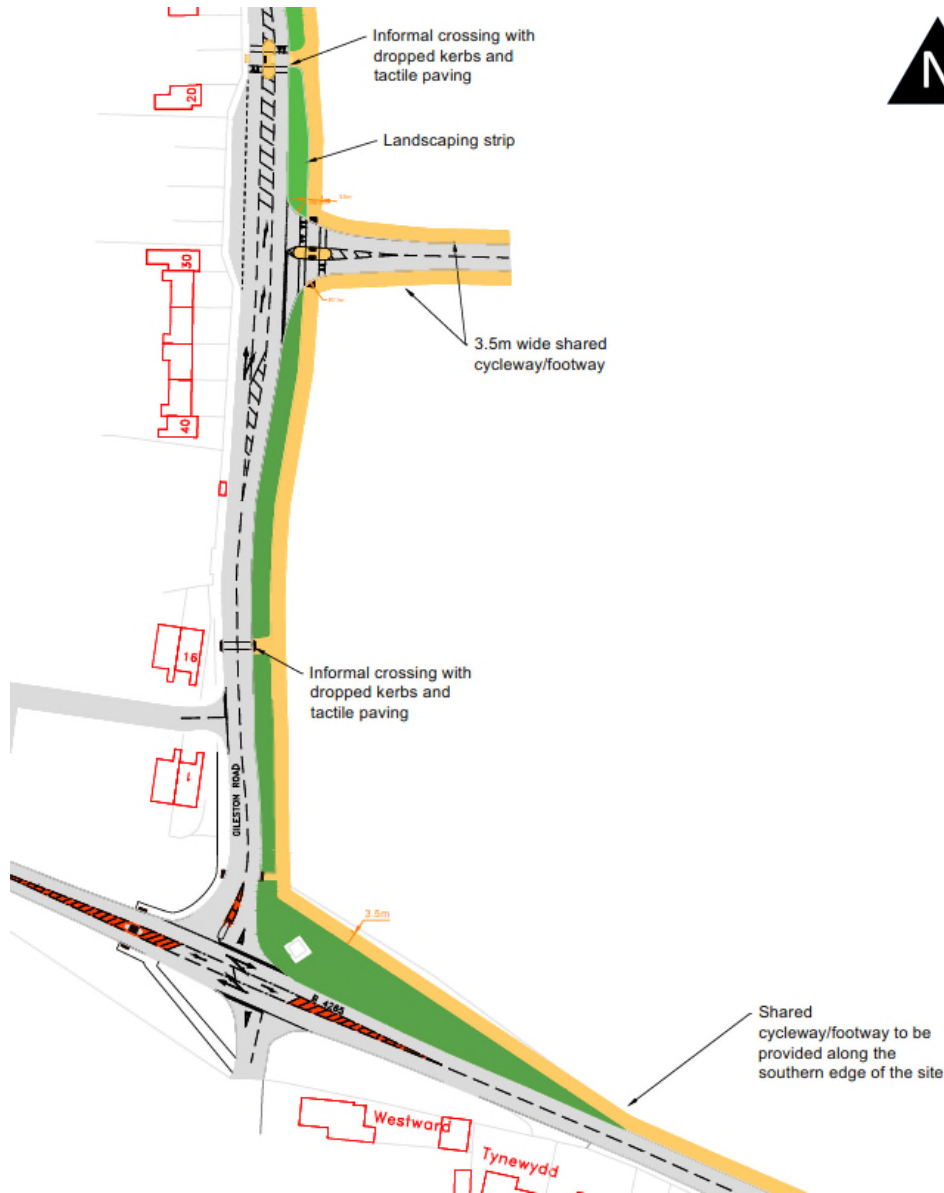


Figure 4.4 Proposed pedestrian and cycle facilities

St Athan primary school

- 4.2.15 There is the potential to create an access through the site to St Athan Primary school. Visitors also have the potential to park in the foodstore car park, which could free-up space in and around the school (on Rock Road). However, this will be subject to negotiations with the school and the local education authority.
- 4.2.16 The access arrangements for the school bus will remain unchanged, and will continue to be provided from the bus stop on Rock Road.

4.3 Parking

Car parking

4.3.1 On-site car parking provision for the proposed development will be provided in accordance with the adopted parking standards set out in 'Vale of Glamorgan County Council Parking Standards Supplementary Planning Guidance – January 2019.

4.3.2 It should be noted that the parking standards also state that:

*'The standards set out within this SPG should be interpreted as **maximum** rather than minimum standards i.e. they are 'not more than' figures ... We need to ensure that new developments provide lower levels of parking than have generally been achieved in the past and minimum parking standards are no longer appropriate.'*

4.3.3 504 allocated parking spaces will be provided on-site, and visitor parking will be provided at a rate of 1 space per 5 units.

4.3.4 Existing car ownership within the LSOA (in which the site is located) is 1.43 vehicles per household, and it is therefore anticipated that the proposed parking provision is more than sufficient to accommodate the anticipated demand.

4.3.5 It is also anticipated that, based on the existing car ownership statistics and the level of car parking provision proposed, there is sufficient capacity to accommodate an element of visitor parking on plot, with any further visitor parking provided on-street.

Cycle parking

4.3.6 In accordance with adopted cycle parking standards, it is anticipated that cycle parking will be accommodated within garages (for those dwellings with garages) or within rear gardens for all other properties.

4.3.7 For flats, cycle parking will be provided at the rate of one space per flat. Secure/covered cycle parking stands will be conveniently located within the communal gardens of each block.

4.4 Deliveries and servicing, refuse and emergency – residential uses

Deliveries and servicing

4.4.1 The majority (upto 85%) of servicing/deliveries to the residential dwellings will be undertaken by LGV vehicles (small vans less than 3.5t) and the remaining 15% will be undertaken by OGV and HGV vehicles (3.5t or more). The busiest time for deliveries was between 10am-2pm, which is outside the AM and PM peak hours.

- 4.4.2 It is anticipated that all servicing and deliveries will be undertaken from within the internal road layout. The likely maximum size of vehicle that would be reasonably expected to deliver to any residential development is a 10m rigid vehicle. In practice, it is more likely that the maximum size of vehicle will be an 8m rigid vehicle, with transit sized vehicles being much more commonly used.

Refuse and recycling

- 4.4.3 It is anticipated that residential refuse will be collected on-street (from within the development), with residents placing their refuse and recycling on the kerbside on the allotted collection day. Refuse storage points have been provided at the private driveways, within the recommended walk distance for both residents and refuse operatives.

Emergency vehicles

- 4.4.4 It is anticipated that access for emergency vehicles (fire and ambulance) will be provided from within the internal road layout, and it is anticipated that the proposed dwellings will all be within an acceptable distance for access by emergency vehicles.

4.5 Servicing and deliveries – foodstore

- 4.5.1 Food stores typically utilise 16.5m articulated HGV to make store deliveries, and this is supplemented by 10m rigid HGVs, particularly where access restrictions require the use of smaller delivery vehicles.
- 4.5.2 Service vehicles will travel to/from the site via the B4265 (to the south of the site), and will turn right into the site/left out of the site to/from Gileston Road. No service/delivery vehicles will be permitted to travel north of the site access through St Athan, and this will be controlled through the implementation of a Servicing and Delivery Management Plan.

5 Transport characteristics

5.1 Introduction

- 5.1.1 In order to assess the impact of the proposed development and the possible future phase on the existing transport network, it is necessary to estimate the number of person trips (by mode) generated by the proposed dwellings and foodstore.
- 5.1.2 This section, therefore, outlines the methodology used to predict the likely volume of person trips generated by the proposed development.
- 5.1.3 It should be noted that, in order to provide a robust assessment, the following analysis is based on a total of 250 dwellings (to correspond to the proposed allocation), whereas the proposed development is for 232 dwellings only.

5.2 Person trip generation – residential dwellings

- 5.2.1 As outlined above, the analysis is based on a total of 250 dwellings, with 162 open market/private dwellings (65%) and 88 affordable/social rented dwellings (35%).
- 5.2.2 The methodology used to determine the volume of trips likely to be generated by the proposed residential dwellings is outlined below:

Open market/private houses – 162 dwellings

- 5.2.3 The residential trip rates and hence the likely person trips generated by the proposed development of 162 open market/private dwellings, have been based on a review of the TRICS (v7.11.3) trip generation database.
- 5.2.4 Sites have been selected on the basis of the following selection criteria:
- Land use: Residential; Houses privately owned;
 - Survey type: Multi-modal;
 - Survey days: Monday – Friday;
 - Number of units: 24 to 480;
 - Location of selected sites: Suburban area, edge of town and neighbourhood centre; and,
 - Regions selected: All, excluding Central London, Northern Ireland and Republic of Ireland.
- 5.2.5 A total of 28 sites have been selected, and the AM, PM and daily trips generated by 162 private dwellings is summarised in **Table 5.1** below, and presented in full in **Appendix E**. It should be noted that given the number of sites selected and in order to provide a robust assessment, 85th percentile trip rates have been used.

Table 5.1 Person trip generation – 162 private dwellings

Time period	Arrival trip rate	No. of arrivals	Depart trip rate	No. of departs	Total trip rate	Total movements
Total people						
8am-9am	0.281	46	0.719	116	1	162
5pm-6pm	0.591	96	0.455	74	1.046	169
7am-7pm	4.575	741	4.594	744	9.169	1485

5.2.6 It can be seen from the table above that the proposed (162) open market/private dwellings could generate up to a maximum of 162 total person trips (two-way) in the am peak period, 169 total person trips (two-way) in the pm peak period, and 1,485 person trips (two-way) throughout the day.

Affordable/social rented dwellings – 88 dwellings

5.2.7 The residential trip rates and hence the likely person trips generated by the proposed development of 88 affordable/social rented dwellings, have also been based on a review of the TRICS (v7.11.13) trip generation database.

5.2.8 Sites have been selected on the basis of the following selection criteria:

- Land use: Residential; Affordable/local authority houses;
- Survey type: Multi-modal;
- Survey days: Monday – Friday;
- Number of units: 14 to 280;
- Car ownership: 0.6 to 1.5;
- Location of selected sites: Suburban area and edge of town; and,
- Regions selected: All, excluding Central London, Northern Ireland and Republic of Ireland.

5.2.9 A total of five sites have been selected, and the AM, PM and daily trips generated by the proposed 88 affordable dwellings is summarised in **Table 5.2** below, and presented in full in **Appendix F**. It should be noted that average trip rates have been calculated as there is insufficient number of sites within the database to obtain 85th percentile trip rates.

Table 5.2 Person trip generation – 88 affordable dwellings

Time period	Arrival trip rate	No. of arrivals	Depart trip rate	No. of departs	Total trip rate	Total movements
Total people						
8am-9am	0.212	19	0.634	56	0.846	74
5pm-6pm	0.410	36	0.320	28	0.73	64
7am-7pm	3.224	284	3.365	296	6.589	580

5.2.10 It can be seen from the table above that the proposed (88) affordable/social rented dwellings could generate up to a maximum of 74 total person trips (two-way) in the AM peak period, up to 64 person trips (two-way) in the PM peak, and up to 580 person trips (two-way) throughout the day.

Total residential person trips

- 5.2.11 **Table 5.3** below outlines the total person trip generation for the proposed 250 private and affordable) dwellings.

Table 5.3 Total person trips – 250 dwellings

Time period	No. of arrivals	No. of departs	Total movements
Total person trips			
8am-9am	64	172	236
5pm-6pm	132	102	234
7am-7pm	1025	1040	2065

Residential trips by mode

- 5.2.12 The number of residential trips by mode have been determined by applying the ‘journey to work mode splits’ (outlined in Table 3.1, Section 3) to the total person trips, outlined in Table 5.3 above.
- 5.2.13 The results residential trips (by mode) are set out in **Table 5.4** below.

Table 5.4 Residential trips (by mode) – 250 dwellings

Time period	No. of arrivals	No. of departs	Total movements
Pedestrians			
8am-9am	8	22	31
5pm-6pm	17	13	30
7am-7pm	133	135	268
Cyclists			
8am-9am	2	5	7
5pm-6pm	4	3	7
7am-7pm	31	31	62
Public transport			
8am-9am	4	12	17
5pm-6pm	9	7	16
7am-7pm	72	73	145
Vehicles (driver)			
8am-9am	45	121	166
5pm-6pm	92	71	164
7am-7pm	717	728	1446
Vehicles (passenger)			
8am-9am	3	9	12
5pm-6pm	7	5	12
7am-7pm	51	52	103

- 5.2.14 It should be noted that the trips (by mode) outlined in Table 5.4 represent a worst-case, as it has been assumed that all the trips during the peak periods are ‘work’ based trips. In practice, the peak hour trips will include a number of journey purposes, such as ‘education’, ‘shopping’, ‘leisure’ and ‘other personal business’ trips.

5.2.15 It is also considered that, due to the proximity of the site to St Athan Primary School, the distance to other primary and secondary schools, and the provision of a foodstore on site, the majority of trips for 'education' and 'shopping' purposes will be 'internal' trips, as detailed below.

Education trips

- The closest school to the site is St Athan Primary School, which is within easy walking/scooting/cycling distance of the proposed residential dwellings and reducing the need to travel by car;
- The nearest alternative primary school(s), and secondary school(s) are located approximately 3 miles (4.8km) from the site (see **Figure 5.1** below), and therefore pupils will be eligible for free school travel; and,
- The majority of learners/pupils travelling to school by car(as a passenger), will be driven as part of a longer 'commuting' or 'shopping' trip, rather than as a primary 'education' trip.

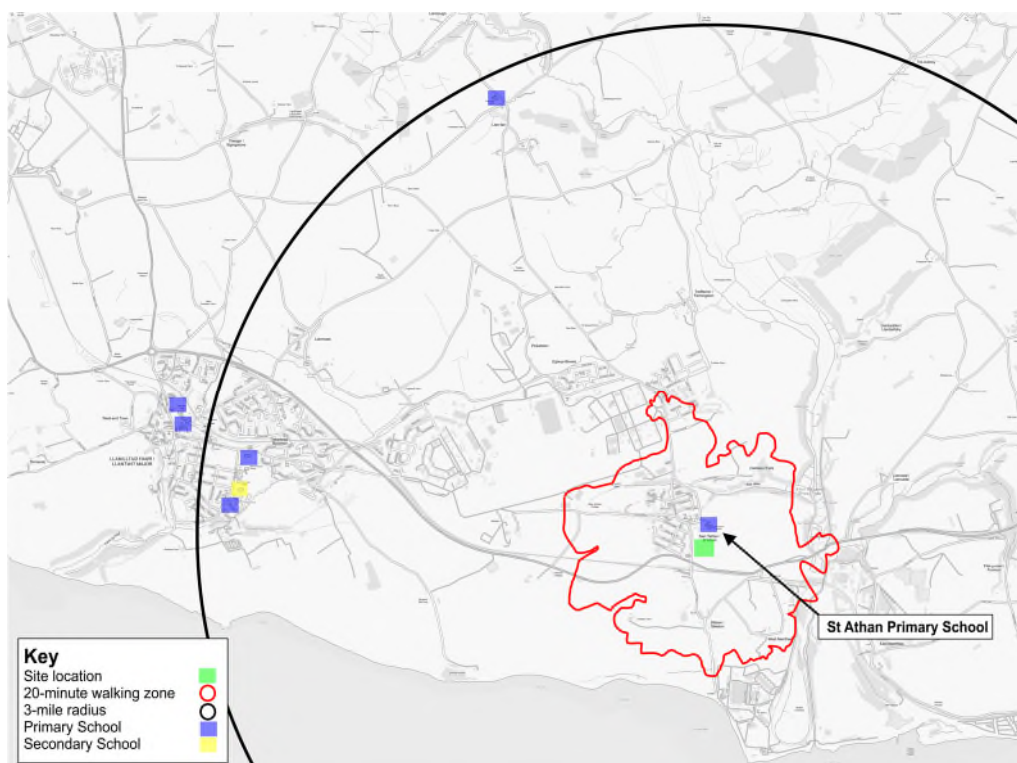


Figure 5.1 Primary and secondary schools within walking distance of the site

Shopping trips

- The proposed development includes a 20,000sq.ft foodstore (at the north-west corner of the site), which is within easy walking distance of the proposed residential dwelling, reducing the need for residents to use their car to undertake their food shopping;

- It is anticipated that the majority of 'shopping' trips undertaken by car, during network peak periods, will be foodstore trips; and,
- The next nearest foodstores are located in Bridgend, Cowbridge or Barry, and will be undertaken as part of a longer 'commuting' or 'other personal business' trip, rather than as a primary 'shopping' trip.

5.2.16 In order to provide a more realistic estimate of the likely 'external' vehicle trips generated by the proposed development, it will be necessary to determine the likely volume of 'education' and 'shopping' trips generated by the proposed residential dwellings on site and remove these trips from vehicle estimates outlined in Table 5.4 above.

5.2.17 The following section, therefore, outlines the methodology used to predict the likely 'education' and 'shopping' trips generated by the proposed residential dwellings on site.

5.3 Residential trips by journey purpose

5.3.1 The percentage of residential trips by journey purpose has been derived from the National Travel Survey (NTS) using the 'Trip start time by trip purpose' dataset (NTS0502), as outlined in **Table 5.5** below.

Table 5.5 Trip purpose by time period

Start time	Education (%)	Shopping (%)
8am-9am	50.4	4.3
5pm-6pm	4.4	12.3
Daily average	15.8	17.1

5.3.2 The resultant trip generation by trip purpose (see **Table 5.6** below) has been estimated by factoring the total person trips (outlined in Table 5.3 above) by the average trip purposes by time period (outlined in Table 5.5).

Table 5.6 Total person trips by trip purpose

Start time	Trips by journey purpose	
	Education	Shopping
AM peak		
Arrive	32	3
Depart	87	7
Total	119	10
PM peak		
Arrive	6	16
Depart	4	13
Total	10	29
Daily		
Arrive	162	175
Depart	164	178
Total	326	353

Education trips

- 5.3.3 The likely mode share for 'education' trips has been derived from the NTS 9908 dataset and is presented in **Table 5.7** below.

Table 5.7 Education trips by mode share (NTS 9908 dataset)

Surface Rail (%)	Bus (%)	Car/van Driver (%)	Car/van Passenger (%)	Bicycle (%)	Walk (%)	Other transport (%)	All modes (%)
1.2	8.7	21.2	21.8	1.4	42.1	3.6	100

- 5.3.4 The resultant trip generation by mode for 'education' trips is outlined in **Table 5.8** below.

Table 5.8 Trip generation by mode – education trips

Mode	AM (8am-9am)		PM (5pm-6pm)		Daily	
	Arrivals	Departs	Arrivals	Departs	Arrivals	Departs
Train	0	1	0	0	2	2
Bus	3	8	1	0	14	14
Car driver	7	18	1	1	34	35
Car (passenger)	7	19	1	1	35	36
Cycle	0	1	0	0	2	2
On foot	14	37	2	2	68	69
Other	1	3	0	0	6	6
Total	32	87	6	4	162	164

Shopping

- 5.3.5 The mode share data for 'shopping' trips have been derived from the NTS 0502 dataset, as outlined in **Table 5.9** below.

Table 5.9 Shopping (NTS 0502 dataset)

Surface Rail (%)	Bus (%)	Car/van Driver (%)	Car/van Passenger (%)	Bicycle (%)	Walk (%)	Other transport (%)	All modes (%)
0.7	7.6	43.8	19.6	1.0	25.5	1.8	100

- 5.3.6 The resultant trip generation by mode for 'education' trips is outlined in **Table 5.10** below.

Table 5.10 Trips by mode – shopping trips

Mode	AM (8am-9am)		PM (5pm-6pm)		Daily	
	Arrivals	Departs	Arrivals	Departs	Arrivals	Departs
Train	0	0	0	0	1	1
Bus	0	1	1	1	13	14
Car driver	1	3	7	5	77	78
Car (passenger)	1	1	3	2	34	35
Cycle	0	0	0	0	2	2
On foot	1	2	4	3	45	45
Other	0	0	0	0	3	3
Total	3	7	16	13	175	178

Total residential vehicle trips

- 5.3.7 The total external vehicle trips generated by the proposed residential dwellings is outlined in **Table 5.11** below.

Table 5.11 Total external vehicle trips – residential dwellings

Purpose	AM peak (8am-9am)		PM peak (5pm-6pm)		Daily	
	Arrive	Depart	Arrive	Depart	Arrive	Depart
Total vehicle trips	45	121	92	71	717	728
Education trips	-7	-18	-1	-1	-34	-35
Shopping trips	-1	-3	-7	-5	-77	-78
Adjusted external vehicle trips	37	100	84	65	606	615

Servicing trip generation

- 5.3.8 There are a limited number of sites available on TRICS database which detail the likely servicing associated with residential use. Therefore, the frequency of delivery and service trips has been estimated using an independent survey carried out at a residential development on 2nd July 2020.

5.3.9 The survey was undertaken between 7am and 10pm and includes deliveries (by LGVs, HGVs, motorbikes and cars) as well as maintenance and security vehicles.

5.3.10 The surveys showed that:

- The typical delivery rate was 0.1077 trips per household per day;
- 85% of deliveries are undertaken by light goods vehicles (cars, motorbikes and small vans under 3.5 tonnes, and with only two axles);
- 15% of deliveries are undertaken by ordinary goods vehicles (over 3.5 tonnes with two-axles or more);
- A number of trips included multiple drops;
- The majority of delivery and servicing trips occurred between 10am and 2pm;
- The busiest time occurred between 10am and midday; and,
- There were few trips during the AM or PM peak periods.

5.3.11 Based on the surveys, it is anticipated that the proposed development of up to 232 dwellings could generate up to 25 delivery and servicing trips per day. It is anticipated that all servicing and deliveries likely to be undertaken from the internal roads within the site.

5.4 Trip generation – foodstore

5.4.1 The likely volume of person trips (by mode) generated by the proposed 1859m² supermarket has been estimated based on a review of the TRICS (v.7.11.3) trip generation database.

- Land use: Retail; Food superstore
- Survey type: Multi-modal;
- Survey days: Monday – Friday;
- Number of units: 1400 to 4780 sqm;
- Car ownership: 0.6 to 1.0;
- Location of selected sites: Edge of town and neighbourhood centre; and,
- Regions selected: All, excluding Central London, Northern Ireland and Republic of Ireland.

5.4.2 A total of three sites have been selected, and the AM, PM and daily trips generated by the proposed supermarket is summarised in **Table 5.12** below, and presented in full in **Appendix G**. It should be noted that average trip rates have been calculated as there is insufficient number of sites within the database to obtain 85th percentile trip rates.

Table 5.12 *Trip generation – 1859m² supermarket*

Time period	Arrival trip rate	No. of arrivals	Depart trip rate	No. of departs	Total trip rate	Total movements
Total people						
8am-9am	6.397	119	5.547	103	11.944	222
5pm-6pm	8.575	159	8.331	155	16.906	314
7am-7pm	99.863	1856	100.326	1865	200.189	3722

Pedestrians						
8am-9am	2.21	41	2.274	42	4.484	83
5pm-6pm	2.178	40	2.285	42	4.463	83
7am-7pm	28.472	529	29.454	548	57.926	1077
Cyclists						
8am-9am	0.117	2	0.117	2	0.234	4
5pm-6pm	0.181	3	0.17	3	0.351	7
7am-7pm	2.27	42	2.322	43	4.592	85
Public transport users						
8am-9am	0.701	13	0.553	10	1.254	23
5pm-6pm	0.51	9	0.404	8	0.914	17
7am-7pm	5.431	101	4.858	90	10.289	191
Vehicles						
8am-9am	2.104	39	1.806	34	3.91	73
5pm-6pm	4.07	76	3.921	73	7.991	149
7am-7pm	44.277	823	44.733	832	89.01	1655

5.4.3 It can be seen from the table above that the proposed supermarket could generate up to a maximum of 73 vehicle movements (two-way) in the AM peak period, up to 149 vehicle movements (two-way) in the PM peak, and up to 1655 vehicle movements (two-way) throughout the day.

Internal trips

5.4.4 As outlined above, the proposed residential dwellings will generate a number of 'internal' shopping trips in the AM and PM peak periods and, therefore, the total vehicle trips generated by the proposed foodstore need to be adjusted to account for the 'internalisation' of these trips.

5.4.5 The total external vehicle trips generated by the proposed foodstore is outlined in **Table 5.13** below.

Table 5.13 Total external vehicle trips – residential dwellings

Purpose	AM peak (8am-9am)		PM peak (5pm-6pm)		Daily	
	Arrive	Depart	Arrive	Depart	Arrive	Depart
Foodstore trips	39	34	76	73	823	832
Internal trips	-1	-3	-7	-5	-77	-78
Adjusted external vehicle trips	38	31	69	68	748	754

Service vehicle trip generation

5.4.6 The above vehicle trip generation includes all vehicles likely to be generated by the proposed food store (including service/delivery vehicles). However, the volume of service/delivery vehicles trips generated by the food store has been estimated based on a review of the TRICS (v.7.11.3) trip generation database.

- Land use: Retail; Food superstore
- Survey type: Multi-modal;
- Survey days: Monday – Friday;
- Number of units: 1400 to 4780 sqm;
- Car ownership: 0.6 to 1.0;
- Location of selected sites: Edge of town and neighbourhood centre; and,
- Regions selected: All, excluding Central London, Northern Ireland and Republic of Ireland.

5.4.7 A total of nine sites have been selected, and the AM, PM and daily trips generated by the proposed supermarket is summarised in **Table 5.14** below, and presented in full in **Appendix H**. It should be noted that average trip rates have been calculated as there is insufficient number of sites within the database to obtain 85th percentile trip rates.

Table 5.14 Service/delivery vehicle trip generation – 1859m² supermarket

Time period	Arrival trip rate	No. of arrivals	Depart trip rate	No. of departs	Total trip rate	Total movements
Service/delivery vehicles						
8am-9am	0.000	0	0.016	0	0.016	0
5pm-6pm	0.008	0	0.016	0	0.024	0
7am-7pm	0.169	3	0.178	4	0.347	7

5.4.8 It can be seen from the table above that the proposed food store is unlikely to generate any vehicle arrivals/departures during the typical network peak periods, but is likely to generate up to seven service/delivery vehicle trips per day.

5.5 Total vehicle trips generated by the proposed development

5.5.1 Table 5.15 below outlines the volume of vehicle trips generated by the proposed development (residential dwellings and foodstore), which has been estimated by combining the vehicle trips outlined in Table 5.11 and Table 5.13.

Table 5.15 Total vehicle trips generated by the proposed development

Purpose	AM peak (8am-9am)		PM peak (5pm-6pm)		Daily	
	Arrive	Depart	Arrive	Depart	Arrive	Depart
Residential trips	37	100	84	65	606	615
Foodstore trips	38	31	69	68	748	754
Total vehicle trips	75	131	153	133	1,354	1,369

5.5.2 It can be seen from the table above that the proposed development is likely to generate up to 206 vehicle movements (two-way) in the AM peak, 286 vehicle movements (two-way) in the PM peak, and up to 2,723 vehicle movements (two-way) throughout the day.

5.6 Assignment and distribution of development generated traffic

5.6.1 The distribution of development generated traffic has been based on the Journey to Work statistics from the 2011 Census for the area in which the site is located (Vale of Glamorgan MSOA 014).

5.6.2 Each destination has been assigned a route/s, based on local knowledge and Google maps, with the most direct and appropriate routes available. The routes are summarised as follows and are shown on **Figure 5.2** overleaf.

- 10% via route A (Fontygary Road) – south-east towards Aberthaw Quarry and Rhoose.
- 20% via route B (Gileston Road north/Cowbridge Road) – north towards Cowbridge Llanharry, Llantrisant and parts west and north Cardiff.
- 15% via route C (B4265 west) – west towards Llantwit Major, Vale Business Park Bridgend County and Neath Port Talbot County.
- 20% via route D (A4265 east/A4226 east) – east towards Dinas Powys, Penarth, Llandough and Cardiff Bay.
- 10% via route E (A4266 north to the A48 and M4 via A4232) – north towards Newport and Cardiff.
- 15% via route F (B4226 south) – south towards Barry town centre and Barry east employment area.
- 10% via route G (Tredogan Road south) – south-west towards Cardiff Airport.

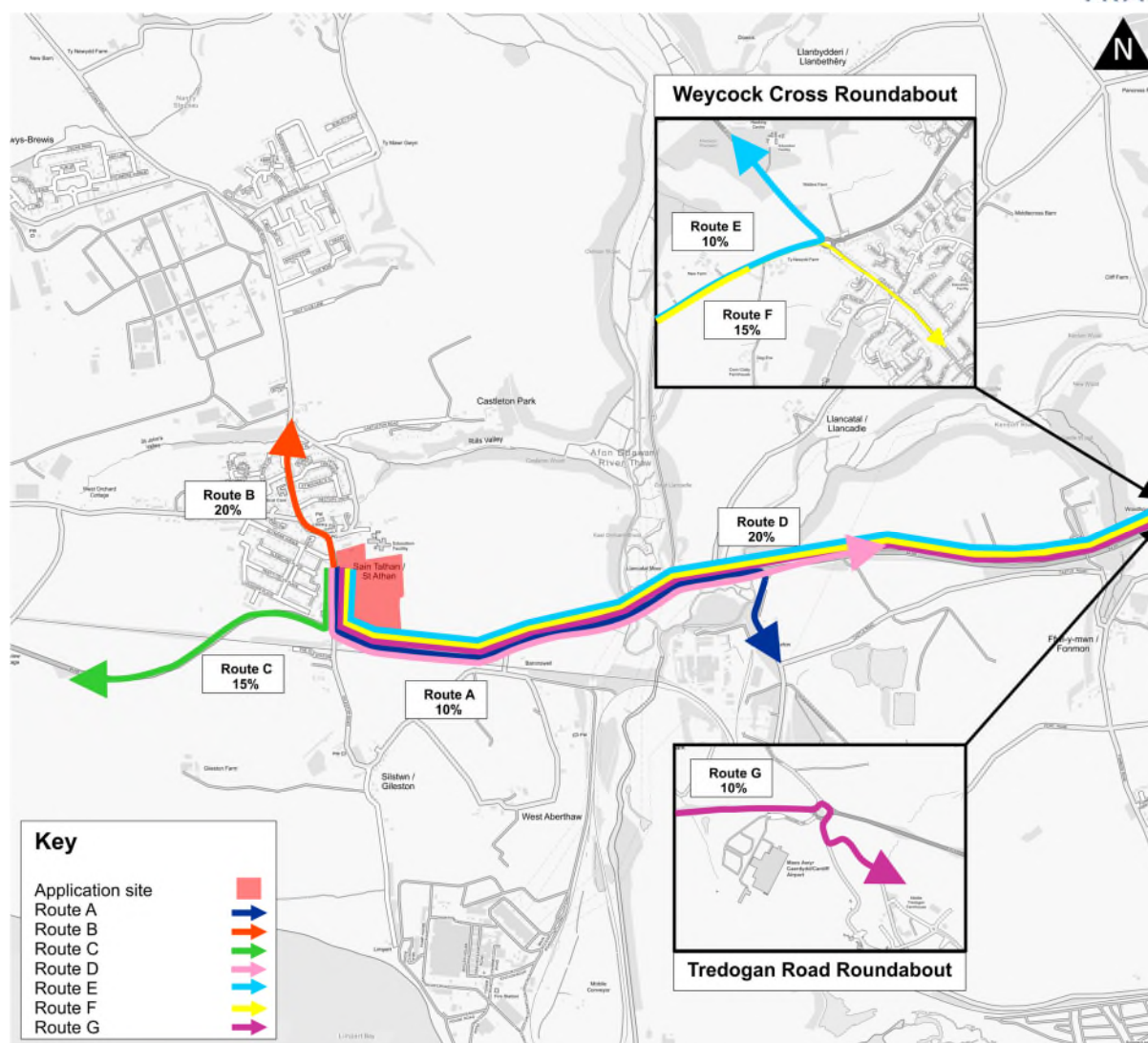


Figure 5.2 Distribution of development generated traffic

5.6.3 For the purpose of this assessment, it is assumed that all trips generated by the development in the peak periods are journey to work trips. However, it is likely that trips in the peak periods will be for other purposes as well, including leisure.

5.6.4 Traffic flows associated with the proposed development (232 dwellings and the foodstore) are set out in **Appendix I**.

5.7 Future traffic flows

5.7.1 The impact of phase 1 development has been assessed for 2027 to coincide with the anticipated year of opening of the proposed development (residential dwellings and foodstore).

5.7.2 In order to obtain the base traffic flows (i.e. with no development traffic) in 2027, the surveyed traffic flows (2024) have been factored using locally adjusted NTM growth factors, version 7.2c for the Vale of Glamorgan.

5.7.3 The factors to be applied to the base (surveyed) flows are identified in **Table 5.7** below.

Table 5.7 NTM growth factors

Period	NTM growth factors
2024 to 2027	
Weekday AM	1.0240
Weekday PM	1.0243

5.7.4 It should be noted that the development site of 250 dwellings is allocated for housing within the Vale of Glamorgan Local Plan, resulting in a degree of double counting as the proposed development generated traffic will already be included within the NTM growth factor. It is therefore considered that the approach taken is robust.

5.7.5 The base 2024 and 2027 traffic flows are set out in **Appendix J**.

Committed development

5.7.6 The Parc Fferm Wen development to the north of St Athan is now substantially occupied, therefore, it is considered that traffic likely to be generated by Parc Fferm Wen development is included within the traffic surveys and in the growth factors outlined in Table 5.7 above.

5.7.7 In addition, the following two committed developments have been considered:

- Land at Model Farm (2019/00817/OUT)
- Land at Rhoose (planning ref.2022/00733/FUL).

5.7.8 The committed development flows are included in **Appendix K**.

Final future traffic flows

5.7.9 The final future traffic flows for 2027 (year of opening phase 1) are summarised in **Appendix L**.

6 Impact of development generated traffic flows

6.1 Introduction

6.1.1 This section of the report considers the potential impact of the development proposals on the surrounding highway network, which includes:

- Junction 1 – Cowbridge Road/B4270/B4265 roundabout
- Junction 2 – B4265/Llanmaes Road/Tyle House Close linked traffic signal-controlled junctions
- Junction 3 - B4265/Northern Access Road roundabout
- Junction 4 - B4265/Boverton Road/Eglwys Brewis Road linked traffic signal-controlled junctions
- Junction 5 - B4265/Llantwit Road priority junction
- Junction 6 - B4265/Gileston Road crossroads
- Junction 7 - Cowbridge Road/ Eglwys Brewis Road/St Athan Road roundabout
- Junction 8 – East Aberthaw priority junction
- Junction 9 - B4265/Tredogan Road/A4226 roundabout
- Junction 10 – Port Road roundabout
- Junction 11 - Waycock Cross Roundabout (Waycock Road/ A4226/ B4266 roundabout)
- Junction 12 – Site access onto Gileston Road

6.1.2 The location of each of these junctions is displayed in **Figure 6.1** overleaf.



Figure 6.1 Location of surveyed junctions

6.2 Percentage impact analysis

- 6.2.1 In the first instance, a percentage impact analysis has been undertaken at each of the 11 junctions outlined above (site access excluded), as summarised in **Appendix M**.

6.2.2 In accordance with Technical Advice Note (TAN) 18 – Transport:

‘... an increase in turning movements in the order of 5% is material in most cases, that is a 5% increase of traffic using any link of the junction.’

6.2.3 It can be seen from the table in Appendix M that the percentage increase in traffic flows, associated with 232 dwellings exceed the 5% threshold at the following junctions:

- Junction 6 - B4265/Gileston Road crossroads
- Junction 8 – East Aberthaw priority junction
- Junction 9 - B4265/Tredogan Road/A4226 roundabout

6.2.4 To provide a robust assessment the impact associated with the proposed development at the following junctions has also been assessed:

- Junction 1 – Cowbridge Road/B4270/B4265 roundabout
- Junction 3 - B4265/Northern Access Road roundabout
- Junction 5 - B4265/Llantwit Road priority junction
- Junction 7 - Cowbridge Road/ Eglwys Brewis Road/St Athan Road roundabout
- Junction 10 – Port Road roundabout
- Junction 11 - Waycock Cross Roundabout (Waycock Road/ A4226/ B4266 roundabout)

6.2.5 In accordance with the principles of TAN 18, junction capacity analysis has been undertaken at each of the nine junctions identified above.

6.3 Junction capacity analysis

6.3.1 As set out above, the impact of the proposed development has been assessed at the proposed site access, as well as Junctions 1,3,5,6,7,8,9,10 and 11.

6.3.2 The operation of each of these junctions is outlined in detail below.

Junction 1 – Cowbridge Road/B4270/B4265 roundabout

6.3.3 The operation of the existing junction (see **Figure 6.2** overleaf) has been assessed for both the AM and PM peak periods, using the computer program Junctions 9 – ARCADY. The results of the analysis, together with the junction parameters, are presented in full in **Appendix N** and summarised in **Table 6.1** overleaf.

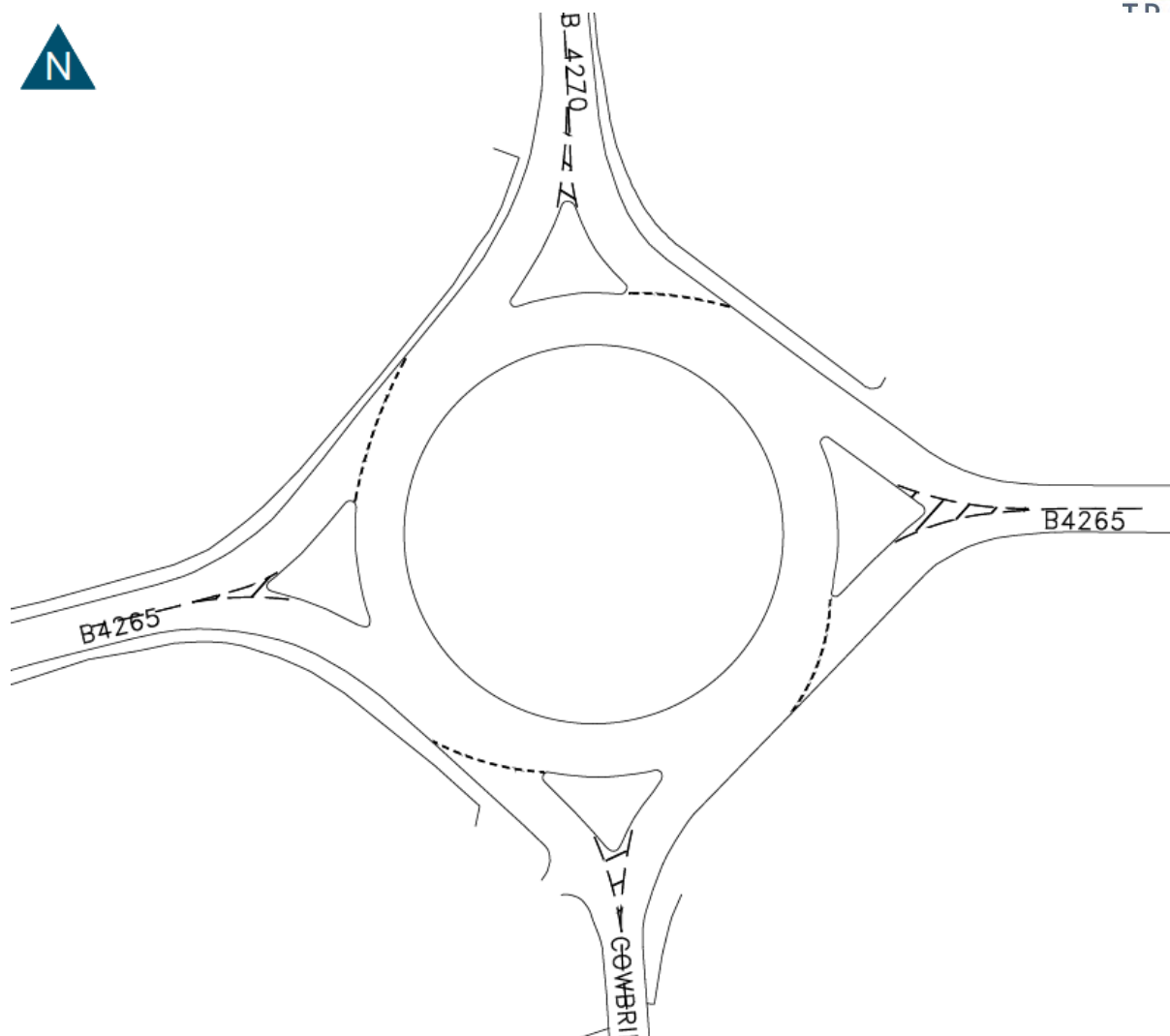


Figure 6.2 Cowbridge Road/B4270/B4265 roundabout

Table 6.1 Cowbridge Road/B4270/B4265 roundabout

	Base				Base + committed				Base + committed + development			
	8am-9am		5pm-6pm		8am-9am		5pm-6pm		8am-9am		5pm-6pm	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
2024												
B4265 (east)	0.30	1	0.18	<1								
Cowbridge Road	0.17	<1	0.12	<1								
B4265 (west)	0.10	<1	0.09	<1								
Cowbridge Road/B4270	0.21	<1	0.34	1								

2027													
B4265 (east)	0.31	1	0.19	<1	0.34	1	0.27	<1	0.35	1	0.27	<1	
Cowbridge Road	0.17	<1	0.12	<1	0.23	<1	0.14	<1	0.23	<1	0.14	<1	
B4265 (west)	0.10	<1	0.09	<1	0.15	<1	0.11	<1	0.15	<1	0.11	<1	
Cowbridge Road/B4270	0.22	<1	0.35	1	0.23	<1	0.36	1	0.23	<1	0.36	1	

6.3.4 It can be seen from the table above that the existing Cowbridge Road/B4270/B4265 roundabout has sufficient capacity to accommodate the proposed development of 232 dwellings and a foodstore, with a maximum ratio to flow capacity (RFC) of 0.36 and maximum queue of one vehicle on the Cowbridge Road approach in the 2027 PM peak (including the proposed phase 1 development).

Junction 3 – B4265/Northern Access roundabout

6.3.5 The operation of the existing junction (see **Figure 6.3 below**) has been assessed, using the computer program Junctions 9 – ARCADY. The results of the analysis, together with the junction dimensions, are presented in full in **Appendix O** and summarised in **Table 6.3** over the page.

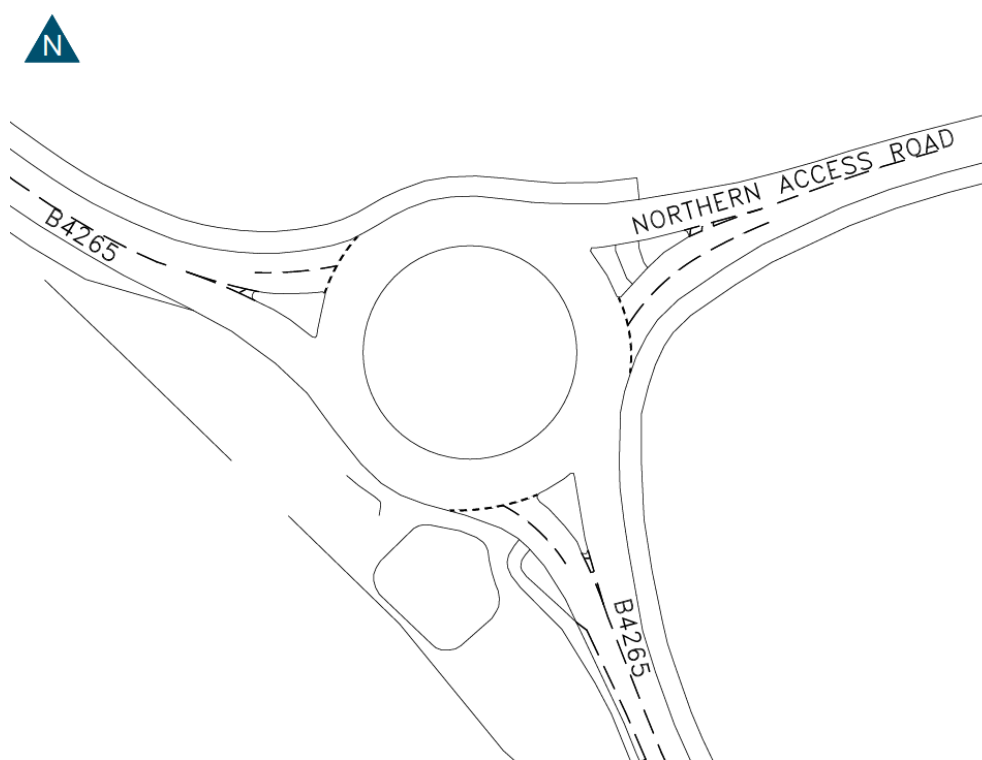


Figure 6.3 B4265/Northern Access roundabout

Table 6.3 Junction capacity analysis – B4265/Northern Access roundabout

	Base				Base + committed				Base + committed + development			
	8am-9am		5pm-6pm		8am-9am		5pm-6pm		8am-9am		5pm-6pm	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
2024												
Northern Access Road	0.10	<1	0.09	<1								
B4265 (east)	0.17	<1	0.15	<1								
B4265 (west)	0.20	<1	0.22	<1								
2027												
Northern Access Road	0.10	<1	0.10	<1	0.10	<1	0.10	<1	0.10	<1	0.10	<1
B4265 (east)	0.18	<1	0.15	<1	0.21	<1	0.24	<1	0.22	<1	0.25	<1
B4265 (west)	0.21	<1	0.22	<1	0.30	<1	0.25	<1	0.30	1	0.26	<1

6.3.6 It can be seen from the table above that the existing B4265/Northern Access roundabout has sufficient capacity to accommodate the proposed development of 232 dwellings and a foodstore, with a maximum ratio to flow capacity (RFC) of 0.30 and maximum queue of one vehicle on the B4265 (west) approach in the 2027 AM peak (including the proposed phase 1 development).

Junction 5 - B4265/Llantwit Road priority junction

6.3.7 The operation of the existing junction (see **Figure 6.4** below) has been assessed, using the computer program Junctions 9 – PICADY. The results of the analysis, together with the junction dimensions, are presented in full in **Appendix P** and summarised in **Table 6.4** below.

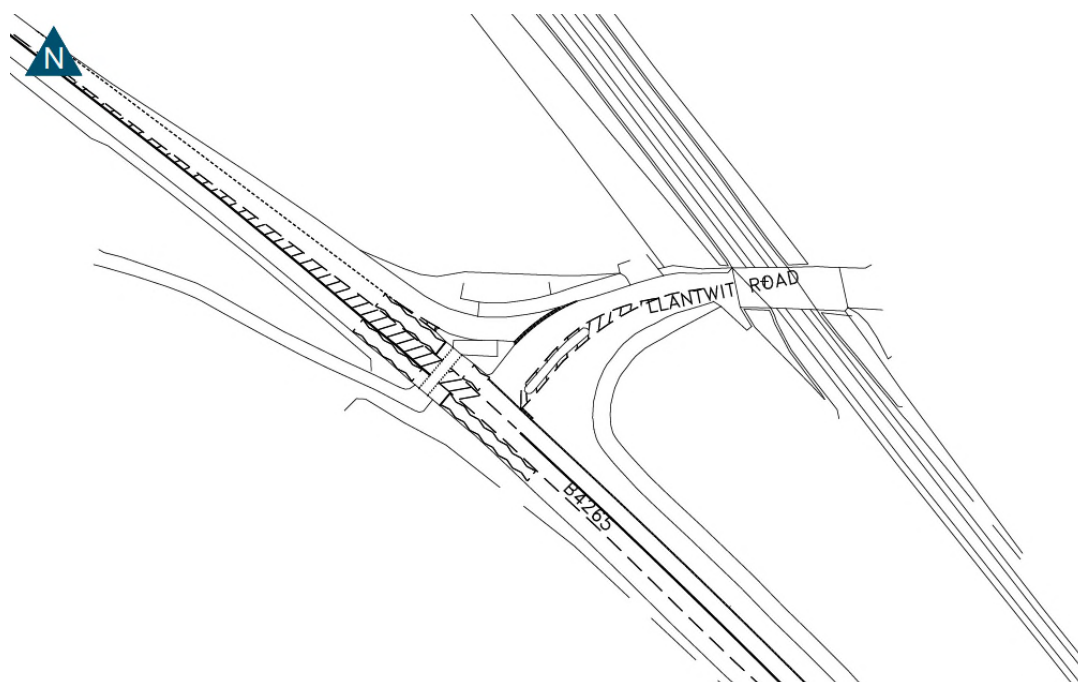


Figure 6.4 B4265/Llantwit Road priority junction

Table 6.4 Junction capacity analysis – B4265/Llantwit Road priority junction

	Base				Base + committed				Base + committed + development			
	8am-9am		5pm-6pm		8am-9am		5pm-6pm		8am-9am		5pm-6pm	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
2024												
Left turn from Llantwit Road	0.07	<1	0.05	0								
Right turn from Llantwit Road	0.11	<1	0.09	<1								
Right turn from B4265 (e)	0.04	0	0.05	<1								
2027												
Left turn from Llantwit Road	0.07	<1	0.05	<1	0.08	<1	0.05	<1	0.08	<1	0.05	<1
Right turn from Llantwit Road	0.11	<1	0.09	<1	0.13	<1	0.10	<1	0.13	<1	0.11	<1
Right turn from B4265 (e)	0.05	0	0.06	<1	0.05	<1	0.06	<1	0.05	<1	0.06	<1

- 6.3.8 It can be seen from the table above that the existing B4265/Llantwit Road priority junction has sufficient capacity to accommodate the proposed development of 232 dwellings and a foodstore, with a maximum ratio to flow capacity (RFC) of 0.13 in the 2027 AM peak on the right turn approach from Llantwit Road and a maximum queue of less than one vehicle (including the proposed phase 1 development).

Junction 6 – B4265/Gileston Road crossroads

- 6.3.9 The operation of the existing junction (see **Figure 6.5** below) has been assessed, using the computer program Junctions 9 – PICADY. The results of the analysis, together with the junction dimensions, are presented in full in **Appendix Q** and summarised in **Table 6.5** over the page.

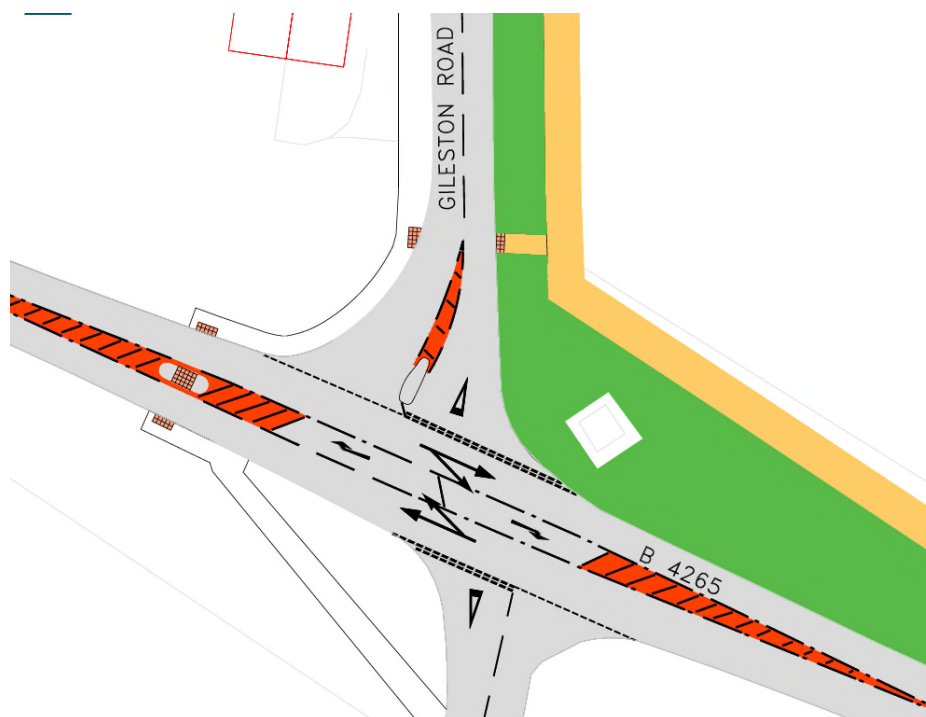


Figure 6.5 B4265/Gileston Road crossroads (existing)

Table 6.5 Junction capacity analysis – B4265/Gileston Road crossroads (existing)

	Base				Base + committed				Base + committed + development			
	8am-9am		5pm-6pm		8am-9am		5pm-6pm		8am-9am		5pm-6pm	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
2024												
Gileston Road south (l, r, a)	0.05	0	0.06	<1								
B4265 east (l, r)	0.32	1	0.42	1								
Gileston Road north (l, a, r)	0.50	1	0.45	1								
B4265 west (l, r)	0.03	0	0.04	0								
2027												
Gileston Road south (l, r, a)	0.05	0	0.06	<1	0.05	<1	0.06	<1	0.05	<1	0.07	<1
B4265 east (l, r)	0.33	1	0.43	1	0.35	1	0.44	1	0.40	1	0.56	1
Gileston Road north (l, a, r)	0.51	1	0.46	1	0.56	1	0.48	1	0.74	3	0.66	2
B4265 west (l, r)	0.03	0	0.04	0	0.03	0	0.04	0	0.03	0	0.04	0

6.3.10 It can be seen from the table above that the existing B4265/Gileston Road crossroads has sufficient capacity to accommodate the proposed development of 232 dwellings and a food store, with a maximum ratio to flow capacity (RFC) of 0.74 and a maximum queue of three vehicles on the Gileston Road north approach in the 2027 AM peak (including the proposed phase 1 development).

6.3.11 In 2022, changes were made to the lane markings on the northern arm of the Gileston Road crossroads. Previously, the markings indicated two lanes, allowing vehicles to double-stack near the give-way line, as shown in **Figure 6.6** below. These markings have since been removed, resulting in a single wide lane. As such, the current junction has been modelled as a 'single lane'. However, it is anticipated that the junction would operate with greater capacity when marked with two lanes; therefore, an additional scenario has been modelled as a 'single lane with flare' along the northern arm to reflect this previous arrangement, the results of this analysis are presented in full in **Appendix R** and summarised in **Table 6.6** below.

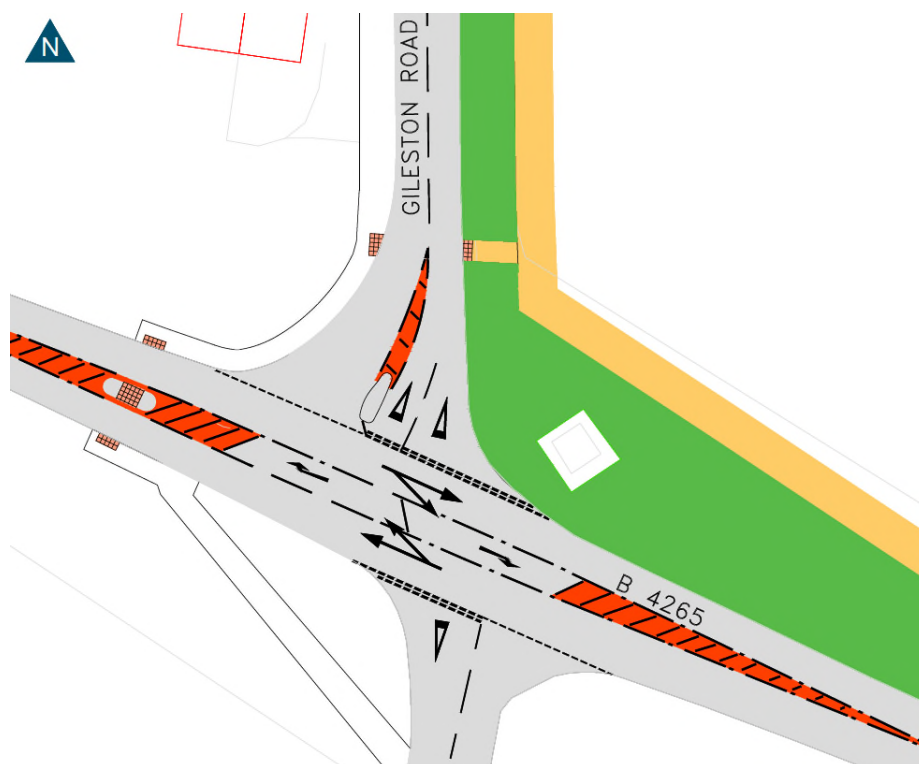


Figure 6.6 B4265/Gileston Road crossroads (previous arrangement)

Table 6.6 Junction capacity analysis – B4265/Gileston Road crossroads (previous arrangement)

	Base				Base + committed				Base + committed + development			
	8am-9am		5pm-6pm		8am-9am		5pm-6pm		8am-9am		5pm-6pm	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
2024												
Gileston Road south (l, r, a)	0.05	0	0.06	<1								
B4265 east (l, r)	0.32	1	0.42	1								
Gileston Road north (l, a)	0.35	1	0.34	1								
Gileston Road north (r)	0.20	<1	0.14	<1								
B4265 west (l, r)	0.03	0	0.04	0								
2027												
Gileston Road south (l, r, a)	0.05	0	0.06	<1	0.05	<1	0.06	<1	0.05	<1	0.07	<1
B4265 east (l, r)	0.33	1	0.43	1	0.35	1	0.44	1	0.40	1	0.56	1
Gileston Road north (l, a)	0.36	1	0.35	1	0.39	1	0.36	1	0.52	1	0.46	1
Gileston Road north (r)	0.20	<1	0.15	<1	0.24	<1	0.16	<1	0.33	1	0.28	<1
B4265 west (l, r)	0.03	0	0.04	0	0.03	0	0.04	0	0.03	0	0.04	0

- 6.3.12 It can be seen from the table above that the previous B4265/Gileston Road crossroads had greater capacity at the northern arm, compared to the existing junction. Without development, the maximum ratio to flow capacity (RFC) with the previous arrangement is 0.35 along the Gileston Road north approach, this is a decrease from 0.5 compared to the existing arrangement. With both junction arrangements there is a maximum queue of one vehicle in the 2024 AM peak.
- 6.3.13 With the proposed phase 1 development, the maximum ratio to flow capacity (RFC) is 0.52 and the maximum queue is one vehicle on the Gileston Road north approach in the 2027 AM peak.
- 6.3.14 The Local Highway Authority has requested that the existing junction is upgraded to provide a traffic signal-controlled junction and to incorporate formal pedestrian crossings across the B4265 and Gileston Road approaches to the junction. However, based on the results of the junction capacity analysis, the existing junction has sufficient capacity to accommodate base traffic flows together with the additional traffic generated by the proposed development and, therefore, no improvements have been proposed.

Junction 7 – Cowbridge Road/Eglwys Brewis Road/St Athan Road roundabout

- 6.3.15 The operation of the existing junction (see **Figure 6.7** below) has been assessed, using the computer program Junctions 9 – ARCADY. The results of the analysis, together with the junction dimensions, are presented in full in **Appendix S** and summarised in **Table 6.8** over the page.

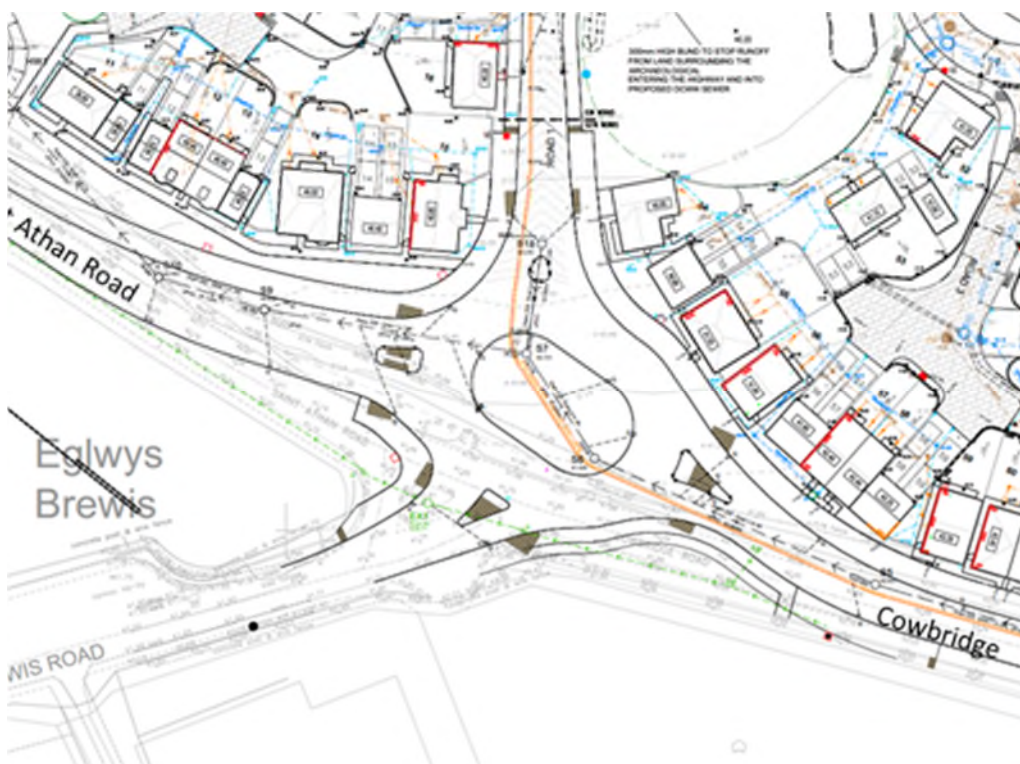


Figure 6.7 Cowbridge Road/Eglwys Brewis Road/St Athan Road roundabout

Table 6.8 Junction capacity analysis – Cowbridge Road/Eglwys Brewis Road/St Athan Road roundabout

	Base				Base + committed				Base + committed + development			
	8am-9am		5pm-6pm		8am-9am		5pm-6pm		8am-9am		5pm-6pm	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
2024												
Cowbridge Road	0.21	<1	0.15	<1								
Eglwys Brewis Road	0.16	<1	0.16	<1								
St Athan Road	0.08	<1	0.07	<1								
Ffordd Y Spitfire	0.03	0	0.02	0								
2027												
Cowbridge Road	0.21	<1	0.15	<1	0.21	<1	0.15	<1	0.24	<1	0.19	<1
Eglwys Brewis Road	0.17	<1	0.17	<1	0.17	<1	0.17	<1	0.17	<1	0.18	<1
St Athan Road	0.08	<1	0.07	<1	0.08	<1	0.07	<1	0.09	<1	0.10	<1
Ffordd Y Spitfire	0.03	0	0.02	0	0.03	0	0.02	0	0.03	0	0.03	0

6.3.16 It can be seen from the table above that the existing Cowbridge Road/Eglwys Brewis Road/St Athan Road roundabout has sufficient capacity to accommodate the proposed development of 232 dwellings and a foodstore, with a maximum ratio to flow capacity (RFC) of 0.24 and a queue of less than one vehicle on the Cowbridge Road approach in the 2027 AM peak (including the proposed phase 1 development).

Junction 8 – East Aberthaw priority junction

6.3.17 The operation of the existing junction (see **Figure 6.8** below) has been assessed, using the computer program Junctions 9 – PICADY. The results of the analysis, together with the junction dimensions, are presented in full in **Appendix T** and summarised in **Table 6.9** over the page.

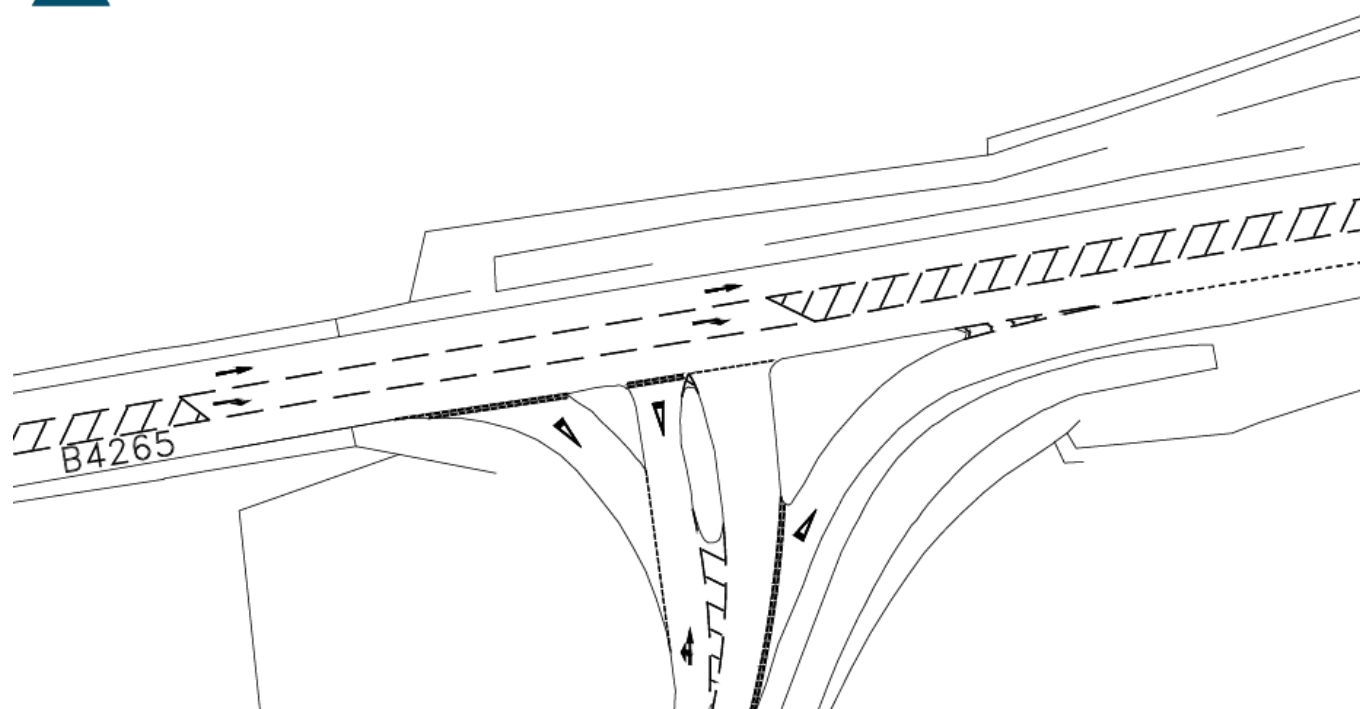


Figure 6.8 East Aberthaw priority junction

Table 6.9 Junction capacity analysis – East Aberthaw priority junction

	Base				Base + committed				Base + committed + development			
	8am-9am		5pm-6pm		8am-9am		5pm-6pm		8am-9am		5pm-6pm	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
2024												
Left turn from East Aberthaw	0.19	<1	0.15	<1								
Right turn from East Aberthaw	0.03	0	0.04	0								
Right turn from B4265 (west)	0.19	<1	0.26	<1								
2027												
Left turn from East Aberthaw	0.20	<1	0.15	<1	0.22	<1	0.17	<1	0.23	<1	0.19	<1
Right turn from East Aberthaw	0.03	0	0.04	0	0.03	0	0.04	0	0.03	<1	0.05	<1
Right turn from B4265 (west)	0.19	<1	0.26	<1	0.20	<1	0.30	<1	0.22	<1	0.32	1

- 6.3.18 It can be seen from the table above that the existing East Aberthaw priority junction has sufficient capacity to accommodate the proposed development of 232 dwellings and a foodstore, with a maximum ratio to flow capacity (RFC) of 0.32 and a queue of one vehicle on the right turn approach from the B4265 (west) in the 2027 PM peak (including the proposed phase 1 development).

Junction 9- B4265/Tredogan Road/A4226 roundabout

- 6.3.19 The operation of the existing junction (see **Figure 6.9** below) has been assessed, using the computer program Junctions 9 – ARCADY. The results of the analysis, together with the junction dimensions, are presented in full in **Appendix U** and summarised in **Table 6.10** over the page.



Figure 6.9 B4265/Tredogan Road/A4226 roundabout

Table 6.10 Junction capacity analysis – B4265/Tredogan Road/A4226 roundabout

	Base				Base + committed				Base + committed + development			
	8am-9am		5pm-6pm		8am-9am		5pm-6pm		8am-9am		5pm-6pm	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
2024												
A4226	0.22	<1	0.26	<1								
Tredogan Road south	0.03	0	0.06	<1								
Dragonfly Drive	0	0	0.02	0								
B4265	0.26	<1	0.21	<1								
Tredogan Road north	0.01	0	0.01	0								
2027												
A4226	0.26	<1	0.26	<1	0.25	<1	0.34	1	0.26	<1	0.36	1
Tredogan Road south	0.06	<1	0.09	<1	0.03	0	0.07	<1	0.03	0	0.07	<1
Dragonfly Drive	0.02	0	0.01	0	0	0	0.02	0	0	0	0.02	0
B4265	0.22	<1	0.24	<1	0.34	1	0.24	<1	0.38	1	0.26	<1
Tredogan Road north	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0

6.3.20 It can be seen from the table above that the existing B4265/Tredogan Road/A4226 roundabout has sufficient capacity to accommodate the proposed development of 232 dwellings and a foodstore, with a maximum ratio to flow capacity (RFC) of 0.38 and a queue of one vehicle on the B4265 in the 2027 AM peak (including the proposed phase 1 development).

Junction 10 – Port Road roundabout

6.3.21 The operation of the existing junction (see **Figure 6.10** below) has been assessed, using the computer program Junctions 9 – ARCADY. The results of the analysis, together with the junction dimensions, are presented in full in **Appendix V** and summarised in **Table 6.11** over the page.

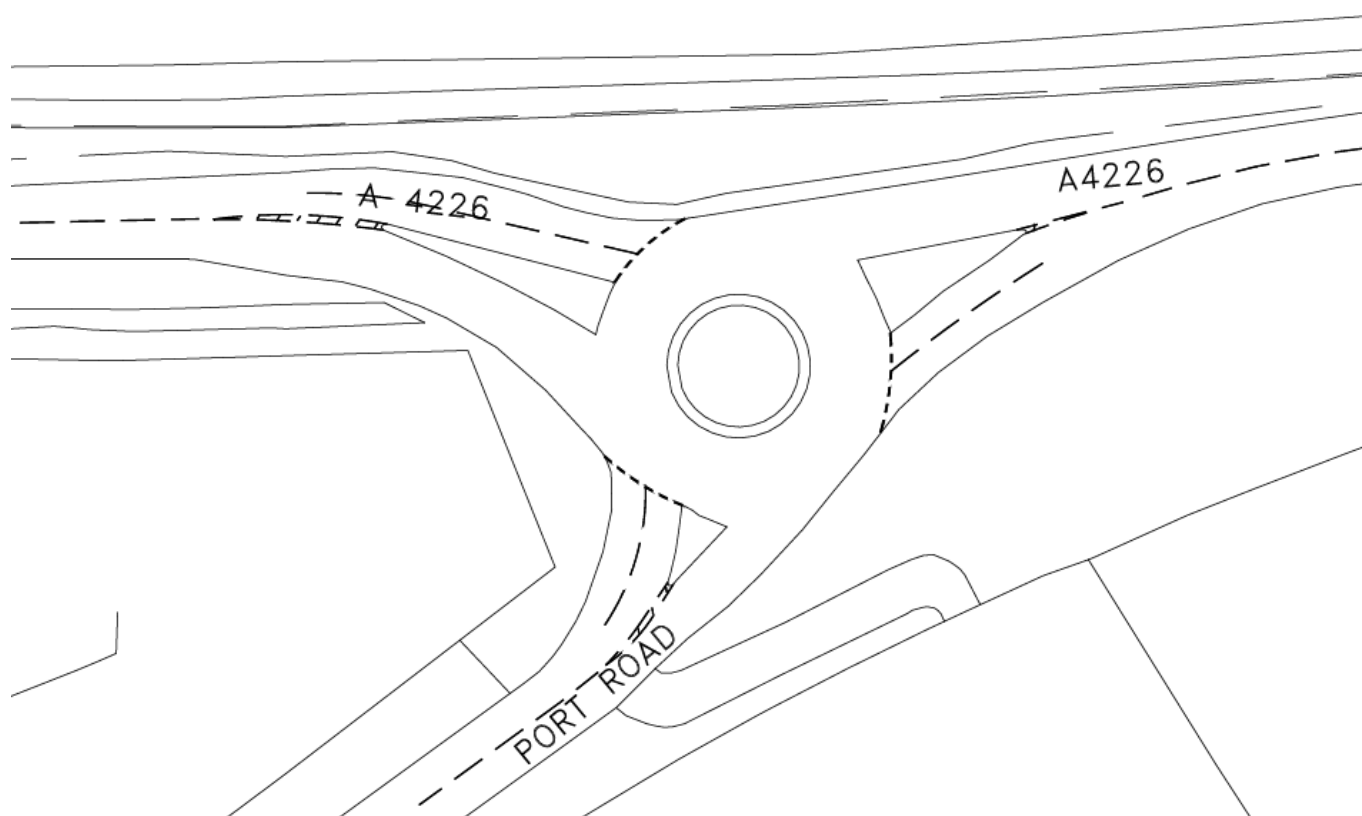


Figure 6.10 Port Road roundabout

Table 6.11 Junction capacity analysis – Port Road roundabout

	Base				Base + committed				Base + committed + development			
	8am-9am		5pm-6pm		8am-9am		5pm-6pm		8am-9am		5pm-6pm	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
2024												
A4226/Port Road	0.31	1	0.48	1								
Port Road	0.35	1	0.30	<1								
A4226	0.30	<1	0.27	<1								
2027												
A4226/Port Road	0.32	1	0.50	1	0.35	1	0.62	2	0.36	1	0.65	2
Port Road	0.36	1	0.31	1	0.47	1	0.38	1	0.48	1	0.39	1
A4226	0.31	1	0.28	<1	0.43	1	0.31	1	0.47	1	0.34	1

6.3.22 It can be seen from the table above that the existing A4226/Port Road roundabout has sufficient capacity to accommodate the proposed development of 232 dwellings and a foodstore, with a maximum ratio to flow capacity (RFC) of 0.65 and a queue of two vehicles on the A4226 in the 2027 PM peak (including the proposed phase 1 development).

Junction 11 - Waycock Cross Roundabout (Waycock Road/ A4226/ B4266 roundabout)

6.3.23 The operation of the existing junction (see **Figure 6.11** below) has been assessed, using the computer program Junctions 9 – ARCADY. It should be noted that in order to model the unequal lane usage at the roundabout, and to replicate the observed queuing at the roundabout, the 'lane simulation' function within the model has been used. The results of the analysis, together with the junction dimensions, are presented in full in **Appendix W** and summarised in **Table 6.12** overleaf.

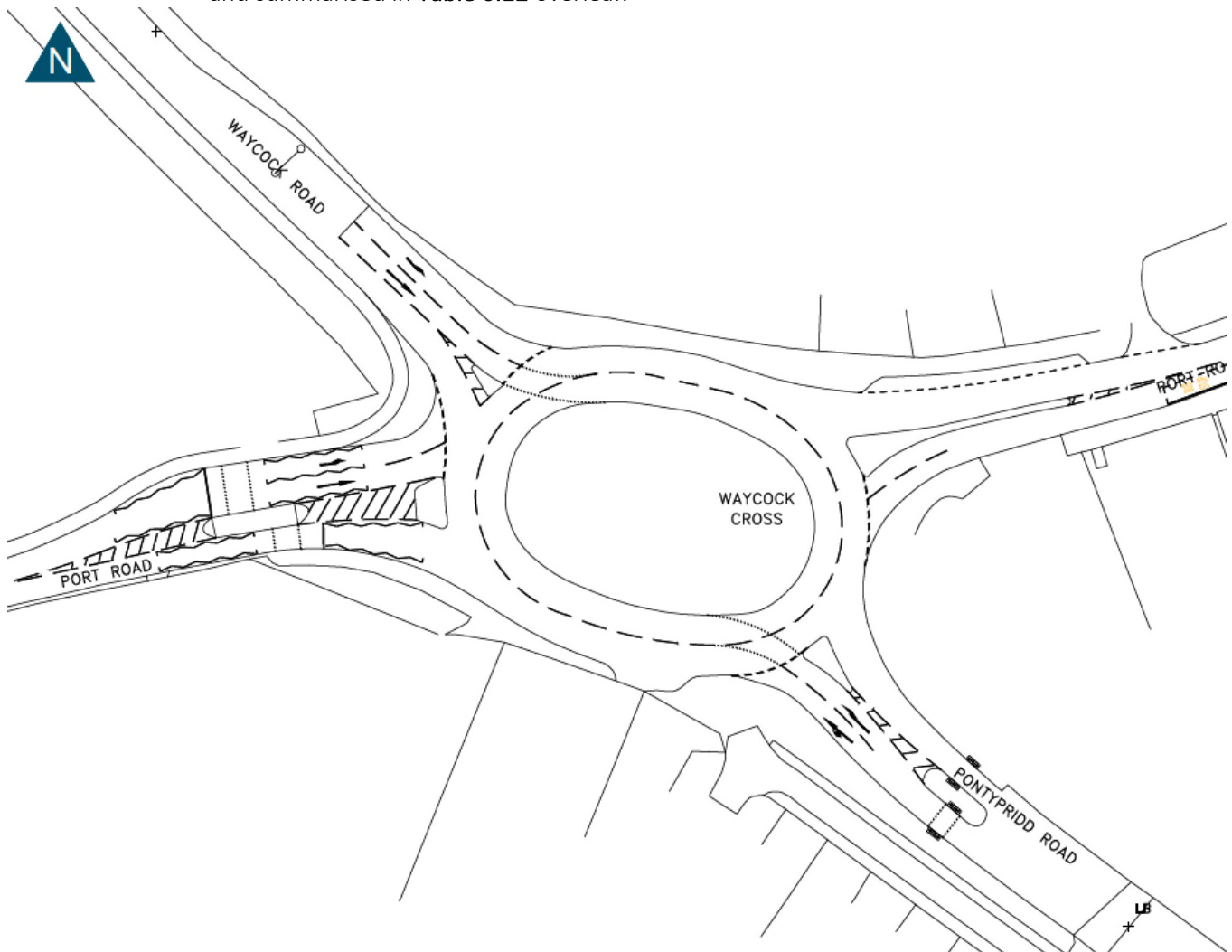


Figure 6.11 Waycock Cross Roundabout

Table 6.12 Junction capacity analysis – Waycock Cross Roundabout (Waycock Road/ A4226/ B4266 roundabout)

	Base				Base + committed				Base + committed + development			
	8am-9am		5pm-6pm		8am-9am		5pm-6pm		8am-9am		5pm-6pm	
	Delay (secs)	Queue	Delay (secs)	Queue	Delay (secs)	Queue	Delay (secs)	Queue	Delay (secs)	Queue	Delay (secs)	Queue
2024												
A4226 east	32	7	108	25								
Pontypridd Road (south)	10	3	10	2								
A4226 west	13	4	9	2								
Waycock Road (north)	13	2	16	3								
2027												
A4226 east	40	8	137	33	1348	318	750	142	1401	331	814	155
Pontypridd Road (south)	10	3	10	2	83	26	11	3	86	29	12	2
A4226 west	14	4	8	2	28	9	148	71	38	14	204	99
Waycock Road (north)	14	2	17	4	140	35	221	54	160	40	264	60

- 6.3.24 It can be seen from the table above that the existing Waycock Cross Roundabout roundabout is working over capacity in the 2024 base scenario, with a queue of 25 vehicles and a delay of 108 seconds on the A4226 east approach in the 2024 PM peak scenario. The impact of the committed developments increases the queue to 142 and delay to 750 seconds on the A4226 east approach in the 2027 PM peak scenario.
- 6.3.25 The committed developments (without the proposed Phase 1 Church Farm) result in a maximum queue of 318 and a delay of 1348 seconds on the A4226 east approach in the 2027 AM peak scenario.
- 6.3.26 With the addition of the proposed 232 dwellings and a foodstore (phase 1 development) at Church Farm the queue increases to 331 vehicles and a delay of 1401 seconds on the A4226 east in the 2027 AM peak.
- 6.3.27 In order to increase capacity at the roundabout, potential improvements have been identified in **Figure 6.12** overleaf. Improvements include provision of two exit lanes on the A4226 east and A4226 west exits, which allows ‘ahead’ traffic on both approaches to use both the nearside and off-side lanes.
- 6.3.28 It should be noted that third-party land will be required to accommodate the widening of the exit on the A4226 west arm of the junction.
- 6.3.29 The operation of the modified junction, with the improvements shown in Figure 6.12, has been assessed for both the AM and PM peak periods, using the computer program Junctions 9 -ARCADY. The results of the analysis, together with the junction dimensions, are presented in full in **Appendix X** and summarised in **Table 6.13** overleaf.

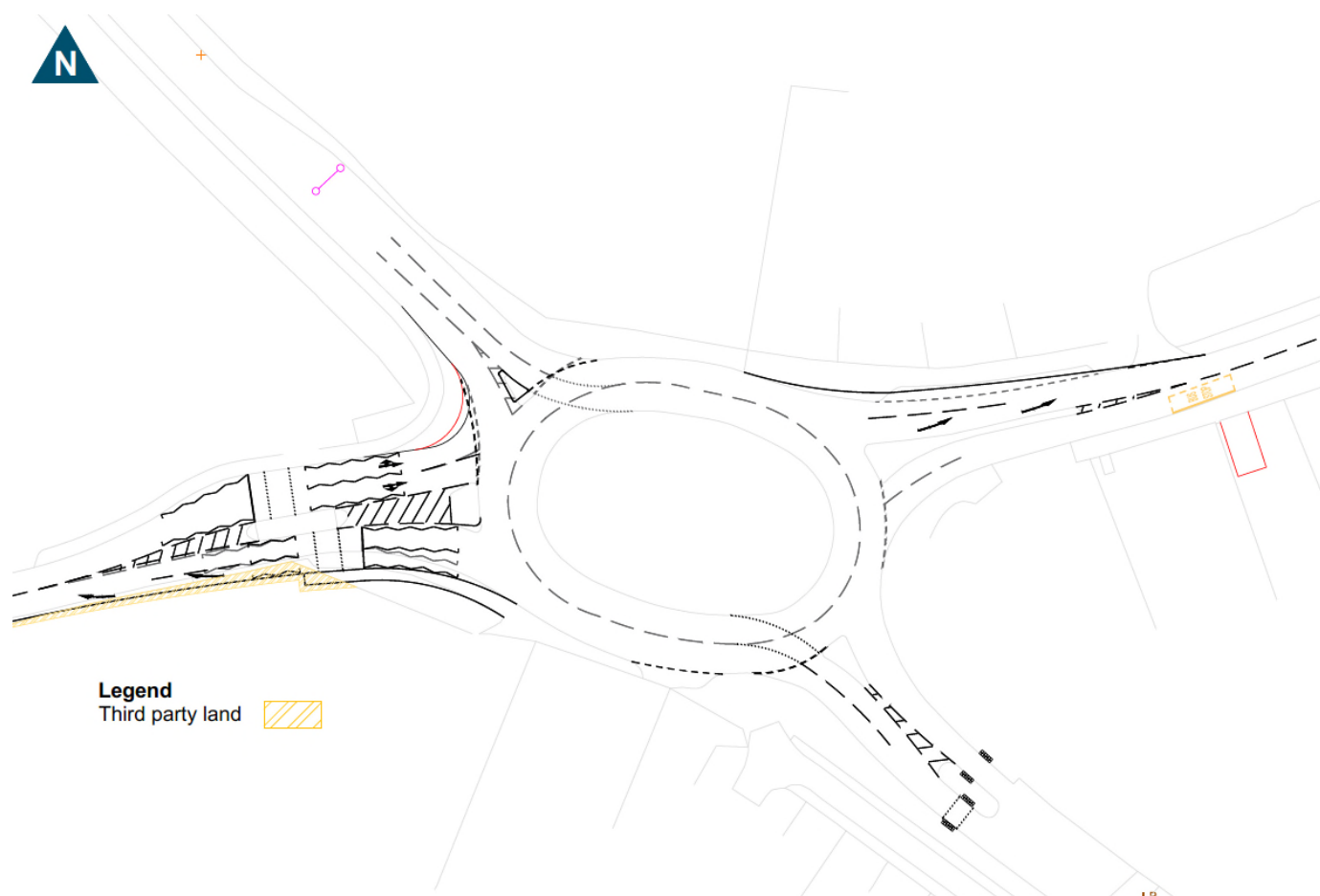


Figure 6.12
Waycock Cross Roundabout (with improvements)

Table 6.13 Junction capacity analysis – Waycock Cross Roundabout (Waycock Road/
A4226/ B4266 roundabout) (with improvements)

	Base				Base + committed				Base + committed + development			
	8am-9am		5pm-6pm		8am-9am		5pm-6pm		8am-9am		5pm-6pm	
	Delay (secs)	Queue	Delay (secs)	Queue	Delay (secs)	Queue	Delay (secs)	Queue	Delay (secs)	Queue	Delay (secs)	Queue
2024												
A4226 east	12	2	11	2								
Pontypridd Road (south)	10	3	10	2								
A4226 west	7	2	5	1								
Waycock Road (north)	14	2	16	3								

2027												
A4226 east	13	3	11	3	102	34	19	5	113	39	21	6
Pontypridd Road (south)	10	3	10	2	273	81	13	3	304	85	14	3
A4226 west	7	2	5	1	8	3	10	5	9	3	10	5
Waycock Road (north)	15	3	21	4	117	29	292	74	145	37	357	87

- 6.3.30 It can be seen from the table above that the potential improvements to the Waycock Cross Roundabout will significantly reduce the level of queues and delays at the junction, compared to the existing junction. The table above shows a maximum queue of 87 vehicles and a delay of 357 seconds on Waycock Road during the 2027 PM peak.

Junction 12 – Site access/Gileston Road priority junction

- 6.3.31 The operation of the proposed junction (see Figure 4.2 above) has been assessed, using the computer program Junctions 9 – PICADY. The results of the analysis, together with the junction dimensions, are presented in full in Appendix Y and summarised in Table 6.15 below.

Table 6.15 Junction capacity analysis – Site access/Gileston Road priority junction

Arm	Base + committed + dev phase 1			
	8am-9am		5pm-6pm	
	RFC	Queue	RFC	Queue
2027				
Site access (right, left)	0.27	<1	0.34	1
Gileston Road (right)	0.07	<1	0.16	<1

- 6.3.32 It can be seen from the table above that the proposed site access onto Gileston Road has sufficient capacity to accommodate the proposed development of 232 dwellings and a foodstore with a maximum ratio to flow capacity (RFC) of 0.34 and a queue of 1 vehicle on the site access in the 2027 PM peak (including the proposed development).

6.4 Summary

- 6.4.1 In summary, it can be seen that the majority of junctions assessed as part of the Transport Assessment are predicted to operate within capacity, with the exception of the Waycock Cross junction which operates above capacity in the 2024 base scenario and the 2027 with phase 1 development scenario.
- 6.4.2 It is considered that the impact of the proposed development could be reduced through the implementation of a robust travel plan and improvements to public transport in the area.

- 6.4.3 Potential improvements to the Waycock Cross junction have been identified, which significantly improve the operation of the junction. However, these improvements require third party land.
- 6.4.4 The Local Highway Authority has requested that the existing junction is upgraded to provide a traffic signal-controlled junction and to incorporate formal pedestrian crossings across the B4265 and Gileston Road approaches to the junction. However, based on the results of the junction capacity analysis, the existing junction has sufficient capacity to accommodate base traffic flows together with the additional traffic generated by the proposed development and, therefore, no improvements have been proposed.

7 Transportation implementation strategy

7.1 Introduction

7.1.1 In accordance with TAN 18, a Transport Implementation Strategy needs to be included in the Transport Assessment process, which sets the objectives and targets relating to managing travel demand.

7.2 Transport implementation strategy

7.2.1 **Table 7.1** below outlines the Transport Implementation Strategy for the proposed development, which provides additional details on the measures outlined in Section 4. These measures are organised into three categories and include likely timescales for implementation. The four categories are:

- Pedestrians;
- Cyclists;
- Public transport users; and,
- Travel Plan measures.

Table 7.1 Transport Implementation Strategy

	Measure	Commentary	Timescale for implementation
Pedestrian users' provision			
A	The internal pedestrian network has been designed to ensure multiple, direct and convenient access points to Gileston Road, B4265 and Rock Road, where bus stops and majority of facilities are located		
B	Provision of a pedestrian footway on both sides of the carriageway throughout the development site, with the exception of those arranged as shared surface roads. The areas of shared surface will encourage lower vehicle speeds and promote social interaction by creating an environment in which pedestrians can walk or stop and chat.	This is likely to be a condition of consent, with details submitted to and approved in writing by the local planning authority.	This will need to be completed prior to the beneficial occupation of the site.
C	Provision of combined pedestrian/cycle route along Gileston Road, connecting the B4265 (to the south) with town centre facilities (to the north). A combined pedestrian/cycle route will be provided along the northern side of the B4265.		
D	Informal crossings across Gileston Road to the west of the site.		

E	Provision of 'Active Travel' information within Travel Plan Welcome Pack, including walk distances/times to local amenities and facilities within 2km as well as a 20-minute cycle isochrone, highlighting the benefits of walking and cycling to work.		
Cycle users			
A	Provision of secure cycle parking spaces in accordance with the adopted parking standards.		
B	Provision of a shared cycleway/footway connection between phase 1 and 2 of the proposed development.		
C	Cycleway/footway along the western and southern edge of the site.	This is likely to be a condition of consent, with details submitted to and approved in writing by the local planning authority	This will need to be completed prior to the beneficial occupation of the site.
D	Provision of 'Active Travel' information within the Travel Plan Welcome Pack, including cycle distances/times from local amenities and facilities within the 20-minute cycle isochrone of the site, as well as neighbouring settlements, and public transport facilities.		
Public transport users			
A	Provision of public transport information within Travel Plan Welcome Pack, including the nearest bus stops, the nearest rail station and routes to/from local facilities within the town centre and public transport timetables.	This is likely to be a condition of consent, with details submitted to and approved in writing by the local planning authority.	This will be provided beyond first occupation of the site.
B	As part of the proposed development, it is proposed to improve the existing bus stop infrastructure and passenger waiting facilities on Gileston Road.		This will need to be completed prior to the beneficial occupation of the site.
Travel Plan			
A	Encouraging the use of more sustainable modes (walking, cycling car sharing and public transport)	This is likely to be a condition of consent, with details submitted to and approved in writing by the local planning authority.	The Travel Plan will need to be completed prior to 50% occupation of the site.
B	Setting mode share targets		
C	On-going monitoring		

8 Summary and conclusions

8.1 Development proposals

8.1.1 Lime Transport has been commissioned by BDW South Wales Ltd to produce a Transport Assessment in support of a planning application for a development of 232 dwellings and a 20,000 square foot supermarket (1859m²) to the east of Gileston Road, St Athan. The site is an allocated site MG2(3) within the current Vale of Glamorgan Local Plan (2011-2026).

8.1.2 The development will also provide:

- Car parking in accordance with adopted parking standards;
- Improvements to pedestrian and cycle infrastructure in the vicinity of the site;
- Improvements to public transport infrastructure in the vicinity of the site;
- Landscaping, formal and informal open space; and,
- Associated infrastructure.

8.1.3 As agreed with the Local Highway Authority, the proposed development will be served from Gileston Road (to the west of phase 1).

8.1.4 The scope of this Transport Assessment has been discussed with the Local Highway Authority.

Vehicle access

8.1.5 As outlined above, and agreed with the Local Highway Authority, the proposed development will be served from Gileston Road (to the west of phase 1).

8.1.6 The proposed access has been designed as a priority junction with ghost-island right-turn lane and has been designed to accommodate the swept path of a maximum legal articulated vehicle accessing the proposed foodstore.

8.1.7 Visibility splays at the proposed access have been based on the posted speed limit along Gileston Road (i.e. 20mph), and it is anticipated that the visibility splays can be accommodated either within land owned by the applicant or within highway land.

8.1.8 As part of the access strategy, it is proposed to provide a short section of localised widening along Gileston Road (approximately 15m north of the junction onto the B4265), to improve access by large vehicles (including articulated service vehicles).

Pedestrian access

8.1.9 The internal pedestrian network will be designed to ensure multiple, direct and convenient access points to the surrounding network of footways and footpaths (including Public Rights of Way).

- 8.1.10 There will be 2.0m footways along both sides of the carriageway throughout the site (with the exception of the shared surface streets), which connect to the existing pedestrian network on Gileston Road.
- 8.1.11 In addition, a 3.5m wide combined cycleway/footway will be provided on the western side of the site, parallel to Gileston Road and along the southern edge of the site parallel to the B4265. The combined cycleway/footway along Gileston Road will be located behind the existing hedgerow but will include a number of access points through the hedge, to connect with the wider area.
- 8.1.12 Convenient access will be provided to local facilities and amenities including:
- Co-op;
 - Bus stops on Gileston Road and the B4265; and,
 - The surrounding residential streets.
- 8.1.13 As part of the development, it is also proposed to provide informal crossing points across Gileston Road (including parallel pedestrian/cycle crossing) to the north and south of the site access.

Car parking

- 8.1.14 On-site car parking provision for the proposed development will be provided in accordance with the adopted parking standards (set out in 'Vale of Glamorgan County Council Parking Standards Supplementary Planning Guidance – January 2019), with provision of 504 spaces on-site, plus an additional one space per five dwellings for visitors.

Cycle parking

- 8.1.15 In accordance with adopted cycle parking standards, it is anticipated that cycle parking will be accommodated within garages (for those dwellings with garages) or within rear gardens for all other properties.
- 8.1.16 For flats, cycle parking will be provided at the rate of one space per flat. Secure/covered cycle parking stands will be conveniently located within the communal gardens of each block.

8.2 Travel characteristics

Trip generation

- 8.2.1 The proposed development (residential dwellings and foodstore) is likely to generate up to 206 vehicle movements (two-way) in the AM peak, 286 vehicle movements (two-way) in the PM peak, and up to 2,723 vehicle movements (two-way) throughout the day.

Distribution

- 8.2.2 The distribution of development generated traffic has been based on the Journey to Work statistics from the 2011 Census for the area in which the site is located (Vale of Glamorgan MSOA 014).

8.3 Likely impact

- 8.3.1 The majority of junctions assessed as part of the Transport Assessment are predicted to operate within capacity, with the exception of the Waycock Cross junction which is predicted to operate above capacity.
- 8.3.2 Potential improvements to the Waycock Cross junction have been identified, which significantly improve the operation of the junction, which require third party land.
- 8.3.3 The Local Highway Authority has requested that the existing junction is upgraded to provide a traffic signal-controlled junction and to incorporate formal pedestrian crossings across the B4265 and Gileston Road approaches to the junction. However, based on the results of the junction capacity analysis, the existing junction has sufficient capacity to accommodate base traffic flows together with the additional traffic generated by the proposed development and, therefore, no improvements have been proposed.

8.4 Conclusions

- 8.4.1 Based on the above, it is considered that the development will have a minimal impact on the surrounding transport network and the proposals can be accommodated within the existing highway network, without significantly increasing queues and delays for existing users.

Appendices



Appendix A



From: Aitken, James <jaitken@valeofglamorgan.gov.uk>
Sent: 09 November 2022 14:55
To: andy@limetransport.com
Cc: Howells, Lee M; Rusne@limetransport.com; Elliott, Lisa; Clogg, Michael T; Robinson, Ian
Subject: RE: Church Farm, Gileston Road - access and scope of the Transport Assessment

Hi Andy,

Apologies for not replaying sooner.

With regard to this proposed development of potentially 600 units, there is going to need to be significant improvements required to the surrounding highway network. The Gileston Road/B4265 4-way junction will likely require improvement such as signalising the junction and incorporating active travel into this and the surrounding area. I appreciate the second parcel is not yet in the LDP however we do not want two smaller TA's analysing the impact of each smaller parcel. I have the following initial comments:

1. The proposed site will need to be analysed as one entity in terms of transport assessments and not split into two smaller assessments. The impact of the development will likely be significant and we will need to assess on the impact of both parcels.
2. Gileston Road/B4265 will require significant improvements to better safety and likely capacity in the area. We will require signalising of this junction which will then be able to incorporate active travel crossings.
3. We would require the single point of access into the development to be off Gileston Road and would want both phases to be accessed from this location. We would not accept two access points or an access onto the B4265.
4. As a minimum, we would want a ghost island right hand turn lane for the proposed new site access. Depending on surveys and traffic generation for 600 dwellings, this might need to be provided as a roundabout or other.
5. Gileston Road for the site frontage will need to be widened to 6.5m.
6. New public transport infrastructure will need to be provided on the development side and upgrades to existing infrastructure on the opposite side.
7. Significant active travel (footway/cycleway) improvements will be required along site frontage, to the North into the village and along the B265 to the South.

The scope for assessment in the TA in principle seems ok to me obviously we will need to add committed development sites in there but that would be better to provide closer to the submission date. And again, we would want impact assessments carried out for 600 dwellings. I would also like Weycock Cross (A4226 Five Mile Lane/A4226 Port Road/B4266 Pontypridd Road) junction added into the impact analysis in the TA.

There will be many additional comments from highways and transport but at this stage I would recommend pre-application discussions on this development as early as possible.

Kind regards

James Aitken
Principal Engineer
Highway Development
Neighbourhood Services and Transport / Gwasanaethau Cymdogaeth a Thrafnidiaeth
Vale of Glamorgan Council / Cyngor Bro Morgannwg
tel / ffôn: 02920-673030
mob / sym: Available on request
e-mail / e-bost: jaitken@valeofglamorgan.gov.uk

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From: andy@limetransport.com <andy@limetransport.com>
Sent: 09 November 2022 13:18
To: Aitken, James <jaitken@valeofglamorgan.gov.uk>
Cc: Howells, Lee M <LMHowells@valeofglamorgan.gov.uk>; Rusne@limetransport.com
Subject: FW: Church Farm, Gileston Road - access and scope of the Transport Assessment

Hi James,

I wonder whether you have had time to consider my email to Lee (dated 26th October 2022) below.

We are fast approaching the deadline for Candidate Site submissions for the replacement LDP, and it would be good to incorporate any comments/amendments to the access strategy.

Kind regards

Andy

Andy Roberts BEng (Hons) MCIHT MSoRSA FFB
Director
t: 02920 700924 m: 07494 442942
5A Andrews Buildings Stanwell Road Penarth CF64 2AA



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From: Howells, Lee M <LMHowells@valeofglamorgan.gov.uk>
Sent: 26 October 2022 09:24
To: Aitken, James <jaitken@valeofglamorgan.gov.uk>
Cc: andy@limetransport.com
Subject: RE: Church Farm, Gileston Road - access and scope of the Transport Assessment

James,

Can you please make contact with Andy.

Andy not sure why documents are bouncing back possibly email size

Kind Regards

Lee

Lee Howells
Engineering Manager Highway Development & Traffic / Prif Beiriannydd
Highways and Engineering / Priffyrdd a Pheirianeg
Vale of Glamorgan Council / Cyngor Bro Morgannwg
tel / ffôn: 02920 673081
mob / sym:
e-mail / e-bost: LMHowells@valeofglamorgan.gov.uk

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From: andy@limetransport.com <andy@limetransport.com>
Sent: 26 October 2022 09:09
To: Howells, Lee M <LMHowells@valeofglamorgan.gov.uk>; Aitken, James <jaitken@valeofglamorgan.gov.uk>
Subject: FW: Church Farm, Gileston Road - access and scope of the Transport Assessment

Hi both,

Hope you are both well.

My colleague tried to send the email below but keeps getting a bounce-back.

By way of background, we have been appointed by Pobl to look at a residential development in St Athan. Part of the site is allocated in the current LDP, and they are also looking at an extension (which they will promote through the replacement LDP), and we had some questions about access and any supporting information.

Kind regards

Andy

Andy Roberts BEng (Hons) MCIHT MSoRSA FFB
Director
t: 02920 700924 m: 07494 442942
5A Andrews Buildings Stanwell Road Penarth CF64 2AA



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From: Rusne@limetransport.com <Rusne@limetransport.com>
Sent: 25 October 2022 17:06
To: 'Aitken, James' <jaitken@valeofglamorgan.gov.uk>
Cc: lmhowells@valeofglamorgan.gov.uk; andy@limetransport.com
Subject: Church Farm, Gileston Road - access and scope of the Transport Assessment

Dear Both,

I hope you are well.

We have been appointed by Pobl Group to prepare a Transport Assessment in support of a development of approximately 250 dwellings on an allocated site at Church Farm, to the east of Gileston Road (see location plan attached).

It is anticipated that access to the site will be achieved from Gileston Road (along the western boundary of the site), and we have identified three potential access locations that take account of existing junctions, accesses and driveways along the western edge of the road. It is assumed that, as with the existing junctions on to Gileston Road, the access(es) will be simple priority junctions, albeit they will be designed to accommodate the range of vehicles likely to access the site (including large refuse vehicle).

It is also anticipated that the allocated site could accommodate up to 250 dwellings, and we assumed that we would provide a single point of access to the site.

In addition to the allocated site, there is potential to accommodate additional development on land to the east of the allocated site (which is in the same ownership as Church Farm), which will need to be subject of a separate candidate site assessment. However, it is anticipated that the additional land could accommodate a further 300-350 dwellings, and we therefore wanted to confirm:

1. Could the additional development be accessed through the allocated site?
2. Would we need to provide two points of access to the wider development (allocated land together with the unallocated site)?
3. Could we accommodate two accesses on to Gileston Road? If so, this will probably be designed as a priority junction with a ghost-island right-turn lane.
4. Could we provide an access on to the B4265 to the south of the site.

Supporting documentation

It is anticipated that any planning application for the allocated site would need to be supported by a Transport Assessment and Travel Plan, and we would include the additional land as a sensitivity analysis. Can you confirm that the following scope is acceptable.

- Percentage impact analysis of development generated traffic will be undertaken at the junctions outlined below, in accordance with TAN18, junctions where the development is over 5%, further junction capacity analysis will be undertaken. The analysis will be undertaken based on a total of 250 dwellings, with a sensitivity test based on 600 dwellings.
 - B4265/Northern Access Road roundabout
 - B4265/Boverton Road/Eglwys Brewis Road linked traffic signal-controlled junctions
 - B4265/Llantwit Major Road traffic signal-controlled junction
 - B4265/Gileston Road crossroads
 - Cowbridge Road/Northern Access Road/St Athan Road roundabout
 - B4265/Tredogan Road/A4226 roundabout
- Junction capacity analysis undertaken for the anticipated 'year of opening' (i.e. 2025) and 'year of opening + 10 years' (i.e. 2035), and the base flows in 2025 and 2035 will be estimated by factoring the base surveyed flows (2022) using NTM locally adjusted growth factors (which includes traffic generated by committed developments in the area);

- Likely travel characteristics will be based on a review of the TRICS trip generation database, as well as a review of recent applications in the area; and,
- The distribution of development generated traffic will be based on 'journey to work' datasets from the 2011 Census (the 2021 data is not yet available).

I trust this all makes sense, however please do not hesitate to contact me if you have any queries.

Kind regards,

Rusne

Rusne Bagdanaviciute BSc (Hons) MSc MCIHT
Senior Transport Planner

t: 02920 700924

5A Andrews Buildings Stanwell Road Penarth CF64 2AA



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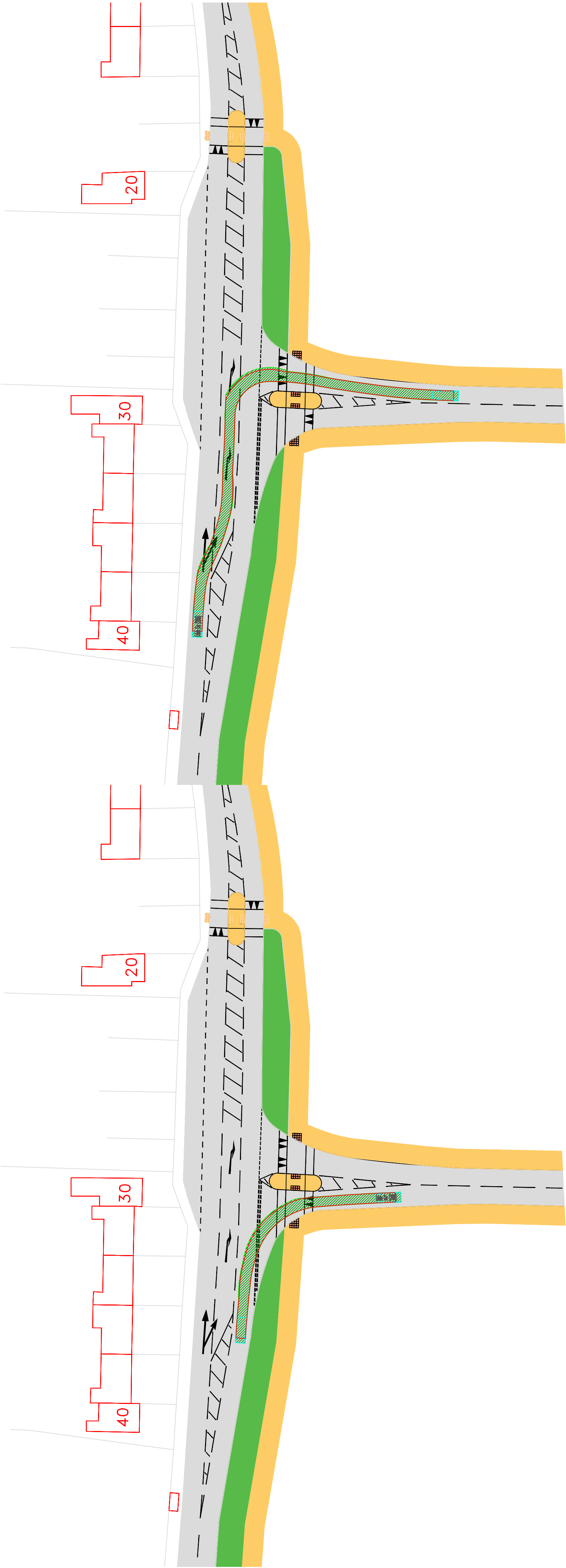
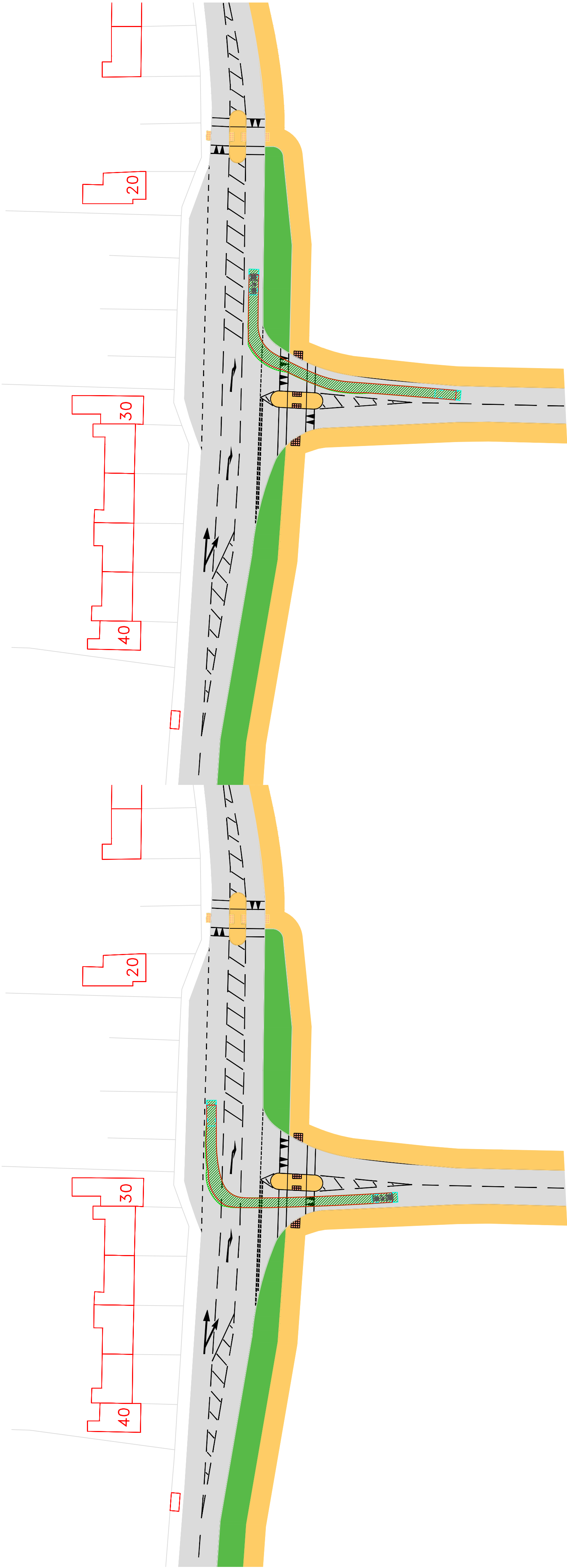
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Appendix B

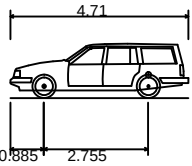




GENERAL NOTES

- This drawing to be read in conjunction with all relevant civil engineering drawings.

LEGEND



Estate Car (2006)
Overall Length 4.710m
Overall Width 1.804m
Overall Body Height 1.442m
Min Body Ground Clearance 0.207m
Max Track Width 1.756m
Lock to Lock Time 4.00s
Kerb to Kerb Turning Radius 5.950m

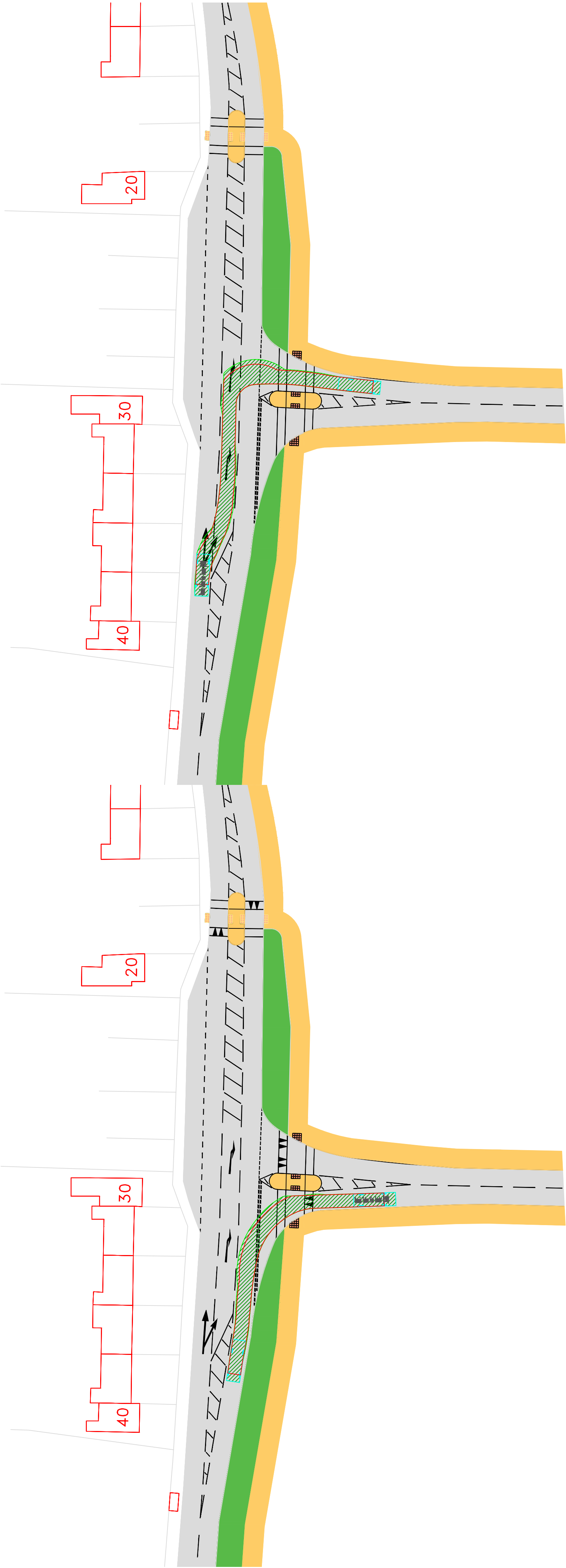
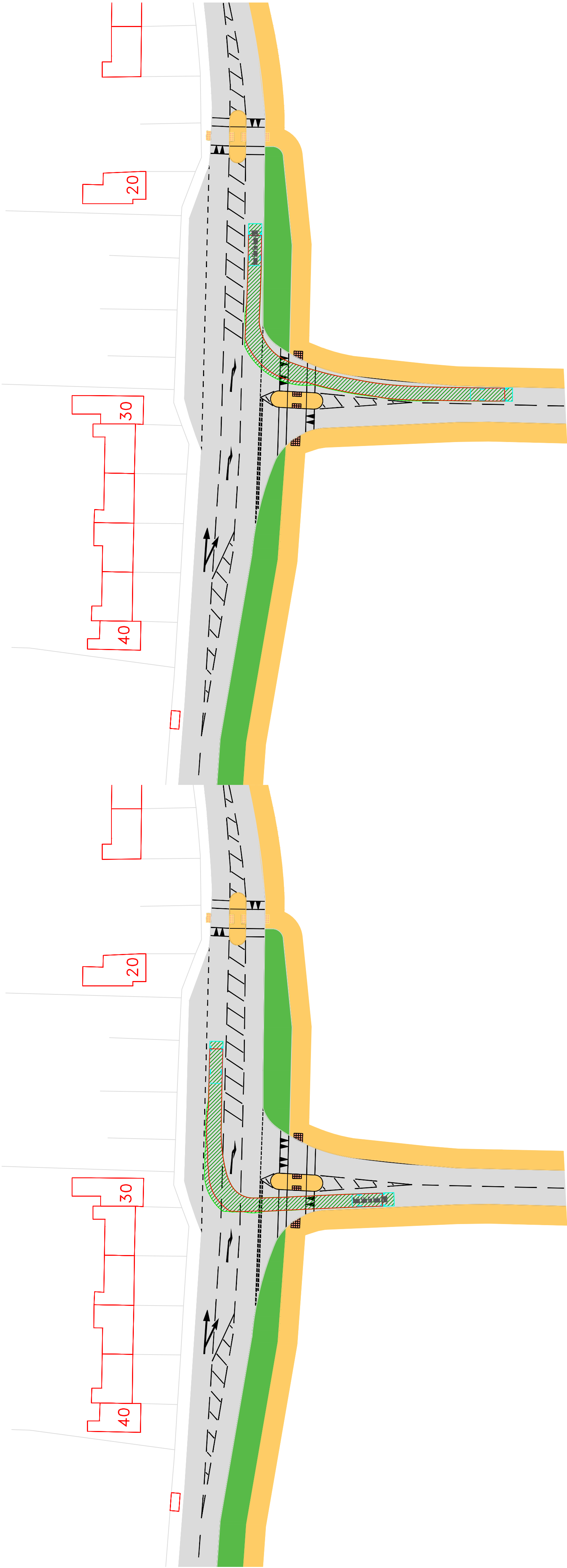
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Rev	Date	Description	Drawn	Check



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Drawing Status	Date 25/11/2024
PRELIMINARY	Scale 1:50@A1
Project	Drawn DT
Church Farm St Athan	Checked HLJ
	Project No 24063
Title	Client Project No
Swept path analysis Estate car Gileston Road access	Revision
Drawing No 24063.OS.101.06	



GENERAL NOTES

1. This drawing to be read in conjunction with all relevant civil engineering drawings.

LEGEND

Dennis Sabre Fire Tender (LWB)

Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock to Lock Time
Kerb to Kerb Turning Radius

7.700m
2.430m
3.512m
0.397m
2.380m
5.00s
7.400m

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Drawing Status
PRELIMINARY

Project
**Church Farm
St Athan**

Title
**Swept path analysis
7.7m fire tender
Gileston Road access**

Drawing No
24063.OS.101.07

Date **25/11/2024**

Scale **1:50@A1**

Drawn **DT**

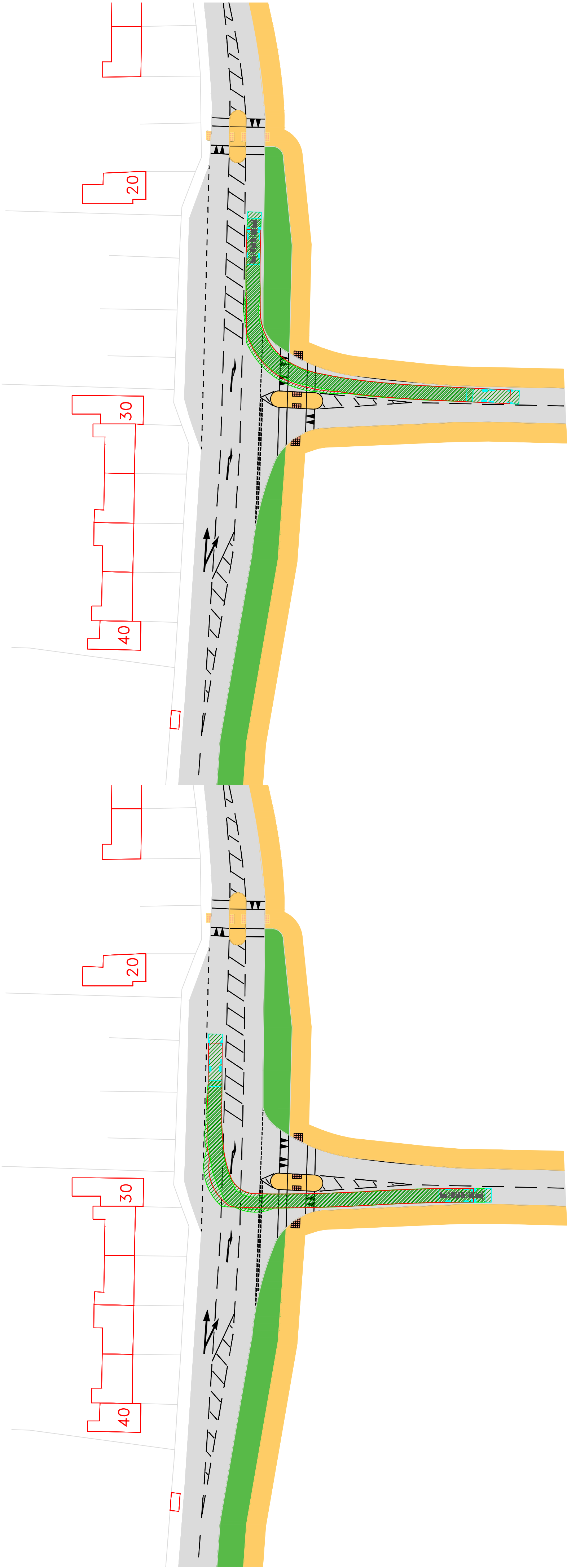
Checked **HLJ**

Project No
24063

Client Project No

Revision

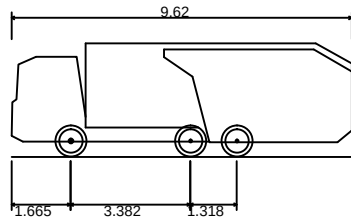
THIS DRAWING MUST BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS. DO NOT SCALE FROM THIS DRAWING.



GENERAL NOTES

- This drawing to be read in conjunction with all relevant civil engineering drawings.

LEGEND



Phoenix 2-18W (with Elite 2 6x2ML chassis)	9.620m
Overall Length	2.530m
Overall Width	3.211m
Overall Body Height	0.416m
Min Body Ground Clearance	2.530m
Track Width	4.00s
Lock to Lock Time	8.550m
Kerb to Kerb Turning Radius	

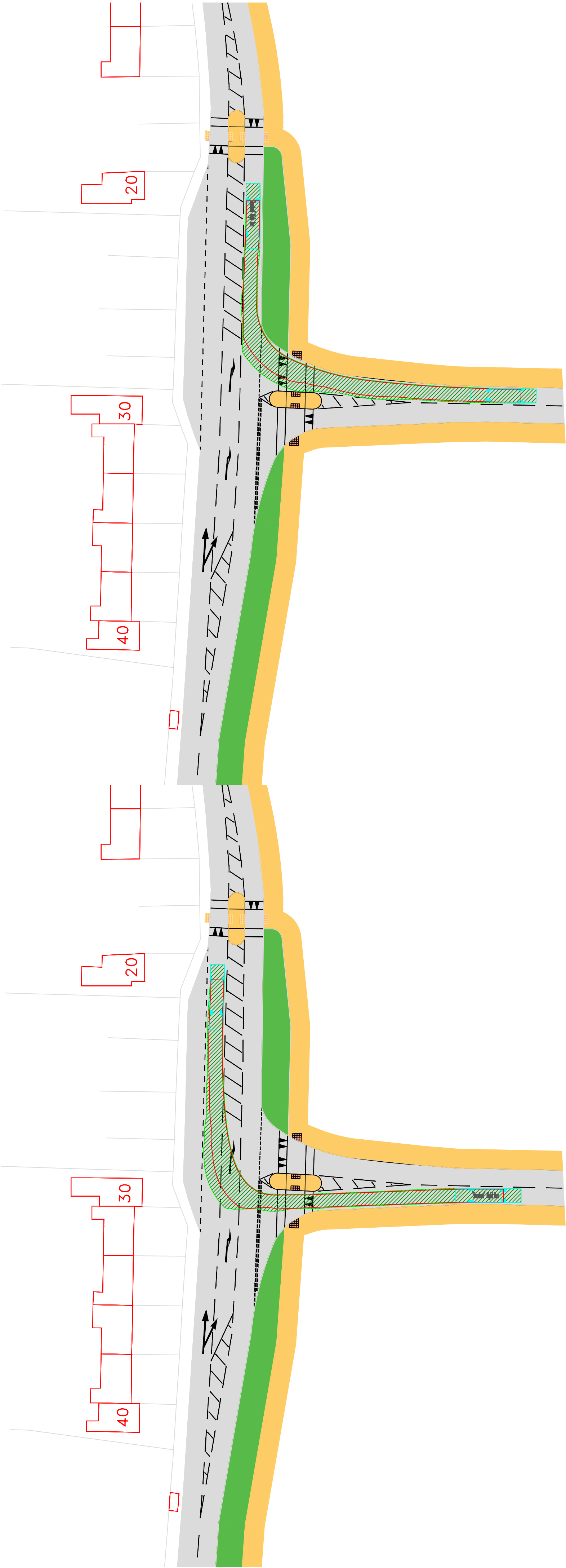
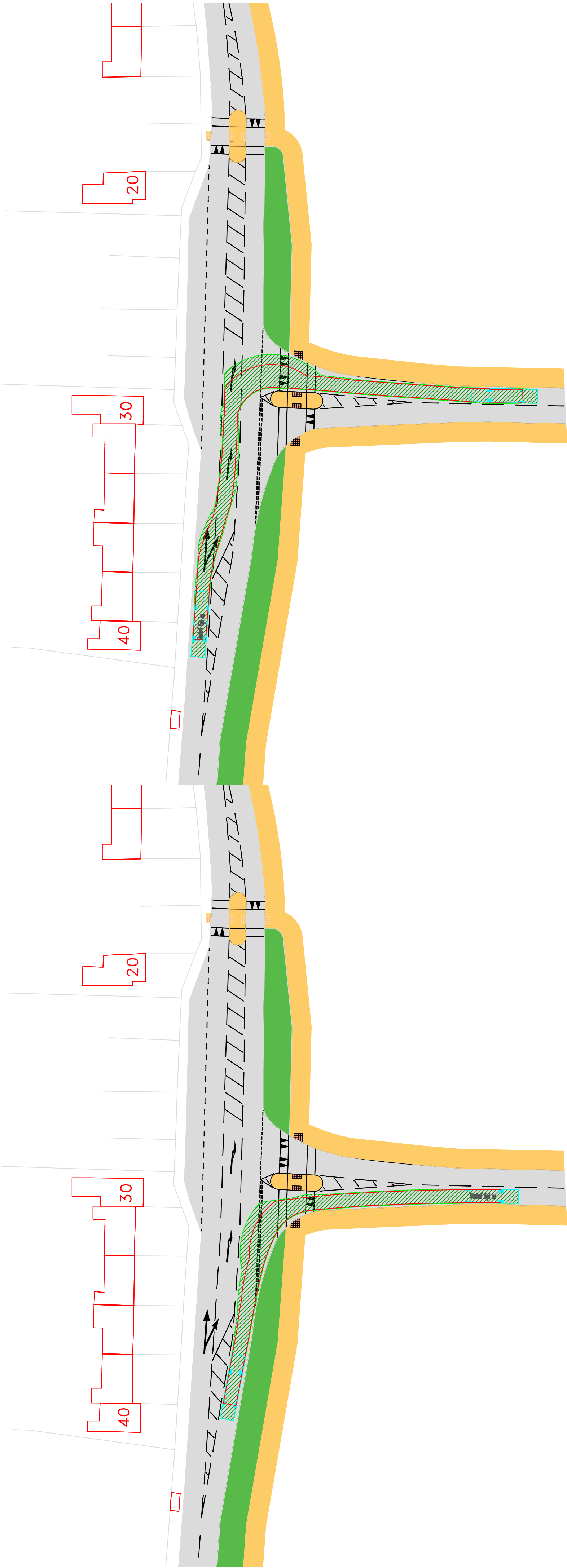
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PRELIMINARY	Scale 1:50@A1
Project	Drawn DT
Church Farm St Athan	Checked HLJ
	Project No 24063
Title	Client Project No
Swept path analysis 9.6m refuse vehicle Gileston Road access	Revision
Drawing No 24063.OS.101.08	



GENERAL NOTES

1. This drawing to be read in conjunction with all relevant civil engineering drawings.

LEGEND

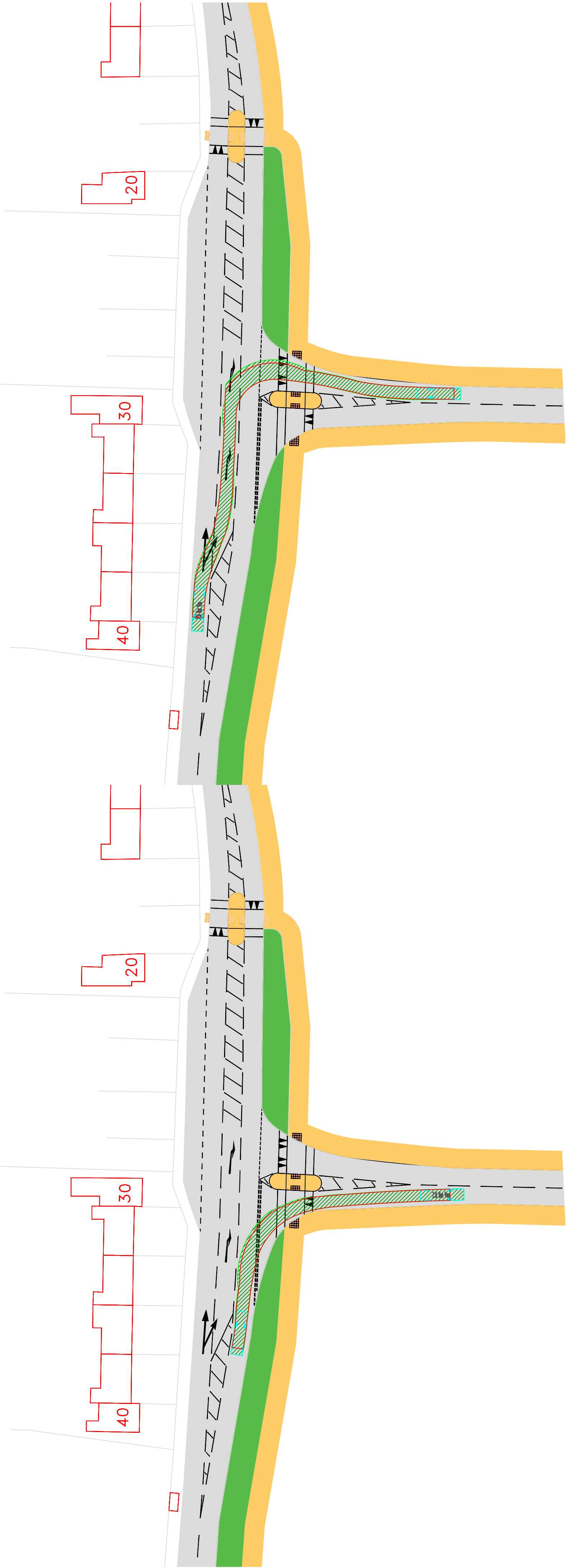
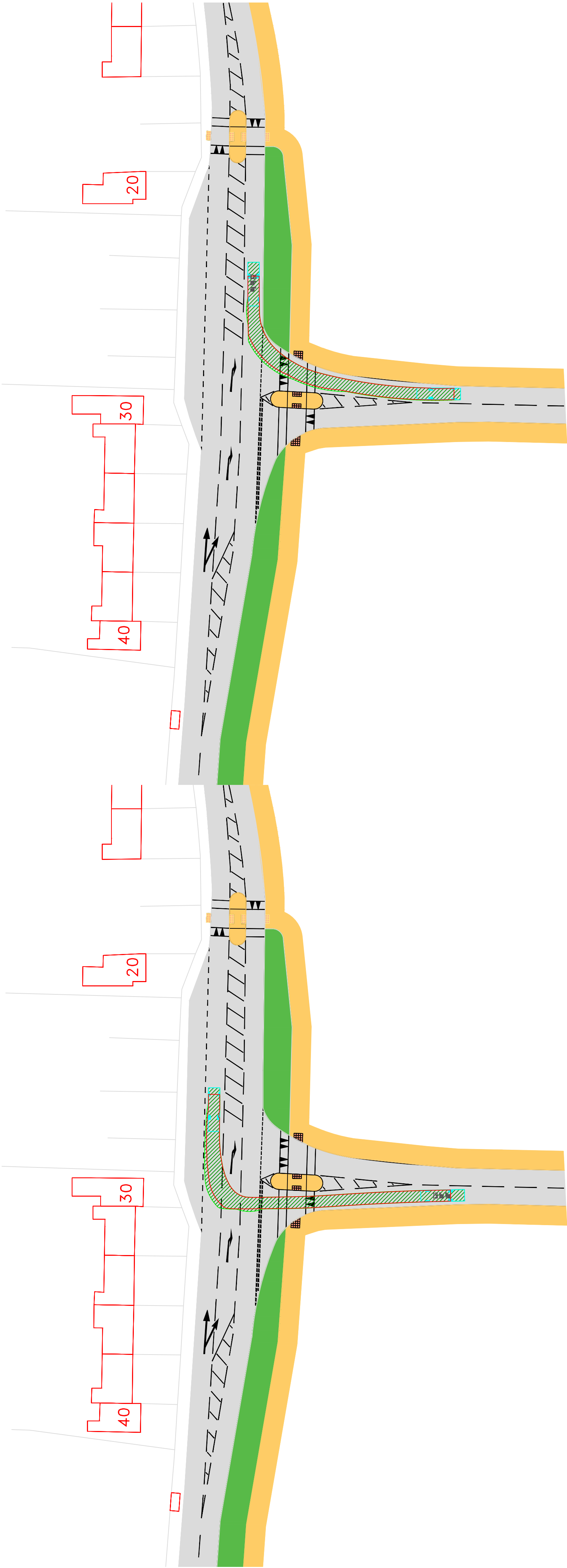
'Standard' Rigid Bus	12.000m
Overall Length	2.550m
Overall Width	3.065m
Overall Body Height	0.309m
Min Body Ground Clearance	2.350m
Track Width	4.00s
Lock to Lock Time	10.771m
Wall to Wall Turning Radius	

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Project	Drawn DT
Church Farm St Athan	Checked HLJ
	Project No 24063
Title	Client Project No
Swept path analysis 12m bus Gileston Road access	Revision
Drawing No 24063.OS.101.10	



GENERAL NOTES

1. This drawing to be read in conjunction with all relevant civil engineering drawings.

LEGEND

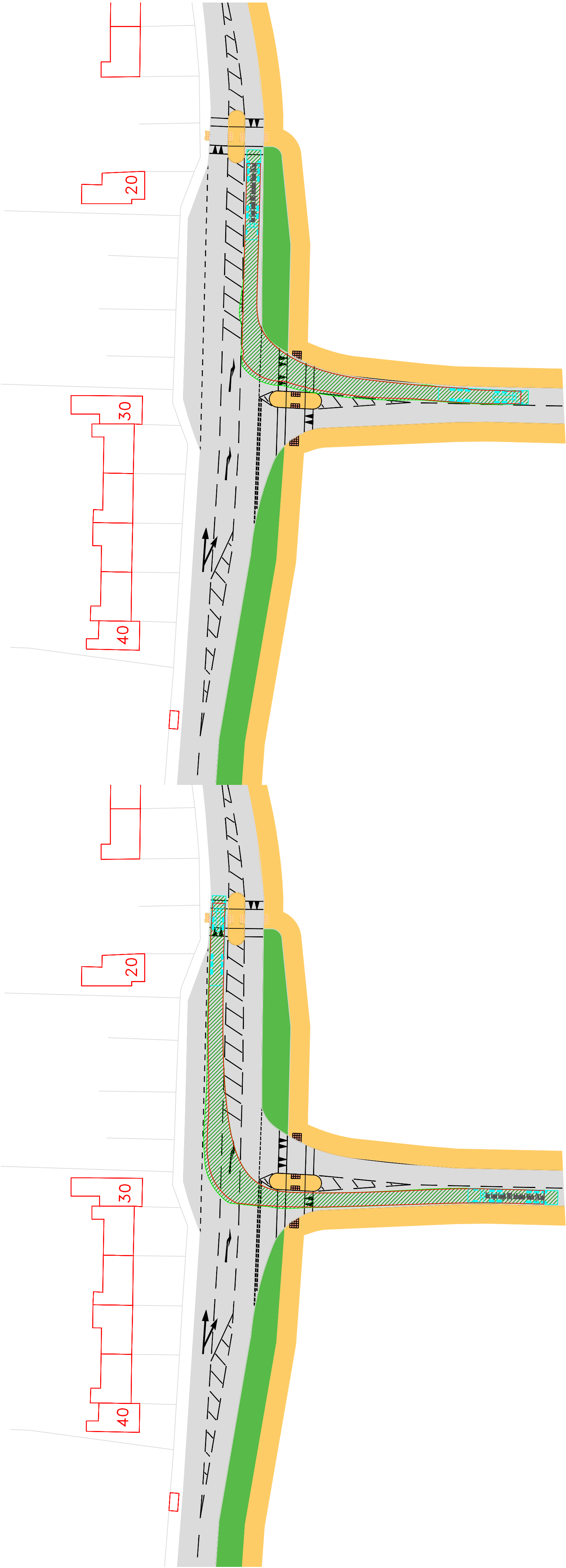
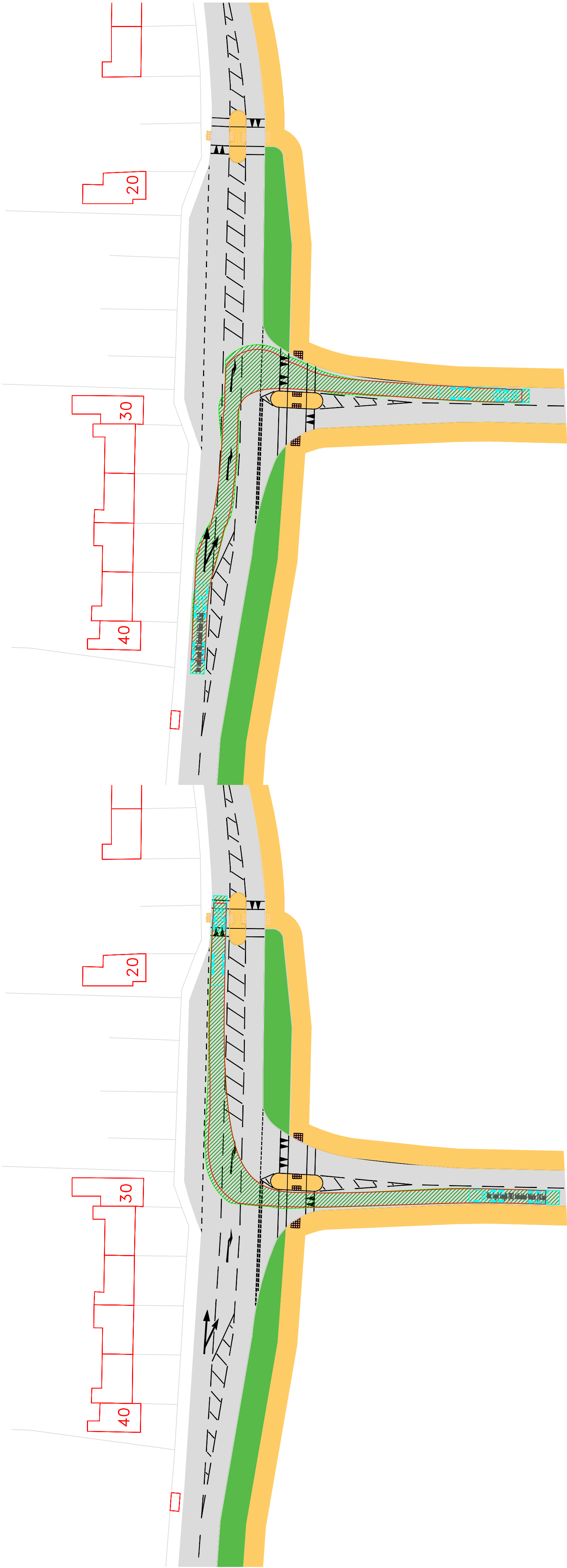
7.5t Box Van	8.010m
Overall Length	2.100m
Overall Width	3.550m
Overall Body Height	0.351m
Min Body Ground Clearance	2.064m
Track Width	4.00s
Lock to Lock Time	7.400m
Kerb to Kerb Turning Radius	

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Project	Drawn DT
Church Farm St Athan	Checked HLJ
	Project No 24063
Title	Client Project No
Swept path analysis 7.5t box van Gileston Road access	Revision
Drawing No 24063.OS.101.09	



GENERAL NOTES

1. This drawing to be read in conjunction with all relevant civil engineering drawings.

LEGEND

Max Legal Length (UK) Articulated Vehicle (16.5m)

Overall Length16.500m

Overall Width2.550m

Overall Body Height3.681m

Min Body Ground Clearance0.411m

Max Track Width2.500m

Lock to Lock Time6.00s

Kerb to Kerb Turning Radius6.530m

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Rev	Date	Description	Drawn	Check



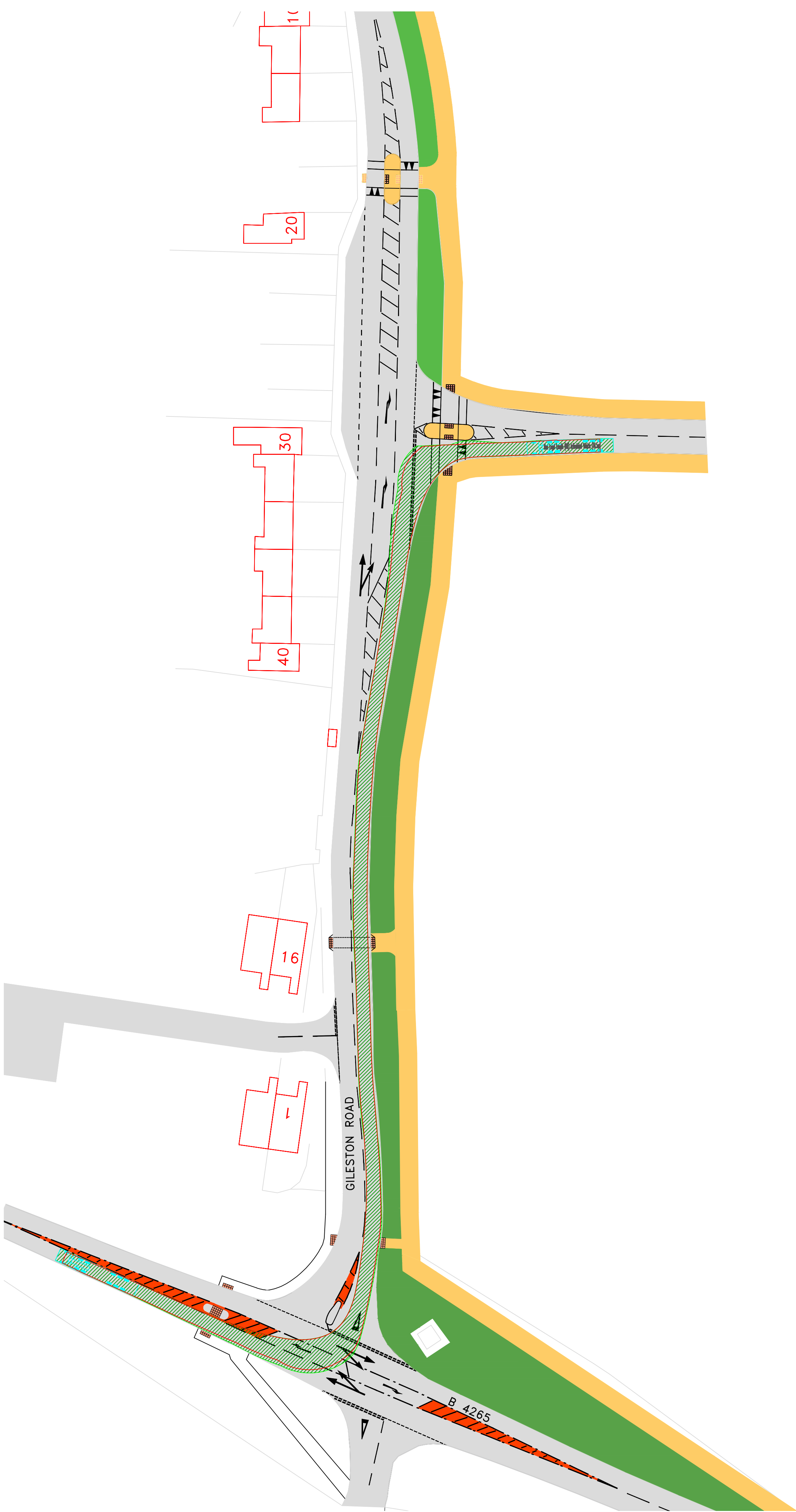
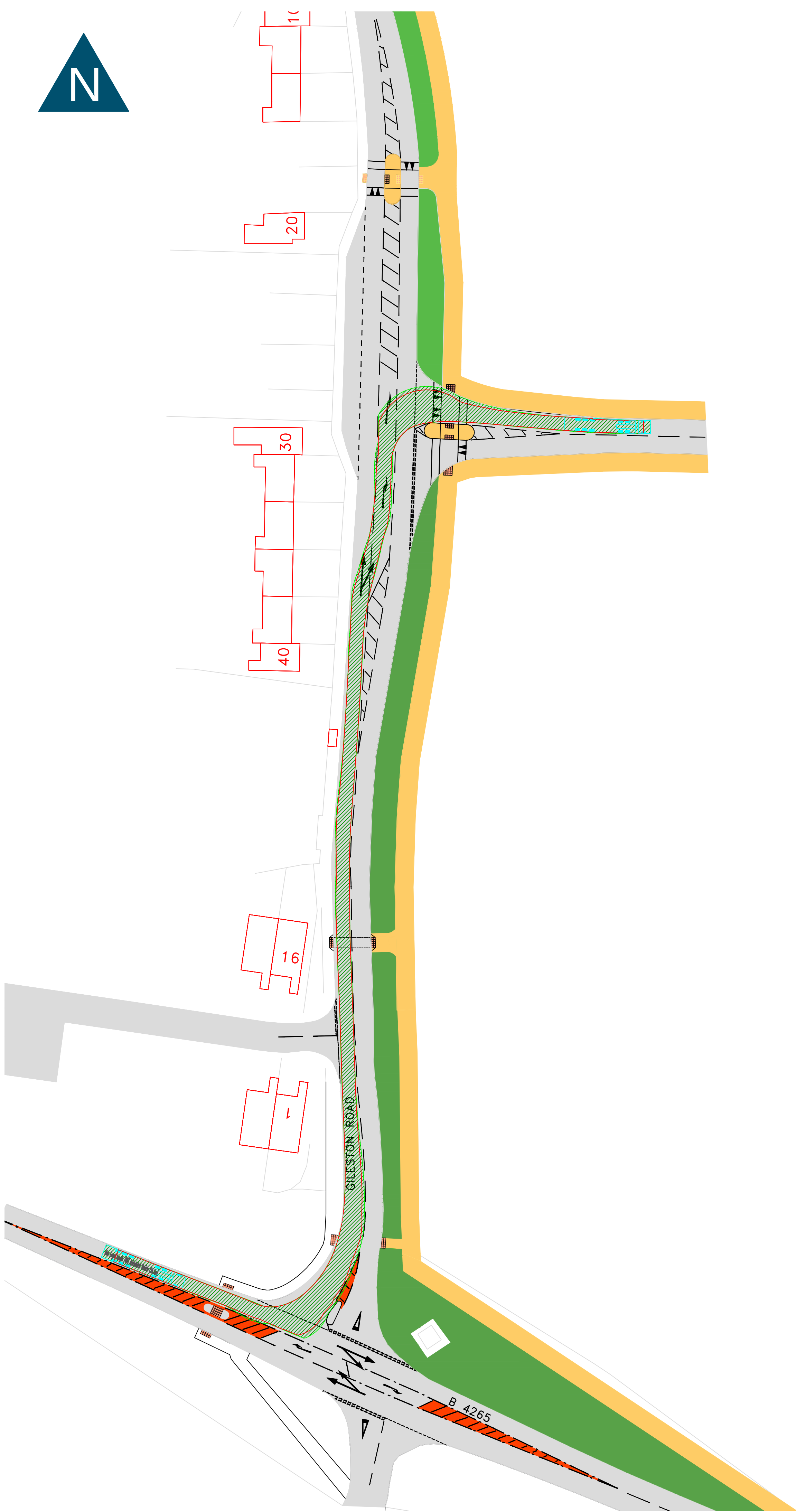
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Drawing Status	Date 25/11/2024
PRELIMINARY	Scale 1:50@A1
Project	Drawn DT
Church Farm St Athan	Checked HLJ
	Project No 24063
Title	Client Project No
Swept path analysis Max. legal length articulated vehicle Gileston Road access	Revision
Drawing No 24063.OS.101.16	

Appendix C





GENERAL NOTES

1. This drawing to be read in conjunction with all relevant civil engineering drawings.

LEGEND

Max Legal Length (UK) Articulated Vehicle (16.5m)

Overall Length16.500m

Overall Width2.550m

Overall Body Height3.681m

Min Body Ground Clearance0.411m

Max Track Width2.500m

Lock to Lock Time6.00s

Kerb to Kerb Turning Radius6.530m

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Rev	Date	Description	Drawn	Check



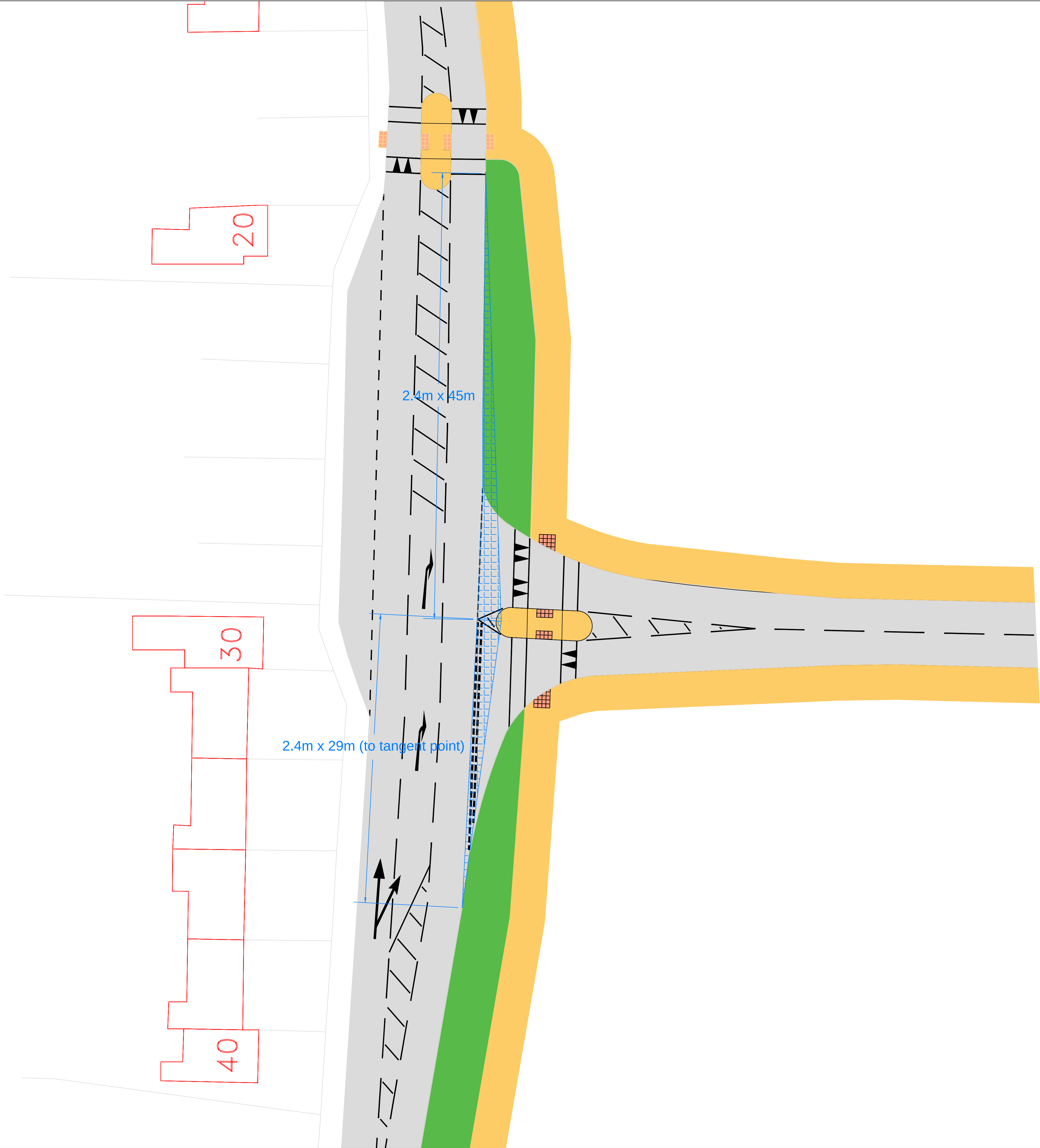
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Drawing Status	Date 19/08/2025
PRELIMINARY	Scale 1:500@A1
Project	Drawn DT
Church Farm St Athan	Checked HLJ
	Project No 24063
Title	Client Project No
Swept path analysis Max. legal length articulated vehicle Gileston Road	Revision
Drawing No 24063.OS.106.18	

Appendix D





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GENERAL NOTES

1. This drawing to be read in conjunction with all relevant civil engineering drawings.

LEGEND

Rev	Date	Description	Drawn	Check



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Drawing Status	Date	17/10/2024
PRELIMINARY	Scale	1:200@A1
Project	Drawn	DT
Church Farm, St Athan	Checked	HLJ
	Project No	24063
	Client Project No	
Proposed access Gileston Road 2.4m x 45m visibility splay	Revision	
Drawing No		
24063.OS.101.02		

Appendix E



TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL PUBLIC TRANSPORT USERS

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	3 days
	HC HAMPSHIRE	2 days
	HF HERTFORDSHIRE	1 days
	KC KENT	3 days
	SC SURREY	1 days
	WS WEST SUSSEX	3 days
03	SOUTH WEST	
	DC DORSET	2 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	2 days
	NF NORFOLK	7 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LE LEICESTERSHIRE	1 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days
11	SCOTLAND	
	AS ABERDEENSHIRE	1 days

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

Lime Transport Limited Stanwell Road Penarth

Licence No: 258601

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: 24 to 480 (units:)
Range Selected by User: 0 to 800 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 14/05/24

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

Selected survey days:

Monday	1 days
Tuesday	8 days
Wednesday	4 days
Thursday	13 days
Friday	2 days

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

Selected survey types:

Manual count	28 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	14
Neighbourhood Centre (PPS6 Local Centre)	12

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	14
Village	12
No Sub Category	2

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	32 days - Selected
Servicing vehicles Excluded	83 days - Selected

Secondary Filtering selection:**Use Class:**

C3 28 days

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	11 days
5,001 to 10,000	16 days

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

Population within 5 miles:

5,001 to 25,000	8 days
25,001 to 50,000	14 days
50,001 to 75,000	6 days

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

Car ownership within 5 miles:

1.1 to 1.5	21 days
1.6 to 2.0	7 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	22 days
No	6 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	28 days

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

LIST OF SITES relevant to selection parameters

1	AC-03-A-04	TOWN HOUSES		CHESHIRE WEST & CHESTER
	LONDON ROAD			
	NORTHWICH			
	LEFTWICH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	24		
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL	
2	AS-03-A-02	MIXED HOUSES		ABERDEENSHIRE
	FARROCHIE ROAD			
	STONEHAVEN			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	131		
	Survey date: WEDNESDAY	20/04/22	Survey Type: MANUAL	
3	CA-03-A-07	MIXED HOUSES		CAMBRIDGESHIRE
	FIELD END			
	NEAR ELY			
	WITCHFORD			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	32		
	Survey date: THURSDAY	27/05/21	Survey Type: MANUAL	
4	CA-03-A-08	DETACHED & SEMI-DETACHED		CAMBRIDGESHIRE
	GIDDING ROAD			
	SAWTRY			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	83		
	Survey date: THURSDAY	13/10/22	Survey Type: MANUAL	
5	DC-03-A-10	MIXED HOUSES		DORSET
	ADDISON CLOSE			
	GILLINGHAM			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	26		
	Survey date: WEDNESDAY	09/11/22	Survey Type: MANUAL	
6	DC-03-A-11	MIXED HOUSES		DORSET
	A350			
	SHAFTESBURY			
	Edge of Town			
	No Sub Category			
	Total No of Dwellings:	141		
	Survey date: TUESDAY	31/10/23	Survey Type: MANUAL	
7	ES-03-A-07	MIXED HOUSES & FLATS		EAST SUSSEX
	NEW ROAD			
	HAILSHAM			
	HELLINGLY			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	91		
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL	
8	ES-03-A-11	MIXED HOUSES		EAST SUSSEX
	BISHOPS LANE			
	RINGMER			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	105		
	Survey date: THURSDAY	28/09/23	Survey Type: MANUAL	

LIST OF SITES relevant to selection parameters (Cont.)

9	ES-03-A-12 HOREBEECH LANE HORAM	MIXED HOUSES & FLATS	EAST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	123	
	Survey date: TUESDAY	03/10/23	Survey Type: MANUAL
10	HC-03-A-23 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings:	62	
	Survey date: TUESDAY	19/11/19	Survey Type: MANUAL
11	HC-03-A-31 KILN ROAD LIPHOOK	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	44	
	Survey date: FRIDAY	07/10/22	Survey Type: MANUAL
12	HF-03-A-03 HARE STREET ROAD BUNTINGFORD	MIXED HOUSES	HERTFORDSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	160	
	Survey date: MONDAY	08/07/19	Survey Type: MANUAL
13	KC-03-A-07 RECULVER ROAD HERNE BAY	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	288	
	Survey date: WEDNESDAY	27/09/17	Survey Type: MANUAL
14	KC-03-A-08 MAIDSTONE ROAD CHARING	MIXED HOUSES	KENT
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	159	
	Survey date: TUESDAY	22/05/18	Survey Type: MANUAL
15	KC-03-A-10 HEADCORN ROAD STAPLEHURST	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	106	
	Survey date: TUESDAY	09/05/23	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

16	LE-03-A-02 MELBOURNE ROAD IBSTOCK	DETACHED & OTHERS		LEICESTERSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 85 Survey date: THURSDAY 28/06/18 Survey Type: MANUAL			
17	NF-03-A-05 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 40 Survey date: THURSDAY 19/09/19 Survey Type: MANUAL			
18	NF-03-A-27 YARMOUTH ROAD NEAR NORWICH BLOFIELD	MIXED HOUSES & FLATS		NORFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 93 Survey date: THURSDAY 16/09/21 Survey Type: MANUAL			
19	NF-03-A-30 BRANDON ROAD SWAFFHAM	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 266 Survey date: THURSDAY 23/09/21 Survey Type: MANUAL			
20	NF-03-A-33 LONDON ROAD ATTLEBOROUGH	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 143 Survey date: THURSDAY 29/09/22 Survey Type: MANUAL			
21	NF-03-A-36 LONDON ROAD WYMONDHAM	MIXED HOUSES		NORFOLK
	Edge of Town No Sub Category Total No of Dwellings: 75 Survey date: THURSDAY 29/09/22 Survey Type: MANUAL			
22	NF-03-A-39 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 212 Survey date: TUESDAY 27/09/22 Survey Type: MANUAL			
23	NF-03-A-46 BURGH ROAD AYLSHAM	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 300 Survey date: TUESDAY 14/09/21 Survey Type: MANUAL			

LIST OF SITES relevant to selection parameters (Cont.)

24	SC-03-A-09 AMLETS LANE CRANLEIGH	MIXED HOUSES & FLATS	SURREY
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 136 Survey date: TUESDAY 24/05/22 Survey Type: MANUAL		
25	SF-03-A-06 BURY ROAD KENTFORD	DETACHED & SEMI-DETACHED	SUFFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 38 Survey date: FRIDAY 22/09/17 Survey Type: MANUAL		
26	WS-03-A-07 EMMS LANE NEAR HORSHAM BROOKS GREEN	BUNGALOWS	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 57 Survey date: THURSDAY 19/10/17 Survey Type: MANUAL		
27	WS-03-A-16 BRACKLESHAM LANE BRACKLESHAM BAY	DETACHED & SEMI-DETACHED	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 58 Survey date: WEDNESDAY 09/11/22 Survey Type: MANUAL		
28	WS-03-A-21 HILLAND ROAD BILLINGSHURST	MIXED HOUSES	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 480 Survey date: THURSDAY 09/11/23 Survey Type: MANUAL		

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

Lime Transport Limited Stanwell Road Penarth

Licence No: 258601

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PUBLIC TRANSPORT USERS

Ranking Type: TOTALS

Time Range: 08:00-09:00

CALCULATION FACTOR 100m2 DWELLS

15th Percentile = No. 24 NF-03-A-05 Tot: 0.000

85th Percentile = No. 5 KC-03-A-07 Tot: 0.073

Median Values

Arrivals: 0.000

Departures: 0.007

Totals: 0.007

Mean Values

Arrivals: 0.001

Departures: 0.036

Totals: 0.037

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	HC-03-A-23	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	62	Tue	19/11/19	0.016	0.516	0.532	2.19
2	HF-03-A-03	MIXED HOUSES	BUNTINGFORD	HERTFORDSHIRE	160	Mon	08/07/19	0.019	0.075	0.094	3.95
3	SF-03-A-06	DETACHED & SEM	KENTFORD	SUFFOLK	38	Fri	22/09/17	0.000	0.079	0.079	0.92
4	DC-03-A-10	MIXED HOUSES	GILLINGHAM	DORSET	26	Wed	09/11/22	0.000	0.077	0.077	2.12
5	KC-03-A-07	MIXED HOUSES	HERNE BAY	KENT	288	Wed	27/09/17	0.000	0.073	0.073	3.09
6	WS-03-A-21	MIXED HOUSES	BILLINGSHURST	WEST SUSSEX	480	Thu	09/11/23	0.000	0.052	0.052	2.31
7	ES-03-A-11	MIXED HOUSES	RINGMER	EAST SUSSEX	105	Thu	28/09/23	0.000	0.029	0.029	2.62
8	NF-03-A-36	MIXED HOUSES	WYMONDHAM	NORFOLK	75	Thu	29/09/22	0.000	0.027	0.027	2.84
9	NF-03-A-46	MIXED HOUSES &	AYLSHAM	NORFOLK	300	Tue	14/09/21	0.000	0.013	0.013	2.41
10	LE-03-A-02	DETACHED & OTH	IBSTOCK	LEICESTERSHIRE	85	Thu	28/06/18	0.000	0.012	0.012	4.27
11	CA-03-A-08	DETACHED & SEM	SAWTRY	CAMBRIDGESHIRE	83	Thu	13/10/22	0.000	0.012	0.012	2.25
12	NF-03-A-27	MIXED HOUSES &	NEAR NORWICH	NORFOLK	93	Thu	16/09/21	0.000	0.011	0.011	2.67
13	NF-03-A-39	MIXED HOUSES	HOLT	NORFOLK	212	Tue	27/09/22	0.000	0.009	0.009	2.31
14	ES-03-A-12	MIXED HOUSES &	HORAM	EAST SUSSEX	123	Tue	03/10/23	0.000	0.008	0.008	2.92
15	KC-03-A-08	MIXED HOUSES	CHARING	KENT	159	Tue	22/05/18	0.000	0.006	0.006	3.02
16	WS-03-A-16	DETACHED & SEM	BRACKLESHAM BAY	WEST SUSSEX	58	Wed	09/11/22	0.000	0.000	0.000	2.28
17	SC-03-A-09	MIXED HOUSES &	CRANLEIGH	SURREY	136	Tue	24/05/22	0.000	0.000	0.000	2.64
18	NF-03-A-33	MIXED HOUSES	ATTLEBOROUGH	NORFOLK	143	Thu	29/09/22	0.000	0.000	0.000	2.28
19	NF-03-A-30	MIXED HOUSES	SWAFFHAM	NORFOLK	266	Thu	23/09/21	0.000	0.000	0.000	2.84
20	KC-03-A-10	MIXED HOUSES	STAPLEHURST	KENT	106	Tue	09/05/23	0.000	0.000	0.000	2.43
21	DC-03-A-11	MIXED HOUSES	SHAFTESBURY	DORSET	141	Tue	31/10/23	0.000	0.000	0.000	2.81
22	AS-03-A-02	MIXED HOUSES	STONEHAVEN	ABERDEENSHIRE	131	Wed	20/04/22	0.000	0.000	0.000	1.77
23	WS-03-A-07	BUNGALOWS	NEAR HORSHAM	WEST SUSSEX	57	Thu	19/10/17	0.000	0.000	0.000	1.89
24	NF-03-A-05	MIXED HOUSES	HOLT	NORFOLK	40	Thu	19/09/19	0.000	0.000	0.000	2.50
25	HC-03-A-31	MIXED HOUSES &	LIPHOOK	HAMPSHIRE	44	Fri	07/10/22	0.000	0.000	0.000	2.57
26	ES-03-A-07	MIXED HOUSES &	HAILSHAM	EAST SUSSEX	91	Thu	07/11/19	0.000	0.000	0.000	2.70
27	CA-03-A-07	MIXED HOUSES	NEAR ELY	CAMBRIDGESHIRE	32	Thu	27/05/21	0.000	0.000	0.000	2.25
28	AC-03-A-04	TOWN HOUSES	NORTHWICH	CHESHIRE WEST & CHE	24	Thu	06/06/19	0.000	0.000	0.000	1.96

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL PUBLIC TRANSPORT USERS

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	3 days
	HC HAMPSHIRE	2 days
	HF HERTFORDSHIRE	1 days
	KC KENT	3 days
	SC SURREY	1 days
	WS WEST SUSSEX	3 days
03	SOUTH WEST	
	DC DORSET	2 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	2 days
	NF NORFOLK	7 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LE LEICESTERSHIRE	1 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days
11	SCOTLAND	
	AS ABERDEENSHIRE	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: 24 to 480 (units:)
Range Selected by User: 0 to 800 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 14/05/24

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

Selected survey days:

Monday	1 days
Tuesday	8 days
Wednesday	4 days
Thursday	13 days
Friday	2 days

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

Selected survey types:

Manual count	28 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	14
Neighbourhood Centre (PPS6 Local Centre)	12

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	14
Village	12
No Sub Category	2

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	32 days - Selected
Servicing vehicles Excluded	83 days - Selected

Secondary Filtering selection:

Use Class:

C3 28 days

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	11 days
5,001 to 10,000	16 days

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

Population within 5 miles:

5,001 to 25,000	8 days
25,001 to 50,000	14 days
50,001 to 75,000	6 days

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

Car ownership within 5 miles:

1.1 to 1.5	21 days
1.6 to 2.0	7 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	22 days
No	6 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	28 days

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

LIST OF SITES relevant to selection parameters

1	AC-03-A-04	TOWN HOUSES		CHESHIRE WEST & CHESTER
	LONDON ROAD			
	NORTHWICH			
	LEFTWICH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	24		
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL	
2	AS-03-A-02	MIXED HOUSES		ABERDEENSHIRE
	FARROCHIE ROAD			
	STONEHAVEN			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	131		
	Survey date: WEDNESDAY	20/04/22	Survey Type: MANUAL	
3	CA-03-A-07	MIXED HOUSES		CAMBRIDGESHIRE
	FIELD END			
	NEAR ELY			
	WITCHFORD			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	32		
	Survey date: THURSDAY	27/05/21	Survey Type: MANUAL	
4	CA-03-A-08	DETACHED & SEMI-DETACHED		CAMBRIDGESHIRE
	GIDDING ROAD			
	SAWTRY			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	83		
	Survey date: THURSDAY	13/10/22	Survey Type: MANUAL	
5	DC-03-A-10	MIXED HOUSES		DORSET
	ADDISON CLOSE			
	GILLINGHAM			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	26		
	Survey date: WEDNESDAY	09/11/22	Survey Type: MANUAL	
6	DC-03-A-11	MIXED HOUSES		DORSET
	A350			
	SHAFTESBURY			
	Edge of Town			
	No Sub Category			
	Total No of Dwellings:	141		
	Survey date: TUESDAY	31/10/23	Survey Type: MANUAL	
7	ES-03-A-07	MIXED HOUSES & FLATS		EAST SUSSEX
	NEW ROAD			
	HAILSHAM			
	HELLINGLY			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	91		
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL	
8	ES-03-A-11	MIXED HOUSES		EAST SUSSEX
	BISHOPS LANE			
	RINGMER			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	105		
	Survey date: THURSDAY	28/09/23	Survey Type: MANUAL	

LIST OF SITES relevant to selection parameters (Cont.)

9	ES-03-A-12 HOREBEECH LANE HORAM	MIXED HOUSES & FLATS	EAST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	123	
	Survey date: TUESDAY	03/10/23	Survey Type: MANUAL
10	HC-03-A-23 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings:	62	
	Survey date: TUESDAY	19/11/19	Survey Type: MANUAL
11	HC-03-A-31 KILN ROAD LIPHOOK	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	44	
	Survey date: FRIDAY	07/10/22	Survey Type: MANUAL
12	HF-03-A-03 HARE STREET ROAD BUNTINGFORD	MIXED HOUSES	HERTFORDSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	160	
	Survey date: MONDAY	08/07/19	Survey Type: MANUAL
13	KC-03-A-07 RECULVER ROAD HERNE BAY	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	288	
	Survey date: WEDNESDAY	27/09/17	Survey Type: MANUAL
14	KC-03-A-08 MAIDSTONE ROAD CHARING	MIXED HOUSES	KENT
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	159	
	Survey date: TUESDAY	22/05/18	Survey Type: MANUAL
15	KC-03-A-10 HEADCORN ROAD STAPLEHURST	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	106	
	Survey date: TUESDAY	09/05/23	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

16	LE-03-A-02 MELBOURNE ROAD IBSTOCK	DETACHED & OTHERS		LEICESTERSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village			
	Total No of Dwellings:		85	
	Survey date: THURSDAY		28/06/18	Survey Type: MANUAL
17	NF-03-A-05 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:		40	
	Survey date: THURSDAY		19/09/19	Survey Type: MANUAL
18	NF-03-A-27 YARMOUTH ROAD NEAR NORWICH BLOFIELD	MIXED HOUSES & FLATS		NORFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village			
	Total No of Dwellings:		93	
	Survey date: THURSDAY		16/09/21	Survey Type: MANUAL
19	NF-03-A-30 BRANDON ROAD SWAFFHAM	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:		266	
	Survey date: THURSDAY		23/09/21	Survey Type: MANUAL
20	NF-03-A-33 LONDON ROAD ATTLEBOROUGH	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:		143	
	Survey date: THURSDAY		29/09/22	Survey Type: MANUAL
21	NF-03-A-36 LONDON ROAD WYMONDHAM	MIXED HOUSES		NORFOLK
	Edge of Town No Sub Category			
	Total No of Dwellings:		75	
	Survey date: THURSDAY		29/09/22	Survey Type: MANUAL
22	NF-03-A-39 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:		212	
	Survey date: TUESDAY		27/09/22	Survey Type: MANUAL
23	NF-03-A-46 BURGH ROAD AYLSHAM	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:		300	
	Survey date: TUESDAY		14/09/21	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

24	SC-03-A-09 AMLETS LANE CRANLEIGH	MIXED HOUSES & FLATS	SURREY
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 136 Survey date: TUESDAY 24/05/22 Survey Type: MANUAL		
25	SF-03-A-06 BURY ROAD KENTFORD	DETACHED & SEMI-DETACHED	SUFFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 38 Survey date: FRIDAY 22/09/17 Survey Type: MANUAL		
26	WS-03-A-07 EMMS LANE NEAR HORSHAM BROOKS GREEN	BUNGALOWS	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 57 Survey date: THURSDAY 19/10/17 Survey Type: MANUAL		
27	WS-03-A-16 BRACKLESHAM LANE BRACKLESHAM BAY	DETACHED & SEMI-DETACHED	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 58 Survey date: WEDNESDAY 09/11/22 Survey Type: MANUAL		
28	WS-03-A-21 HILLAND ROAD BILLINGSHURST	MIXED HOUSES	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 480 Survey date: THURSDAY 09/11/23 Survey Type: MANUAL		

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

Lime Transport Limited Stanwell Road Penarth

Licence No: 258601

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PUBLIC TRANSPORT USERS

Ranking Type: TOTALS

Time Range: 17:00-18:00

CALCULATION FACTOR 100m2 DWELLS

15th Percentile = No. 24 NF-03-A-05 Tot: 0.000

85th Percentile = No. 5 KC-03-A-07 Tot: 0.034

Median Values

Arrivals: 0.000

Departures: 0.000

Totals: 0.000

Mean Values

Arrivals: 0.019

Departures: 0.002

Totals: 0.021

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	HC-03-A-23	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	62	Tue	19/11/19	0.242	0.016	0.258	2.19
2	DC-03-A-10	MIXED HOUSES	GILLINGHAM	DORSET	26	Wed	09/11/22	0.077	0.000	0.077	2.12
3	WS-03-A-21	MIXED HOUSES	BILLINGSHURST	WEST SUSSEX	480	Thu	09/11/23	0.060	0.000	0.060	2.31
4	LE-03-A-02	DETACHED & OTH	IBSTOCK	LEICESTERSHIRE	85	Thu	28/06/18	0.035	0.024	0.059	4.27
5	KC-03-A-07	MIXED HOUSES	HERNE BAY	KENT	288	Wed	27/09/17	0.024	0.010	0.034	3.09
6	NF-03-A-36	MIXED HOUSES	WYMONDHAM	NORFOLK	75	Thu	29/09/22	0.027	0.000	0.027	2.84
7	KC-03-A-10	MIXED HOUSES	STAPLEHURST	KENT	106	Tue	09/05/23	0.019	0.000	0.019	2.43
8	ES-03-A-11	MIXED HOUSES	RINGMER	EAST SUSSEX	105	Thu	28/09/23	0.019	0.000	0.019	2.62
9	HF-03-A-03	MIXED HOUSES	BUNTINGFORD	HERTFORDSHIRE	160	Mon	08/07/19	0.013	0.006	0.019	3.95
10	KC-03-A-08	MIXED HOUSES	CHARING	KENT	159	Tue	22/05/18	0.013	0.000	0.013	3.02
11	NF-03-A-30	MIXED HOUSES	SWAFFHAM	NORFOLK	266	Thu	23/09/21	0.008	0.000	0.008	2.84
12	ES-03-A-12	MIXED HOUSES &	HORAM	EAST SUSSEX	123	Tue	03/10/23	0.008	0.000	0.008	2.92
13	WS-03-A-16	DETACHED & SEM	BRACKLESHAM BAY	WEST SUSSEX	58	Wed	09/11/22	0.000	0.000	0.000	2.28
14	SF-03-A-06	DETACHED & SEM	KENTFORD	SUFFOLK	38	Fri	22/09/17	0.000	0.000	0.000	0.92
15	SC-03-A-09	MIXED HOUSES &	CRANLEIGH	SURREY	136	Tue	24/05/22	0.000	0.000	0.000	2.64
16	NF-03-A-46	MIXED HOUSES &	AYLSHAM	NORFOLK	300	Tue	14/09/21	0.000	0.000	0.000	2.41
17	NF-03-A-39	MIXED HOUSES	HOLT	NORFOLK	212	Tue	27/09/22	0.000	0.000	0.000	2.31
18	NF-03-A-33	MIXED HOUSES	ATTLEBOROUGH	NORFOLK	143	Thu	29/09/22	0.000	0.000	0.000	2.28
19	NF-03-A-27	MIXED HOUSES &	NEAR NORWICH	NORFOLK	93	Thu	16/09/21	0.000	0.000	0.000	2.67
20	DC-03-A-11	MIXED HOUSES	SHAFTESBURY	DORSET	141	Tue	31/10/23	0.000	0.000	0.000	2.81
21	CA-03-A-08	DETACHED & SEM	SAWTRY	CAMBRIDGESHIRE	83	Thu	13/10/22	0.000	0.000	0.000	2.25
22	AS-03-A-02	MIXED HOUSES	STONEHAVEN	ABERDEENSHIRE	131	Wed	20/04/22	0.000	0.000	0.000	1.77
23	WS-03-A-07	BUNGALOWS	NEAR HORSHAM	WEST SUSSEX	57	Thu	19/10/17	0.000	0.000	0.000	1.89
24	NF-03-A-05	MIXED HOUSES	HOLT	NORFOLK	40	Thu	19/09/19	0.000	0.000	0.000	2.50
25	HC-03-A-31	MIXED HOUSES &	LIPHOOK	HAMPSHIRE	44	Fri	07/10/22	0.000	0.000	0.000	2.57
26	ES-03-A-07	MIXED HOUSES &	HAILSHAM	EAST SUSSEX	91	Thu	07/11/19	0.000	0.000	0.000	2.70
27	CA-03-A-07	MIXED HOUSES	NEAR ELY	CAMBRIDGESHIRE	32	Thu	27/05/21	0.000	0.000	0.000	2.25
28	AC-03-A-04	TOWN HOUSES	NORTHWICH	CHESHIRE WEST & CHE	24	Thu	06/06/19	0.000	0.000	0.000	1.96

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL PUBLIC TRANSPORT USERS

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	3 days
	HC HAMPSHIRE	2 days
	HF HERTFORDSHIRE	1 days
	KC KENT	3 days
	SC SURREY	1 days
	WS WEST SUSSEX	3 days
03	SOUTH WEST	
	DC DORSET	2 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	2 days
	NF NORFOLK	7 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LE LEICESTERSHIRE	1 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days
11	SCOTLAND	
	AS ABERDEENSHIRE	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: 24 to 480 (units:)
Range Selected by User: 0 to 800 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 14/05/24

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

Selected survey days:

Monday	1 days
Tuesday	8 days
Wednesday	4 days
Thursday	13 days
Friday	2 days

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

Selected survey types:

Manual count	28 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	14
Neighbourhood Centre (PPS6 Local Centre)	12

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	14
Village	12
No Sub Category	2

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	32 days - Selected
Servicing vehicles Excluded	83 days - Selected

Secondary Filtering selection:

Use Class:

C3 28 days

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	11 days
5,001 to 10,000	16 days

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

Population within 5 miles:

5,001 to 25,000	8 days
25,001 to 50,000	14 days
50,001 to 75,000	6 days

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

Car ownership within 5 miles:

1.1 to 1.5	21 days
1.6 to 2.0	7 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	22 days
No	6 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	28 days

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

LIST OF SITES relevant to selection parameters

1	AC-03-A-04	TOWN HOUSES		CHESHIRE WEST & CHESTER
	LONDON ROAD			
	NORTHWICH			
	LEFTWICH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	24		
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL	
2	AS-03-A-02	MIXED HOUSES		ABERDEENSHIRE
	FARROCHIE ROAD			
	STONEHAVEN			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	131		
	Survey date: WEDNESDAY	20/04/22	Survey Type: MANUAL	
3	CA-03-A-07	MIXED HOUSES		CAMBRIDGESHIRE
	FIELD END			
	NEAR ELY			
	WITCHFORD			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	32		
	Survey date: THURSDAY	27/05/21	Survey Type: MANUAL	
4	CA-03-A-08	DETACHED & SEMI-DETACHED		CAMBRIDGESHIRE
	GIDDING ROAD			
	SAWTRY			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	83		
	Survey date: THURSDAY	13/10/22	Survey Type: MANUAL	
5	DC-03-A-10	MIXED HOUSES		DORSET
	ADDISON CLOSE			
	GILLINGHAM			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	26		
	Survey date: WEDNESDAY	09/11/22	Survey Type: MANUAL	
6	DC-03-A-11	MIXED HOUSES		DORSET
	A350			
	SHAFTESBURY			
	Edge of Town			
	No Sub Category			
	Total No of Dwellings:	141		
	Survey date: TUESDAY	31/10/23	Survey Type: MANUAL	
7	ES-03-A-07	MIXED HOUSES & FLATS		EAST SUSSEX
	NEW ROAD			
	HAILSHAM			
	HELLINGLY			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	91		
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL	
8	ES-03-A-11	MIXED HOUSES		EAST SUSSEX
	BISHOPS LANE			
	RINGMER			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	105		
	Survey date: THURSDAY	28/09/23	Survey Type: MANUAL	

LIST OF SITES relevant to selection parameters (Cont.)

9	ES-03-A-12 HOREBEECH LANE HORAM	MIXED HOUSES & FLATS	EAST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	123	
	Survey date: TUESDAY	03/10/23	Survey Type: MANUAL
10	HC-03-A-23 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings:	62	
	Survey date: TUESDAY	19/11/19	Survey Type: MANUAL
11	HC-03-A-31 KILN ROAD LIPHOOK	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	44	
	Survey date: FRIDAY	07/10/22	Survey Type: MANUAL
12	HF-03-A-03 HARE STREET ROAD BUNTINGFORD	MIXED HOUSES	HERTFORDSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	160	
	Survey date: MONDAY	08/07/19	Survey Type: MANUAL
13	KC-03-A-07 RECULVER ROAD HERNE BAY	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	288	
	Survey date: WEDNESDAY	27/09/17	Survey Type: MANUAL
14	KC-03-A-08 MAIDSTONE ROAD CHARING	MIXED HOUSES	KENT
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	159	
	Survey date: TUESDAY	22/05/18	Survey Type: MANUAL
15	KC-03-A-10 HEADCORN ROAD STAPLEHURST	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	106	
	Survey date: TUESDAY	09/05/23	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

16	LE-03-A-02 MELBOURNE ROAD IBSTOCK	DETACHED & OTHERS		LEICESTERSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 85 Survey date: THURSDAY 28/06/18 Survey Type: MANUAL			
17	NF-03-A-05 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 40 Survey date: THURSDAY 19/09/19 Survey Type: MANUAL			
18	NF-03-A-27 YARMOUTH ROAD NEAR NORWICH BLOFIELD	MIXED HOUSES & FLATS		NORFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 93 Survey date: THURSDAY 16/09/21 Survey Type: MANUAL			
19	NF-03-A-30 BRANDON ROAD SWAFFHAM	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 266 Survey date: THURSDAY 23/09/21 Survey Type: MANUAL			
20	NF-03-A-33 LONDON ROAD ATTLEBOROUGH	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 143 Survey date: THURSDAY 29/09/22 Survey Type: MANUAL			
21	NF-03-A-36 LONDON ROAD WYMONDHAM	MIXED HOUSES		NORFOLK
	Edge of Town No Sub Category Total No of Dwellings: 75 Survey date: THURSDAY 29/09/22 Survey Type: MANUAL			
22	NF-03-A-39 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 212 Survey date: TUESDAY 27/09/22 Survey Type: MANUAL			
23	NF-03-A-46 BURGH ROAD AYLSHAM	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 300 Survey date: TUESDAY 14/09/21 Survey Type: MANUAL			

LIST OF SITES relevant to selection parameters (Cont.)

24	SC-03-A-09 AMLETS LANE CRANLEIGH	MIXED HOUSES & FLATS	SURREY
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 136 Survey date: TUESDAY 24/05/22 Survey Type: MANUAL		
25	SF-03-A-06 BURY ROAD KENTFORD	DETACHED & SEMI-DETACHED	SUFFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 38 Survey date: FRIDAY 22/09/17 Survey Type: MANUAL		
26	WS-03-A-07 EMMS LANE NEAR HORSHAM BROOKS GREEN	BUNGALOWS	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 57 Survey date: THURSDAY 19/10/17 Survey Type: MANUAL		
27	WS-03-A-16 BRACKLESHAM LANE BRACKLESHAM BAY	DETACHED & SEMI-DETACHED	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 58 Survey date: WEDNESDAY 09/11/22 Survey Type: MANUAL		
28	WS-03-A-21 HILLAND ROAD BILLINGSHURST	MIXED HOUSES	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 480 Survey date: THURSDAY 09/11/23 Survey Type: MANUAL		

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

Lime Transport Limited Stanwell Road Penarth

Licence No: 258601

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PUBLIC TRANSPORT USERS

Ranking Type: TOTALS

Time Range: 07:00-19:00

CALCULATION FACTOR 100m2 DWELLS

15th Percentile = No. 24 NF-03-A-05 Tot: 0.000

85th Percentile = No. 5 WS-03-A-21 Tot: 0.370

Median Values

Arrivals: 0.028

Departures: 0.044

Totals: 0.072

Mean Values

Arrivals: 0.112

Departures: 0.114

Totals: 0.226

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	HC-03-A-23	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	62	Tue	19/11/19	1.097	1.226	2.323	2.19
2	DC-03-A-10	MIXED HOUSES	GILLINGHAM	DORSET	26	Wed	09/11/22	0.423	0.346	0.769	2.12
3	HF-03-A-03	MIXED HOUSES	BUNTINGFORD	HERTFORDSHIRE	160	Mon	08/07/19	0.238	0.231	0.469	3.95
4	KC-03-A-07	MIXED HOUSES	HERNE BAY	KENT	288	Wed	27/09/17	0.174	0.198	0.372	3.09
5	WS-03-A-21	MIXED HOUSES	BILLINGSHURST	WEST SUSSEX	480	Thu	09/11/23	0.185	0.185	0.370	2.31
6	LE-03-A-02	DETACHED & OTH	IBSTOCK	LEICESTERSHIRE	85	Thu	28/06/18	0.212	0.129	0.341	4.27
7	KC-03-A-10	MIXED HOUSES	STAPLEHURST	KENT	106	Tue	09/05/23	0.113	0.170	0.283	2.43
8	SF-03-A-06	DETACHED & SEM	KENTFORD	SUFFOLK	38	Fri	22/09/17	0.132	0.132	0.264	0.92
9	ES-03-A-11	MIXED HOUSES	RINGMER	EAST SUSSEX	105	Thu	28/09/23	0.114	0.086	0.200	2.62
10	NF-03-A-27	MIXED HOUSES &	NEAR NORWICH	NORFOLK	93	Thu	16/09/21	0.075	0.097	0.172	2.67
11	KC-03-A-08	MIXED HOUSES	CHARING	KENT	159	Tue	22/05/18	0.069	0.069	0.138	3.02
12	NF-03-A-36	MIXED HOUSES	WYMONDHAM	NORFOLK	75	Thu	29/09/22	0.080	0.053	0.133	2.84
13	NF-03-A-39	MIXED HOUSES	HOLT	NORFOLK	212	Tue	27/09/22	0.066	0.066	0.132	2.31
14	ES-03-A-12	MIXED HOUSES &	HORAM	EAST SUSSEX	123	Tue	03/10/23	0.033	0.057	0.090	2.92
15	AS-03-A-02	MIXED HOUSES	STONEHAVEN	ABERDEENSHIRE	131	Wed	20/04/22	0.023	0.031	0.054	1.77
16	NF-03-A-46	MIXED HOUSES &	AYLSHAM	NORFOLK	300	Tue	14/09/21	0.017	0.033	0.050	2.41
17	CA-03-A-08	DETACHED & SEM	SAWTRY	CAMBRIDGESHIRE	83	Thu	13/10/22	0.024	0.024	0.048	2.25
18	DC-03-A-11	MIXED HOUSES	SHAFTESBURY	DORSET	141	Tue	31/10/23	0.014	0.021	0.035	2.81
19	WS-03-A-16	DETACHED & SEM	BRACKLESHAM BAY	WEST SUSSEX	58	Wed	09/11/22	0.017	0.017	0.034	2.28
20	SC-03-A-09	MIXED HOUSES &	CRANLEIGH	SURREY	136	Tue	24/05/22	0.022	0.000	0.022	2.64
21	NF-03-A-30	MIXED HOUSES	SWAFFHAM	NORFOLK	266	Thu	23/09/21	0.011	0.011	0.022	2.84
22	NF-03-A-33	MIXED HOUSES	ATTLEBOROUGH	NORFOLK	143	Thu	29/09/22	0.000	0.007	0.007	2.28
23	WS-03-A-07	BUNGALOWS	NEAR HORSHAM	WEST SUSSEX	57	Thu	19/10/17	0.000	0.000	0.000	1.89
24	NF-03-A-05	MIXED HOUSES	HOLT	NORFOLK	40	Thu	19/09/19	0.000	0.000	0.000	2.50
25	HC-03-A-31	MIXED HOUSES &	LIPHOOK	HAMPSHIRE	44	Fri	07/10/22	0.000	0.000	0.000	2.57
26	ES-03-A-07	MIXED HOUSES &	HAILSHAM	EAST SUSSEX	91	Thu	07/11/19	0.000	0.000	0.000	2.70
27	CA-03-A-07	MIXED HOUSES	NEAR ELY	CAMBRIDGESHIRE	32	Thu	27/05/21	0.000	0.000	0.000	2.25
28	AC-03-A-04	TOWN HOUSES	NORTHWICH	CHESHIRE WEST & CHE	24	Thu	06/06/19	0.000	0.000	0.000	1.96

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	3 days
	HC HAMPSHIRE	2 days
	HF HERTFORDSHIRE	1 days
	KC KENT	3 days
	SC SURREY	1 days
	WS WEST SUSSEX	3 days
03	SOUTH WEST	
	DC DORSET	2 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	2 days
	NF NORFOLK	7 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LE LEICESTERSHIRE	1 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days
11	SCOTLAND	
	AS ABERDEENSHIRE	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: 24 to 480 (units:)
Range Selected by User: 0 to 800 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 14/05/24

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

Selected survey days:

Monday	1 days
Tuesday	8 days
Wednesday	4 days
Thursday	13 days
Friday	2 days

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

Selected survey types:

Manual count	28 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	14
Neighbourhood Centre (PPS6 Local Centre)	12

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	14
Village	12
No Sub Category	2

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	32 days - Selected
Servicing vehicles Excluded	83 days - Selected

Secondary Filtering selection:

Use Class:

C3 28 days

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	11 days
5,001 to 10,000	16 days

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

Population within 5 miles:

5,001 to 25,000	8 days
25,001 to 50,000	14 days
50,001 to 75,000	6 days

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

Car ownership within 5 miles:

1.1 to 1.5	21 days
1.6 to 2.0	7 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	22 days
No	6 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	28 days

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

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

1	AC-03-A-04	TOWN HOUSES		CHESHIRE WEST & CHESTER
	LONDON ROAD			
	NORTHWICH			
	LEFTWICH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	24		
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL	
2	AS-03-A-02	MIXED HOUSES		ABERDEENSHIRE
	FARROCHIE ROAD			
	STONEHAVEN			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	131		
	Survey date: WEDNESDAY	20/04/22	Survey Type: MANUAL	
3	CA-03-A-07	MIXED HOUSES		CAMBRIDGESHIRE
	FIELD END			
	NEAR ELY			
	WITCHFORD			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	32		
	Survey date: THURSDAY	27/05/21	Survey Type: MANUAL	
4	CA-03-A-08	DETACHED & SEMI-DETACHED		CAMBRIDGESHIRE
	GIDDING ROAD			
	SAWTRY			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	83		
	Survey date: THURSDAY	13/10/22	Survey Type: MANUAL	
5	DC-03-A-10	MIXED HOUSES		DORSET
	ADDISON CLOSE			
	GILLINGHAM			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	26		
	Survey date: WEDNESDAY	09/11/22	Survey Type: MANUAL	
6	DC-03-A-11	MIXED HOUSES		DORSET
	A350			
	SHAFTESBURY			
	Edge of Town			
	No Sub Category			
	Total No of Dwellings:	141		
	Survey date: TUESDAY	31/10/23	Survey Type: MANUAL	
7	ES-03-A-07	MIXED HOUSES & FLATS		EAST SUSSEX
	NEW ROAD			
	HAILSHAM			
	HELLINGLY			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	91		
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL	
8	ES-03-A-11	MIXED HOUSES		EAST SUSSEX
	BISHOPS LANE			
	RINGMER			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	105		
	Survey date: THURSDAY	28/09/23	Survey Type: MANUAL	

LIST OF SITES relevant to selection parameters (Cont.)

9	ES-03-A-12 HOREBEECH LANE HORAM	MIXED HOUSES & FLATS	EAST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	123	
	Survey date: TUESDAY	03/10/23	Survey Type: MANUAL
10	HC-03-A-23 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings:	62	
	Survey date: TUESDAY	19/11/19	Survey Type: MANUAL
11	HC-03-A-31 KILN ROAD LIPHOOK	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	44	
	Survey date: FRIDAY	07/10/22	Survey Type: MANUAL
12	HF-03-A-03 HARE STREET ROAD BUNTINGFORD	MIXED HOUSES	HERTFORDSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	160	
	Survey date: MONDAY	08/07/19	Survey Type: MANUAL
13	KC-03-A-07 RECULVER ROAD HERNE BAY	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	288	
	Survey date: WEDNESDAY	27/09/17	Survey Type: MANUAL
14	KC-03-A-08 MAIDSTONE ROAD CHARING	MIXED HOUSES	KENT
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	159	
	Survey date: TUESDAY	22/05/18	Survey Type: MANUAL
15	KC-03-A-10 HEADCORN ROAD STAPLEHURST	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	106	
	Survey date: TUESDAY	09/05/23	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

16	LE-03-A-02 MELBOURNE ROAD IBSTOCK	DETACHED & OTHERS		LEICESTERSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 85 Survey date: THURSDAY 28/06/18 Survey Type: MANUAL			
17	NF-03-A-05 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 40 Survey date: THURSDAY 19/09/19 Survey Type: MANUAL			
18	NF-03-A-27 YARMOUTH ROAD NEAR NORWICH BLOFIELD	MIXED HOUSES & FLATS		NORFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 93 Survey date: THURSDAY 16/09/21 Survey Type: MANUAL			
19	NF-03-A-30 BRANDON ROAD SWAFFHAM	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 266 Survey date: THURSDAY 23/09/21 Survey Type: MANUAL			
20	NF-03-A-33 LONDON ROAD ATTLEBOROUGH	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 143 Survey date: THURSDAY 29/09/22 Survey Type: MANUAL			
21	NF-03-A-36 LONDON ROAD WYMONDHAM	MIXED HOUSES		NORFOLK
	Edge of Town No Sub Category Total No of Dwellings: 75 Survey date: THURSDAY 29/09/22 Survey Type: MANUAL			
22	NF-03-A-39 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 212 Survey date: TUESDAY 27/09/22 Survey Type: MANUAL			
23	NF-03-A-46 BURGH ROAD AYLSHAM	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 300 Survey date: TUESDAY 14/09/21 Survey Type: MANUAL			

LIST OF SITES relevant to selection parameters (Cont.)

24	SC-03-A-09 AMLETS LANE CRANLEIGH	MIXED HOUSES & FLATS	SURREY
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 136 Survey date: TUESDAY 24/05/22 Survey Type: MANUAL		
25	SF-03-A-06 BURY ROAD KENTFORD	DETACHED & SEMI-DETACHED	SUFFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 38 Survey date: FRIDAY 22/09/17 Survey Type: MANUAL		
26	WS-03-A-07 EMMS LANE NEAR HORSHAM BROOKS GREEN	BUNGALOWS	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 57 Survey date: THURSDAY 19/10/17 Survey Type: MANUAL		
27	WS-03-A-16 BRACKLESHAM LANE BRACKLESHAM BAY	DETACHED & SEMI-DETACHED	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 58 Survey date: WEDNESDAY 09/11/22 Survey Type: MANUAL		
28	WS-03-A-21 HILLAND ROAD BILLINGSHURST	MIXED HOUSES	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 480 Survey date: THURSDAY 09/11/23 Survey Type: MANUAL		

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

Lime Transport Limited Stanwell Road Penarth

Licence No: 258601

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES

Ranking Type: TOTALS

Time Range: 08:00-09:00

CALCULATION FACTOR 100m2 DWELLS

15th Percentile = No. 24 KC-03-A-08 Tot: 0.327

85th Percentile = No. 5 NF-03-A-05 Tot: 0.600

Median Values

Arrivals: 0.115

Departures: 0.321

Totals: 0.436

Mean Values

Arrivals: 0.157

Departures: 0.313

Totals: 0.470

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	DC-03-A-10	MIXED HOUSES	GILLINGHAM	DORSET	26	Wed	09/11/22	0.346	0.577	0.923	2.12
2	AC-03-A-04	TOWN HOUSES	NORTHWICH	CHESHIRE WEST & CHE	24	Thu	06/06/19	0.292	0.542	0.834	1.96
3	KC-03-A-07	MIXED HOUSES	HERNE BAY	KENT	288	Wed	27/09/17	0.240	0.385	0.625	3.09
4	HC-03-A-23	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	62	Tue	19/11/19	0.113	0.500	0.613	2.19
5	NF-03-A-05	MIXED HOUSES	HOLT	NORFOLK	40	Thu	19/09/19	0.300	0.300	0.600	2.50
6	SC-03-A-09	MIXED HOUSES &	CRANLEIGH	SURREY	136	Tue	24/05/22	0.162	0.419	0.581	2.64
7	LE-03-A-02	DETACHED & OTH	IBSTOCK	LEICESTERSHIRE	85	Thu	28/06/18	0.212	0.353	0.565	4.27
8	ES-03-A-12	MIXED HOUSES &	HORAM	EAST SUSSEX	123	Tue	03/10/23	0.203	0.358	0.561	2.92
9	NF-03-A-46	MIXED HOUSES &	AYLSHAM	NORFOLK	300	Tue	14/09/21	0.253	0.293	0.546	2.41
10	ES-03-A-07	MIXED HOUSES &	HAILSHAM	EAST SUSSEX	91	Thu	07/11/19	0.121	0.407	0.528	2.70
11	DC-03-A-11	MIXED HOUSES	SHAFTESBURY	DORSET	141	Tue	31/10/23	0.135	0.390	0.525	2.81
12	CA-03-A-08	DETACHED & SEM	SAWTRY	CAMBRIDGESHIRE	83	Thu	13/10/22	0.169	0.325	0.494	2.25
13	NF-03-A-36	MIXED HOUSES	WYMONDHAM	NORFOLK	75	Thu	29/09/22	0.200	0.253	0.453	2.84
14	HF-03-A-03	MIXED HOUSES	BUNTINGFORD	HERTFORDSHIRE	160	Mon	08/07/19	0.119	0.319	0.438	3.95
15	NF-03-A-33	MIXED HOUSES	ATTLEBOROUGH	NORFOLK	143	Thu	29/09/22	0.112	0.322	0.434	2.28
16	NF-03-A-39	MIXED HOUSES	HOLT	NORFOLK	212	Tue	27/09/22	0.118	0.297	0.415	2.31
17	KC-03-A-10	MIXED HOUSES	STAPLEHURST	KENT	106	Tue	09/05/23	0.094	0.311	0.405	2.43
18	AS-03-A-02	MIXED HOUSES	STONEHAVEN	ABERDEENSHIRE	131	Wed	20/04/22	0.137	0.267	0.404	1.77
19	ES-03-A-11	MIXED HOUSES	RINGMER	EAST SUSSEX	105	Thu	28/09/23	0.105	0.286	0.391	2.62
20	HC-03-A-31	MIXED HOUSES &	LIPHOOK	HAMPSHIRE	44	Fri	07/10/22	0.159	0.227	0.386	2.57
21	NF-03-A-27	MIXED HOUSES &	NEAR NORWICH	NORFOLK	93	Thu	16/09/21	0.129	0.247	0.376	2.67
22	CA-03-A-07	MIXED HOUSES	NEAR ELY	CAMBRIDGESHIRE	32	Thu	27/05/21	0.125	0.250	0.375	2.25
23	WS-03-A-21	MIXED HOUSES	BILLINGSHURST	WEST SUSSEX	480	Thu	09/11/23	0.113	0.260	0.373	2.31
24	KC-03-A-08	MIXED HOUSES	CHARING	KENT	159	Tue	22/05/18	0.113	0.214	0.327	3.02
25	SF-03-A-06	DETACHED & SEM	KENTFORD	SUFFOLK	38	Fri	22/09/17	0.053	0.237	0.290	0.92
26	WS-03-A-07	BUNGALOWS	NEAR HORSHAM	WEST SUSSEX	57	Thu	19/10/17	0.140	0.140	0.280	1.89
27	NF-03-A-30	MIXED HOUSES	SWAFFHAM	NORFOLK	266	Thu	23/09/21	0.075	0.158	0.233	2.84
28	WS-03-A-16	DETACHED & SEM	BRACKLESHAM BAY	WEST SUSSEX	58	Wed	09/11/22	0.052	0.138	0.190	2.28

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	3 days
	HC HAMPSHIRE	2 days
	HF HERTFORDSHIRE	1 days
	KC KENT	3 days
	SC SURREY	1 days
	WS WEST SUSSEX	3 days
03	SOUTH WEST	
	DC DORSET	2 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	2 days
	NF NORFOLK	7 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LE LEICESTERSHIRE	1 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days
11	SCOTLAND	
	AS ABERDEENSHIRE	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: 24 to 480 (units:)
Range Selected by User: 0 to 800 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 14/05/24

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

Selected survey days:

Monday	1 days
Tuesday	8 days
Wednesday	4 days
Thursday	13 days
Friday	2 days

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

Selected survey types:

Manual count	28 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	14
Neighbourhood Centre (PPS6 Local Centre)	12

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	14
Village	12
No Sub Category	2

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	32 days - Selected
Servicing vehicles Excluded	83 days - Selected

Secondary Filtering selection:

Use Class:

C3	28 days

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	11 days
5,001 to 10,000	16 days

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

Population within 5 miles:

5,001 to 25,000	8 days
25,001 to 50,000	14 days
50,001 to 75,000	6 days

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

Car ownership within 5 miles:

1.1 to 1.5	21 days
1.6 to 2.0	7 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	22 days
No	6 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	28 days

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

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

1	AC-03-A-04	TOWN HOUSES		CHESHIRE WEST & CHESTER
	LONDON ROAD			
	NORTHWICH			
	LEFTWICH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	24		
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL	
2	AS-03-A-02	MIXED HOUSES		ABERDEENSHIRE
	FARROCHIE ROAD			
	STONEHAVEN			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	131		
	Survey date: WEDNESDAY	20/04/22	Survey Type: MANUAL	
3	CA-03-A-07	MIXED HOUSES		CAMBRIDGESHIRE
	FIELD END			
	NEAR ELY			
	WITCHFORD			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	32		
	Survey date: THURSDAY	27/05/21	Survey Type: MANUAL	
4	CA-03-A-08	DETACHED & SEMI-DETACHED		CAMBRIDGESHIRE
	GIDDING ROAD			
	SAWTRY			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	83		
	Survey date: THURSDAY	13/10/22	Survey Type: MANUAL	
5	DC-03-A-10	MIXED HOUSES		DORSET
	ADDISON CLOSE			
	GILLINGHAM			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	26		
	Survey date: WEDNESDAY	09/11/22	Survey Type: MANUAL	
6	DC-03-A-11	MIXED HOUSES		DORSET
	A350			
	SHAFTESBURY			
	Edge of Town			
	No Sub Category			
	Total No of Dwellings:	141		
	Survey date: TUESDAY	31/10/23	Survey Type: MANUAL	
7	ES-03-A-07	MIXED HOUSES & FLATS		EAST SUSSEX
	NEW ROAD			
	HAILSHAM			
	HELLINGLY			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	91		
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL	
8	ES-03-A-11	MIXED HOUSES		EAST SUSSEX
	BISHOPS LANE			
	RINGMER			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	105		
	Survey date: THURSDAY	28/09/23	Survey Type: MANUAL	

LIST OF SITES relevant to selection parameters (Cont.)

9	ES-03-A-12 HOREBEECH LANE HORAM	MIXED HOUSES & FLATS	EAST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	123	
	Survey date: TUESDAY	03/10/23	Survey Type: MANUAL
10	HC-03-A-23 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings:	62	
	Survey date: TUESDAY	19/11/19	Survey Type: MANUAL
11	HC-03-A-31 KILN ROAD LIPHOOK	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	44	
	Survey date: FRIDAY	07/10/22	Survey Type: MANUAL
12	HF-03-A-03 HARE STREET ROAD BUNTINGFORD	MIXED HOUSES	HERTFORDSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	160	
	Survey date: MONDAY	08/07/19	Survey Type: MANUAL
13	KC-03-A-07 RECULVER ROAD HERNE BAY	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	288	
	Survey date: WEDNESDAY	27/09/17	Survey Type: MANUAL
14	KC-03-A-08 MAIDSTONE ROAD CHARING	MIXED HOUSES	KENT
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	159	
	Survey date: TUESDAY	22/05/18	Survey Type: MANUAL
15	KC-03-A-10 HEADCORN ROAD STAPLEHURST	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	106	
	Survey date: TUESDAY	09/05/23	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

16	LE-03-A-02 MELBOURNE ROAD IBSTOCK	DETACHED & OTHERS		LEICESTERSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 85 Survey date: THURSDAY 28/06/18 Survey Type: MANUAL			
17	NF-03-A-05 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 40 Survey date: THURSDAY 19/09/19 Survey Type: MANUAL			
18	NF-03-A-27 YARMOUTH ROAD NEAR NORWICH BLOFIELD	MIXED HOUSES & FLATS		NORFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 93 Survey date: THURSDAY 16/09/21 Survey Type: MANUAL			
19	NF-03-A-30 BRANDON ROAD SWAFFHAM	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 266 Survey date: THURSDAY 23/09/21 Survey Type: MANUAL			
20	NF-03-A-33 LONDON ROAD ATTLEBOROUGH	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 143 Survey date: THURSDAY 29/09/22 Survey Type: MANUAL			
21	NF-03-A-36 LONDON ROAD WYMONDHAM	MIXED HOUSES		NORFOLK
	Edge of Town No Sub Category Total No of Dwellings: 75 Survey date: THURSDAY 29/09/22 Survey Type: MANUAL			
22	NF-03-A-39 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 212 Survey date: TUESDAY 27/09/22 Survey Type: MANUAL			
23	NF-03-A-46 BURGH ROAD AYLSHAM	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 300 Survey date: TUESDAY 14/09/21 Survey Type: MANUAL			

LIST OF SITES relevant to selection parameters (Cont.)

24	SC-03-A-09 AMLETS LANE CRANLEIGH	MIXED HOUSES & FLATS	SURREY
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 136 Survey date: TUESDAY 24/05/22 Survey Type: MANUAL		
25	SF-03-A-06 BURY ROAD KENTFORD	DETACHED & SEMI-DETACHED	SUFFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 38 Survey date: FRIDAY 22/09/17 Survey Type: MANUAL		
26	WS-03-A-07 EMMS LANE NEAR HORSHAM BROOKS GREEN	BUNGALOWS	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 57 Survey date: THURSDAY 19/10/17 Survey Type: MANUAL		
27	WS-03-A-16 BRACKLESHAM LANE BRACKLESHAM BAY	DETACHED & SEMI-DETACHED	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 58 Survey date: WEDNESDAY 09/11/22 Survey Type: MANUAL		
28	WS-03-A-21 HILLAND ROAD BILLINGSHURST	MIXED HOUSES	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 480 Survey date: THURSDAY 09/11/23 Survey Type: MANUAL		

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

Lime Transport Limited Stanwell Road Penarth

Licence No: 258601

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES

Ranking Type: TOTALS

Time Range: 17:00-18:00

CALCULATION FACTOR 100m2 DWELLS

15th Percentile = No. 24 SF-03-A-06 Tot: 0.342

85th Percentile = No. 5 NF-03-A-33 Tot: 0.581

Median Values

Arrivals: 0.314

Departures: 0.140

Totals: 0.454

Mean Values

Arrivals: 0.296

Departures: 0.142

Totals: 0.439

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	CA-03-A-08	DETACHED & SEM	SAWTRY	CAMBRIDGESHIRE	83	Thu	13/10/22	0.458	0.193	0.651	2.25
2	HC-03-A-23	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	62	Tue	19/11/19	0.532	0.097	0.629	2.19
3	DC-03-A-10	MIXED HOUSES	GILLINGHAM	DORSET	26	Wed	09/11/22	0.500	0.115	0.615	2.12
4	KC-03-A-07	MIXED HOUSES	HERNE BAY	KENT	288	Wed	27/09/17	0.444	0.149	0.593	3.09
5	NF-03-A-33	MIXED HOUSES	ATTLEBOROUGH	NORFOLK	143	Thu	29/09/22	0.357	0.224	0.581	2.28
6	NF-03-A-36	MIXED HOUSES	WYMONDHAM	NORFOLK	75	Thu	29/09/22	0.387	0.187	0.574	2.84
7	NF-03-A-27	MIXED HOUSES &	NEAR NORWICH	NORFOLK	93	Thu	16/09/21	0.344	0.204	0.548	2.67
8	LE-03-A-02	DETACHED & OTH	IBSTOCK	LEICESTERSHIRE	85	Thu	28/06/18	0.329	0.212	0.541	4.27
9	HC-03-A-31	MIXED HOUSES &	LIPHOOK	HAMPSHIRE	44	Fri	07/10/22	0.318	0.205	0.523	2.57
10	DC-03-A-11	MIXED HOUSES	SHAFTESBURY	DORSET	141	Tue	31/10/23	0.369	0.142	0.511	2.81
11	NF-03-A-05	MIXED HOUSES	HOLT	NORFOLK	40	Thu	19/09/19	0.300	0.175	0.475	2.50
12	KC-03-A-10	MIXED HOUSES	STAPLEHURST	KENT	106	Tue	09/05/23	0.302	0.170	0.472	2.43
13	NF-03-A-39	MIXED HOUSES	HOLT	NORFOLK	212	Tue	27/09/22	0.297	0.165	0.462	2.31
14	HF-03-A-03	MIXED HOUSES	BUNTINGFORD	HERTFORDSHIRE	160	Mon	08/07/19	0.287	0.169	0.456	3.95
15	ES-03-A-07	MIXED HOUSES &	HAILSHAM	EAST SUSSEX	91	Thu	07/11/19	0.341	0.110	0.451	2.70
16	ES-03-A-11	MIXED HOUSES	RINGMER	EAST SUSSEX	105	Thu	28/09/23	0.248	0.200	0.448	2.62
17	CA-03-A-07	MIXED HOUSES	NEAR ELY	CAMBRIDGESHIRE	32	Thu	27/05/21	0.281	0.156	0.437	2.25
18	AS-03-A-02	MIXED HOUSES	STONEHAVEN	ABERDEENSHIRE	131	Wed	20/04/22	0.260	0.168	0.428	1.77
19	ES-03-A-12	MIXED HOUSES &	HORAM	EAST SUSSEX	123	Tue	03/10/23	0.268	0.138	0.406	2.92
20	NF-03-A-46	MIXED HOUSES &	AYLSHAM	NORFOLK	300	Tue	14/09/21	0.240	0.163	0.403	2.41
21	NF-03-A-30	MIXED HOUSES	SWAFFHAM	NORFOLK	266	Thu	23/09/21	0.271	0.120	0.391	2.84
22	SC-03-A-09	MIXED HOUSES &	CRANLEIGH	SURREY	136	Tue	24/05/22	0.243	0.140	0.383	2.64
23	WS-03-A-21	MIXED HOUSES	BILLINGSHURST	WEST SUSSEX	480	Thu	09/11/23	0.252	0.125	0.377	2.31
24	SF-03-A-06	DETACHED & SEM	KENTFORD	SUFFOLK	38	Fri	22/09/17	0.263	0.079	0.342	0.92
25	KC-03-A-08	MIXED HOUSES	CHARING	KENT	159	Tue	22/05/18	0.220	0.088	0.308	3.02
26	WS-03-A-07	BUNGALOWS	NEAR HORSHAM	WEST SUSSEX	57	Thu	19/10/17	0.088	0.070	0.158	1.89
27	WS-03-A-16	DETACHED & SEM	BRACKLESHAM BAY	WEST SUSSEX	58	Wed	09/11/22	0.103	0.017	0.120	2.28
28	AC-03-A-04	TOWN HOUSES	NORTHWICH	CHESHIRE WEST & CHE	24	Thu	06/06/19	0.000	0.000	0.000	1.96

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	3 days
	HC HAMPSHIRE	2 days
	HF HERTFORDSHIRE	1 days
	KC KENT	3 days
	SC SURREY	1 days
	WS WEST SUSSEX	3 days
03	SOUTH WEST	
	DC DORSET	2 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	2 days
	NF NORFOLK	7 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LE LEICESTERSHIRE	1 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days
11	SCOTLAND	
	AS ABERDEENSHIRE	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: 24 to 480 (units:)
Range Selected by User: 0 to 800 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 14/05/24

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

Selected survey days:

Monday	1 days
Tuesday	8 days
Wednesday	4 days
Thursday	13 days
Friday	2 days

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

Selected survey types:

Manual count	28 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	14
Neighbourhood Centre (PPS6 Local Centre)	12

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	14
Village	12
No Sub Category	2

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	32 days - Selected
Servicing vehicles Excluded	83 days - Selected

Secondary Filtering selection:

Use Class:

C3 28 days

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	11 days
5,001 to 10,000	16 days

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

Population within 5 miles:

5,001 to 25,000	8 days
25,001 to 50,000	14 days
50,001 to 75,000	6 days

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

Car ownership within 5 miles:

1.1 to 1.5	21 days
1.6 to 2.0	7 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	22 days
No	6 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	28 days

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

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

1	AC-03-A-04	TOWN HOUSES		CHESHIRE WEST & CHESTER
	LONDON ROAD			
	NORTHWICH			
	LEFTWICH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	24		
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL	
2	AS-03-A-02	MIXED HOUSES		ABERDEENSHIRE
	FARROCHIE ROAD			
	STONEHAVEN			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	131		
	Survey date: WEDNESDAY	20/04/22	Survey Type: MANUAL	
3	CA-03-A-07	MIXED HOUSES		CAMBRIDGESHIRE
	FIELD END			
	NEAR ELY			
	WITCHFORD			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	32		
	Survey date: THURSDAY	27/05/21	Survey Type: MANUAL	
4	CA-03-A-08	DETACHED & SEMI-DETACHED		CAMBRIDGESHIRE
	GIDDING ROAD			
	SAWTRY			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	83		
	Survey date: THURSDAY	13/10/22	Survey Type: MANUAL	
5	DC-03-A-10	MIXED HOUSES		DORSET
	ADDISON CLOSE			
	GILLINGHAM			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	26		
	Survey date: WEDNESDAY	09/11/22	Survey Type: MANUAL	
6	DC-03-A-11	MIXED HOUSES		DORSET
	A350			
	SHAFTESBURY			
	Edge of Town			
	No Sub Category			
	Total No of Dwellings:	141		
	Survey date: TUESDAY	31/10/23	Survey Type: MANUAL	
7	ES-03-A-07	MIXED HOUSES & FLATS		EAST SUSSEX
	NEW ROAD			
	HAILSHAM			
	HELLINGLY			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	91		
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL	
8	ES-03-A-11	MIXED HOUSES		EAST SUSSEX
	BISHOPS LANE			
	RINGMER			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	105		
	Survey date: THURSDAY	28/09/23	Survey Type: MANUAL	

LIST OF SITES relevant to selection parameters (Cont.)

9	ES-03-A-12 HOREBEECH LANE HORAM	MIXED HOUSES & FLATS	EAST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	123	
	Survey date: TUESDAY	03/10/23	Survey Type: MANUAL
10	HC-03-A-23 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings:	62	
	Survey date: TUESDAY	19/11/19	Survey Type: MANUAL
11	HC-03-A-31 KILN ROAD LIPHOOK	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	44	
	Survey date: FRIDAY	07/10/22	Survey Type: MANUAL
12	HF-03-A-03 HARE STREET ROAD BUNTINGFORD	MIXED HOUSES	HERTFORDSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	160	
	Survey date: MONDAY	08/07/19	Survey Type: MANUAL
13	KC-03-A-07 RECULVER ROAD HERNE BAY	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	288	
	Survey date: WEDNESDAY	27/09/17	Survey Type: MANUAL
14	KC-03-A-08 MAIDSTONE ROAD CHARING	MIXED HOUSES	KENT
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	159	
	Survey date: TUESDAY	22/05/18	Survey Type: MANUAL
15	KC-03-A-10 HEADCORN ROAD STAPLEHURST	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	106	
	Survey date: TUESDAY	09/05/23	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

16	LE-03-A-02 MELBOURNE ROAD IBSTOCK	DETACHED & OTHERS		LEICESTERSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 85 Survey date: THURSDAY 28/06/18 Survey Type: MANUAL			
17	NF-03-A-05 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 40 Survey date: THURSDAY 19/09/19 Survey Type: MANUAL			
18	NF-03-A-27 YARMOUTH ROAD NEAR NORWICH BLOFIELD	MIXED HOUSES & FLATS		NORFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 93 Survey date: THURSDAY 16/09/21 Survey Type: MANUAL			
19	NF-03-A-30 BRANDON ROAD SWAFFHAM	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 266 Survey date: THURSDAY 23/09/21 Survey Type: MANUAL			
20	NF-03-A-33 LONDON ROAD ATTLEBOROUGH	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 143 Survey date: THURSDAY 29/09/22 Survey Type: MANUAL			
21	NF-03-A-36 LONDON ROAD WYMONDHAM	MIXED HOUSES		NORFOLK
	Edge of Town No Sub Category Total No of Dwellings: 75 Survey date: THURSDAY 29/09/22 Survey Type: MANUAL			
22	NF-03-A-39 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 212 Survey date: TUESDAY 27/09/22 Survey Type: MANUAL			
23	NF-03-A-46 BURGH ROAD AYLSHAM	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 300 Survey date: TUESDAY 14/09/21 Survey Type: MANUAL			

LIST OF SITES relevant to selection parameters (Cont.)

24	SC-03-A-09 AMLETS LANE CRANLEIGH	MIXED HOUSES & FLATS	SURREY
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 136 Survey date: TUESDAY 24/05/22 Survey Type: MANUAL		
25	SF-03-A-06 BURY ROAD KENTFORD	DETACHED & SEMI-DETACHED	SUFFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 38 Survey date: FRIDAY 22/09/17 Survey Type: MANUAL		
26	WS-03-A-07 EMMS LANE NEAR HORSHAM BROOKS GREEN	BUNGALOWS	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 57 Survey date: THURSDAY 19/10/17 Survey Type: MANUAL		
27	WS-03-A-16 BRACKLESHAM LANE BRACKLESHAM BAY	DETACHED & SEMI-DETACHED	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 58 Survey date: WEDNESDAY 09/11/22 Survey Type: MANUAL		
28	WS-03-A-21 HILLAND ROAD BILLINGSHURST	MIXED HOUSES	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 480 Survey date: THURSDAY 09/11/23 Survey Type: MANUAL		

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

Lime Transport Limited Stanwell Road Penarth

Licence No: 258601

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES

Ranking Type: TOTALS

Time Range: 07:00-19:00

CALCULATION FACTOR 100m2 DWELLS

15th Percentile = No. 24 WS-03-A-07 Tot: 3.246

85th Percentile = No. 5 ES-03-A-07 Tot: 5.164

Median Values

Arrivals: 2.130

Departures: 2.210

Totals: 4.340

Mean Values

Arrivals: 2.115

Departures: 2.120

Totals: 4.235

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	HC-03-A-23	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	62	Tue	19/11/19	2.952	2.984	5.936	2.19
2	HC-03-A-31	MIXED HOUSES &	LIPHOOK	HAMPSHIRE	44	Fri	07/10/22	2.795	2.568	5.363	2.57
3	KC-03-A-07	MIXED HOUSES	HERNE BAY	KENT	288	Wed	27/09/17	2.844	2.510	5.354	3.09
4	NF-03-A-05	MIXED HOUSES	HOLT	NORFOLK	40	Thu	19/09/19	2.600	2.750	5.350	2.50
5	ES-03-A-07	MIXED HOUSES &	HAILSHAM	EAST SUSSEX	91	Thu	07/11/19	2.604	2.560	5.164	2.70
6	LE-03-A-02	DETACHED & OTH	IBSTOCK	LEICESTERSHIRE	85	Thu	28/06/18	2.471	2.576	5.047	4.27
7	CA-03-A-07	MIXED HOUSES	NEAR ELY	CAMBRIDGESHIRE	32	Thu	27/05/21	2.469	2.500	4.969	2.25
8	NF-03-A-36	MIXED HOUSES	WYMONDHAM	NORFOLK	75	Thu	29/09/22	2.427	2.520	4.947	2.84
9	AS-03-A-02	MIXED HOUSES	STONEHAVEN	ABERDEENSHIRE	131	Wed	20/04/22	2.504	2.336	4.840	1.77
10	CA-03-A-08	DETACHED & SEM	SAWTRY	CAMBRIDGESHIRE	83	Thu	13/10/22	2.337	2.301	4.638	2.25
11	HF-03-A-03	MIXED HOUSES	BUNTINGFORD	HERTFORDSHIRE	160	Mon	08/07/19	2.288	2.331	4.619	3.95
12	NF-03-A-33	MIXED HOUSES	ATTLEBOROUGH	NORFOLK	143	Thu	29/09/22	2.175	2.301	4.476	2.28
13	DC-03-A-11	MIXED HOUSES	SHAFTESBURY	DORSET	141	Tue	31/10/23	2.241	2.177	4.418	2.81
14	DC-03-A-10	MIXED HOUSES	GILLINGHAM	DORSET	26	Wed	09/11/22	2.154	2.192	4.346	2.12
15	ES-03-A-12	MIXED HOUSES &	HORAM	EAST SUSSEX	123	Tue	03/10/23	2.106	2.228	4.334	2.92
16	NF-03-A-46	MIXED HOUSES &	AYLSHAM	NORFOLK	300	Tue	14/09/21	2.213	2.097	4.310	2.41
17	SC-03-A-09	MIXED HOUSES &	CRANLEIGH	SURREY	136	Tue	24/05/22	2.059	2.140	4.199	2.64
18	NF-03-A-27	MIXED HOUSES &	NEAR NORWICH	NORFOLK	93	Thu	16/09/21	2.065	2.108	4.173	2.67
19	KC-03-A-10	MIXED HOUSES	STAPLEHURST	KENT	106	Tue	09/05/23	1.953	1.925	3.878	2.43
20	ES-03-A-11	MIXED HOUSES	RINGMER	EAST SUSSEX	105	Thu	28/09/23	1.886	1.924	3.810	2.62
21	NF-03-A-39	MIXED HOUSES	HOLT	NORFOLK	212	Tue	27/09/22	1.788	1.778	3.566	2.31
22	NF-03-A-30	MIXED HOUSES	SWAFFHAM	NORFOLK	266	Thu	23/09/21	1.835	1.722	3.557	2.84
23	WS-03-A-21	MIXED HOUSES	BILLINGSHURST	WEST SUSSEX	480	Thu	09/11/23	1.704	1.708	3.412	2.31
24	WS-03-A-07	BUNGALOWS	NEAR HORSHAM	WEST SUSSEX	57	Thu	19/10/17	1.614	1.632	3.246	1.89
25	KC-03-A-08	MIXED HOUSES	CHARING	KENT	159	Tue	22/05/18	1.484	1.597	3.081	3.02
26	SF-03-A-06	DETACHED & SEM	KENTFORD	SUFFOLK	38	Fri	22/09/17	1.368	1.553	2.921	0.92
27	AC-03-A-04	TOWN HOUSES	NORTHWICH	CHESHIRE WEST & CHE	24	Thu	06/06/19	1.375	1.500	2.875	1.96
28	WS-03-A-16	DETACHED & SEM	BRACKLESHAM BAY	WEST SUSSEX	58	Wed	09/11/22	0.914	0.845	1.759	2.28

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL CYCLISTS

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	3 days
	HC HAMPSHIRE	2 days
	HF HERTFORDSHIRE	1 days
	KC KENT	3 days
	SC SURREY	1 days
	WS WEST SUSSEX	3 days
03	SOUTH WEST	
	DC DORSET	2 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	2 days
	NF NORFOLK	7 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LE LEICESTERSHIRE	1 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days
11	SCOTLAND	
	AS ABERDEENSHIRE	1 days

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

Lime Transport Limited Stanwell Road Penarth

Licence No: 258601

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: 24 to 480 (units:)
Range Selected by User: 0 to 800 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 14/05/24

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

Selected survey days:

Monday	1 days
Tuesday	8 days
Wednesday	4 days
Thursday	13 days
Friday	2 days

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

Selected survey types:

Manual count	28 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	14
Neighbourhood Centre (PPS6 Local Centre)	12

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	14
Village	12
No Sub Category	2

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	32 days - Selected
Servicing vehicles Excluded	83 days - Selected

Secondary Filtering selection:**Use Class:**

C3 28 days

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	11 days
5,001 to 10,000	16 days

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

Population within 5 miles:

5,001 to 25,000	8 days
25,001 to 50,000	14 days
50,001 to 75,000	6 days

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

Car ownership within 5 miles:

1.1 to 1.5	21 days
1.6 to 2.0	7 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	22 days
No	6 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	28 days

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

LIST OF SITES relevant to selection parameters

1	AC-03-A-04	TOWN HOUSES		CHESHIRE WEST & CHESTER
	LONDON ROAD			
	NORTHWICH			
	LEFTWICH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	24		
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL	
2	AS-03-A-02	MIXED HOUSES		ABERDEENSHIRE
	FARROCHIE ROAD			
	STONEHAVEN			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	131		
	Survey date: WEDNESDAY	20/04/22	Survey Type: MANUAL	
3	CA-03-A-07	MIXED HOUSES		CAMBRIDGESHIRE
	FIELD END			
	NEAR ELY			
	WITCHFORD			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	32		
	Survey date: THURSDAY	27/05/21	Survey Type: MANUAL	
4	CA-03-A-08	DETACHED & SEMI-DETACHED		CAMBRIDGESHIRE
	GIDDING ROAD			
	SAWTRY			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	83		
	Survey date: THURSDAY	13/10/22	Survey Type: MANUAL	
5	DC-03-A-10	MIXED HOUSES		DORSET
	ADDISON CLOSE			
	GILLINGHAM			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	26		
	Survey date: WEDNESDAY	09/11/22	Survey Type: MANUAL	
6	DC-03-A-11	MIXED HOUSES		DORSET
	A350			
	SHAFTESBURY			
	Edge of Town			
	No Sub Category			
	Total No of Dwellings:	141		
	Survey date: TUESDAY	31/10/23	Survey Type: MANUAL	
7	ES-03-A-07	MIXED HOUSES & FLATS		EAST SUSSEX
	NEW ROAD			
	HAILSHAM			
	HELLINGLY			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	91		
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL	
8	ES-03-A-11	MIXED HOUSES		EAST SUSSEX
	BISHOPS LANE			
	RINGMER			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	105		
	Survey date: THURSDAY	28/09/23	Survey Type: MANUAL	

LIST OF SITES relevant to selection parameters (Cont.)

9	ES-03-A-12 HOREBEECH LANE HORAM	MIXED HOUSES & FLATS	EAST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	123	
	Survey date: TUESDAY	03/10/23	Survey Type: MANUAL
10	HC-03-A-23 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings:	62	
	Survey date: TUESDAY	19/11/19	Survey Type: MANUAL
11	HC-03-A-31 KILN ROAD LIPHOOK	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	44	
	Survey date: FRIDAY	07/10/22	Survey Type: MANUAL
12	HF-03-A-03 HARE STREET ROAD BUNTINGFORD	MIXED HOUSES	HERTFORDSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	160	
	Survey date: MONDAY	08/07/19	Survey Type: MANUAL
13	KC-03-A-07 RECULVER ROAD HERNE BAY	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	288	
	Survey date: WEDNESDAY	27/09/17	Survey Type: MANUAL
14	KC-03-A-08 MAIDSTONE ROAD CHARING	MIXED HOUSES	KENT
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	159	
	Survey date: TUESDAY	22/05/18	Survey Type: MANUAL
15	KC-03-A-10 HEADCORN ROAD STAPLEHURST	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	106	
	Survey date: TUESDAY	09/05/23	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

16	LE-03-A-02 MELBOURNE ROAD IBSTOCK	DETACHED & OTHERS		LEICESTERSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village			
	Total No of Dwellings:	85		
	Survey date: THURSDAY	28/06/18	Survey Type: MANUAL	
17	NF-03-A-05 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	40		
	Survey date: THURSDAY	19/09/19	Survey Type: MANUAL	
18	NF-03-A-27 YARMOUTH ROAD NEAR NORWICH BLOFIELD	MIXED HOUSES & FLATS		NORFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village			
	Total No of Dwellings:	93		
	Survey date: THURSDAY	16/09/21	Survey Type: MANUAL	
19	NF-03-A-30 BRANDON ROAD SWAFFHAM	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	266		
	Survey date: THURSDAY	23/09/21	Survey Type: MANUAL	
20	NF-03-A-33 LONDON ROAD ATTLEBOROUGH	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	143		
	Survey date: THURSDAY	29/09/22	Survey Type: MANUAL	
21	NF-03-A-36 LONDON ROAD WYMONDHAM	MIXED HOUSES		NORFOLK
	Edge of Town No Sub Category			
	Total No of Dwellings:	75		
	Survey date: THURSDAY	29/09/22	Survey Type: MANUAL	
22	NF-03-A-39 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	212		
	Survey date: TUESDAY	27/09/22	Survey Type: MANUAL	
23	NF-03-A-46 BURGH ROAD AYLSHAM	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	300		
	Survey date: TUESDAY	14/09/21	Survey Type: MANUAL	

LIST OF SITES relevant to selection parameters (Cont.)

24	SC-03-A-09 AMLETS LANE CRANLEIGH	MIXED HOUSES & FLATS	SURREY
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 136 Survey date: TUESDAY 24/05/22 Survey Type: MANUAL		
25	SF-03-A-06 BURY ROAD KENTFORD	DETACHED & SEMI-DETACHED	SUFFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 38 Survey date: FRIDAY 22/09/17 Survey Type: MANUAL		
26	WS-03-A-07 EMMS LANE NEAR HORSHAM BROOKS GREEN	BUNGALOWS	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 57 Survey date: THURSDAY 19/10/17 Survey Type: MANUAL		
27	WS-03-A-16 BRACKLESHAM LANE BRACKLESHAM BAY	DETACHED & SEMI-DETACHED	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 58 Survey date: WEDNESDAY 09/11/22 Survey Type: MANUAL		
28	WS-03-A-21 HILLAND ROAD BILLINGSHURST	MIXED HOUSES	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 480 Survey date: THURSDAY 09/11/23 Survey Type: MANUAL		

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

Lime Transport Limited Stanwell Road Penarth

Licence No: 258601

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL CYCLISTS

Ranking Type: TOTALS

Time Range: 08:00-09:00

CALCULATION FACTOR 100m2 DWELLS

15th Percentile = No. 24 AS-03-A-02 Tot: 0.000

85th Percentile = No. 5 HF-03-A-03 Tot: 0.032

Median Values

Arrivals: 0.000

Departures: 0.000

Totals: 0.000

Mean Values

Arrivals: 0.002

Departures: 0.014

Totals: 0.016

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	SF-03-A-06	DETACHED & SEM	KENTFORD	SUFFOLK	38	Fri	22/09/17	0.026	0.079	0.105	0.92
2	AC-03-A-04	TOWN HOUSES	NORTHWICH	CHESHIRE WEST & CHE	24	Thu	06/06/19	0.000	0.083	0.083	1.96
3	HC-03-A-23	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	62	Tue	19/11/19	0.000	0.065	0.065	2.19
4	SC-03-A-09	MIXED HOUSES &	CRANLEIGH	SURREY	136	Tue	24/05/22	0.007	0.029	0.036	2.64
5	HF-03-A-03	MIXED HOUSES	BUNTINGFORD	HERTFORDSHIRE	160	Mon	08/07/19	0.013	0.019	0.032	3.95
6	NF-03-A-46	MIXED HOUSES &	AYLSHAM	NORFOLK	300	Tue	14/09/21	0.007	0.023	0.030	2.41
7	HC-03-A-31	MIXED HOUSES &	LIPHOOK	HAMPSHIRE	44	Fri	07/10/22	0.000	0.023	0.023	2.57
8	WS-03-A-16	DETACHED & SEM	BRACKLESHAM BAY	WEST SUSSEX	58	Wed	09/11/22	0.000	0.017	0.017	2.28
9	WS-03-A-21	MIXED HOUSES	BILLINGSHURST	WEST SUSSEX	480	Thu	09/11/23	0.002	0.013	0.015	2.31
10	NF-03-A-33	MIXED HOUSES	ATTLEBOROUGH	NORFOLK	143	Thu	29/09/22	0.000	0.014	0.014	2.28
11	CA-03-A-08	DETACHED & SEM	SAWTRY	CAMBRIDGESHIRE	83	Thu	13/10/22	0.000	0.012	0.012	2.25
12	NF-03-A-30	MIXED HOUSES	SWAFFHAM	NORFOLK	266	Thu	23/09/21	0.000	0.004	0.004	2.84
13	KC-03-A-07	MIXED HOUSES	HERNE BAY	KENT	288	Wed	27/09/17	0.000	0.003	0.003	3.09
14	NF-03-A-39	MIXED HOUSES	HOLT	NORFOLK	212	Tue	27/09/22	0.000	0.000	0.000	2.31
15	NF-03-A-27	MIXED HOUSES &	NEAR NORWICH	NORFOLK	93	Thu	16/09/21	0.000	0.000	0.000	2.67
16	NF-03-A-05	MIXED HOUSES	HOLT	NORFOLK	40	Thu	19/09/19	0.000	0.000	0.000	2.50
17	LE-03-A-02	DETACHED & OTH	IBSTOCK	LEICESTERSHIRE	85	Thu	28/06/18	0.000	0.000	0.000	4.27
18	KC-03-A-10	MIXED HOUSES	STAPLEHURST	KENT	106	Tue	09/05/23	0.000	0.000	0.000	2.43
19	KC-03-A-08	MIXED HOUSES	CHARING	KENT	159	Tue	22/05/18	0.000	0.000	0.000	3.02
20	ES-03-A-11	MIXED HOUSES	RINGMER	EAST SUSSEX	105	Thu	28/09/23	0.000	0.000	0.000	2.62
21	ES-03-A-07	MIXED HOUSES &	HAILSHAM	EAST SUSSEX	91	Thu	07/11/19	0.000	0.000	0.000	2.70
22	DC-03-A-11	MIXED HOUSES	SHAFTESBURY	DORSET	141	Tue	31/10/23	0.000	0.000	0.000	2.81
23	DC-03-A-10	MIXED HOUSES	GILLINGHAM	DORSET	26	Wed	09/11/22	0.000	0.000	0.000	2.12
24	AS-03-A-02	MIXED HOUSES	STONEHAVEN	ABERDEENSHIRE	131	Wed	20/04/22	0.000	0.000	0.000	1.77
25	WS-03-A-07	BUNGALOWS	NEAR HORSHAM	WEST SUSSEX	57	Thu	19/10/17	0.000	0.000	0.000	1.89
26	NF-03-A-36	MIXED HOUSES	WYMONDHAM	NORFOLK	75	Thu	29/09/22	0.000	0.000	0.000	2.84
27	ES-03-A-12	MIXED HOUSES &	HORAM	EAST SUSSEX	123	Tue	03/10/23	0.000	0.000	0.000	2.92
28	CA-03-A-07	MIXED HOUSES	NEAR ELY	CAMBRIDGESHIRE	32	Thu	27/05/21	0.000	0.000	0.000	2.25

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL CYCLISTS

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	3 days
	HC HAMPSHIRE	2 days
	HF HERTFORDSHIRE	1 days
	KC KENT	3 days
	SC SURREY	1 days
	WS WEST SUSSEX	3 days
03	SOUTH WEST	
	DC DORSET	2 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	2 days
	NF NORFOLK	7 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LE LEICESTERSHIRE	1 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days
11	SCOTLAND	
	AS ABERDEENSHIRE	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: 24 to 480 (units:)
Range Selected by User: 0 to 800 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 14/05/24

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

Selected survey days:

Monday	1 days
Tuesday	8 days
Wednesday	4 days
Thursday	13 days
Friday	2 days

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

Selected survey types:

Manual count	28 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	14
Neighbourhood Centre (PPS6 Local Centre)	12

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	14
Village	12
No Sub Category	2

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	32 days - Selected
Servicing vehicles Excluded	83 days - Selected

Secondary Filtering selection:

Use Class:

C3 28 days

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	11 days
5,001 to 10,000	16 days

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

Population within 5 miles:

5,001 to 25,000	8 days
25,001 to 50,000	14 days
50,001 to 75,000	6 days

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

Car ownership within 5 miles:

1.1 to 1.5	21 days
1.6 to 2.0	7 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	22 days
No	6 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	28 days

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

LIST OF SITES relevant to selection parameters

1	AC-03-A-04	TOWN HOUSES		CHESHIRE WEST & CHESTER
	LONDON ROAD			
	NORTHWICH			
	LEFTWICH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	24		
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL	
2	AS-03-A-02	MIXED HOUSES		ABERDEENSHIRE
	FARROCHIE ROAD			
	STONEHAVEN			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	131		
	Survey date: WEDNESDAY	20/04/22	Survey Type: MANUAL	
3	CA-03-A-07	MIXED HOUSES		CAMBRIDGESHIRE
	FIELD END			
	NEAR ELY			
	WITCHFORD			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	32		
	Survey date: THURSDAY	27/05/21	Survey Type: MANUAL	
4	CA-03-A-08	DETACHED & SEMI-DETACHED		CAMBRIDGESHIRE
	GIDDING ROAD			
	SAWTRY			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	83		
	Survey date: THURSDAY	13/10/22	Survey Type: MANUAL	
5	DC-03-A-10	MIXED HOUSES		DORSET
	ADDISON CLOSE			
	GILLINGHAM			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	26		
	Survey date: WEDNESDAY	09/11/22	Survey Type: MANUAL	
6	DC-03-A-11	MIXED HOUSES		DORSET
	A350			
	SHAFTESBURY			
	Edge of Town			
	No Sub Category			
	Total No of Dwellings:	141		
	Survey date: TUESDAY	31/10/23	Survey Type: MANUAL	
7	ES-03-A-07	MIXED HOUSES & FLATS		EAST SUSSEX
	NEW ROAD			
	HAILSHAM			
	HELLINGLY			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	91		
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL	
8	ES-03-A-11	MIXED HOUSES		EAST SUSSEX
	BISHOPS LANE			
	RINGMER			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	105		
	Survey date: THURSDAY	28/09/23	Survey Type: MANUAL	

LIST OF SITES relevant to selection parameters (Cont.)

9	ES-03-A-12 HOREBEECH LANE HORAM	MIXED HOUSES & FLATS	EAST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	123	
	Survey date: TUESDAY	03/10/23	Survey Type: MANUAL
10	HC-03-A-23 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings:	62	
	Survey date: TUESDAY	19/11/19	Survey Type: MANUAL
11	HC-03-A-31 KILN ROAD LIPHOOK	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	44	
	Survey date: FRIDAY	07/10/22	Survey Type: MANUAL
12	HF-03-A-03 HARE STREET ROAD BUNTINGFORD	MIXED HOUSES	HERTFORDSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	160	
	Survey date: MONDAY	08/07/19	Survey Type: MANUAL
13	KC-03-A-07 RECULVER ROAD HERNE BAY	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	288	
	Survey date: WEDNESDAY	27/09/17	Survey Type: MANUAL
14	KC-03-A-08 MAIDSTONE ROAD CHARING	MIXED HOUSES	KENT
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	159	
	Survey date: TUESDAY	22/05/18	Survey Type: MANUAL
15	KC-03-A-10 HEADCORN ROAD STAPLEHURST	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	106	
	Survey date: TUESDAY	09/05/23	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

16	LE-03-A-02 MELBOURNE ROAD IBSTOCK	DETACHED & OTHERS		LEICESTERSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village			
	Total No of Dwellings:	85		
	Survey date: THURSDAY	28/06/18	Survey Type: MANUAL	
17	NF-03-A-05 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	40		
	Survey date: THURSDAY	19/09/19	Survey Type: MANUAL	
18	NF-03-A-27 YARMOUTH ROAD NEAR NORWICH BLOFIELD	MIXED HOUSES & FLATS		NORFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village			
	Total No of Dwellings:	93		
	Survey date: THURSDAY	16/09/21	Survey Type: MANUAL	
19	NF-03-A-30 BRANDON ROAD SWAFFHAM	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	266		
	Survey date: THURSDAY	23/09/21	Survey Type: MANUAL	
20	NF-03-A-33 LONDON ROAD ATTLEBOROUGH	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	143		
	Survey date: THURSDAY	29/09/22	Survey Type: MANUAL	
21	NF-03-A-36 LONDON ROAD WYMONDHAM	MIXED HOUSES		NORFOLK
	Edge of Town No Sub Category			
	Total No of Dwellings:	75		
	Survey date: THURSDAY	29/09/22	Survey Type: MANUAL	
22	NF-03-A-39 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	212		
	Survey date: TUESDAY	27/09/22	Survey Type: MANUAL	
23	NF-03-A-46 BURGH ROAD AYLSHAM	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	300		
	Survey date: TUESDAY	14/09/21	Survey Type: MANUAL	

LIST OF SITES relevant to selection parameters (Cont.)

24	SC-03-A-09 AMLETS LANE CRANLEIGH	MIXED HOUSES & FLATS	SURREY
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 136 Survey date: TUESDAY 24/05/22 Survey Type: MANUAL		
25	SF-03-A-06 BURY ROAD KENTFORD	DETACHED & SEMI-DETACHED	SUFFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 38 Survey date: FRIDAY 22/09/17 Survey Type: MANUAL		
26	WS-03-A-07 EMMS LANE NEAR HORSHAM BROOKS GREEN	BUNGALOWS	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 57 Survey date: THURSDAY 19/10/17 Survey Type: MANUAL		
27	WS-03-A-16 BRACKLESHAM LANE BRACKLESHAM BAY	DETACHED & SEMI-DETACHED	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 58 Survey date: WEDNESDAY 09/11/22 Survey Type: MANUAL		
28	WS-03-A-21 HILLAND ROAD BILLINGSHURST	MIXED HOUSES	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 480 Survey date: THURSDAY 09/11/23 Survey Type: MANUAL		

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

Lime Transport Limited Stanwell Road Penarth

Licence No: 258601

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL CYCLISTS

Ranking Type: TOTALS

Time Range: 17:00-18:00

CALCULATION FACTOR 100m2 DWELLS

15th Percentile = No. 24 AS-03-A-02 Tot: 0.000

85th Percentile = No. 5 HF-03-A-03 Tot: 0.019

Median Values

Arrivals: 0.000

Departures: 0.000

Totals: 0.000

Mean Values

Arrivals: 0.004

Departures: 0.007

Totals: 0.011

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	SF-03-A-06	DETACHED & SEM	KENTFORD	SUFFOLK	38	Fri	22/09/17	0.026	0.053	0.079	0.92
2	NF-03-A-39	MIXED HOUSES	HOLT	NORFOLK	212	Tue	27/09/22	0.009	0.042	0.051	2.31
3	HC-03-A-31	MIXED HOUSES &	LIPHOOK	HAMPSHIRE	44	Fri	07/10/22	0.023	0.023	0.046	2.57
4	AC-03-A-04	TOWN HOUSES	NORTHWICH	CHESHIRE WEST & CHE	24	Thu	06/06/19	0.000	0.042	0.042	1.96
5	HF-03-A-03	MIXED HOUSES	BUNTINGFORD	HERTFORDSHIRE	160	Mon	08/07/19	0.013	0.006	0.019	3.95
6	NF-03-A-30	MIXED HOUSES	SWAFFHAM	NORFOLK	266	Thu	23/09/21	0.011	0.008	0.019	2.84
7	NF-03-A-33	MIXED HOUSES	ATTLEBOROUGH	NORFOLK	143	Thu	29/09/22	0.014	0.000	0.014	2.28
8	CA-03-A-08	DETACHED & SEM	SAWTRY	CAMBRIDGESHIRE	83	Thu	13/10/22	0.012	0.000	0.012	2.25
9	WS-03-A-21	MIXED HOUSES	BILLINGSHURST	WEST SUSSEX	480	Thu	09/11/23	0.004	0.006	0.010	2.31
10	SC-03-A-09	MIXED HOUSES &	CRANLEIGH	SURREY	136	Tue	24/05/22	0.007	0.000	0.007	2.64
11	DC-03-A-11	MIXED HOUSES	SHAFTESBURY	DORSET	141	Tue	31/10/23	0.007	0.000	0.007	2.81
12	NF-03-A-46	MIXED HOUSES &	AYLSHAM	NORFOLK	300	Tue	14/09/21	0.000	0.003	0.003	2.41
13	WS-03-A-16	DETACHED & SEM	BRACKLESHAM BAY	WEST SUSSEX	58	Wed	09/11/22	0.000	0.000	0.000	2.28
14	NF-03-A-27	MIXED HOUSES &	NEAR NORWICH	NORFOLK	93	Thu	16/09/21	0.000	0.000	0.000	2.67
15	NF-03-A-05	MIXED HOUSES	HOLT	NORFOLK	40	Thu	19/09/19	0.000	0.000	0.000	2.50
16	LE-03-A-02	DETACHED & OTH	IBSTOCK	LEICESTERSHIRE	85	Thu	28/06/18	0.000	0.000	0.000	4.27
17	KC-03-A-10	MIXED HOUSES	STAPLEHURST	KENT	106	Tue	09/05/23	0.000	0.000	0.000	2.43
18	KC-03-A-08	MIXED HOUSES	CHARING	KENT	159	Tue	22/05/18	0.000	0.000	0.000	3.02
19	KC-03-A-07	MIXED HOUSES	HERNE BAY	KENT	288	Wed	27/09/17	0.000	0.000	0.000	3.09
20	HC-03-A-23	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	62	Tue	19/11/19	0.000	0.000	0.000	2.19
21	ES-03-A-11	MIXED HOUSES	RINGMER	EAST SUSSEX	105	Thu	28/09/23	0.000	0.000	0.000	2.62
22	ES-03-A-07	MIXED HOUSES &	HAILSHAM	EAST SUSSEX	91	Thu	07/11/19	0.000	0.000	0.000	2.70
23	DC-03-A-10	MIXED HOUSES	GILLINGHAM	DORSET	26	Wed	09/11/22	0.000	0.000	0.000	2.12
24	AS-03-A-02	MIXED HOUSES	STONEHAVEN	ABERDEENSHIRE	131	Wed	20/04/22	0.000	0.000	0.000	1.77
25	WS-03-A-07	BUNGALOWS	NEAR HORSHAM	WEST SUSSEX	57	Thu	19/10/17	0.000	0.000	0.000	1.89
26	NF-03-A-36	MIXED HOUSES	WYMONDHAM	NORFOLK	75	Thu	29/09/22	0.000	0.000	0.000	2.84
27	ES-03-A-12	MIXED HOUSES &	HORAM	EAST SUSSEX	123	Tue	03/10/23	0.000	0.000	0.000	2.92
28	CA-03-A-07	MIXED HOUSES	NEAR ELY	CAMBRIDGESHIRE	32	Thu	27/05/21	0.000	0.000	0.000	2.25

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL CYCLISTS

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	3 days
	HC HAMPSHIRE	2 days
	HF HERTFORDSHIRE	1 days
	KC KENT	3 days
	SC SURREY	1 days
	WS WEST SUSSEX	3 days
03	SOUTH WEST	
	DC DORSET	2 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	2 days
	NF NORFOLK	7 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LE LEICESTERSHIRE	1 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days
11	SCOTLAND	
	AS ABERDEENSHIRE	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: 24 to 480 (units:)
Range Selected by User: 0 to 800 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 14/05/24

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

Selected survey days:

Monday	1 days
Tuesday	8 days
Wednesday	4 days
Thursday	13 days
Friday	2 days

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

Selected survey types:

Manual count	28 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	14
Neighbourhood Centre (PPS6 Local Centre)	12

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	14
Village	12
No Sub Category	2

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	32 days - Selected
Servicing vehicles Excluded	83 days - Selected

Secondary Filtering selection:

Use Class:

C3 28 days

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	11 days
5,001 to 10,000	16 days

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

Population within 5 miles:

5,001 to 25,000	8 days
25,001 to 50,000	14 days
50,001 to 75,000	6 days

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

Car ownership within 5 miles:

1.1 to 1.5	21 days
1.6 to 2.0	7 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	22 days
No	6 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	28 days

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

LIST OF SITES relevant to selection parameters

1	AC-03-A-04	TOWN HOUSES		CHESHIRE WEST & CHESTER
	LONDON ROAD			
	NORTHWICH			
	LEFTWICH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	24		
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL	
2	AS-03-A-02	MIXED HOUSES		ABERDEENSHIRE
	FARROCHIE ROAD			
	STONEHAVEN			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	131		
	Survey date: WEDNESDAY	20/04/22	Survey Type: MANUAL	
3	CA-03-A-07	MIXED HOUSES		CAMBRIDGESHIRE
	FIELD END			
	NEAR ELY			
	WITCHFORD			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	32		
	Survey date: THURSDAY	27/05/21	Survey Type: MANUAL	
4	CA-03-A-08	DETACHED & SEMI-DETACHED		CAMBRIDGESHIRE
	GIDDING ROAD			
	SAWTRY			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	83		
	Survey date: THURSDAY	13/10/22	Survey Type: MANUAL	
5	DC-03-A-10	MIXED HOUSES		DORSET
	ADDISON CLOSE			
	GILLINGHAM			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	26		
	Survey date: WEDNESDAY	09/11/22	Survey Type: MANUAL	
6	DC-03-A-11	MIXED HOUSES		DORSET
	A350			
	SHAFTESBURY			
	Edge of Town			
	No Sub Category			
	Total No of Dwellings:	141		
	Survey date: TUESDAY	31/10/23	Survey Type: MANUAL	
7	ES-03-A-07	MIXED HOUSES & FLATS		EAST SUSSEX
	NEW ROAD			
	HAILSHAM			
	HELLINGLY			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	91		
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL	
8	ES-03-A-11	MIXED HOUSES		EAST SUSSEX
	BISHOPS LANE			
	RINGMER			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	105		
	Survey date: THURSDAY	28/09/23	Survey Type: MANUAL	

LIST OF SITES relevant to selection parameters (Cont.)

9	ES-03-A-12 HOREBEECH LANE HORAM	MIXED HOUSES & FLATS	EAST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	123	
	Survey date: TUESDAY	03/10/23	Survey Type: MANUAL
10	HC-03-A-23 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings:	62	
	Survey date: TUESDAY	19/11/19	Survey Type: MANUAL
11	HC-03-A-31 KILN ROAD LIPHOOK	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	44	
	Survey date: FRIDAY	07/10/22	Survey Type: MANUAL
12	HF-03-A-03 HARE STREET ROAD BUNTINGFORD	MIXED HOUSES	HERTFORDSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	160	
	Survey date: MONDAY	08/07/19	Survey Type: MANUAL
13	KC-03-A-07 RECULVER ROAD HERNE BAY	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	288	
	Survey date: WEDNESDAY	27/09/17	Survey Type: MANUAL
14	KC-03-A-08 MAIDSTONE ROAD CHARING	MIXED HOUSES	KENT
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	159	
	Survey date: TUESDAY	22/05/18	Survey Type: MANUAL
15	KC-03-A-10 HEADCORN ROAD STAPLEHURST	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	106	
	Survey date: TUESDAY	09/05/23	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

16	LE-03-A-02 MELBOURNE ROAD IBSTOCK	DETACHED & OTHERS		LEICESTERSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village			
	Total No of Dwellings:	85		
	Survey date: THURSDAY	28/06/18	Survey Type: MANUAL	
17	NF-03-A-05 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	40		
	Survey date: THURSDAY	19/09/19	Survey Type: MANUAL	
18	NF-03-A-27 YARMOUTH ROAD NEAR NORWICH BLOFIELD	MIXED HOUSES & FLATS		NORFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village			
	Total No of Dwellings:	93		
	Survey date: THURSDAY	16/09/21	Survey Type: MANUAL	
19	NF-03-A-30 BRANDON ROAD SWAFFHAM	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	266		
	Survey date: THURSDAY	23/09/21	Survey Type: MANUAL	
20	NF-03-A-33 LONDON ROAD ATTLEBOROUGH	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	143		
	Survey date: THURSDAY	29/09/22	Survey Type: MANUAL	
21	NF-03-A-36 LONDON ROAD WYMONDHAM	MIXED HOUSES		NORFOLK
	Edge of Town No Sub Category			
	Total No of Dwellings:	75		
	Survey date: THURSDAY	29/09/22	Survey Type: MANUAL	
22	NF-03-A-39 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	212		
	Survey date: TUESDAY	27/09/22	Survey Type: MANUAL	
23	NF-03-A-46 BURGH ROAD AYLSHAM	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	300		
	Survey date: TUESDAY	14/09/21	Survey Type: MANUAL	

LIST OF SITES relevant to selection parameters (Cont.)

24	SC-03-A-09 AMLETS LANE CRANLEIGH	MIXED HOUSES & FLATS	SURREY
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 136 Survey date: TUESDAY 24/05/22 Survey Type: MANUAL		
25	SF-03-A-06 BURY ROAD KENTFORD	DETACHED & SEMI-DETACHED	SUFFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 38 Survey date: FRIDAY 22/09/17 Survey Type: MANUAL		
26	WS-03-A-07 EMMS LANE NEAR HORSHAM BROOKS GREEN	BUNGALOWS	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 57 Survey date: THURSDAY 19/10/17 Survey Type: MANUAL		
27	WS-03-A-16 BRACKLESHAM LANE BRACKLESHAM BAY	DETACHED & SEMI-DETACHED	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 58 Survey date: WEDNESDAY 09/11/22 Survey Type: MANUAL		
28	WS-03-A-21 HILLAND ROAD BILLINGSHURST	MIXED HOUSES	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 480 Survey date: THURSDAY 09/11/23 Survey Type: MANUAL		

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

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL CYCLISTS

Ranking Type: TOTALS Time Range: 07:00-19:00 CALCULATION FACTOR 100m2 DWELLS
15th Percentile = No. 24 KC-03-A-07 Tot: 0.006
85th Percentile = No. 5 NF-03-A-33 Tot: 0.189

Median Values

Arrivals: 0.022
Departures: 0.028
Totals: 0.051

Mean Values

Arrivals: 0.048
Departures: 0.052
Totals: 0.100

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	SF-03-A-06	DETACHED & SEM	KENTFORD	SUFFOLK	38	Fri	22/09/17	0.342	0.342	0.684	0.92
2	HC-03-A-23	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	62	Tue	19/11/19	0.145	0.145	0.290	2.19
3	AC-03-A-04	TOWN HOUSES	NORTHWICH	CHESHIRE WEST & CHE	24	Thu	06/06/19	0.125	0.125	0.250	1.96
4	HC-03-A-31	MIXED HOUSES &	LIPHOOK	HAMPSHIRE	44	Fri	07/10/22	0.091	0.136	0.227	2.57
5	NF-03-A-33	MIXED HOUSES	ATTLEBOROUGH	NORFOLK	143	Thu	29/09/22	0.105	0.084	0.189	2.28
6	ES-03-A-11	MIXED HOUSES	RINGMER	EAST SUSSEX	105	Thu	28/09/23	0.067	0.076	0.143	2.62
7	HF-03-A-03	MIXED HOUSES	BUNTINGFORD	HERTFORDSHIRE	160	Mon	08/07/19	0.062	0.069	0.131	3.95
8	SC-03-A-09	MIXED HOUSES &	CRANLEIGH	SURREY	136	Tue	24/05/22	0.059	0.066	0.125	2.64
9	NF-03-A-30	MIXED HOUSES	SWAFFHAM	NORFOLK	266	Thu	23/09/21	0.060	0.060	0.120	2.84
10	NF-03-A-39	MIXED HOUSES	HOLT	NORFOLK	212	Tue	27/09/22	0.052	0.052	0.104	2.31
11	WS-03-A-21	MIXED HOUSES	BILLINGSHURST	WEST SUSSEX	480	Thu	09/11/23	0.048	0.048	0.096	2.31
12	NF-03-A-46	MIXED HOUSES &	AYLSHAM	NORFOLK	300	Tue	14/09/21	0.043	0.050	0.093	2.41
13	DC-03-A-10	MIXED HOUSES	GILLINGHAM	DORSET	26	Wed	09/11/22	0.038	0.038	0.076	2.12
14	LE-03-A-02	DETACHED & OTH	IBSTOCK	LEICESTERSHIRE	85	Thu	28/06/18	0.024	0.035	0.059	4.27
15	DC-03-A-11	MIXED HOUSES	SHAFTESBURY	DORSET	141	Tue	31/10/23	0.021	0.021	0.042	2.81
16	KC-03-A-10	MIXED HOUSES	STAPLEHURST	KENT	106	Tue	09/05/23	0.019	0.019	0.038	2.43
17	WS-03-A-16	DETACHED & SEM	BRACKLESHAM BAY	WEST SUSSEX	58	Wed	09/11/22	0.017	0.017	0.034	2.28
18	NF-03-A-05	MIXED HOUSES	HOLT	NORFOLK	40	Thu	19/09/19	0.000	0.025	0.025	2.50
19	CA-03-A-08	DETACHED & SEM	SAWTRY	CAMBRIDGESHIRE	83	Thu	13/10/22	0.012	0.012	0.024	2.25
20	KC-03-A-08	MIXED HOUSES	CHARING	KENT	159	Tue	22/05/18	0.006	0.013	0.019	3.02
21	AS-03-A-02	MIXED HOUSES	STONEHAVEN	ABERDEENSHIRE	131	Wed	20/04/22	0.008	0.008	0.016	1.77
22	NF-03-A-27	MIXED HOUSES &	NEAR NORWICH	NORFOLK	93	Thu	16/09/21	0.000	0.011	0.011	2.67
23	ES-03-A-07	MIXED HOUSES &	HAILSHAM	EAST SUSSEX	91	Thu	07/11/19	0.000	0.011	0.011	2.70
24	KC-03-A-07	MIXED HOUSES	HERNE BAY	KENT	288	Wed	27/09/17	0.003	0.003	0.006	3.09
25	WS-03-A-07	BUNGALOWS	NEAR HORSHAM	WEST SUSSEX	57	Thu	19/10/17	0.000	0.000	0.000	1.89
26	NF-03-A-36	MIXED HOUSES	WYMONDHAM	NORFOLK	75	Thu	29/09/22	0.000	0.000	0.000	2.84
27	ES-03-A-12	MIXED HOUSES &	HORAM	EAST SUSSEX	123	Tue	03/10/23	0.000	0.000	0.000	2.92
28	CA-03-A-07	MIXED HOUSES	NEAR ELY	CAMBRIDGESHIRE	32	Thu	27/05/21	0.000	0.000	0.000	2.25

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	3 days
	HC HAMPSHIRE	2 days
	HF HERTFORDSHIRE	1 days
	KC KENT	3 days
	SC SURREY	1 days
	WS WEST SUSSEX	3 days
03	SOUTH WEST	
	DC DORSET	2 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	2 days
	NF NORFOLK	7 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LE LEICESTERSHIRE	1 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days
11	SCOTLAND	
	AS ABERDEENSHIRE	1 days

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

Lime Transport Limited Stanwell Road Penarth

Licence No: 258601

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: 24 to 480 (units:)
Range Selected by User: 0 to 800 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 14/05/24

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

Selected survey days:

Monday	1 days
Tuesday	8 days
Wednesday	4 days
Thursday	13 days
Friday	2 days

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

Selected survey types:

Manual count	28 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	14
Neighbourhood Centre (PPS6 Local Centre)	12

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	14
Village	12
No Sub Category	2

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	32 days - Selected
Servicing vehicles Excluded	83 days - Selected

Secondary Filtering selection:**Use Class:**

C3	28 days

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	11 days
5,001 to 10,000	16 days

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

Population within 5 miles:

5,001 to 25,000	8 days
25,001 to 50,000	14 days
50,001 to 75,000	6 days

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

Car ownership within 5 miles:

1.1 to 1.5	21 days
1.6 to 2.0	7 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	22 days
No	6 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	28 days

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

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

1	AC-03-A-04	TOWN HOUSES		CHESHIRE WEST & CHESTER
	LONDON ROAD			
	NORTHWICH			
	LEFTWICH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	24		
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL	
2	AS-03-A-02	MIXED HOUSES		ABERDEENSHIRE
	FARROCHIE ROAD			
	STONEHAVEN			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	131		
	Survey date: WEDNESDAY	20/04/22	Survey Type: MANUAL	
3	CA-03-A-07	MIXED HOUSES		CAMBRIDGESHIRE
	FIELD END			
	NEAR ELY			
	WITCHFORD			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	32		
	Survey date: THURSDAY	27/05/21	Survey Type: MANUAL	
4	CA-03-A-08	DETACHED & SEMI-DETACHED		CAMBRIDGESHIRE
	GIDDING ROAD			
	SAWTRY			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	83		
	Survey date: THURSDAY	13/10/22	Survey Type: MANUAL	
5	DC-03-A-10	MIXED HOUSES		DORSET
	ADDISON CLOSE			
	GILLINGHAM			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	26		
	Survey date: WEDNESDAY	09/11/22	Survey Type: MANUAL	
6	DC-03-A-11	MIXED HOUSES		DORSET
	A350			
	SHAFTESBURY			
	Edge of Town			
	No Sub Category			
	Total No of Dwellings:	141		
	Survey date: TUESDAY	31/10/23	Survey Type: MANUAL	
7	ES-03-A-07	MIXED HOUSES & FLATS		EAST SUSSEX
	NEW ROAD			
	HAILSHAM			
	HELLINGLY			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	91		
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL	
8	ES-03-A-11	MIXED HOUSES		EAST SUSSEX
	BISHOPS LANE			
	RINGMER			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	105		
	Survey date: THURSDAY	28/09/23	Survey Type: MANUAL	

LIST OF SITES relevant to selection parameters (Cont.)

9	ES-03-A-12 HOREBEECH LANE HORAM	MIXED HOUSES & FLATS	EAST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	123	
	Survey date: TUESDAY	03/10/23	Survey Type: MANUAL
10	HC-03-A-23 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings:	62	
	Survey date: TUESDAY	19/11/19	Survey Type: MANUAL
11	HC-03-A-31 KILN ROAD LIPHOOK	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	44	
	Survey date: FRIDAY	07/10/22	Survey Type: MANUAL
12	HF-03-A-03 HARE STREET ROAD BUNTINGFORD	MIXED HOUSES	HERTFORDSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	160	
	Survey date: MONDAY	08/07/19	Survey Type: MANUAL
13	KC-03-A-07 RECULVER ROAD HERNE BAY	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	288	
	Survey date: WEDNESDAY	27/09/17	Survey Type: MANUAL
14	KC-03-A-08 MAIDSTONE ROAD CHARING	MIXED HOUSES	KENT
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	159	
	Survey date: TUESDAY	22/05/18	Survey Type: MANUAL
15	KC-03-A-10 HEADCORN ROAD STAPLEHURST	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	106	
	Survey date: TUESDAY	09/05/23	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

16	LE-03-A-02 MELBOURNE ROAD IBSTOCK	DETACHED & OTHERS		LEICESTERSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 85 Survey date: THURSDAY 28/06/18 Survey Type: MANUAL			
17	NF-03-A-05 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 40 Survey date: THURSDAY 19/09/19 Survey Type: MANUAL			
18	NF-03-A-27 YARMOUTH ROAD NEAR NORWICH BLOFIELD	MIXED HOUSES & FLATS		NORFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 93 Survey date: THURSDAY 16/09/21 Survey Type: MANUAL			
19	NF-03-A-30 BRANDON ROAD SWAFFHAM	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 266 Survey date: THURSDAY 23/09/21 Survey Type: MANUAL			
20	NF-03-A-33 LONDON ROAD ATTLEBOROUGH	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 143 Survey date: THURSDAY 29/09/22 Survey Type: MANUAL			
21	NF-03-A-36 LONDON ROAD WYMONDHAM	MIXED HOUSES		NORFOLK
	Edge of Town No Sub Category Total No of Dwellings: 75 Survey date: THURSDAY 29/09/22 Survey Type: MANUAL			
22	NF-03-A-39 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 212 Survey date: TUESDAY 27/09/22 Survey Type: MANUAL			
23	NF-03-A-46 BURGH ROAD AYLSHAM	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 300 Survey date: TUESDAY 14/09/21 Survey Type: MANUAL			

LIST OF SITES relevant to selection parameters (Cont.)

24	SC-03-A-09 AMLETS LANE CRANLEIGH	MIXED HOUSES & FLATS	SURREY
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 136 Survey date: TUESDAY 24/05/22 Survey Type: MANUAL		
25	SF-03-A-06 BURY ROAD KENTFORD	DETACHED & SEMI-DETACHED	SUFFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 38 Survey date: FRIDAY 22/09/17 Survey Type: MANUAL		
26	WS-03-A-07 EMMS LANE NEAR HORSHAM BROOKS GREEN	BUNGALOWS	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 57 Survey date: THURSDAY 19/10/17 Survey Type: MANUAL		
27	WS-03-A-16 BRACKLESHAM LANE BRACKLESHAM BAY	DETACHED & SEMI-DETACHED	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 58 Survey date: WEDNESDAY 09/11/22 Survey Type: MANUAL		
28	WS-03-A-21 HILLAND ROAD BILLINGSHURST	MIXED HOUSES	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 480 Survey date: THURSDAY 09/11/23 Survey Type: MANUAL		

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

Lime Transport Limited Stanwell Road Penarth

Licence No: 258601

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE

Ranking Type: TOTALS

Time Range: 08:00-09:00

CALCULATION FACTOR 100m2 DWELLS

15th Percentile = No. 24 SF-03-A-06 Tot: 0.658

85th Percentile = No. 5 CA-03-A-07 Tot: 1.000

Median Values

Arrivals: 0.203

Departures: 0.635

Totals: 0.838

Mean Values

Arrivals: 0.238

Departures: 0.685

Totals: 0.923

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	DC-03-A-10	MIXED HOUSES	GILLINGHAM	DORSET	26	Wed	09/11/22	0.654	1.692	2.346	2.12
2	HC-03-A-23	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	62	Tue	19/11/19	0.258	1.468	1.726	2.19
3	AC-03-A-04	TOWN HOUSES	NORTHWICH	CHESHIRE WEST & CHE	24	Thu	06/06/19	0.458	1.125	1.583	1.96
4	KC-03-A-07	MIXED HOUSES	HERNE BAY	KENT	288	Wed	27/09/17	0.451	1.073	1.524	3.09
5	CA-03-A-07	MIXED HOUSES	NEAR ELY	CAMBRIDGESHIRE	32	Thu	27/05/21	0.281	0.719	1.000	2.25
6	SC-03-A-09	MIXED HOUSES &	CRANLEIGH	SURREY	136	Tue	24/05/22	0.221	0.765	0.986	2.64
7	NF-03-A-46	MIXED HOUSES &	AYLSHAM	NORFOLK	300	Tue	14/09/21	0.370	0.610	0.980	2.41
8	ES-03-A-07	MIXED HOUSES &	HAILSHAM	EAST SUSSEX	91	Thu	07/11/19	0.165	0.769	0.934	2.70
9	CA-03-A-08	DETACHED & SEM	SAWTRY	CAMBRIDGESHIRE	83	Thu	13/10/22	0.217	0.711	0.928	2.25
10	KC-03-A-10	MIXED HOUSES	STAPLEHURST	KENT	106	Tue	09/05/23	0.198	0.726	0.924	2.43
11	DC-03-A-11	MIXED HOUSES	SHAFTESBURY	DORSET	141	Tue	31/10/23	0.206	0.716	0.922	2.81
12	HF-03-A-03	MIXED HOUSES	BUNTINGFORD	HERTFORDSHIRE	160	Mon	08/07/19	0.269	0.619	0.888	3.95
13	ES-03-A-12	MIXED HOUSES &	HORAM	EAST SUSSEX	123	Tue	03/10/23	0.236	0.626	0.862	2.92
14	LE-03-A-02	DETACHED & OTH	IBSTOCK	LEICESTERSHIRE	85	Thu	28/06/18	0.282	0.565	0.847	4.27
15	ES-03-A-11	MIXED HOUSES	RINGMER	EAST SUSSEX	105	Thu	28/09/23	0.124	0.705	0.829	2.62
16	NF-03-A-05	MIXED HOUSES	HOLT	NORFOLK	40	Thu	19/09/19	0.325	0.500	0.825	2.50
17	WS-03-A-21	MIXED HOUSES	BILLINGSHURST	WEST SUSSEX	480	Thu	09/11/23	0.177	0.635	0.812	2.31
18	NF-03-A-33	MIXED HOUSES	ATTLEBOROUGH	NORFOLK	143	Thu	29/09/22	0.168	0.636	0.804	2.28
19	NF-03-A-36	MIXED HOUSES	WYMONDHAM	NORFOLK	75	Thu	29/09/22	0.240	0.547	0.787	2.84
20	HC-03-A-31	MIXED HOUSES &	LIPHOOK	HAMPSHIRE	44	Fri	07/10/22	0.205	0.568	0.773	2.57
21	AS-03-A-02	MIXED HOUSES	STONEHAVEN	ABERDEENSHIRE	131	Wed	20/04/22	0.183	0.511	0.694	1.77
22	NF-03-A-39	MIXED HOUSES	HOLT	NORFOLK	212	Tue	27/09/22	0.165	0.509	0.674	2.31
23	NF-03-A-27	MIXED HOUSES &	NEAR NORWICH	NORFOLK	93	Thu	16/09/21	0.215	0.452	0.667	2.67
24	SF-03-A-06	DETACHED & SEM	KENTFORD	SUFFOLK	38	Fri	22/09/17	0.105	0.553	0.658	0.92
25	KC-03-A-08	MIXED HOUSES	CHARING	KENT	159	Tue	22/05/18	0.145	0.447	0.592	3.02
26	NF-03-A-30	MIXED HOUSES	SWAFFHAM	NORFOLK	266	Thu	23/09/21	0.132	0.395	0.527	2.84
27	WS-03-A-16	DETACHED & SEM	BRACKLESHAM BAY	WEST SUSSEX	58	Wed	09/11/22	0.069	0.345	0.414	2.28
28	WS-03-A-07	BUNGALOWS	NEAR HORSHAM	WEST SUSSEX	57	Thu	19/10/17	0.158	0.193	0.351	1.89

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	3 days
	HC HAMPSHIRE	2 days
	HF HERTFORDSHIRE	1 days
	KC KENT	3 days
	SC SURREY	1 days
	WS WEST SUSSEX	3 days
03	SOUTH WEST	
	DC DORSET	2 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	2 days
	NF NORFOLK	7 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LE LEICESTERSHIRE	1 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days
11	SCOTLAND	
	AS ABERDEENSHIRE	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: 24 to 480 (units:)
Range Selected by User: 0 to 800 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 14/05/24

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

Selected survey days:

Monday	1 days
Tuesday	8 days
Wednesday	4 days
Thursday	13 days
Friday	2 days

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

Selected survey types:

Manual count	28 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	14
Neighbourhood Centre (PPS6 Local Centre)	12

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	14
Village	12
No Sub Category	2

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	32 days - Selected
Servicing vehicles Excluded	83 days - Selected

Secondary Filtering selection:

Use Class:

C3 28 days

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	11 days
5,001 to 10,000	16 days

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

Population within 5 miles:

5,001 to 25,000	8 days
25,001 to 50,000	14 days
50,001 to 75,000	6 days

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

Car ownership within 5 miles:

1.1 to 1.5	21 days
1.6 to 2.0	7 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	22 days
No	6 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	28 days

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

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

1	AC-03-A-04	TOWN HOUSES		CHESHIRE WEST & CHESTER
	LONDON ROAD			
	NORTHWICH			
	LEFTWICH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	24		
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL	
2	AS-03-A-02	MIXED HOUSES		ABERDEENSHIRE
	FARROCHIE ROAD			
	STONEHAVEN			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	131		
	Survey date: WEDNESDAY	20/04/22	Survey Type: MANUAL	
3	CA-03-A-07	MIXED HOUSES		CAMBRIDGESHIRE
	FIELD END			
	NEAR ELY			
	WITCHFORD			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	32		
	Survey date: THURSDAY	27/05/21	Survey Type: MANUAL	
4	CA-03-A-08	DETACHED & SEMI-DETACHED		CAMBRIDGESHIRE
	GIDDING ROAD			
	SAWTRY			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	83		
	Survey date: THURSDAY	13/10/22	Survey Type: MANUAL	
5	DC-03-A-10	MIXED HOUSES		DORSET
	ADDISON CLOSE			
	GILLINGHAM			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	26		
	Survey date: WEDNESDAY	09/11/22	Survey Type: MANUAL	
6	DC-03-A-11	MIXED HOUSES		DORSET
	A350			
	SHAFTESBURY			
	Edge of Town			
	No Sub Category			
	Total No of Dwellings:	141		
	Survey date: TUESDAY	31/10/23	Survey Type: MANUAL	
7	ES-03-A-07	MIXED HOUSES & FLATS		EAST SUSSEX
	NEW ROAD			
	HAILSHAM			
	HELLINGLY			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	91		
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL	
8	ES-03-A-11	MIXED HOUSES		EAST SUSSEX
	BISHOPS LANE			
	RINGMER			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	105		
	Survey date: THURSDAY	28/09/23	Survey Type: MANUAL	

LIST OF SITES relevant to selection parameters (Cont.)

9	ES-03-A-12 HOREBEECH LANE HORAM	MIXED HOUSES & FLATS	EAST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	123	
	Survey date: TUESDAY	03/10/23	Survey Type: MANUAL
10	HC-03-A-23 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings:	62	
	Survey date: TUESDAY	19/11/19	Survey Type: MANUAL
11	HC-03-A-31 KILN ROAD LIPHOOK	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	44	
	Survey date: FRIDAY	07/10/22	Survey Type: MANUAL
12	HF-03-A-03 HARE STREET ROAD BUNTINGFORD	MIXED HOUSES	HERTFORDSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	160	
	Survey date: MONDAY	08/07/19	Survey Type: MANUAL
13	KC-03-A-07 RECULVER ROAD HERNE BAY	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	288	
	Survey date: WEDNESDAY	27/09/17	Survey Type: MANUAL
14	KC-03-A-08 MAIDSTONE ROAD CHARING	MIXED HOUSES	KENT
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	159	
	Survey date: TUESDAY	22/05/18	Survey Type: MANUAL
15	KC-03-A-10 HEADCORN ROAD STAPLEHURST	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	106	
	Survey date: TUESDAY	09/05/23	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

16	LE-03-A-02 MELBOURNE ROAD IBSTOCK	DETACHED & OTHERS		LEICESTERSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village			
	Total No of Dwellings:	85		
	Survey date: THURSDAY	28/06/18	Survey Type: MANUAL	
17	NF-03-A-05 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	40		
	Survey date: THURSDAY	19/09/19	Survey Type: MANUAL	
18	NF-03-A-27 YARMOUTH ROAD NEAR NORWICH BLOFIELD	MIXED HOUSES & FLATS		NORFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village			
	Total No of Dwellings:	93		
	Survey date: THURSDAY	16/09/21	Survey Type: MANUAL	
19	NF-03-A-30 BRANDON ROAD SWAFFHAM	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	266		
	Survey date: THURSDAY	23/09/21	Survey Type: MANUAL	
20	NF-03-A-33 LONDON ROAD ATTLEBOROUGH	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	143		
	Survey date: THURSDAY	29/09/22	Survey Type: MANUAL	
21	NF-03-A-36 LONDON ROAD WYMONDHAM	MIXED HOUSES		NORFOLK
	Edge of Town No Sub Category			
	Total No of Dwellings:	75		
	Survey date: THURSDAY	29/09/22	Survey Type: MANUAL	
22	NF-03-A-39 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	212		
	Survey date: TUESDAY	27/09/22	Survey Type: MANUAL	
23	NF-03-A-46 BURGH ROAD AYLSHAM	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	300		
	Survey date: TUESDAY	14/09/21	Survey Type: MANUAL	

LIST OF SITES relevant to selection parameters (Cont.)

24	SC-03-A-09 AMLETS LANE CRANLEIGH	MIXED HOUSES & FLATS	SURREY
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 136 Survey date: TUESDAY 24/05/22 Survey Type: MANUAL		
25	SF-03-A-06 BURY ROAD KENTFORD	DETACHED & SEMI-DETACHED	SUFFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 38 Survey date: FRIDAY 22/09/17 Survey Type: MANUAL		
26	WS-03-A-07 EMMS LANE NEAR HORSHAM BROOKS GREEN	BUNGALOWS	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 57 Survey date: THURSDAY 19/10/17 Survey Type: MANUAL		
27	WS-03-A-16 BRACKLESHAM LANE BRACKLESHAM BAY	DETACHED & SEMI-DETACHED	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 58 Survey date: WEDNESDAY 09/11/22 Survey Type: MANUAL		
28	WS-03-A-21 HILLAND ROAD BILLINGSHURST	MIXED HOUSES	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 480 Survey date: THURSDAY 09/11/23 Survey Type: MANUAL		

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

Lime Transport Limited Stanwell Road Penarth

Licence No: 258601

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE

Ranking Type: TOTALS Time Range: 17:00-18:00

CALCULATION FACTOR 100m2 DWELLS

15th Percentile = No. 24 NF-03-A-46 Tot: 0.576

85th Percentile = No. 5 HC-03-A-31 Tot: 1.046

Median Values

Arrivals: 0.488

Departures: 0.280

Totals: 0.768

Mean Values

Arrivals: 0.511

Departures: 0.250

Totals: 0.760

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	CA-03-A-08	DETACHED & SEM	SAWTRY	CAMBRIDGESHIRE	83	Thu	13/10/22	0.952	0.458	1.410	2.25
2	KC-03-A-07	MIXED HOUSES	HERNE BAY	KENT	288	Wed	27/09/17	0.972	0.299	1.271	3.09
3	DC-03-A-10	MIXED HOUSES	GILLINGHAM	DORSET	26	Wed	09/11/22	0.885	0.192	1.077	2.12
4	HC-03-A-23	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	62	Tue	19/11/19	0.903	0.145	1.048	2.19
5	HC-03-A-31	MIXED HOUSES &	LIPHOOK	HAMPSHIRE	44	Fri	07/10/22	0.591	0.455	1.046	2.57
6	CA-03-A-07	MIXED HOUSES	NEAR ELY	CAMBRIDGESHIRE	32	Thu	27/05/21	0.563	0.469	1.031	2.25
7	LE-03-A-02	DETACHED & OTH	IBSTOCK	LEICESTERSHIRE	85	Thu	28/06/18	0.612	0.329	0.941	4.27
8	NF-03-A-27	MIXED HOUSES &	NEAR NORWICH	NORFOLK	93	Thu	16/09/21	0.548	0.333	0.881	2.67
9	NF-03-A-36	MIXED HOUSES	WYMONDHAM	NORFOLK	75	Thu	29/09/22	0.587	0.280	0.867	2.84
10	NF-03-A-33	MIXED HOUSES	ATTLEBOROUGH	NORFOLK	143	Thu	29/09/22	0.517	0.350	0.867	2.28
11	DC-03-A-11	MIXED HOUSES	SHAFTESBURY	DORSET	141	Tue	31/10/23	0.582	0.284	0.866	2.81
12	NF-03-A-30	MIXED HOUSES	SWAFFHAM	NORFOLK	266	Thu	23/09/21	0.530	0.278	0.808	2.84
13	HF-03-A-03	MIXED HOUSES	BUNTINGFORD	HERTFORDSHIRE	160	Mon	08/07/19	0.525	0.275	0.800	3.95
14	NF-03-A-39	MIXED HOUSES	HOLT	NORFOLK	212	Tue	27/09/22	0.476	0.297	0.773	2.31
15	KC-03-A-10	MIXED HOUSES	STAPLEHURST	KENT	106	Tue	09/05/23	0.500	0.264	0.764	2.43
16	WS-03-A-21	MIXED HOUSES	BILLINGSHURST	WEST SUSSEX	480	Thu	09/11/23	0.496	0.233	0.729	2.31
17	NF-03-A-05	MIXED HOUSES	HOLT	NORFOLK	40	Thu	19/09/19	0.525	0.200	0.725	2.50
18	ES-03-A-11	MIXED HOUSES	RINGMER	EAST SUSSEX	105	Thu	28/09/23	0.419	0.267	0.686	2.62
19	SF-03-A-06	DETACHED & SEM	KENTFORD	SUFFOLK	38	Fri	22/09/17	0.500	0.184	0.684	0.92
20	ES-03-A-12	MIXED HOUSES &	HORAM	EAST SUSSEX	123	Tue	03/10/23	0.415	0.220	0.635	2.92
21	SC-03-A-09	MIXED HOUSES &	CRANLEIGH	SURREY	136	Tue	24/05/22	0.390	0.228	0.618	2.64
22	KC-03-A-08	MIXED HOUSES	CHARING	KENT	159	Tue	22/05/18	0.484	0.113	0.597	3.02
23	AS-03-A-02	MIXED HOUSES	STONEHAVEN	ABERDEENSHIRE	131	Wed	20/04/22	0.351	0.229	0.580	1.77
24	NF-03-A-46	MIXED HOUSES &	AYLSHAM	NORFOLK	300	Tue	14/09/21	0.313	0.263	0.576	2.41
25	ES-03-A-07	MIXED HOUSES &	HAILSHAM	EAST SUSSEX	91	Thu	07/11/19	0.352	0.121	0.473	2.70
26	AC-03-A-04	TOWN HOUSES	NORTHWICH	CHESHIRE WEST & CHE	24	Thu	06/06/19	0.083	0.125	0.208	1.96
27	WS-03-A-07	BUNGALOWS	NEAR HORSHAM	WEST SUSSEX	57	Thu	19/10/17	0.105	0.088	0.193	1.89
28	WS-03-A-16	DETACHED & SEM	BRACKLESHAM BAY	WEST SUSSEX	58	Wed	09/11/22	0.121	0.017	0.138	2.28

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	3 days
	HC HAMPSHIRE	2 days
	HF HERTFORDSHIRE	1 days
	KC KENT	3 days
	SC SURREY	1 days
	WS WEST SUSSEX	3 days
03	SOUTH WEST	
	DC DORSET	2 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	2 days
	NF NORFOLK	7 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LE LEICESTERSHIRE	1 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days
11	SCOTLAND	
	AS ABERDEENSHIRE	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: 24 to 480 (units:)
Range Selected by User: 0 to 800 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 14/05/24

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

Selected survey days:

Monday	1 days
Tuesday	8 days
Wednesday	4 days
Thursday	13 days
Friday	2 days

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

Selected survey types:

Manual count	28 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	14
Neighbourhood Centre (PPS6 Local Centre)	12

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	14
Village	12
No Sub Category	2

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	32 days - Selected
Servicing vehicles Excluded	83 days - Selected

Secondary Filtering selection:

Use Class:

C3 28 days

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	11 days
5,001 to 10,000	16 days

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

Population within 5 miles:

5,001 to 25,000	8 days
25,001 to 50,000	14 days
50,001 to 75,000	6 days

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

Car ownership within 5 miles:

1.1 to 1.5	21 days
1.6 to 2.0	7 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	22 days
No	6 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	28 days

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

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

1	AC-03-A-04	TOWN HOUSES		CHESHIRE WEST & CHESTER
	LONDON ROAD			
	NORTHWICH			
	LEFTWICH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	24		
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL	
2	AS-03-A-02	MIXED HOUSES		ABERDEENSHIRE
	FARROCHIE ROAD			
	STONEHAVEN			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	131		
	Survey date: WEDNESDAY	20/04/22	Survey Type: MANUAL	
3	CA-03-A-07	MIXED HOUSES		CAMBRIDGESHIRE
	FIELD END			
	NEAR ELY			
	WITCHFORD			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	32		
	Survey date: THURSDAY	27/05/21	Survey Type: MANUAL	
4	CA-03-A-08	DETACHED & SEMI-DETACHED		CAMBRIDGESHIRE
	GIDDING ROAD			
	SAWTRY			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	83		
	Survey date: THURSDAY	13/10/22	Survey Type: MANUAL	
5	DC-03-A-10	MIXED HOUSES		DORSET
	ADDISON CLOSE			
	GILLINGHAM			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	26		
	Survey date: WEDNESDAY	09/11/22	Survey Type: MANUAL	
6	DC-03-A-11	MIXED HOUSES		DORSET
	A350			
	SHAFTESBURY			
	Edge of Town			
	No Sub Category			
	Total No of Dwellings:	141		
	Survey date: TUESDAY	31/10/23	Survey Type: MANUAL	
7	ES-03-A-07	MIXED HOUSES & FLATS		EAST SUSSEX
	NEW ROAD			
	HAILSHAM			
	HELLINGLY			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	91		
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL	
8	ES-03-A-11	MIXED HOUSES		EAST SUSSEX
	BISHOPS LANE			
	RINGMER			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	105		
	Survey date: THURSDAY	28/09/23	Survey Type: MANUAL	

LIST OF SITES relevant to selection parameters (Cont.)

9	ES-03-A-12 HOREBEECH LANE HORAM	MIXED HOUSES & FLATS	EAST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	123	
	Survey date: TUESDAY	03/10/23	Survey Type: MANUAL
10	HC-03-A-23 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings:	62	
	Survey date: TUESDAY	19/11/19	Survey Type: MANUAL
11	HC-03-A-31 KILN ROAD LIPHOOK	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	44	
	Survey date: FRIDAY	07/10/22	Survey Type: MANUAL
12	HF-03-A-03 HARE STREET ROAD BUNTINGFORD	MIXED HOUSES	HERTFORDSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	160	
	Survey date: MONDAY	08/07/19	Survey Type: MANUAL
13	KC-03-A-07 RECULVER ROAD HERNE BAY	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	288	
	Survey date: WEDNESDAY	27/09/17	Survey Type: MANUAL
14	KC-03-A-08 MAIDSTONE ROAD CHARING	MIXED HOUSES	KENT
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	159	
	Survey date: TUESDAY	22/05/18	Survey Type: MANUAL
15	KC-03-A-10 HEADCORN ROAD STAPLEHURST	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	106	
	Survey date: TUESDAY	09/05/23	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

16	LE-03-A-02 MELBOURNE ROAD IBSTOCK	DETACHED & OTHERS		LEICESTERSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village			
	Total No of Dwellings:	85		
	Survey date: THURSDAY	28/06/18	Survey Type: MANUAL	
17	NF-03-A-05 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	40		
	Survey date: THURSDAY	19/09/19	Survey Type: MANUAL	
18	NF-03-A-27 YARMOUTH ROAD NEAR NORWICH BLOFIELD	MIXED HOUSES & FLATS		NORFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village			
	Total No of Dwellings:	93		
	Survey date: THURSDAY	16/09/21	Survey Type: MANUAL	
19	NF-03-A-30 BRANDON ROAD SWAFFHAM	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	266		
	Survey date: THURSDAY	23/09/21	Survey Type: MANUAL	
20	NF-03-A-33 LONDON ROAD ATTLEBOROUGH	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	143		
	Survey date: THURSDAY	29/09/22	Survey Type: MANUAL	
21	NF-03-A-36 LONDON ROAD WYMONDHAM	MIXED HOUSES		NORFOLK
	Edge of Town No Sub Category			
	Total No of Dwellings:	75		
	Survey date: THURSDAY	29/09/22	Survey Type: MANUAL	
22	NF-03-A-39 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	212		
	Survey date: TUESDAY	27/09/22	Survey Type: MANUAL	
23	NF-03-A-46 BURGH ROAD AYLSHAM	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	300		
	Survey date: TUESDAY	14/09/21	Survey Type: MANUAL	

LIST OF SITES relevant to selection parameters (Cont.)

24	SC-03-A-09 AMLETS LANE CRANLEIGH	MIXED HOUSES & FLATS	SURREY
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 136 Survey date: TUESDAY 24/05/22 Survey Type: MANUAL		
25	SF-03-A-06 BURY ROAD KENTFORD	DETACHED & SEMI-DETACHED	SUFFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 38 Survey date: FRIDAY 22/09/17 Survey Type: MANUAL		
26	WS-03-A-07 EMMS LANE NEAR HORSHAM BROOKS GREEN	BUNGALOWS	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 57 Survey date: THURSDAY 19/10/17 Survey Type: MANUAL		
27	WS-03-A-16 BRACKLESHAM LANE BRACKLESHAM BAY	DETACHED & SEMI-DETACHED	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 58 Survey date: WEDNESDAY 09/11/22 Survey Type: MANUAL		
28	WS-03-A-21 HILLAND ROAD BILLINGSHURST	MIXED HOUSES	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 480 Survey date: THURSDAY 09/11/23 Survey Type: MANUAL		

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

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE

Ranking Type: TOTALS

Time Range: 07:00-19:00

CALCULATION FACTOR 100m2 DWELLS

15th Percentile = No. 24 NF-03-A-39 Tot: 5.990

85th Percentile = No. 5 HF-03-A-03 Tot: 9.169

Median Values

Arrivals: 3.405

Departures: 3.571

Totals: 6.975

Mean Values

Arrivals: 3.623

Departures: 3.660

Totals: 7.282

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	HC-03-A-23	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	62	Tue	19/11/19	6.048	6.177	12.225	2.19
2	KC-03-A-07	MIXED HOUSES	HERNE BAY	KENT	288	Wed	27/09/17	5.854	5.437	11.291	3.09
3	CA-03-A-07	MIXED HOUSES	NEAR ELY	CAMBRIDGESHIRE	32	Thu	27/05/21	5.125	4.969	10.094	2.25
4	DC-03-A-10	MIXED HOUSES	GILLINGHAM	DORSET	26	Wed	09/11/22	4.885	4.923	9.808	2.12
5	HF-03-A-03	MIXED HOUSES	BUNTINGFORD	HERTFORDSHIRE	160	Mon	08/07/19	4.575	4.594	9.169	3.95
6	HC-03-A-31	MIXED HOUSES &	LIPHOOK	HAMPSHIRE	44	Fri	07/10/22	4.614	4.545	9.159	2.57
7	CA-03-A-08	DETACHED & SEM	SAWTRY	CAMBRIDGESHIRE	83	Thu	13/10/22	4.024	4.060	8.084	2.25
8	LE-03-A-02	DETACHED & OTH	IBSTOCK	LEICESTERSHIRE	85	Thu	28/06/18	3.835	3.765	7.600	4.27
9	NF-03-A-36	MIXED HOUSES	WYMONDHAM	NORFOLK	75	Thu	29/09/22	3.680	3.747	7.427	2.84
10	AS-03-A-02	MIXED HOUSES	STONEHAVEN	ABERDEENSHIRE	131	Wed	20/04/22	3.695	3.565	7.260	1.77
11	NF-03-A-33	MIXED HOUSES	ATTLEBOROUGH	NORFOLK	143	Thu	29/09/22	3.434	3.720	7.154	2.28
12	DC-03-A-11	MIXED HOUSES	SHAFTESBURY	DORSET	141	Tue	31/10/23	3.582	3.454	7.036	2.81
13	ES-03-A-11	MIXED HOUSES	RINGMER	EAST SUSSEX	105	Thu	28/09/23	3.476	3.543	7.019	2.62
14	KC-03-A-10	MIXED HOUSES	STAPLEHURST	KENT	106	Tue	09/05/23	3.434	3.566	7.000	2.43
15	NF-03-A-05	MIXED HOUSES	HOLT	NORFOLK	40	Thu	19/09/19	3.375	3.575	6.950	2.50
16	NF-03-A-27	MIXED HOUSES &	NEAR NORWICH	NORFOLK	93	Thu	16/09/21	3.409	3.516	6.925	2.67
17	SC-03-A-09	MIXED HOUSES &	CRANLEIGH	SURREY	136	Tue	24/05/22	3.316	3.485	6.801	2.64
18	ES-03-A-07	MIXED HOUSES &	HAILSHAM	EAST SUSSEX	91	Thu	07/11/19	3.429	3.341	6.770	2.70
19	NF-03-A-46	MIXED HOUSES &	AYLSHAM	NORFOLK	300	Tue	14/09/21	3.277	3.340	6.617	2.41
20	WS-03-A-21	MIXED HOUSES	BILLINGSHURST	WEST SUSSEX	480	Thu	09/11/23	3.269	3.281	6.550	2.31
21	ES-03-A-12	MIXED HOUSES &	HORAM	EAST SUSSEX	123	Tue	03/10/23	3.220	3.268	6.488	2.92
22	NF-03-A-30	MIXED HOUSES	SWAFFHAM	NORFOLK	266	Thu	23/09/21	3.241	3.218	6.459	2.84
23	SF-03-A-06	DETACHED & SEM	KENTFORD	SUFFOLK	38	Fri	22/09/17	2.658	3.368	6.026	0.92
24	NF-03-A-39	MIXED HOUSES	HOLT	NORFOLK	212	Tue	27/09/22	2.995	2.995	5.990	2.31
25	KC-03-A-08	MIXED HOUSES	CHARING	KENT	159	Tue	22/05/18	2.774	2.899	5.673	3.02
26	AC-03-A-04	TOWN HOUSES	NORTHWICH	CHESHIRE WEST & CHE	24	Thu	06/06/19	2.583	2.458	5.041	1.96
27	WS-03-A-07	BUNGALOWS	NEAR HORSHAM	WEST SUSSEX	57	Thu	19/10/17	2.158	2.246	4.404	1.89
28	WS-03-A-16	DETACHED & SEM	BRACKLESHAM BAY	WEST SUSSEX	58	Wed	09/11/22	1.466	1.414	2.880	2.28

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL PEDESTRIANS

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	3 days
	HC HAMPSHIRE	2 days
	HF HERTFORDSHIRE	1 days
	KC KENT	3 days
	SC SURREY	1 days
	WS WEST SUSSEX	3 days
03	SOUTH WEST	
	DC DORSET	2 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	2 days
	NF NORFOLK	7 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LE LEICESTERSHIRE	1 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days
11	SCOTLAND	
	AS ABERDEENSHIRE	1 days

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

Lime Transport Limited Stanwell Road Penarth

Licence No: 258601

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: 24 to 480 (units:)
Range Selected by User: 0 to 800 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 14/05/24

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

Selected survey days:

Monday	1 days
Tuesday	8 days
Wednesday	4 days
Thursday	13 days
Friday	2 days

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

Selected survey types:

Manual count	28 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	14
Neighbourhood Centre (PPS6 Local Centre)	12

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	14
Village	12
No Sub Category	2

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	32 days - Selected
Servicing vehicles Excluded	83 days - Selected

Secondary Filtering selection:**Use Class:**

C3 28 days

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	11 days
5,001 to 10,000	16 days

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

Population within 5 miles:

5,001 to 25,000	8 days
25,001 to 50,000	14 days
50,001 to 75,000	6 days

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

Car ownership within 5 miles:

1.1 to 1.5	21 days
1.6 to 2.0	7 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	22 days
No	6 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	28 days

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

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

1	AC-03-A-04	TOWN HOUSES		CHESHIRE WEST & CHESTER
	LONDON ROAD			
	NORTHWICH			
	LEFTWICH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	24		
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL	
2	AS-03-A-02	MIXED HOUSES		ABERDEENSHIRE
	FARROCHIE ROAD			
	STONEHAVEN			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	131		
	Survey date: WEDNESDAY	20/04/22	Survey Type: MANUAL	
3	CA-03-A-07	MIXED HOUSES		CAMBRIDGESHIRE
	FIELD END			
	NEAR ELY			
	WITCHFORD			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	32		
	Survey date: THURSDAY	27/05/21	Survey Type: MANUAL	
4	CA-03-A-08	DETACHED & SEMI-DETACHED		CAMBRIDGESHIRE
	GIDDING ROAD			
	SAWTRY			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	83		
	Survey date: THURSDAY	13/10/22	Survey Type: MANUAL	
5	DC-03-A-10	MIXED HOUSES		DORSET
	ADDISON CLOSE			
	GILLINGHAM			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	26		
	Survey date: WEDNESDAY	09/11/22	Survey Type: MANUAL	
6	DC-03-A-11	MIXED HOUSES		DORSET
	A350			
	SHAFTESBURY			
	Edge of Town			
	No Sub Category			
	Total No of Dwellings:	141		
	Survey date: TUESDAY	31/10/23	Survey Type: MANUAL	
7	ES-03-A-07	MIXED HOUSES & FLATS		EAST SUSSEX
	NEW ROAD			
	HAILSHAM			
	HELLINGLY			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	91		
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL	
8	ES-03-A-11	MIXED HOUSES		EAST SUSSEX
	BISHOPS LANE			
	RINGMER			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	105		
	Survey date: THURSDAY	28/09/23	Survey Type: MANUAL	

LIST OF SITES relevant to selection parameters (Cont.)

9	ES-03-A-12 HOREBEECH LANE HORAM	MIXED HOUSES & FLATS	EAST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 123 Survey date: TUESDAY 03/10/23		Survey Type: MANUAL
10	HC-03-A-23 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 62 Survey date: TUESDAY 19/11/19		Survey Type: MANUAL
11	HC-03-A-31 KILN ROAD LIPHOOK	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 44 Survey date: FRIDAY 07/10/22		Survey Type: MANUAL
12	HF-03-A-03 HARE STREET ROAD BUNTINGFORD	MIXED HOUSES	HERTFORDSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 160 Survey date: MONDAY 08/07/19		Survey Type: MANUAL
13	KC-03-A-07 RECULVER ROAD HERNE BAY	MIXED HOUSES	KENT
	Edge of Town Residential Zone Total No of Dwellings: 288 Survey date: WEDNESDAY 27/09/17		Survey Type: MANUAL
14	KC-03-A-08 MAIDSTONE ROAD CHARING	MIXED HOUSES	KENT
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 159 Survey date: TUESDAY 22/05/18		Survey Type: MANUAL
15	KC-03-A-10 HEADCORN ROAD STAPLEHURST	MIXED HOUSES	KENT
	Edge of Town Residential Zone Total No of Dwellings: 106 Survey date: TUESDAY 09/05/23		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

16	LE-03-A-02 MELBOURNE ROAD IBSTOCK	DETACHED & OTHERS		LEICESTERSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 85 Survey date: THURSDAY 28/06/18 Survey Type: MANUAL			
17	NF-03-A-05 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 40 Survey date: THURSDAY 19/09/19 Survey Type: MANUAL			
18	NF-03-A-27 YARMOUTH ROAD NEAR NORWICH BLOFIELD	MIXED HOUSES & FLATS		NORFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 93 Survey date: THURSDAY 16/09/21 Survey Type: MANUAL			
19	NF-03-A-30 BRANDON ROAD SWAFFHAM	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 266 Survey date: THURSDAY 23/09/21 Survey Type: MANUAL			
20	NF-03-A-33 LONDON ROAD ATTLEBOROUGH	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 143 Survey date: THURSDAY 29/09/22 Survey Type: MANUAL			
21	NF-03-A-36 LONDON ROAD WYMONDHAM	MIXED HOUSES		NORFOLK
	Edge of Town No Sub Category Total No of Dwellings: 75 Survey date: THURSDAY 29/09/22 Survey Type: MANUAL			
22	NF-03-A-39 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 212 Survey date: TUESDAY 27/09/22 Survey Type: MANUAL			
23	NF-03-A-46 BURGH ROAD AYLSHAM	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 300 Survey date: TUESDAY 14/09/21 Survey Type: MANUAL			

LIST OF SITES relevant to selection parameters (Cont.)

24	SC-03-A-09 AMLETS LANE CRANLEIGH	MIXED HOUSES & FLATS	SURREY
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 136 Survey date: TUESDAY 24/05/22 Survey Type: MANUAL		
25	SF-03-A-06 BURY ROAD KENTFORD	DETACHED & SEMI-DETACHED	SUFFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 38 Survey date: FRIDAY 22/09/17 Survey Type: MANUAL		
26	WS-03-A-07 EMMS LANE NEAR HORSHAM BROOKS GREEN	BUNGALOWS	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 57 Survey date: THURSDAY 19/10/17 Survey Type: MANUAL		
27	WS-03-A-16 BRACKLESHAM LANE BRACKLESHAM BAY	DETACHED & SEMI-DETACHED	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 58 Survey date: WEDNESDAY 09/11/22 Survey Type: MANUAL		
28	WS-03-A-21 HILLAND ROAD BILLINGSHURST	MIXED HOUSES	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 480 Survey date: THURSDAY 09/11/23 Survey Type: MANUAL		

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

Lime Transport Limited Stanwell Road Penarth

Licence No: 258601

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PEDESTRIANS

Ranking Type: TOTALS Time Range: 08:00-09:00

CALCULATION FACTOR 100m2 DWELLS

15th Percentile = No. 24 SF-03-A-06 Tot: 0.052

85th Percentile = No. 5 HC-03-A-31 Tot: 0.318

Median Values

Arrivals: 0.027

Departures: 0.119

Totals: 0.146

Mean Values

Arrivals: 0.048

Departures: 0.125

Totals: 0.173

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	AC-03-A-04	TOWN HOUSES	NORTHWICH	CHESHIRE WEST & CHE	24	Thu	06/06/19	0.167	0.375	0.542	1.96
2	DC-03-A-10	MIXED HOUSES	GILLINGHAM	DORSET	26	Wed	09/11/22	0.154	0.385	0.539	2.12
3	HC-03-A-23	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	62	Tue	19/11/19	0.129	0.274	0.403	2.19
4	CA-03-A-07	MIXED HOUSES	NEAR ELY	CAMBRIDGESHIRE	32	Thu	27/05/21	0.094	0.281	0.375	2.25
5	HC-03-A-31	MIXED HOUSES &	LIPHOOK	HAMPSHIRE	44	Fri	07/10/22	0.068	0.250	0.318	2.57
6	KC-03-A-10	MIXED HOUSES	STAPLEHURST	KENT	106	Tue	09/05/23	0.094	0.132	0.226	2.43
7	NF-03-A-30	MIXED HOUSES	SWAFFHAM	NORFOLK	266	Thu	23/09/21	0.045	0.173	0.218	2.84
8	CA-03-A-08	DETACHED & SEM	SAWTRY	CAMBRIDGESHIRE	83	Thu	13/10/22	0.012	0.181	0.193	2.25
9	DC-03-A-11	MIXED HOUSES	SHAFTESBURY	DORSET	141	Tue	31/10/23	0.050	0.135	0.185	2.81
10	NF-03-A-33	MIXED HOUSES	ATTLEBOROUGH	NORFOLK	143	Thu	29/09/22	0.035	0.147	0.182	2.28
11	ES-03-A-11	MIXED HOUSES	RINGMER	EAST SUSSEX	105	Thu	28/09/23	0.010	0.162	0.172	2.62
12	AS-03-A-02	MIXED HOUSES	STONEHAVEN	ABERDEENSHIRE	131	Wed	20/04/22	0.046	0.122	0.168	1.77
13	SC-03-A-09	MIXED HOUSES &	CRANLEIGH	SURREY	136	Tue	24/05/22	0.037	0.118	0.155	2.64
14	ES-03-A-12	MIXED HOUSES &	HORAM	EAST SUSSEX	123	Tue	03/10/23	0.033	0.122	0.155	2.92
15	NF-03-A-46	MIXED HOUSES &	AYLSHAM	NORFOLK	300	Tue	14/09/21	0.020	0.117	0.137	2.41
16	WS-03-A-21	MIXED HOUSES	BILLINGSHURST	WEST SUSSEX	480	Thu	09/11/23	0.037	0.096	0.133	2.31
17	NF-03-A-27	MIXED HOUSES &	NEAR NORWICH	NORFOLK	93	Thu	16/09/21	0.043	0.086	0.129	2.67
18	NF-03-A-36	MIXED HOUSES	WYMONDHAM	NORFOLK	75	Thu	29/09/22	0.027	0.093	0.120	2.84
19	HF-03-A-03	MIXED HOUSES	BUNTINGFORD	HERTFORDSHIRE	160	Mon	08/07/19	0.075	0.019	0.094	3.95
20	ES-03-A-07	MIXED HOUSES &	HAILSHAM	EAST SUSSEX	91	Thu	07/11/19	0.011	0.077	0.088	2.70
21	NF-03-A-39	MIXED HOUSES	HOLT	NORFOLK	212	Tue	27/09/22	0.042	0.038	0.080	2.31
22	LE-03-A-02	DETACHED & OTH	IBSTOCK	LEICESTERSHIRE	85	Thu	28/06/18	0.024	0.035	0.059	4.27
23	KC-03-A-07	MIXED HOUSES	HERNE BAY	KENT	288	Wed	27/09/17	0.028	0.028	0.056	3.09
24	SF-03-A-06	DETACHED & SEM	KENTFORD	SUFFOLK	38	Fri	22/09/17	0.026	0.026	0.052	0.92
25	WS-03-A-16	DETACHED & SEM	BRACKLESHAM BAY	WEST SUSSEX	58	Wed	09/11/22	0.017	0.017	0.034	2.28
26	WS-03-A-07	BUNGALOWS	NEAR HORSHAM	WEST SUSSEX	57	Thu	19/10/17	0.018	0.000	0.018	1.89
27	KC-03-A-08	MIXED HOUSES	CHARING	KENT	159	Tue	22/05/18	0.006	0.006	0.012	3.02
28	NF-03-A-05	MIXED HOUSES	HOLT	NORFOLK	40	Thu	19/09/19	0.000	0.000	0.000	2.50

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL PEDESTRIANS

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	3 days
	HC HAMPSHIRE	2 days
	HF HERTFORDSHIRE	1 days
	KC KENT	3 days
	SC SURREY	1 days
	WS WEST SUSSEX	3 days
03	SOUTH WEST	
	DC DORSET	2 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	2 days
	NF NORFOLK	7 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LE LEICESTERSHIRE	1 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days
11	SCOTLAND	
	AS ABERDEENSHIRE	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: 24 to 480 (units:)
Range Selected by User: 0 to 800 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 14/05/24

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

Selected survey days:

Monday	1 days
Tuesday	8 days
Wednesday	4 days
Thursday	13 days
Friday	2 days

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

Selected survey types:

Manual count	28 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	14
Neighbourhood Centre (PPS6 Local Centre)	12

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	14
Village	12
No Sub Category	2

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	32 days - Selected
Servicing vehicles Excluded	83 days - Selected

Secondary Filtering selection:

Use Class:

C3 28 days

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	11 days
5,001 to 10,000	16 days

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

Population within 5 miles:

5,001 to 25,000	8 days
25,001 to 50,000	14 days
50,001 to 75,000	6 days

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

Car ownership within 5 miles:

1.1 to 1.5	21 days
1.6 to 2.0	7 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	22 days
No	6 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	28 days

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

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

1	AC-03-A-04	TOWN HOUSES		CHESHIRE WEST & CHESTER
	LONDON ROAD			
	NORTHWICH			
	LEFTWICH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	24		
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL	
2	AS-03-A-02	MIXED HOUSES		ABERDEENSHIRE
	FARROCHIE ROAD			
	STONEHAVEN			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	131		
	Survey date: WEDNESDAY	20/04/22	Survey Type: MANUAL	
3	CA-03-A-07	MIXED HOUSES		CAMBRIDGESHIRE
	FIELD END			
	NEAR ELY			
	WITCHFORD			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	32		
	Survey date: THURSDAY	27/05/21	Survey Type: MANUAL	
4	CA-03-A-08	DETACHED & SEMI-DETACHED		CAMBRIDGESHIRE
	GIDDING ROAD			
	SAWTRY			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	83		
	Survey date: THURSDAY	13/10/22	Survey Type: MANUAL	
5	DC-03-A-10	MIXED HOUSES		DORSET
	ADDISON CLOSE			
	GILLINGHAM			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	26		
	Survey date: WEDNESDAY	09/11/22	Survey Type: MANUAL	
6	DC-03-A-11	MIXED HOUSES		DORSET
	A350			
	SHAFTESBURY			
	Edge of Town			
	No Sub Category			
	Total No of Dwellings:	141		
	Survey date: TUESDAY	31/10/23	Survey Type: MANUAL	
7	ES-03-A-07	MIXED HOUSES & FLATS		EAST SUSSEX
	NEW ROAD			
	HAILSHAM			
	HELLINGLY			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	91		
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL	
8	ES-03-A-11	MIXED HOUSES		EAST SUSSEX
	BISHOPS LANE			
	RINGMER			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	105		
	Survey date: THURSDAY	28/09/23	Survey Type: MANUAL	

LIST OF SITES relevant to selection parameters (Cont.)

9	ES-03-A-12 HOREBEECH LANE HORAM	MIXED HOUSES & FLATS	EAST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	123	
	Survey date: TUESDAY	03/10/23	Survey Type: MANUAL
10	HC-03-A-23 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings:	62	
	Survey date: TUESDAY	19/11/19	Survey Type: MANUAL
11	HC-03-A-31 KILN ROAD LIPHOOK	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	44	
	Survey date: FRIDAY	07/10/22	Survey Type: MANUAL
12	HF-03-A-03 HARE STREET ROAD BUNTINGFORD	MIXED HOUSES	HERTFORDSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	160	
	Survey date: MONDAY	08/07/19	Survey Type: MANUAL
13	KC-03-A-07 RECULVER ROAD HERNE BAY	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	288	
	Survey date: WEDNESDAY	27/09/17	Survey Type: MANUAL
14	KC-03-A-08 MAIDSTONE ROAD CHARING	MIXED HOUSES	KENT
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	159	
	Survey date: TUESDAY	22/05/18	Survey Type: MANUAL
15	KC-03-A-10 HEADCORN ROAD STAPLEHURST	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	106	
	Survey date: TUESDAY	09/05/23	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

16	LE-03-A-02 MELBOURNE ROAD IBSTOCK	DETACHED & OTHERS		LEICESTERSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village			
	Total No of Dwellings:	85		
	Survey date: THURSDAY	28/06/18	Survey Type: MANUAL	
17	NF-03-A-05 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	40		
	Survey date: THURSDAY	19/09/19	Survey Type: MANUAL	
18	NF-03-A-27 YARMOUTH ROAD NEAR NORWICH BLOFIELD	MIXED HOUSES & FLATS		NORFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village			
	Total No of Dwellings:	93		
	Survey date: THURSDAY	16/09/21	Survey Type: MANUAL	
19	NF-03-A-30 BRANDON ROAD SWAFFHAM	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	266		
	Survey date: THURSDAY	23/09/21	Survey Type: MANUAL	
20	NF-03-A-33 LONDON ROAD ATTLEBOROUGH	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	143		
	Survey date: THURSDAY	29/09/22	Survey Type: MANUAL	
21	NF-03-A-36 LONDON ROAD WYMONDHAM	MIXED HOUSES		NORFOLK
	Edge of Town No Sub Category			
	Total No of Dwellings:	75		
	Survey date: THURSDAY	29/09/22	Survey Type: MANUAL	
22	NF-03-A-39 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	212		
	Survey date: TUESDAY	27/09/22	Survey Type: MANUAL	
23	NF-03-A-46 BURGH ROAD AYLSHAM	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone			
	Total No of Dwellings:	300		
	Survey date: TUESDAY	14/09/21	Survey Type: MANUAL	

LIST OF SITES relevant to selection parameters (Cont.)

24	SC-03-A-09 AMLETS LANE CRANLEIGH	MIXED HOUSES & FLATS	SURREY
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 136 Survey date: TUESDAY 24/05/22 Survey Type: MANUAL		
25	SF-03-A-06 BURY ROAD KENTFORD	DETACHED & SEMI-DETACHED	SUFFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 38 Survey date: FRIDAY 22/09/17 Survey Type: MANUAL		
26	WS-03-A-07 EMMS LANE NEAR HORSHAM BROOKS GREEN	BUNGALOWS	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 57 Survey date: THURSDAY 19/10/17 Survey Type: MANUAL		
27	WS-03-A-16 BRACKLESHAM LANE BRACKLESHAM BAY	DETACHED & SEMI-DETACHED	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 58 Survey date: WEDNESDAY 09/11/22 Survey Type: MANUAL		
28	WS-03-A-21 HILLAND ROAD BILLINGSHURST	MIXED HOUSES	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 480 Survey date: THURSDAY 09/11/23 Survey Type: MANUAL		

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

Lime Transport Limited Stanwell Road Penarth

Licence No: 258601

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PEDESTRIANS

Ranking Type: TOTALS Time Range: 17:00-18:00 CALCULATION FACTOR 100m2 DWELLS
15th Percentile = No. 24 WS-03-A-16 Tot: 0.017
85th Percentile = No. 5 DC-03-A-11 Tot: 0.248

Median Values

Arrivals: 0.045
Departures: 0.037
Totals: 0.083

Mean Values

Arrivals: 0.058
Departures: 0.055
Totals: 0.113

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	CA-03-A-07	MIXED HOUSES	NEAR ELY	CAMBRIDGESHIRE	32	Thu	27/05/21	0.188	0.250	0.438	2.25
2	CA-03-A-08	DETACHED & SEM	SAWTRY	CAMBRIDGESHIRE	83	Thu	13/10/22	0.145	0.145	0.290	2.25
3	HC-03-A-31	MIXED HOUSES &	LIPHOOK	HAMPSHIRE	44	Fri	07/10/22	0.136	0.136	0.272	2.57
4	NF-03-A-30	MIXED HOUSES	SWAFFHAM	NORFOLK	266	Thu	23/09/21	0.143	0.105	0.248	2.84
5	DC-03-A-11	MIXED HOUSES	SHAFESBURY	DORSET	141	Tue	31/10/23	0.106	0.142	0.248	2.81
6	AC-03-A-04	TOWN HOUSES	NORTHWICH	CHESHIRE WEST & CHE	24	Thu	06/06/19	0.083	0.083	0.166	1.96
7	KC-03-A-10	MIXED HOUSES	STAPLEHURST	KENT	106	Tue	09/05/23	0.094	0.057	0.151	2.43
8	ES-03-A-12	MIXED HOUSES &	HORAM	EAST SUSSEX	123	Tue	03/10/23	0.081	0.065	0.146	2.92
9	ES-03-A-11	MIXED HOUSES	RINGMER	EAST SUSSEX	105	Thu	28/09/23	0.086	0.057	0.143	2.62
10	LE-03-A-02	DETACHED & OTH	IBSTOCK	LEICESTERSHIRE	85	Thu	28/06/18	0.071	0.047	0.118	4.27
11	DC-03-A-10	MIXED HOUSES	GILLINGHAM	DORSET	26	Wed	09/11/22	0.077	0.038	0.115	2.12
12	NF-03-A-39	MIXED HOUSES	HOLT	NORFOLK	212	Tue	27/09/22	0.042	0.061	0.103	2.31
13	SC-03-A-09	MIXED HOUSES &	CRANLEIGH	SURREY	136	Tue	24/05/22	0.044	0.044	0.088	2.64
14	NF-03-A-27	MIXED HOUSES &	NEAR NORWICH	NORFOLK	93	Thu	16/09/21	0.043	0.043	0.086	2.67
15	HC-03-A-23	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	62	Tue	19/11/19	0.048	0.032	0.080	2.19
16	SF-03-A-06	DETACHED & SEM	KENTFORD	SUFFOLK	38	Fri	22/09/17	0.053	0.026	0.079	0.92
17	NF-03-A-33	MIXED HOUSES	ATTLEBOROUGH	NORFOLK	143	Thu	29/09/22	0.028	0.042	0.070	2.28
18	AS-03-A-02	MIXED HOUSES	STONEHAVEN	ABERDEENSHIRE	131	Wed	20/04/22	0.031	0.038	0.069	1.77
19	WS-03-A-21	MIXED HOUSES	BILLINGSHURST	WEST SUSSEX	480	Thu	09/11/23	0.027	0.037	0.064	2.31
20	NF-03-A-36	MIXED HOUSES	WYMONDHAM	NORFOLK	75	Thu	29/09/22	0.013	0.040	0.053	2.84
21	NF-03-A-46	MIXED HOUSES &	AYLSHAM	NORFOLK	300	Tue	14/09/21	0.027	0.020	0.047	2.41
22	KC-03-A-07	MIXED HOUSES	HERNE BAY	KENT	288	Wed	27/09/17	0.035	0.007	0.042	3.09
23	HF-03-A-03	MIXED HOUSES	BUNTINGFORD	HERTFORDSHIRE	160	Mon	08/07/19	0.013	0.019	0.032	3.95
24	WS-03-A-16	DETACHED & SEM	BRACKLESHAM BAY	WEST SUSSEX	58	Wed	09/11/22	0.017	0.000	0.017	2.28
25	KC-03-A-08	MIXED HOUSES	CHARING	KENT	159	Tue	22/05/18	0.006	0.000	0.006	3.02
26	WS-03-A-07	BUNGALOWS	NEAR HORSHAM	WEST SUSSEX	57	Thu	19/10/17	0.000	0.000	0.000	1.89
27	NF-03-A-05	MIXED HOUSES	HOLT	NORFOLK	40	Thu	19/09/19	0.000	0.000	0.000	2.50
28	ES-03-A-07	MIXED HOUSES &	HAILSHAM	EAST SUSSEX	91	Thu	07/11/19	0.000	0.000	0.000	2.70

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL PEDESTRIANS

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	3 days
	HC HAMPSHIRE	2 days
	HF HERTFORDSHIRE	1 days
	KC KENT	3 days
	SC SURREY	1 days
	WS WEST SUSSEX	3 days
03	SOUTH WEST	
	DC DORSET	2 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	2 days
	NF NORFOLK	7 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LE LEICESTERSHIRE	1 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days
11	SCOTLAND	
	AS ABERDEENSHIRE	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: 24 to 480 (units:)
Range Selected by User: 0 to 800 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 14/05/24

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

Selected survey days:

Monday	1 days
Tuesday	8 days
Wednesday	4 days
Thursday	13 days
Friday	2 days

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

Selected survey types:

Manual count	28 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	14
Neighbourhood Centre (PPS6 Local Centre)	12

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	14
Village	12
No Sub Category	2

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	32 days - Selected
Servicing vehicles Excluded	83 days - Selected

Secondary Filtering selection:

Use Class:

C3 28 days

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	11 days
5,001 to 10,000	16 days

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

Population within 5 miles:

5,001 to 25,000	8 days
25,001 to 50,000	14 days
50,001 to 75,000	6 days

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

Car ownership within 5 miles:

1.1 to 1.5	21 days
1.6 to 2.0	7 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	22 days
No	6 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	28 days

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

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

1	AC-03-A-04	TOWN HOUSES		CHESHIRE WEST & CHESTER
	LONDON ROAD			
	NORTHWICH			
	LEFTWICH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	24		
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL	
2	AS-03-A-02	MIXED HOUSES		ABERDEENSHIRE
	FARROCHIE ROAD			
	STONEHAVEN			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	131		
	Survey date: WEDNESDAY	20/04/22	Survey Type: MANUAL	
3	CA-03-A-07	MIXED HOUSES		CAMBRIDGESHIRE
	FIELD END			
	NEAR ELY			
	WITCHFORD			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	32		
	Survey date: THURSDAY	27/05/21	Survey Type: MANUAL	
4	CA-03-A-08	DETACHED & SEMI-DETACHED		CAMBRIDGESHIRE
	GIDDING ROAD			
	SAWTRY			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	83		
	Survey date: THURSDAY	13/10/22	Survey Type: MANUAL	
5	DC-03-A-10	MIXED HOUSES		DORSET
	ADDISON CLOSE			
	GILLINGHAM			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	26		
	Survey date: WEDNESDAY	09/11/22	Survey Type: MANUAL	
6	DC-03-A-11	MIXED HOUSES		DORSET
	A350			
	SHAFTESBURY			
	Edge of Town			
	No Sub Category			
	Total No of Dwellings:	141		
	Survey date: TUESDAY	31/10/23	Survey Type: MANUAL	
7	ES-03-A-07	MIXED HOUSES & FLATS		EAST SUSSEX
	NEW ROAD			
	HAILSHAM			
	HELLINGLY			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	91		
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL	
8	ES-03-A-11	MIXED HOUSES		EAST SUSSEX
	BISHOPS LANE			
	RINGMER			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	105		
	Survey date: THURSDAY	28/09/23	Survey Type: MANUAL	

LIST OF SITES relevant to selection parameters (Cont.)

9	ES-03-A-12 HOREBEECH LANE HORAM	MIXED HOUSES & FLATS	EAST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	123	
	Survey date: TUESDAY	03/10/23	Survey Type: MANUAL
10	HC-03-A-23 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings:	62	
	Survey date: TUESDAY	19/11/19	Survey Type: MANUAL
11	HC-03-A-31 KILN ROAD LIPHOOK	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	44	
	Survey date: FRIDAY	07/10/22	Survey Type: MANUAL
12	HF-03-A-03 HARE STREET ROAD BUNTINGFORD	MIXED HOUSES	HERTFORDSHIRE
	Edge of Town Residential Zone		
	Total No of Dwellings:	160	
	Survey date: MONDAY	08/07/19	Survey Type: MANUAL
13	KC-03-A-07 RECULVER ROAD HERNE BAY	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	288	
	Survey date: WEDNESDAY	27/09/17	Survey Type: MANUAL
14	KC-03-A-08 MAIDSTONE ROAD CHARING	MIXED HOUSES	KENT
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	159	
	Survey date: TUESDAY	22/05/18	Survey Type: MANUAL
15	KC-03-A-10 HEADCORN ROAD STAPLEHURST	MIXED HOUSES	KENT
	Edge of Town Residential Zone		
	Total No of Dwellings:	106	
	Survey date: TUESDAY	09/05/23	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

16	LE-03-A-02 MELBOURNE ROAD IBSTOCK	DETACHED & OTHERS		LEICESTERSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 85 Survey date: THURSDAY 28/06/18 Survey Type: MANUAL			
17	NF-03-A-05 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 40 Survey date: THURSDAY 19/09/19 Survey Type: MANUAL			
18	NF-03-A-27 YARMOUTH ROAD NEAR NORWICH BLOFIELD	MIXED HOUSES & FLATS		NORFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 93 Survey date: THURSDAY 16/09/21 Survey Type: MANUAL			
19	NF-03-A-30 BRANDON ROAD SWAFFHAM	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 266 Survey date: THURSDAY 23/09/21 Survey Type: MANUAL			
20	NF-03-A-33 LONDON ROAD ATTLEBOROUGH	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 143 Survey date: THURSDAY 29/09/22 Survey Type: MANUAL			
21	NF-03-A-36 LONDON ROAD WYMONDHAM	MIXED HOUSES		NORFOLK
	Edge of Town No Sub Category Total No of Dwellings: 75 Survey date: THURSDAY 29/09/22 Survey Type: MANUAL			
22	NF-03-A-39 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 212 Survey date: TUESDAY 27/09/22 Survey Type: MANUAL			
23	NF-03-A-46 BURGH ROAD AYLSHAM	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 300 Survey date: TUESDAY 14/09/21 Survey Type: MANUAL			

LIST OF SITES relevant to selection parameters (Cont.)

24	SC-03-A-09 AMLETS LANE CRANLEIGH	MIXED HOUSES & FLATS	SURREY
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 136 Survey date: TUESDAY 24/05/22 Survey Type: MANUAL		
25	SF-03-A-06 BURY ROAD KENTFORD	DETACHED & SEMI-DETACHED	SUFFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 38 Survey date: FRIDAY 22/09/17 Survey Type: MANUAL		
26	WS-03-A-07 EMMS LANE NEAR HORSHAM BROOKS GREEN	BUNGALOWS	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 57 Survey date: THURSDAY 19/10/17 Survey Type: MANUAL		
27	WS-03-A-16 BRACKLESHAM LANE BRACKLESHAM BAY	DETACHED & SEMI-DETACHED	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 58 Survey date: WEDNESDAY 09/11/22 Survey Type: MANUAL		
28	WS-03-A-21 HILLAND ROAD BILLINGSHURST	MIXED HOUSES	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 480 Survey date: THURSDAY 09/11/23 Survey Type: MANUAL		

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

Lime Transport Limited Stanwell Road Penarth

Licence No: 258601

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PEDESTRIANS

Ranking Type: TOTALS Time Range: 07:00-19:00

CALCULATION FACTOR 100m2 DWELLS

15th Percentile = No. 24 WS-03-A-16 Tot: 0.518

85th Percentile = No. 5 ES-03-A-11 Tot: 1.942

Median Values

Arrivals: 0.540

Departures: 0.559

Totals: 1.099

Mean Values

Arrivals: 0.592

Departures: 0.599

Totals: 1.191

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	CA-03-A-07	MIXED HOUSES	NEAR ELY	CAMBRIDGESHIRE	32	Thu	27/05/21	1.375	1.375	2.750	2.25
2	HC-03-A-23	HOUSES & FLATS	LIPHOOK	HAMPSHIRE	62	Tue	19/11/19	1.290	1.274	2.564	2.19
3	HC-03-A-31	MIXED HOUSES &	LIPHOOK	HAMPSHIRE	44	Fri	07/10/22	1.023	1.068	2.091	2.57
4	DC-03-A-10	MIXED HOUSES	GILLINGHAM	DORSET	26	Wed	09/11/22	1.000	1.077	2.077	2.12
5	ES-03-A-11	MIXED HOUSES	RINGMER	EAST SUSSEX	105	Thu	28/09/23	0.952	0.990	1.942	2.62
6	CA-03-A-08	DETACHED & SEM	SAWTRY	CAMBRIDGESHIRE	83	Thu	13/10/22	0.880	0.928	1.808	2.25
7	AC-03-A-04	TOWN HOUSES	NORTHWICH	CHESHIRE WEST & CHE	24	Thu	06/06/19	0.958	0.667	1.625	1.96
8	NF-03-A-30	MIXED HOUSES	SWAFFHAM	NORFOLK	266	Thu	23/09/21	0.774	0.808	1.582	2.84
9	AS-03-A-02	MIXED HOUSES	STONEHAVEN	ABERDEENSHIRE	131	Wed	20/04/22	0.733	0.649	1.382	1.77
10	KC-03-A-10	MIXED HOUSES	STAPLEHURST	KENT	106	Tue	09/05/23	0.642	0.698	1.340	2.43
11	ES-03-A-12	MIXED HOUSES &	HORAM	EAST SUSSEX	123	Tue	03/10/23	0.659	0.618	1.277	2.92
12	SC-03-A-09	MIXED HOUSES &	CRANLEIGH	SURREY	136	Tue	24/05/22	0.574	0.647	1.221	2.64
13	DC-03-A-11	MIXED HOUSES	SHAFTESBURY	DORSET	141	Tue	31/10/23	0.574	0.560	1.134	2.81
14	NF-03-A-33	MIXED HOUSES	ATTLEBOROUGH	NORFOLK	143	Thu	29/09/22	0.552	0.559	1.111	2.28
15	NF-03-A-27	MIXED HOUSES &	NEAR NORWICH	NORFOLK	93	Thu	16/09/21	0.527	0.559	1.086	2.67
16	NF-03-A-39	MIXED HOUSES	HOLT	NORFOLK	212	Tue	27/09/22	0.524	0.528	1.052	2.31
17	WS-03-A-21	MIXED HOUSES	BILLINGSHURST	WEST SUSSEX	480	Thu	09/11/23	0.510	0.519	1.029	2.31
18	HF-03-A-03	MIXED HOUSES	BUNTINGFORD	HERTFORDSHIRE	160	Mon	08/07/19	0.469	0.475	0.944	3.95
19	NF-03-A-46	MIXED HOUSES &	AYLSHAM	NORFOLK	300	Tue	14/09/21	0.413	0.480	0.893	2.41
20	NF-03-A-36	MIXED HOUSES	WYMONDHAM	NORFOLK	75	Thu	29/09/22	0.347	0.413	0.760	2.84
21	SF-03-A-06	DETACHED & SEM	KENTFORD	SUFFOLK	38	Fri	22/09/17	0.342	0.395	0.737	0.92
22	LE-03-A-02	DETACHED & OTH	IBSTOCK	LEICESTERSHIRE	85	Thu	28/06/18	0.341	0.341	0.682	4.27
23	ES-03-A-07	MIXED HOUSES &	HAILSHAM	EAST SUSSEX	91	Thu	07/11/19	0.264	0.264	0.528	2.70
24	WS-03-A-16	DETACHED & SEM	BRACKLESHAM BAY	WEST SUSSEX	58	Wed	09/11/22	0.259	0.259	0.518	2.28
25	KC-03-A-07	MIXED HOUSES	HERNE BAY	KENT	288	Wed	27/09/17	0.191	0.226	0.417	3.09
26	KC-03-A-08	MIXED HOUSES	CHARING	KENT	159	Tue	22/05/18	0.145	0.151	0.296	3.02
27	WS-03-A-07	BUNGALOWS	NEAR HORSHAM	WEST SUSSEX	57	Thu	19/10/17	0.140	0.140	0.280	1.89
28	NF-03-A-05	MIXED HOUSES	HOLT	NORFOLK	40	Thu	19/09/19	0.125	0.100	0.225	2.50

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

Appendix F



Calculation Reference: AUDIT-258601-241004-1031

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : B - AFFORDABLE/LOCAL AUTHORITY HOUSES
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
04	EAST ANGLIA	
	SF SUFFOLK	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	KS KIRKLEES	1 days
	NY NORTH YORKSHIRE	1 days
08	NORTH WEST	
	MS MERSEYSIDE	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
 Actual Range: 14 to 280 (units:)
 Range Selected by User: 0 to 300 (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: 01/01/03 to 22/10/21

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 3 days
 Thursday 2 days

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

Selected survey types:

Manual count 5 days
 Directional ATC Count 0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre) 2
 Edge of Town 3

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

Selected Location Sub Categories:

Residential Zone 3
 No Sub Category 2

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included X days - Selected
 Servicing vehicles Excluded 9 days - Selected

Secondary Filtering selection:**Use Class:**

C3 5 days

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	2 days
10,001 to 15,000	3 days

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

Population within 5 miles:

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

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

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	2 days

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

Travel Plan:

No	5 days

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

PTAL Rating:

No PTAL Present	5 days

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

LIST OF SITES relevant to selection parameters

1	ES-03-B-01 BOWLEY ROAD HAILSHAM	BUNGALOWS		EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings:	14		
	Survey date: THURSDAY	03/07/03	Survey Type: MANUAL	
2	KS-03-B-01 WHITEACRE STREET HUDDERSFIELD DEIGHTON	MIXED HOUSES		KIRKLEES
	Edge of Town Residential Zone Total No of Dwellings:	54		
	Survey date: TUESDAY	17/09/13	Survey Type: MANUAL	
3	MS-03-B-01 TARBOCK ROAD LIVERPOOL SPEKE	TERRACED		MERSEYSIDE
	Edge of Town Residential Zone Total No of Dwellings:	16		
	Survey date: TUESDAY	18/06/13	Survey Type: MANUAL	
4	NY-03-B-01 NORTHALLERTON ROAD THIRSK NORBY	TERRACED HOUSING		NORTH YORKSHIRE
	Suburban Area (PPS6 Out of Centre) No Sub Category Total No of Dwellings:	280		
	Survey date: THURSDAY	20/09/07	Survey Type: MANUAL	
5	SF-03-B-01 A1144 ST PETERS STREET LOWESTOFT	SEMI D./TERRACED		SUFFOLK
	Suburban Area (PPS6 Out of Centre) No Sub Category Total No of Dwellings:	46		
	Survey date: TUESDAY	20/09/05	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 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.15

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	5	82	0.032	5	82	0.132	5	82	0.164
08:00 - 09:00	5	82	0.105	5	82	0.205	5	82	0.310
09:00 - 10:00	5	82	0.112	5	82	0.122	5	82	0.234
10:00 - 11:00	5	82	0.120	5	82	0.124	5	82	0.244
11:00 - 12:00	5	82	0.144	5	82	0.117	5	82	0.261
12:00 - 13:00	5	82	0.127	5	82	0.141	5	82	0.268
13:00 - 14:00	5	82	0.129	5	82	0.093	5	82	0.222
14:00 - 15:00	5	82	0.115	5	82	0.144	5	82	0.259
15:00 - 16:00	5	82	0.149	5	82	0.102	5	82	0.251
16:00 - 17:00	5	82	0.137	5	82	0.129	5	82	0.266
17:00 - 18:00	5	82	0.212	5	82	0.149	5	82	0.361
18:00 - 19:00	5	82	0.132	5	82	0.088	5	82	0.220
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.514			1.546			3.060

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

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

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Parameter summary

Trip rate parameter range selected:
Survey date date range:
Number of weekdays (Monday-Friday):
Number of Saturdays:
Number of Sundays:
Surveys automatically removed from selection:
Surveys manually removed from selection:

14 - 280 (units:)
01/01/03 - 22/10/21
5
0
0
0
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 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES
 MULTI-MODAL CYCLISTS
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	5	82	0.010	5	82	0.005	5	82	0.015
08:00 - 09:00	5	82	0.002	5	82	0.010	5	82	0.012
09:00 - 10:00	5	82	0.007	5	82	0.015	5	82	0.022
10:00 - 11:00	5	82	0.005	5	82	0.000	5	82	0.005
11:00 - 12:00	5	82	0.005	5	82	0.005	5	82	0.010
12:00 - 13:00	5	82	0.007	5	82	0.002	5	82	0.009
13:00 - 14:00	5	82	0.005	5	82	0.005	5	82	0.010
14:00 - 15:00	5	82	0.000	5	82	0.002	5	82	0.002
15:00 - 16:00	5	82	0.022	5	82	0.002	5	82	0.024
16:00 - 17:00	5	82	0.012	5	82	0.020	5	82	0.032
17:00 - 18:00	5	82	0.015	5	82	0.012	5	82	0.027
18:00 - 19:00	5	82	0.017	5	82	0.020	5	82	0.037
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.107			0.098			0.205

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/B - AFFORDABLE/LOCAL AUTHORITY HOUSES
MULTI-MODAL PEDESTRIANS
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	5	82	0.017	5	82	0.039	5	82	0.056
08:00 - 09:00	5	82	0.051	5	82	0.244	5	82	0.295
09:00 - 10:00	5	82	0.095	5	82	0.080	5	82	0.175
10:00 - 11:00	5	82	0.071	5	82	0.105	5	82	0.176
11:00 - 12:00	5	82	0.071	5	82	0.063	5	82	0.134
12:00 - 13:00	5	82	0.088	5	82	0.073	5	82	0.161
13:00 - 14:00	5	82	0.041	5	82	0.049	5	82	0.090
14:00 - 15:00	5	82	0.059	5	82	0.076	5	82	0.135
15:00 - 16:00	5	82	0.159	5	82	0.100	5	82	0.259
16:00 - 17:00	5	82	0.129	5	82	0.054	5	82	0.183
17:00 - 18:00	5	82	0.107	5	82	0.083	5	82	0.190
18:00 - 19:00	5	82	0.071	5	82	0.061	5	82	0.132
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.959			1.027			1.986

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/B - AFFORDABLE/LOCAL AUTHORITY HOUSES
 MULTI-MODAL PUBLIC TRANSPORT USERS
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	5	82	0.000	5	82	0.000	5	82	0.000
08:00 - 09:00	5	82	0.000	5	82	0.002	5	82	0.002
09:00 - 10:00	5	82	0.005	5	82	0.015	5	82	0.020
10:00 - 11:00	5	82	0.000	5	82	0.000	5	82	0.000
11:00 - 12:00	5	82	0.005	5	82	0.007	5	82	0.012
12:00 - 13:00	5	82	0.000	5	82	0.000	5	82	0.000
13:00 - 14:00	5	82	0.022	5	82	0.007	5	82	0.029
14:00 - 15:00	5	82	0.000	5	82	0.000	5	82	0.000
15:00 - 16:00	5	82	0.000	5	82	0.002	5	82	0.002
16:00 - 17:00	5	82	0.000	5	82	0.000	5	82	0.000
17:00 - 18:00	5	82	0.000	5	82	0.000	5	82	0.000
18:00 - 19:00	5	82	0.000	5	82	0.000	5	82	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.032			0.033			0.065

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/B - AFFORDABLE/LOCAL AUTHORITY HOUSES
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.15

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	5	82	0.059	5	82	0.229	5	82	0.288
08:00 - 09:00	5	82	0.212	5	82	0.634	5	82	0.846
09:00 - 10:00	5	82	0.244	5	82	0.273	5	82	0.517
10:00 - 11:00	5	82	0.241	5	82	0.285	5	82	0.526
11:00 - 12:00	5	82	0.263	5	82	0.217	5	82	0.480
12:00 - 13:00	5	82	0.263	5	82	0.259	5	82	0.522
13:00 - 14:00	5	82	0.232	5	82	0.161	5	82	0.393
14:00 - 15:00	5	82	0.205	5	82	0.251	5	82	0.456
15:00 - 16:00	5	82	0.444	5	82	0.244	5	82	0.688
16:00 - 17:00	5	82	0.356	5	82	0.285	5	82	0.641
17:00 - 18:00	5	82	0.410	5	82	0.320	5	82	0.730
18:00 - 19:00	5	82	0.295	5	82	0.207	5	82	0.502
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.224			3.365			6.589

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 G



Calculation Reference: AUDIT-258601-241009-1037

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : A - FOOD SUPERSTORE
MULTI-MODAL TOTAL VEHICLES

<u>Selected regions and areas:</u>		
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
06	WEST MIDLANDS	
	WO WORCESTERSHIRE	1 days
09	NORTH	
	TW TYNE & WEAR	1 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
Actual Range: 1400 to 4780 (units: sqm)
Range Selected by User: 0 to 5000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 17/05/23

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

Selected survey days:

Tuesday 1 days
Wednesday 1 days
Friday 1 days

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

Selected survey types:

Manual count 3 days
Directional ATC Count 0 days

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

Selected Locations:

Edge of Town 1
Neighbourhood Centre (PPS6 Local Centre) 2

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

Selected Location Sub Categories:

Development Zone 1
Residential Zone 1
Built-Up Zone 1

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included 3 days - Selected
Servicing vehicles Excluded X days - Selected

Secondary Filtering selection:

Use Class:

E(a) 3 days

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000	1 days
25,001 to 50,000	2 days

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

Population within 5 miles:

125,001 to 250,000	2 days
250,001 to 500,000	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	2 days

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

Petrol filling station:

PFS is present at the site and is included in the count	0 days
PFS is present at the site but is excluded from the count	0 days
There is no PFS at the site	3 days

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

Travel Plan:

No	3 days

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

PTAL Rating:

No PTAL Present	3 days

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

LIST OF SITES relevant to selection parameters

1	CA-01-A-04	SAINSBURY'S	CAMBRIDGESHIRE
	EDDINGTON AVENUE		
	CAMBRIDGE		
	EDDINGTON		
	Edge of Town		
	Development Zone		
	Total Gross floor area:	3231 sqm	
	Survey date: WEDNESDAY	17/05/23	Survey Type: MANUAL
2	TW-01-A-03	M&S FOOD HALL	TYNE & WEAR
	HOLLYWOOD AVENUE		
	NEWCASTLE UPON TYNE		
	GOSFORTH		
	Neighbourhood Centre (PPS6 Local Centre)		
	Built-Up Zone		
	Total Gross floor area:	1400 sqm	
	Survey date: TUESDAY	19/10/21	Survey Type: MANUAL
3	WO-01-A-02	WAITROSE	WORCESTERSHIRE
	LONDON ROAD		
	WORCESTER		
	RED HILL		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total Gross floor area:	4780 sqm	
	Survey date: FRIDAY	27/09/19	Survey Type: MANUAL

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

Lime Transport Limited Stanwell Road Penarth

Licence No: 258601

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 2.25

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	3	3137	0.882	3	3137	0.531	3	3137	1.413
08:00 - 09:00	3	3137	2.104	3	3137	1.806	3	3137	3.910
09:00 - 10:00	3	3137	2.763	3	3137	1.966	3	3137	4.729
10:00 - 11:00	3	3137	3.581	3	3137	2.784	3	3137	6.365
11:00 - 12:00	3	3137	3.475	3	3137	3.262	3	3137	6.737
12:00 - 13:00	3	3137	4.782	3	3137	4.293	3	3137	9.075
13:00 - 14:00	3	3137	4.176	3	3137	4.527	3	3137	8.703
14:00 - 15:00	3	3137	3.581	3	3137	3.857	3	3137	7.438
15:00 - 16:00	3	3137	4.080	3	3137	4.537	3	3137	8.617
16:00 - 17:00	3	3137	3.740	3	3137	3.581	3	3137	7.321
17:00 - 18:00	3	3137	4.070	3	3137	3.921	3	3137	7.991
18:00 - 19:00	3	3137	3.602	3	3137	4.144	3	3137	7.746
19:00 - 20:00	3	3137	2.295	3	3137	3.209	3	3137	5.504
20:00 - 21:00	3	3137	0.871	3	3137	1.413	3	3137	2.284
21:00 - 22:00	2	4006	0.275	2	4006	0.562	2	4006	0.837
22:00 - 23:00	1	3231	0.000	1	3231	0.340	1	3231	0.340
23:00 - 24:00									
Total Rates:			44.277			44.733			89.010

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

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

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Parameter summary

Trip rate parameter range selected: 1400 - 4780 (units: sqm)
Survey date range: 01/01/16 - 17/05/23
Number of weekdays (Monday-Friday): 3
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 0
Surveys manually removed from selection: 0

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

Lime Transport Limited Stanwell Road Penarth

Licence No: 258601

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE

MULTI-MODAL CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	3	3137	0.053	3	3137	0.032	3	3137	0.085
08:00 - 09:00	3	3137	0.117	3	3137	0.117	3	3137	0.234
09:00 - 10:00	3	3137	0.223	3	3137	0.213	3	3137	0.436
10:00 - 11:00	3	3137	0.149	3	3137	0.128	3	3137	0.277
11:00 - 12:00	3	3137	0.223	3	3137	0.181	3	3137	0.404
12:00 - 13:00	3	3137	0.213	3	3137	0.213	3	3137	0.426
13:00 - 14:00	3	3137	0.181	3	3137	0.170	3	3137	0.351
14:00 - 15:00	3	3137	0.085	3	3137	0.128	3	3137	0.213
15:00 - 16:00	3	3137	0.244	3	3137	0.244	3	3137	0.488
16:00 - 17:00	3	3137	0.096	3	3137	0.085	3	3137	0.181
17:00 - 18:00	3	3137	0.181	3	3137	0.170	3	3137	0.351
18:00 - 19:00	3	3137	0.170	3	3137	0.159	3	3137	0.329
19:00 - 20:00	3	3137	0.138	3	3137	0.159	3	3137	0.297
20:00 - 21:00	3	3137	0.085	3	3137	0.117	3	3137	0.202
21:00 - 22:00	2	4006	0.112	2	4006	0.175	2	4006	0.287
22:00 - 23:00	1	3231	0.000	1	3231	0.031	1	3231	0.031
23:00 - 24:00									
Total Rates:			2.270				2.322	4.592	

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.

Lime Transport Limited Stanwell Road Penarth

Licence No: 258601

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
 MULTI-MODAL PEDESTRIANS
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	3	3137	0.776	3	3137	0.436	3	3137	1.212
08:00 - 09:00	3	3137	2.210	3	3137	2.274	3	3137	4.484
09:00 - 10:00	3	3137	1.328	3	3137	1.328	3	3137	2.656
10:00 - 11:00	3	3137	1.530	3	3137	1.445	3	3137	2.975
11:00 - 12:00	3	3137	1.551	3	3137	1.881	3	3137	3.432
12:00 - 13:00	3	3137	3.411	3	3137	3.315	3	3137	6.726
13:00 - 14:00	3	3137	3.241	3	3137	3.400	3	3137	6.641
14:00 - 15:00	3	3137	1.594	3	3137	1.690	3	3137	3.284
15:00 - 16:00	3	3137	3.549	3	3137	3.177	3	3137	6.726
16:00 - 17:00	3	3137	2.380	3	3137	2.316	3	3137	4.696
17:00 - 18:00	3	3137	2.178	3	3137	2.285	3	3137	4.463
18:00 - 19:00	3	3137	1.860	3	3137	2.210	3	3137	4.070
19:00 - 20:00	3	3137	1.328	3	3137	1.647	3	3137	2.975
20:00 - 21:00	3	3137	0.924	3	3137	1.190	3	3137	2.114
21:00 - 22:00	2	4006	0.612	2	4006	0.674	2	4006	1.286
22:00 - 23:00	1	3231	0.000	1	3231	0.186	1	3231	0.186
23:00 - 24:00									
Total Rates:			28.472			29.454			57.926

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.

Lime Transport Limited Stanwell Road Penarth

Licence No: 258601

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
 MULTI-MODAL PUBLIC TRANSPORT USERS
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	3	3137	0.181	3	3137	0.085	3	3137	0.266
08:00 - 09:00	3	3137	0.701	3	3137	0.553	3	3137	1.254
09:00 - 10:00	3	3137	0.234	3	3137	0.287	3	3137	0.521
10:00 - 11:00	3	3137	0.308	3	3137	0.287	3	3137	0.595
11:00 - 12:00	3	3137	0.329	3	3137	0.393	3	3137	0.722
12:00 - 13:00	3	3137	0.478	3	3137	0.457	3	3137	0.935
13:00 - 14:00	3	3137	0.425	3	3137	0.393	3	3137	0.818
14:00 - 15:00	3	3137	0.276	3	3137	0.266	3	3137	0.542
15:00 - 16:00	3	3137	0.595	3	3137	0.638	3	3137	1.233
16:00 - 17:00	3	3137	0.351	3	3137	0.266	3	3137	0.617
17:00 - 18:00	3	3137	0.510	3	3137	0.404	3	3137	0.914
18:00 - 19:00	3	3137	0.340	3	3137	0.329	3	3137	0.669
19:00 - 20:00	3	3137	0.255	3	3137	0.213	3	3137	0.468
20:00 - 21:00	3	3137	0.298	3	3137	0.138	3	3137	0.436
21:00 - 22:00	2	4006	0.150	2	4006	0.087	2	4006	0.237
22:00 - 23:00	1	3231	0.000	1	3231	0.062	1	3231	0.062
23:00 - 24:00									
Total Rates:			5.431			4.858			10.289

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.

Lime Transport Limited Stanwell Road Penarth

Licence No: 258601

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 2.25

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	3	3137	2.019	3	3137	1.158	3	3137	3.177
08:00 - 09:00	3	3137	6.397	3	3137	5.547	3	3137	11.944
09:00 - 10:00	3	3137	5.377	3	3137	4.452	3	3137	9.829
10:00 - 11:00	3	3137	7.077	3	3137	5.483	3	3137	12.560
11:00 - 12:00	3	3137	7.332	3	3137	7.045	3	3137	14.377
12:00 - 13:00	3	3137	10.945	3	3137	9.946	3	3137	20.891
13:00 - 14:00	3	3137	9.840	3	3137	10.148	3	3137	19.988
14:00 - 15:00	3	3137	7.725	3	3137	7.597	3	3137	15.322
15:00 - 16:00	3	3137	10.275	3	3137	11.540	3	3137	21.815
16:00 - 17:00	3	3137	8.394	3	3137	7.661	3	3137	16.055
17:00 - 18:00	3	3137	8.575	3	3137	8.331	3	3137	16.906
18:00 - 19:00	3	3137	7.449	3	3137	8.830	3	3137	16.279
19:00 - 20:00	3	3137	4.782	3	3137	6.747	3	3137	11.529
20:00 - 21:00	3	3137	2.465	3	3137	3.475	3	3137	5.940
21:00 - 22:00	2	4006	1.211	2	4006	1.685	2	4006	2.896
22:00 - 23:00	1	3231	0.000	1	3231	0.681	1	3231	0.681
23:00 - 24:00									
Total Rates:			99.863			100.326			200.189

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

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

Appendix H



Audit Code: 57971372-9f4a-4e1a-9b62-161afd08a732

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 01 - RETAIL
Category: A - FOOD SUPERSTORE
Total Vehicles

Selected regions and areas:

01	GREATER LONDON		
	HG	HARINGEY	2 days
	IS	ISLINGTON	2 days
08	NORTH WEST		
	GM	GREATER MANCHESTER	1 day
09	NORTH		
	TW	TYNE & WEAR	2 days
11	SCOTLAND		
	AS	ABERDEENSHIRE	1 day
17	ULSTER (NORTHERN IRELAND)		
	AN	ANTRIM	1 day

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

Audit Code: 57971372-9f4a-4e1a-9b62-161afd08a732

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:	GFA
Actual Range:	506 to 1813 (units:sqm)
Range Selected by User:	506 to 2000 (units:sqm)
Parking Spaces Range:	0 - 811

Public Transport Provision:

Selection by:	All Surveys Included
Date Range:	01/01/16 to 20/06/24

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

Selected survey days:

Friday	2 days
Monday	1 days
Saturday	1 days
Tuesday	2 days
Wednesday	3 days

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

Selected survey types:

Manual count	9
Direction ATC Count	0

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

Selected Locations:

Edge of Town Centre	1 days
Neighbourhood Centre (PPS6 Local Centre)	1 days
Suburban Area (PPS6 Out of Centre)	2 days
Town Centre	5 days

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

Selected Location Sub Categories:

Built-Up Zone	2 days
High Street	4 days
Residential Zone	3 days

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

Inclusion of Servicing Vehicle Counts:

Servicing vehicles Excluded	4 days
Servicing vehicles Included	5 days

Audit Code: 57971372-9f4a-4e1a-9b62-161afd08a732

Secondary Filtering Selection:

Use Class:

E(a)	9 surveys

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

Population within 500m Range:

1500 - 11500

Population within 1 mile:

10,001 to 15,000	1 surveys
100,001 or More	1 surveys
25,001 to 50,000	3 surveys
5,001 to 10,000	1 surveys
50,001 to 100,000	3 surveys

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

Population within 5 miles:

250,001 to 500,000	3 surveys
5,001 to 25,000	1 surveys
500,001 or More	5 surveys

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

Car ownership within 5 miles:

0.5 or Less	1 surveys
0.6 to 1.0	5 surveys
1.1 to 1.5	2 surveys
2.1 to 2.5	1 surveys

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

Audit Code: 57971372-9f4a-4e1a-9b62-161afd08a732

Petrol filling station:

Unknown 9 surveys

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

Travel Plan:

No 9 surveys

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

PTAL Rating:

3 - Moderate	1 surveys
4 - Good	1 surveys
6a - Excellent	2 surveys
No PTAL Present	5 surveys

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

COVID-19 Restrictions:

No

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

Audit Code: 57971372-9f4a-4e1a-9b62-161afd08a732

1	AN-01-A-06	M&S FOOD HALL	ANTRIM
UPPER NEWTONARDS RD BELFAST BALLYHACKAMORE Suburban Area (PPS6 Out of Centre) Residential Zone Gross floor area: 506 sqm Survey date: Friday 21/06/2024			
			Survey Type: Manual
2	AS-01-A-02	CO-OP	ABERDEENSHIRE
DAVID STREET STONEHAVEN Edge of Town Centre Residential Zone Gross floor area: 1515 sqm Survey date: Saturday 23/04/2022			
			Survey Type: Manual
3	GM-01-A-28	TESCO EXPRESS	GREATER MANCHESTER
MARKET STREET MANCHESTER Town Centre Built-Up Zone Gross floor area: 1600 sqm Survey date: Wednesday 27/04/2022			
			Survey Type: Manual
4	HG-01-A-01	SAINSBURY'S	HARINGEY
FORTIS GREEN ROAD MUSWELL HILL Town Centre High Street Gross floor area: 820 sqm Survey date: Monday 13/06/2022			
			Survey Type: Manual
5	HG-01-A-02	M&S FOOD HALL	HARINGEY
MUSWELL HILL BROADWAY MUSWELL HILL Town Centre High Street Gross floor area: 1707 sqm Survey date: Wednesday 15/06/2022			
			Survey Type: Manual
6	IS-01-A-02	WAITROSE	ISLINGTON
LIVERPOOL ROAD ANGEL Town Centre High Street Gross floor area: 1625 sqm Survey date: Tuesday 05/07/2016			
			Survey Type: Manual
7	IS-01-A-03	WAITROSE	ISLINGTON
HOLLOWAY ROAD HOLLOWAY Town Centre High Street Gross floor area: 1813 sqm Survey date: Wednesday 15/11/2017			
			Survey Type: Manual
8	TW-01-A-02	ASDA	TYNE & WEAR
WANSBECK ROAD SOUTH NEWCASTLE UPON TYNE GOSFORTH Suburban Area (PPS6 Out of Centre) Residential Zone			

Audit Code: 57971372-9f4a-4e1a-9b62-161afd08a732

Gross floor area: 1260 sqm
Survey date: Friday 03/05/2019

Survey Type: Manual

9	TW-01-A-03	M&S FOOD HALL	TYNE & WEAR
HOLLYWOOD AVENUE NEWCASTLE UPON TYNE GOSFORTH Neighbourhood Centre (PPS6 Local Centre) Built-Up Zone Gross floor area: 1400 sqm Survey date: Tuesday 19/10/2021			
			Survey Type: Manual

Audit Code: 57971372-9f4a-4e1a-9b62-161afd08a732

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE

Total Vehicles

Calculation factor: 100 sqm

*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. GFA	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00	1	1600	0.000	0.000	0.000
06:00-07:00	3	1312	0.178	0.025	0.203
07:00-08:00	9	1361	0.710	0.310	1.020
08:00-09:00	9	1361	1.976	1.486	3.462
09:00-10:00	9	1361	2.164	1.943	4.107
10:00-11:00	9	1361	2.540	2.303	4.843
11:00-12:00	9	1361	2.695	2.621	5.316
12:00-13:00	9	1361	3.021	2.744	5.765
13:00-14:00	9	1361	2.556	2.695	5.251
14:00-15:00	9	1361	2.817	2.752	5.569
15:00-16:00	9	1361	3.185	3.307	6.492
16:00-17:00	9	1361	2.956	3.332	6.288
17:00-18:00	9	1361	2.989	2.997	5.986
18:00-19:00	9	1361	2.915	2.825	5.740
19:00-20:00	9	1361	2.041	2.572	4.613
20:00-21:00	9	1361	0.980	1.413	2.393
21:00-22:00	8	1356	0.415	0.627	1.042
22:00-23:00	5	1364	0.147	0.337	0.484
23:00-00:00	1	1600	0.062	0.438	0.500
Total Rates:			34.347	34.727	69.074

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.

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Audit Code: 57971372-9f4a-4e1a-9b62-161afd08a732

Parameter Summary:

Trip rate parameter range selected:	506 - 2000 (units: sqm)
Survey date date range:	05/07/2016 - 21/06/2024
Number of weekdays (Monday-Friday):	8
Number of Saturdays:	1
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.

Audit Code: 57971372-9f4a-4e1a-9b62-161afd08a732

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE

OGVs

Calculation factor: 100 sqm

*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. GFA	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00	1	1600	0.000	0.000	0.000
06:00-07:00	3	1312	0.000	0.000	0.000
07:00-08:00	9	1361	0.041	0.033	0.074
08:00-09:00	9	1361	0.000	0.016	0.016
09:00-10:00	9	1361	0.016	0.000	0.016
10:00-11:00	9	1361	0.016	0.016	0.032
11:00-12:00	9	1361	0.008	0.016	0.024
12:00-13:00	9	1361	0.016	0.008	0.024
13:00-14:00	9	1361	0.008	0.016	0.024
14:00-15:00	9	1361	0.016	0.008	0.024
15:00-16:00	9	1361	0.008	0.008	0.016
16:00-17:00	9	1361	0.008	0.016	0.024
17:00-18:00	9	1361	0.008	0.016	0.024
18:00-19:00	9	1361	0.000	0.000	0.000
19:00-20:00	9	1361	0.008	0.008	0.016
20:00-21:00	9	1361	0.016	0.008	0.024
21:00-22:00	8	1356	0.000	0.009	0.009
22:00-23:00	5	1364	0.000	0.000	0.000
23:00-00:00	1	1600	0.000	0.000	0.000
Total Rates:			0.169	0.178	0.347

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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Audit Code: 57971372-9f4a-4e1a-9b62-161afd08a732

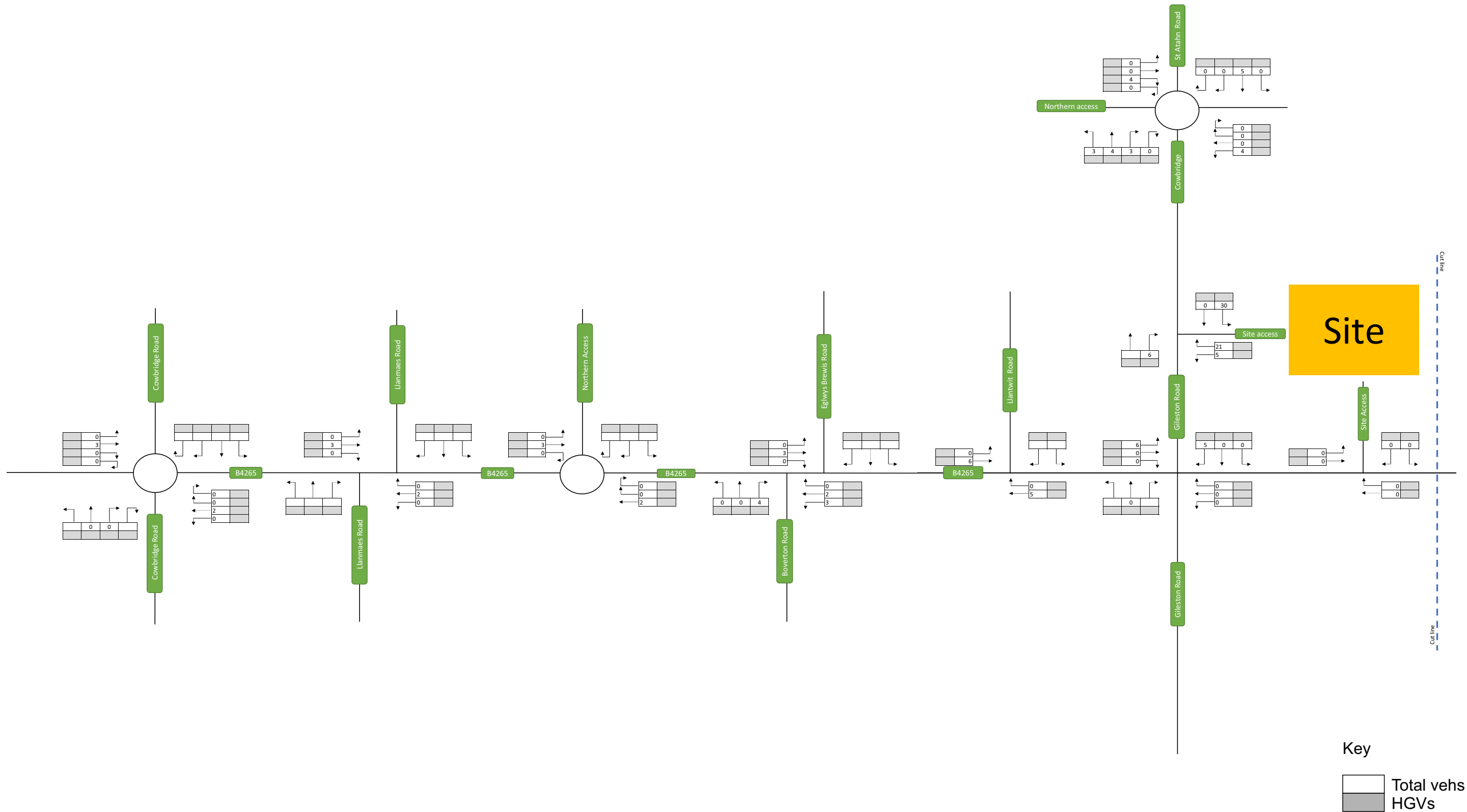
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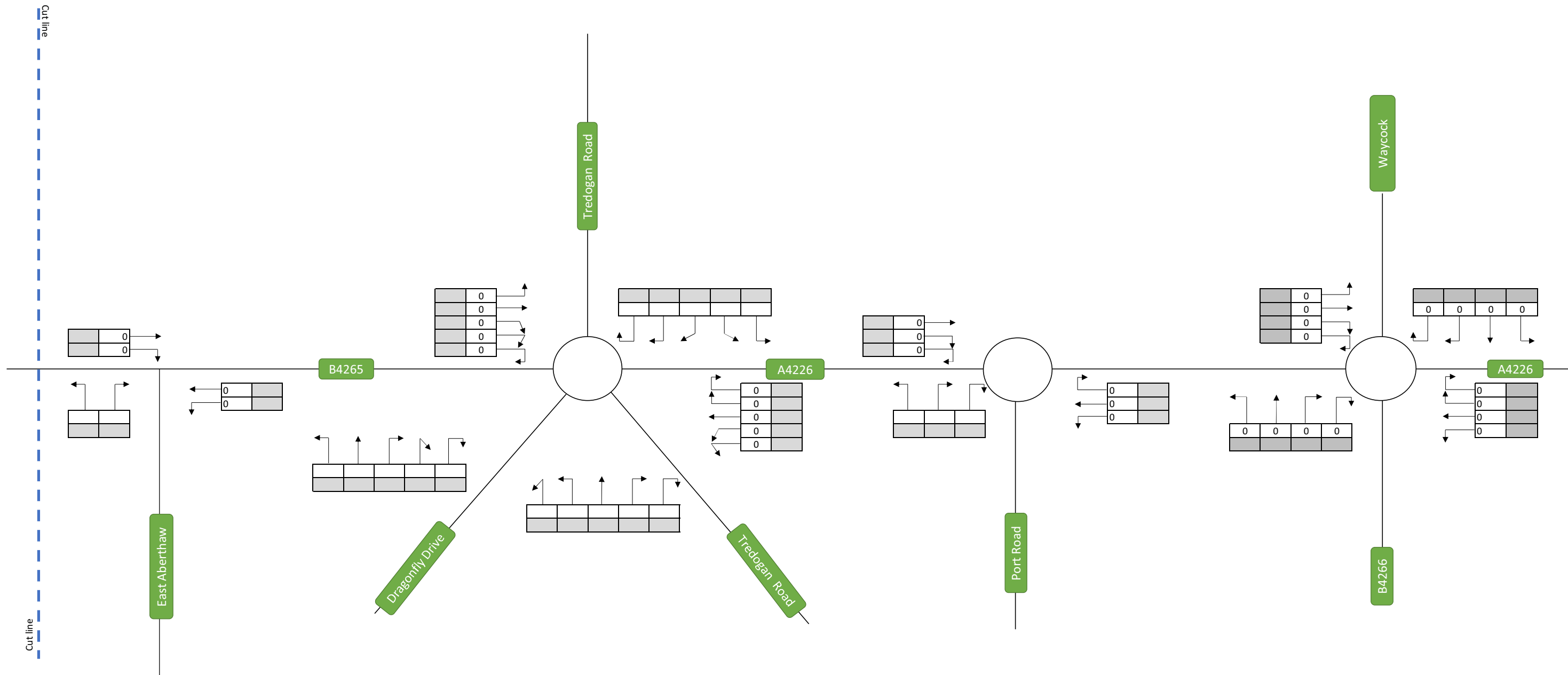
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Survey date date range:	15/11/2017 - 21/06/2024
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	1
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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.

Appendix I







Key

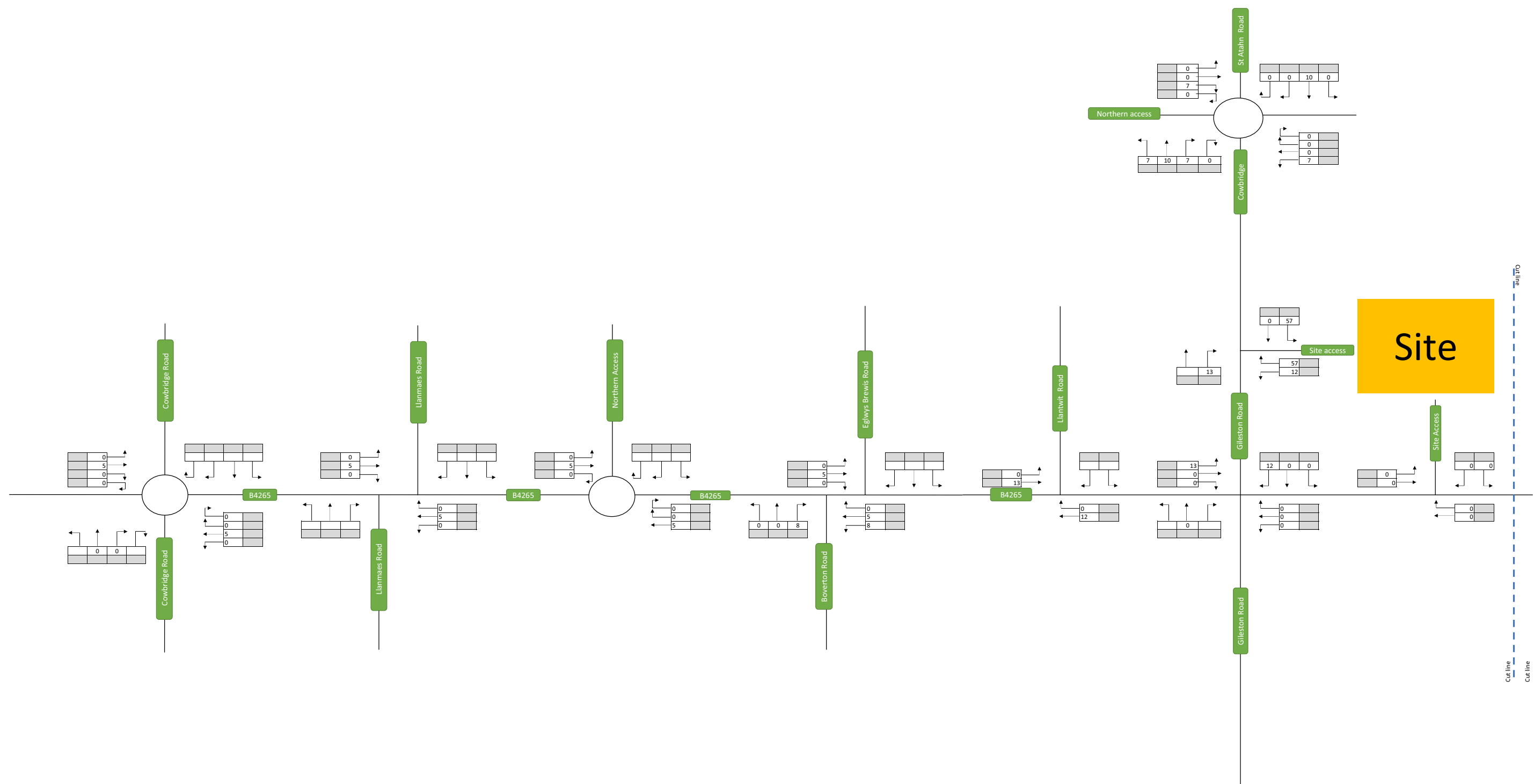
Total vehs
 HGVs

Project no. 24063
 Prepared by MD
 Checked by ABR
 Date Nov. 2024
 Scale nts
 Figure no. 2

Church Farm, St Athan

Network flow diagram - supermarket trips - AM peak
 sheet 2 of 2





Key

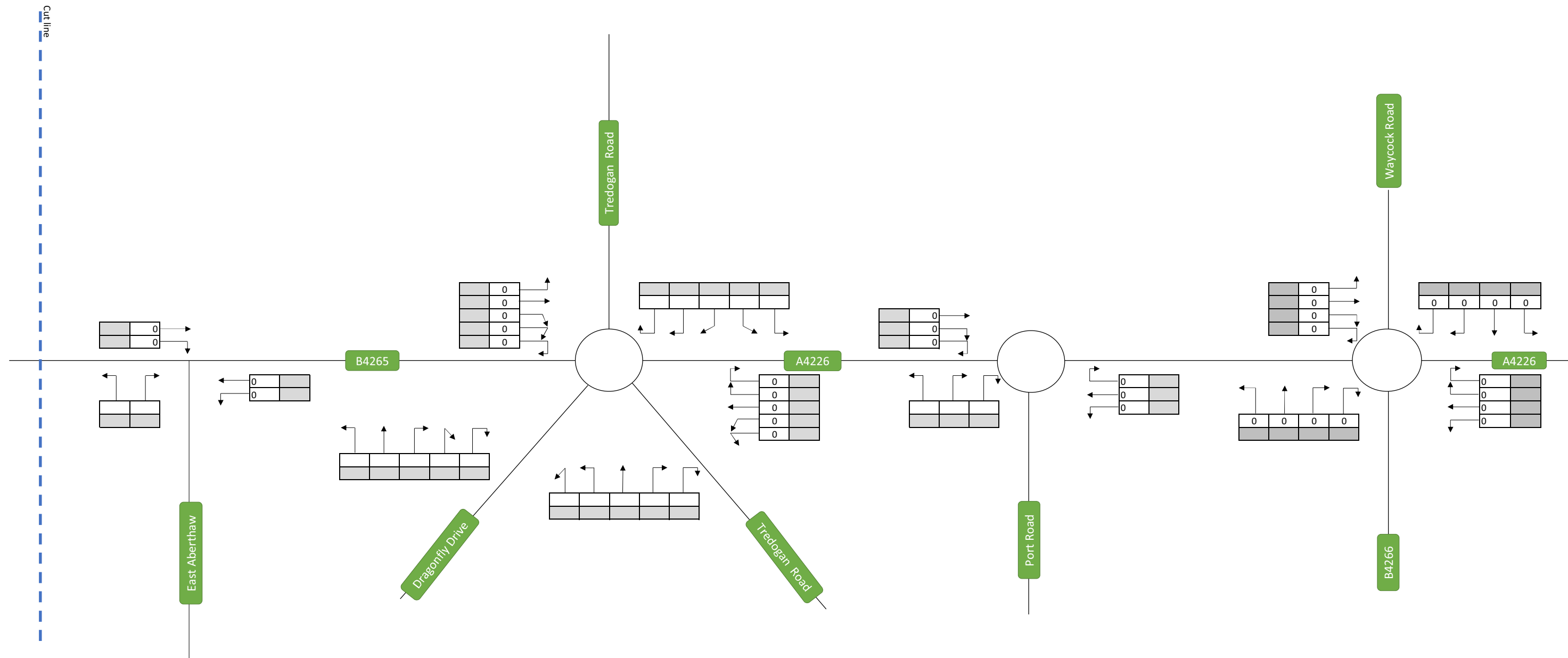
Total vehs
 HGVs

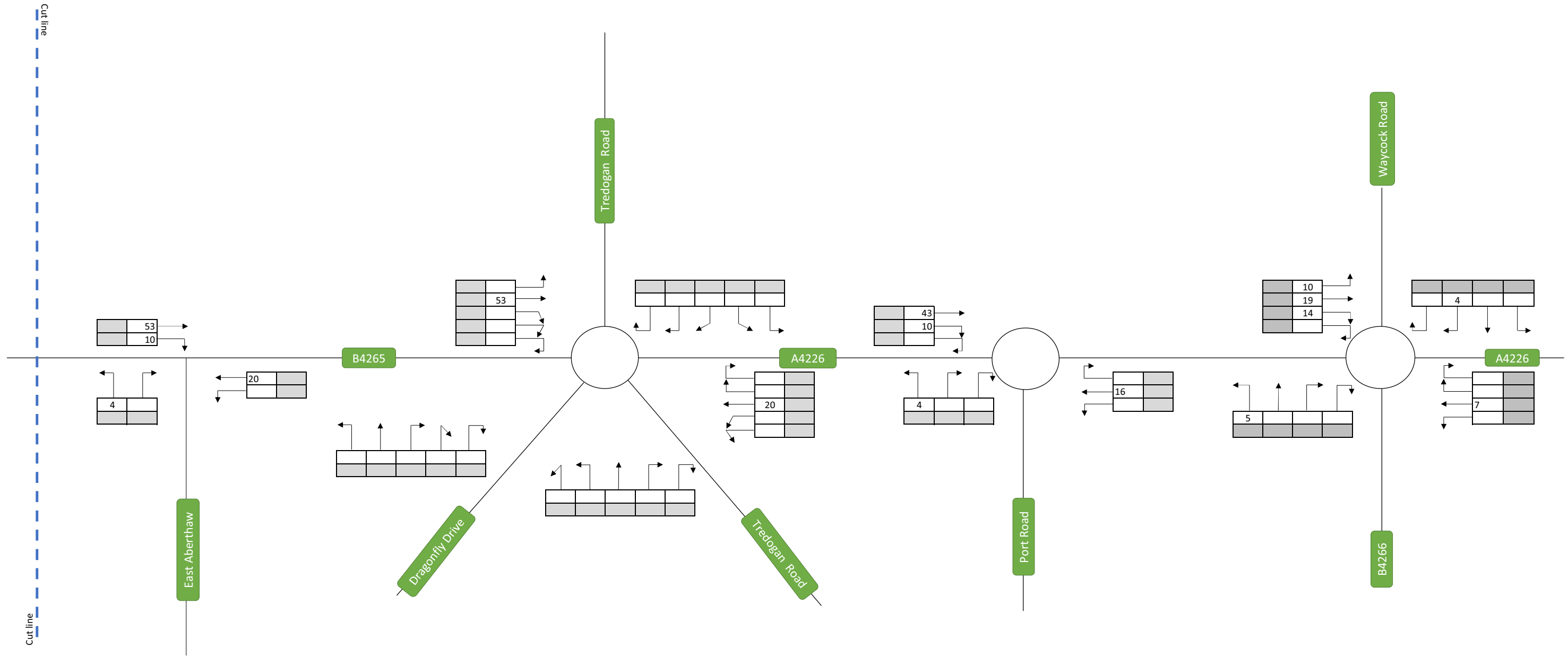
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 Prepared by MD
 Checked by ABR
 Date Nov. 2024
 Scale nts
 Figure no. 3

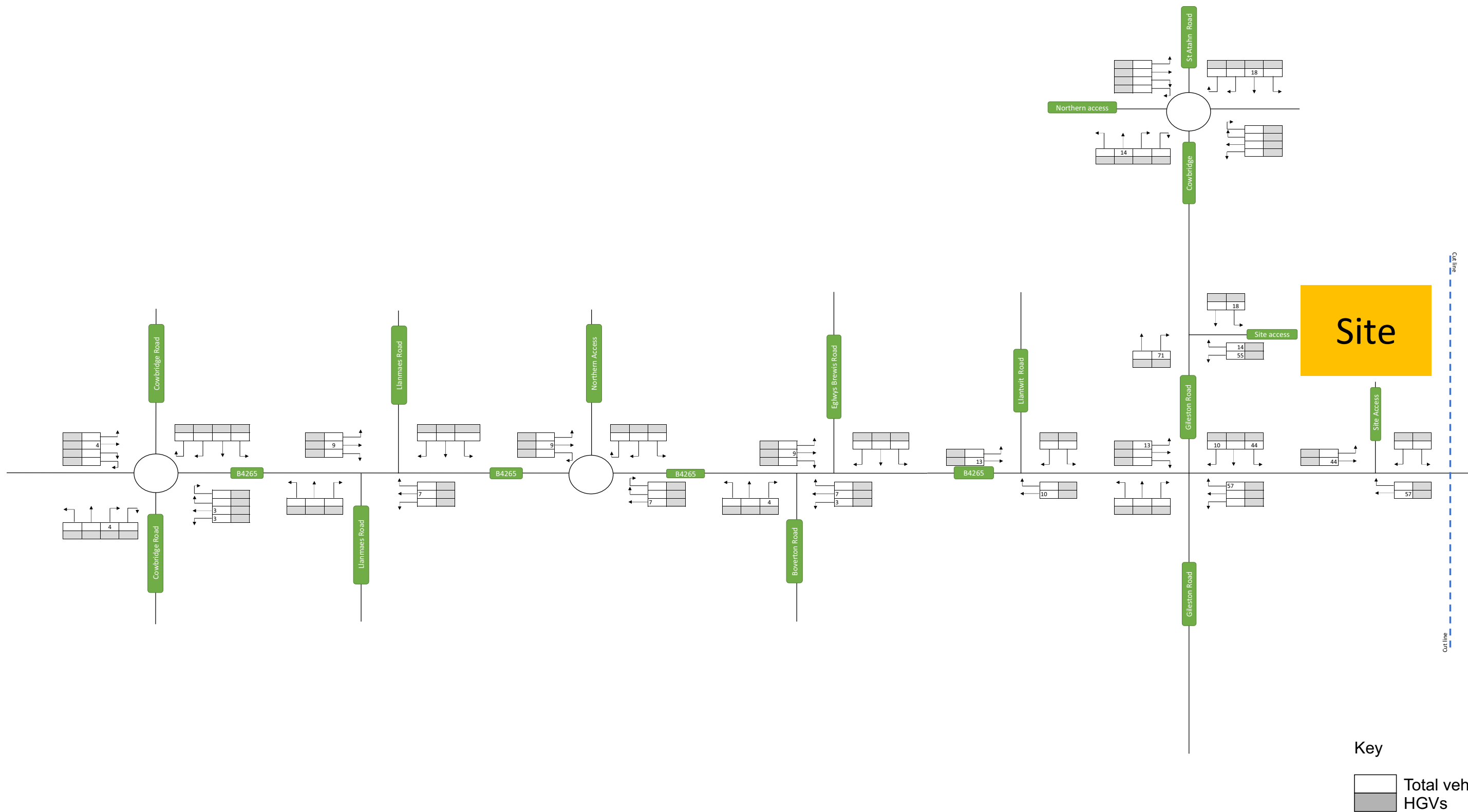
Church Farm, St Athan

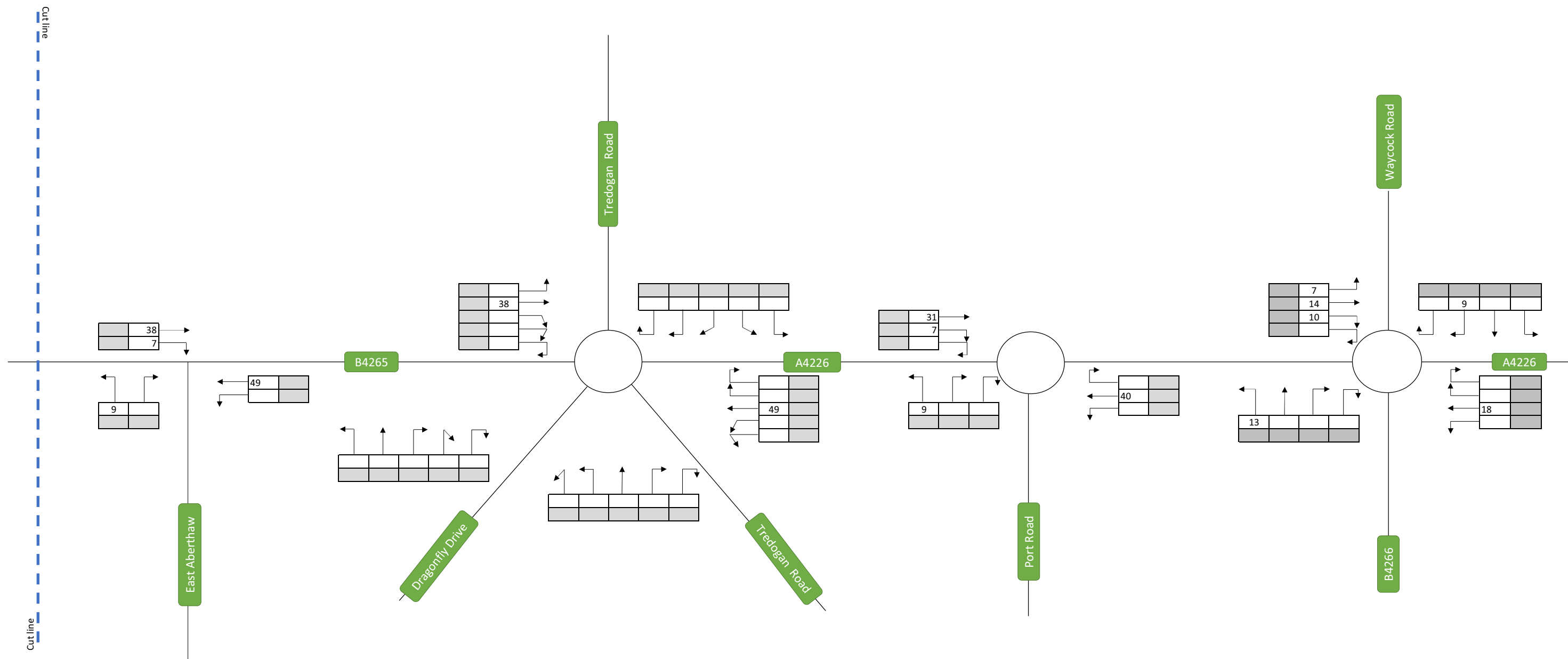
Network flow diagram - supermarket trips - PM peak
 sheet 1 of 2





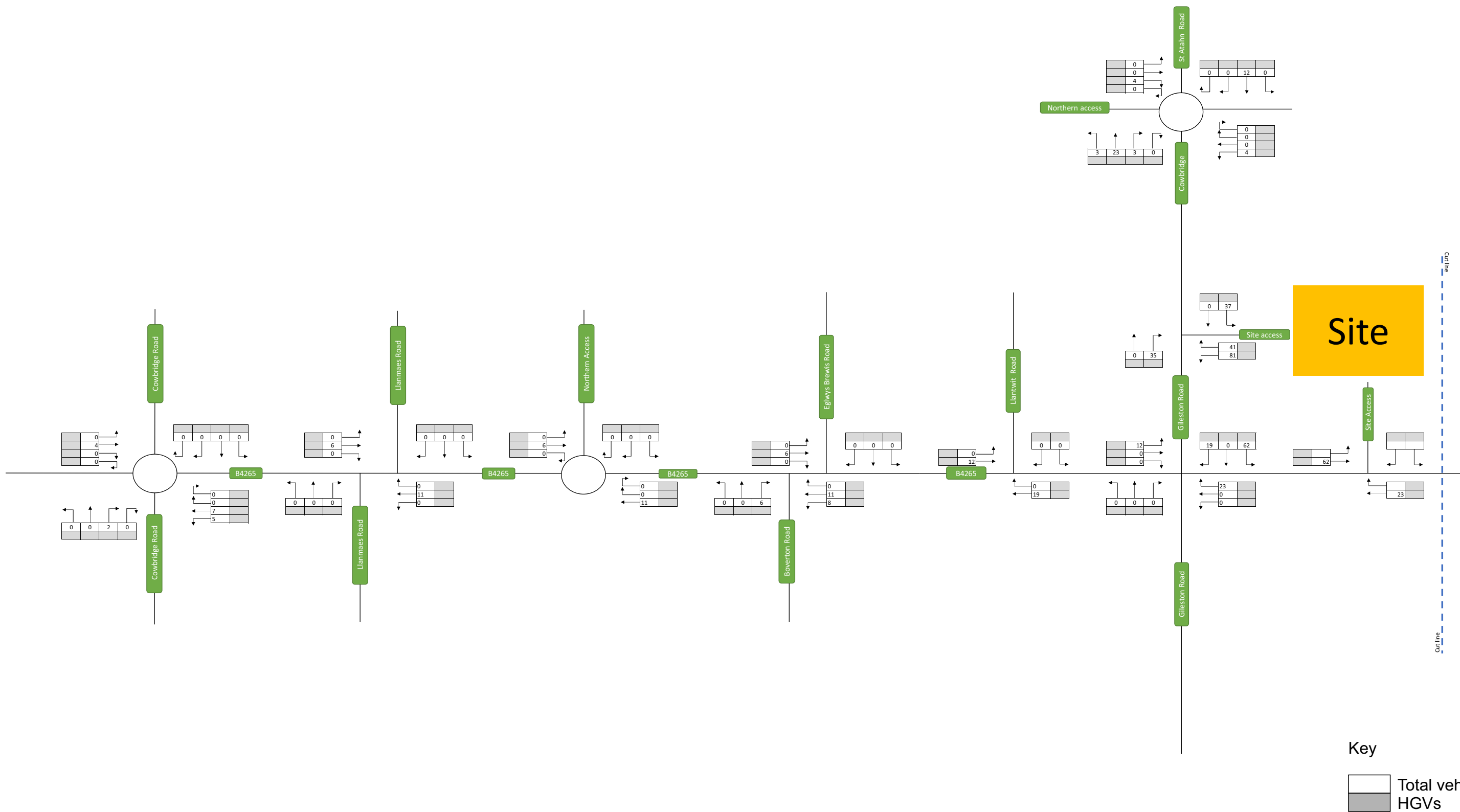


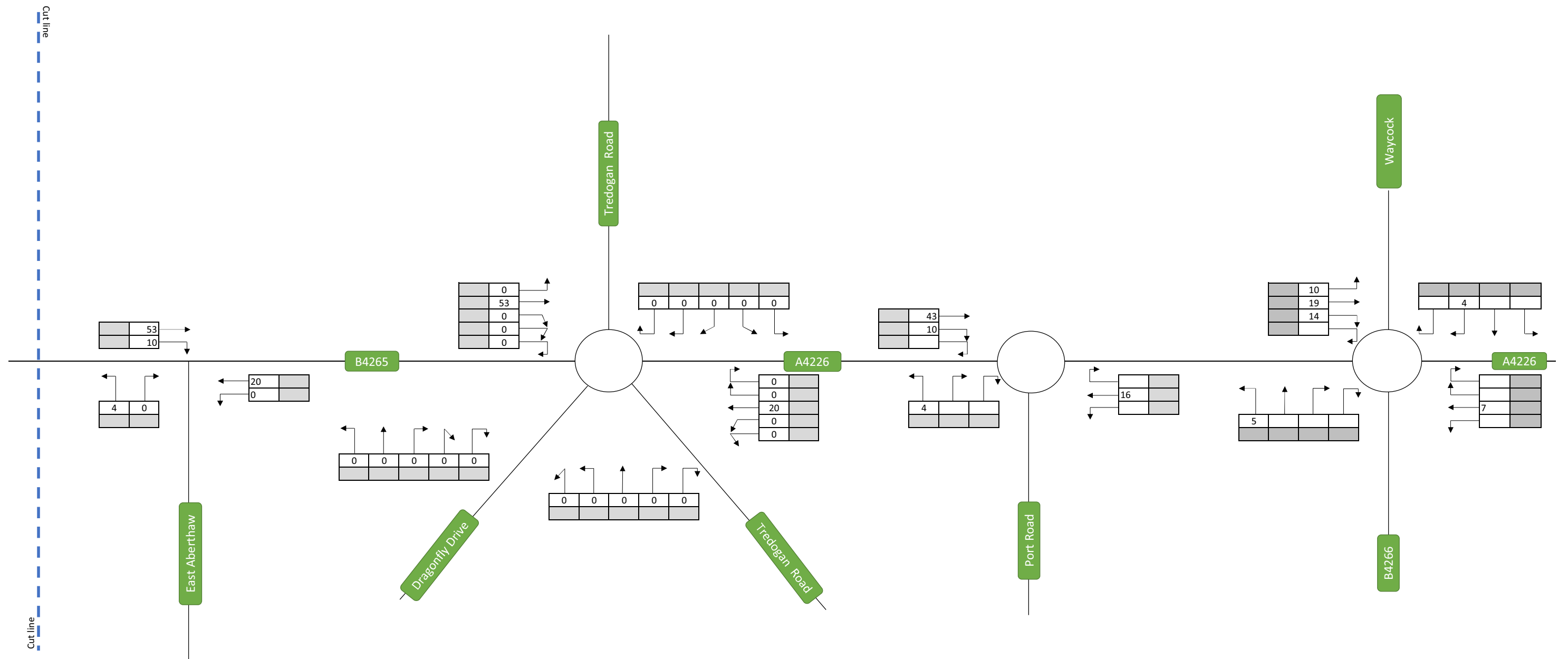




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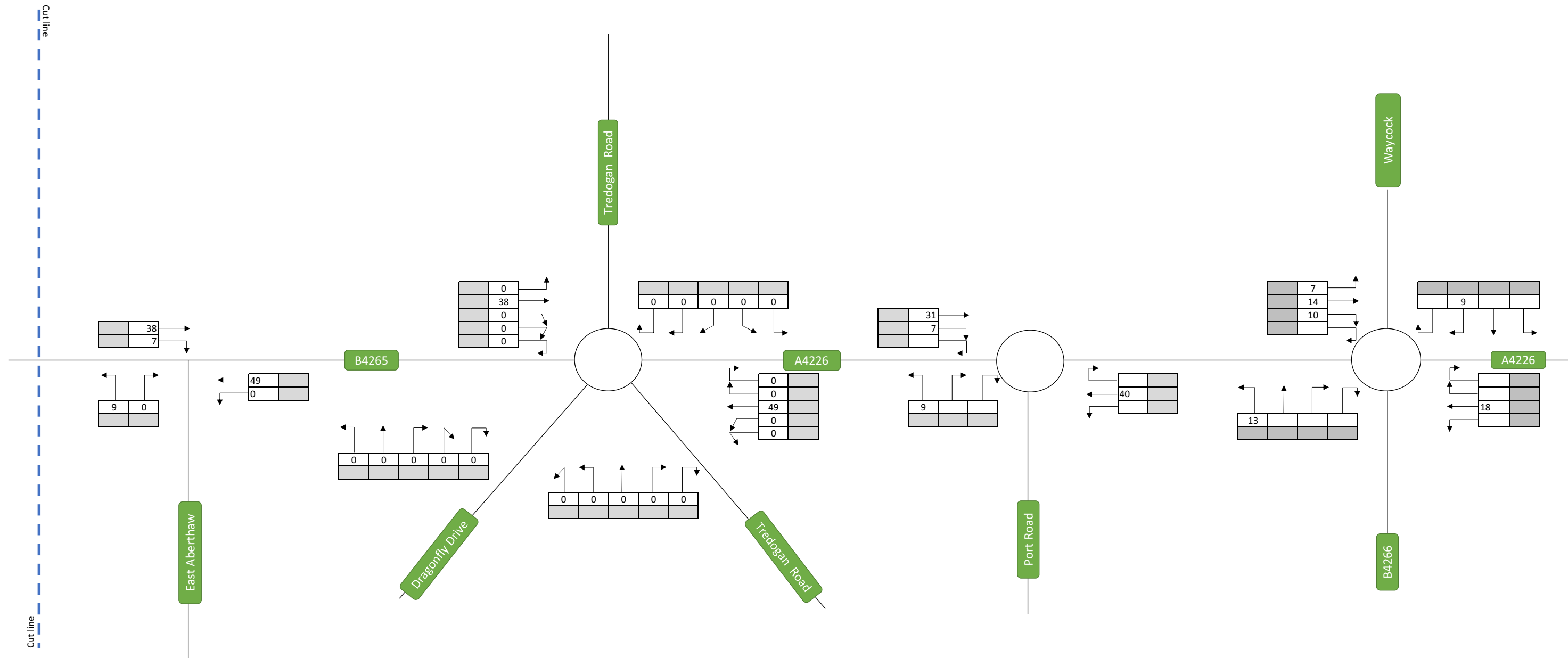
	Total vehs
	HGVs

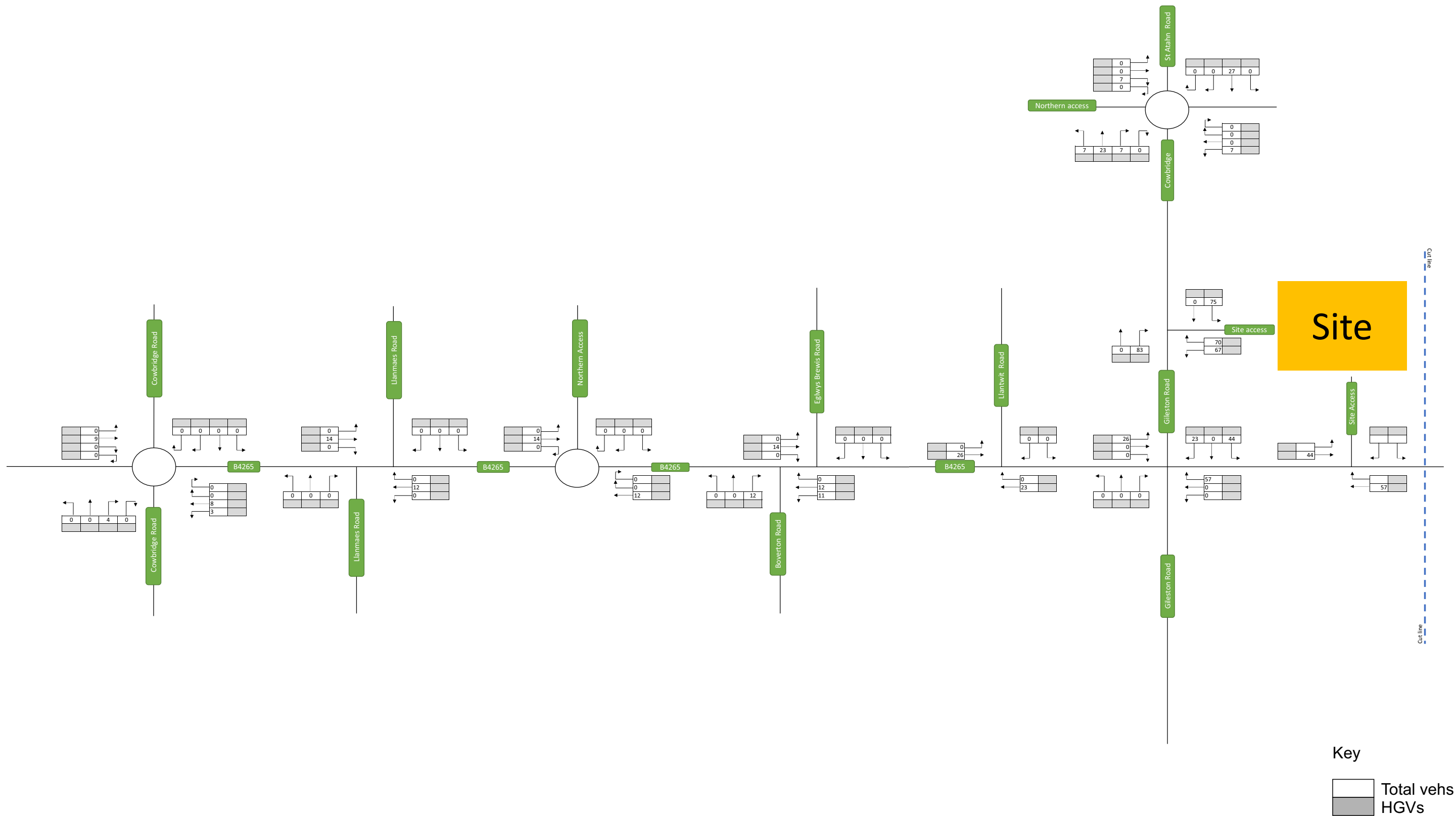




Key

	Total vehs
	HGVs

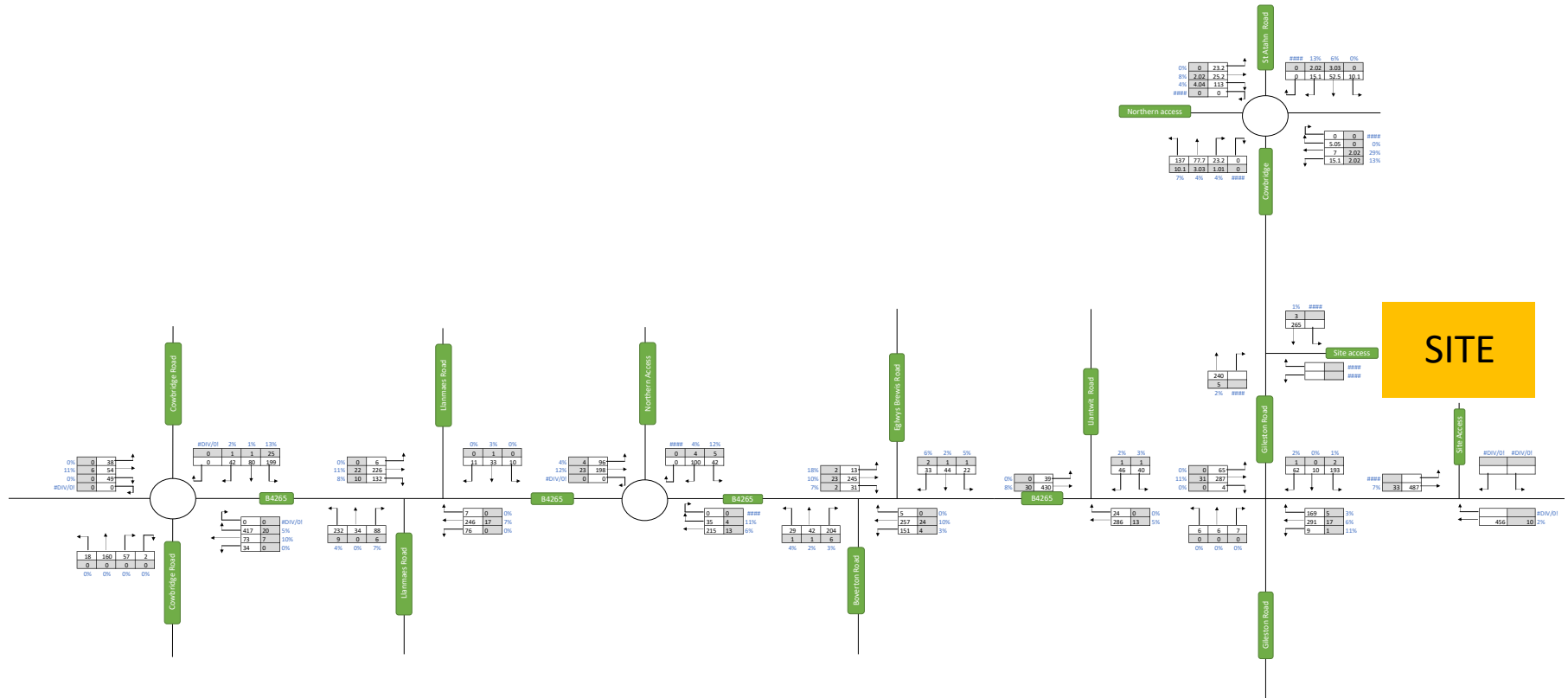




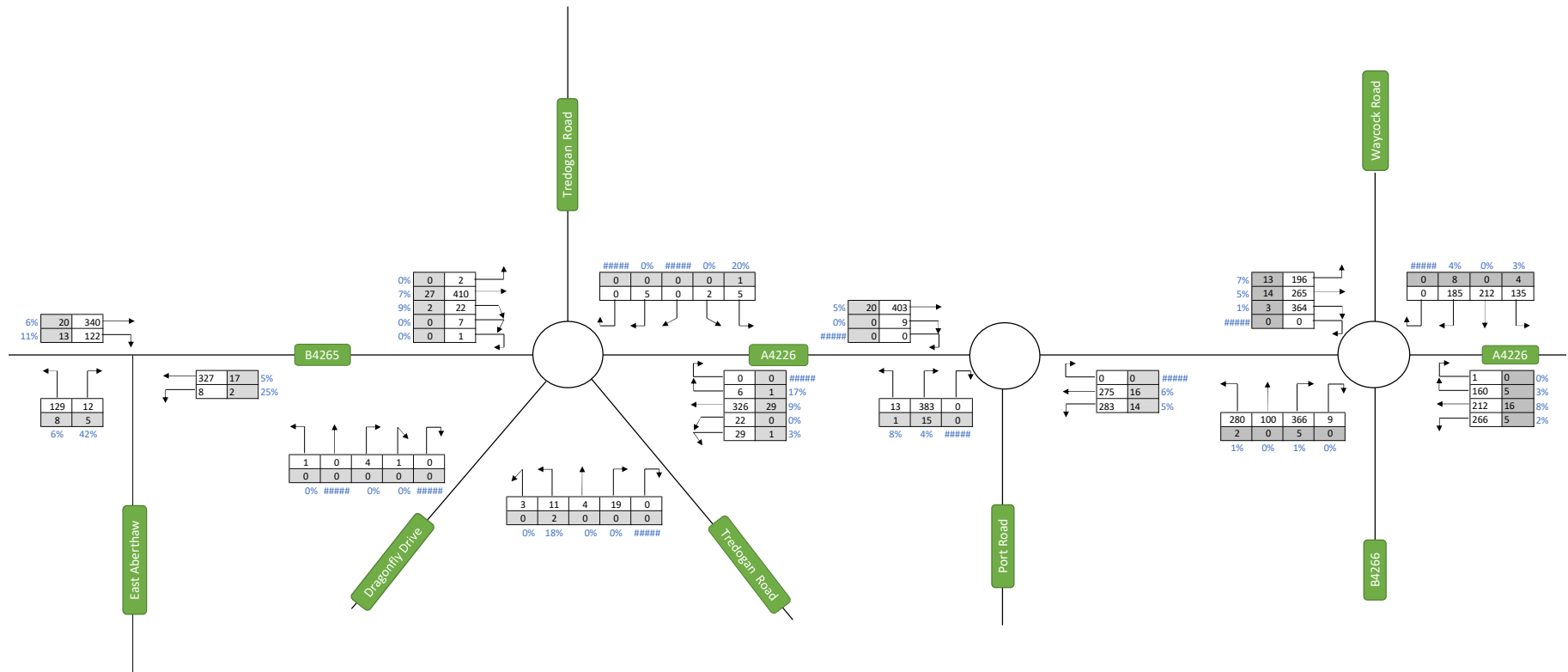
Appendix J



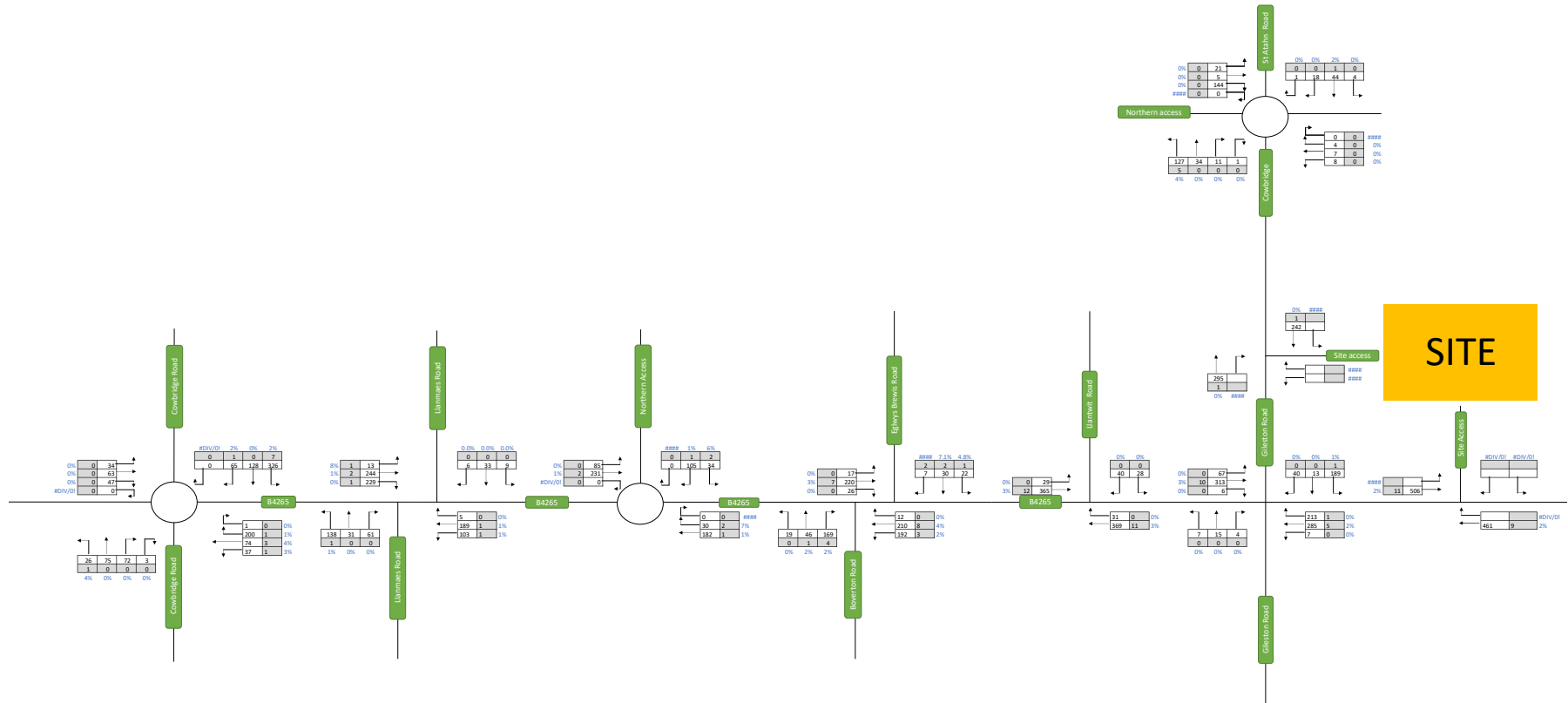
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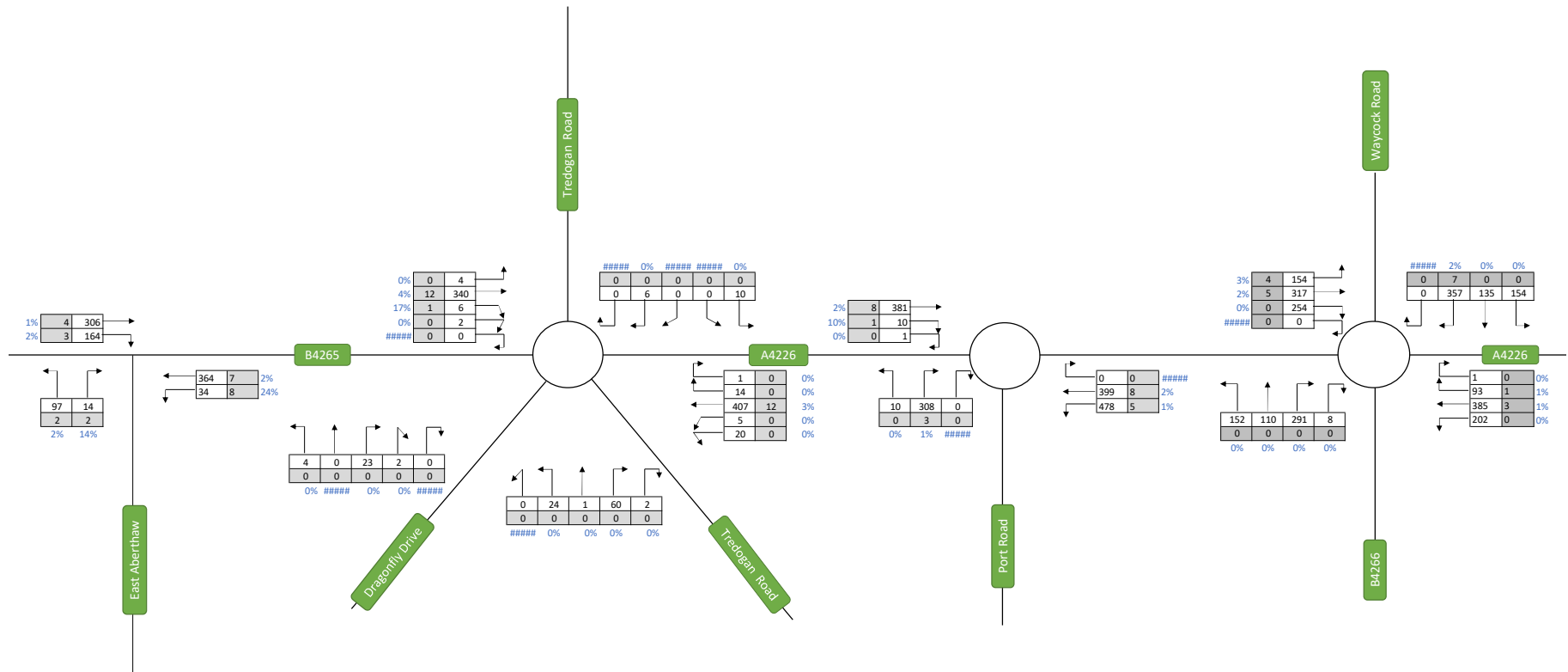
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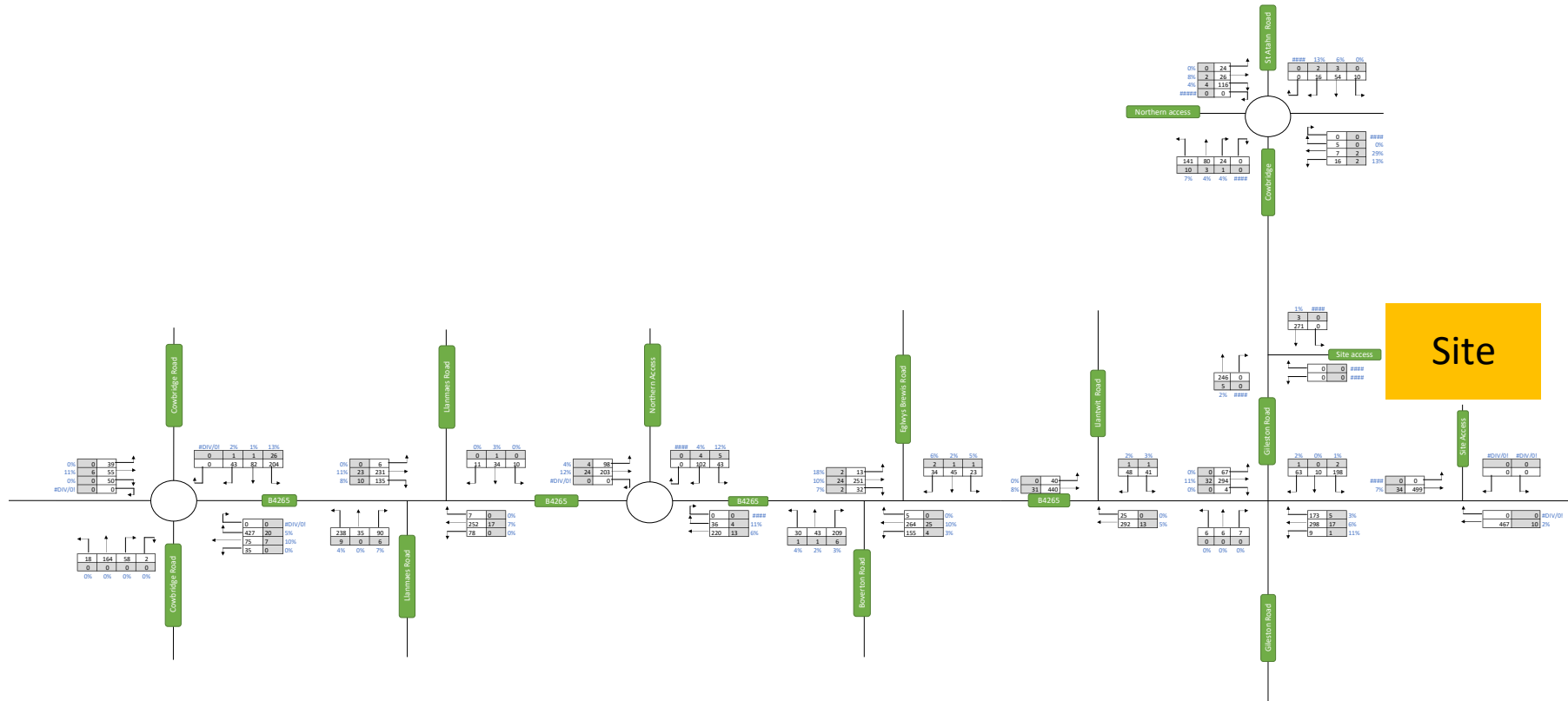
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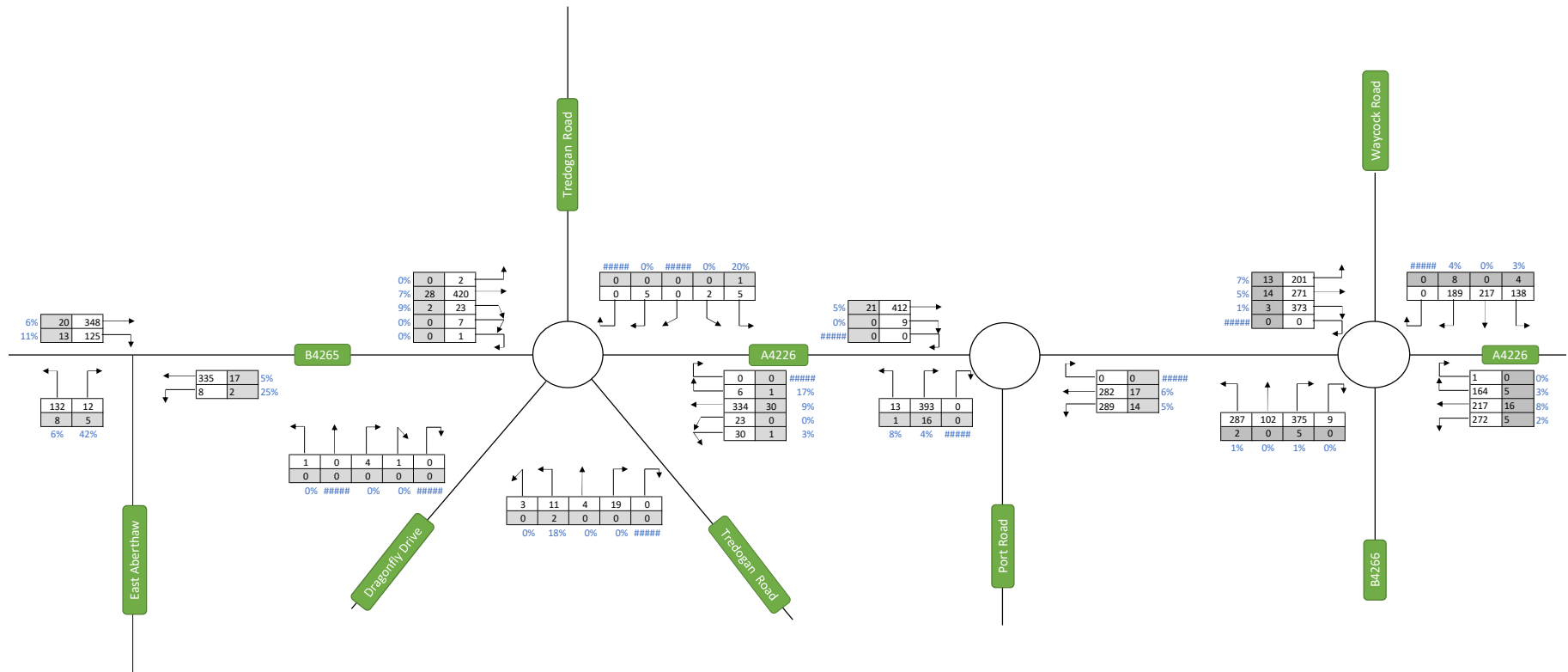
Base 2024 PM



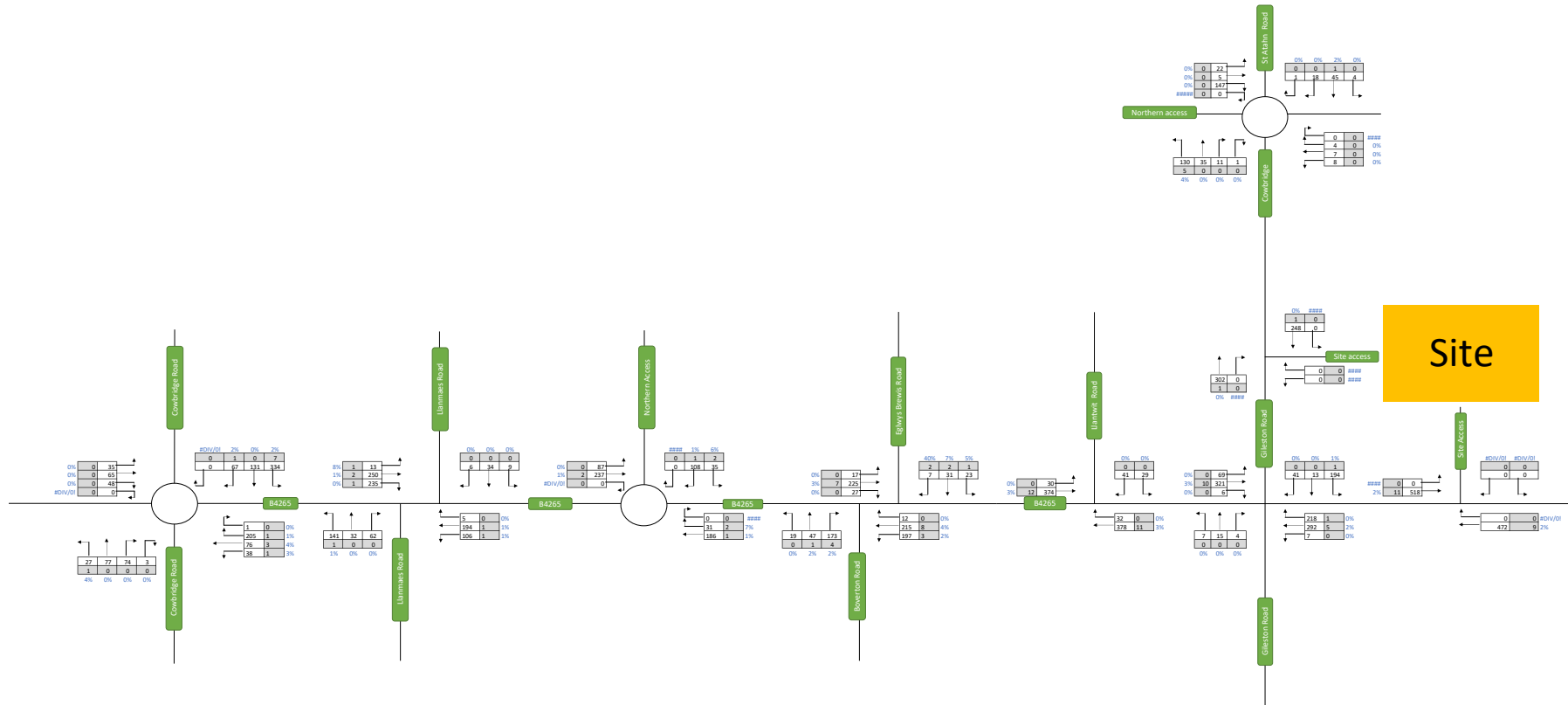
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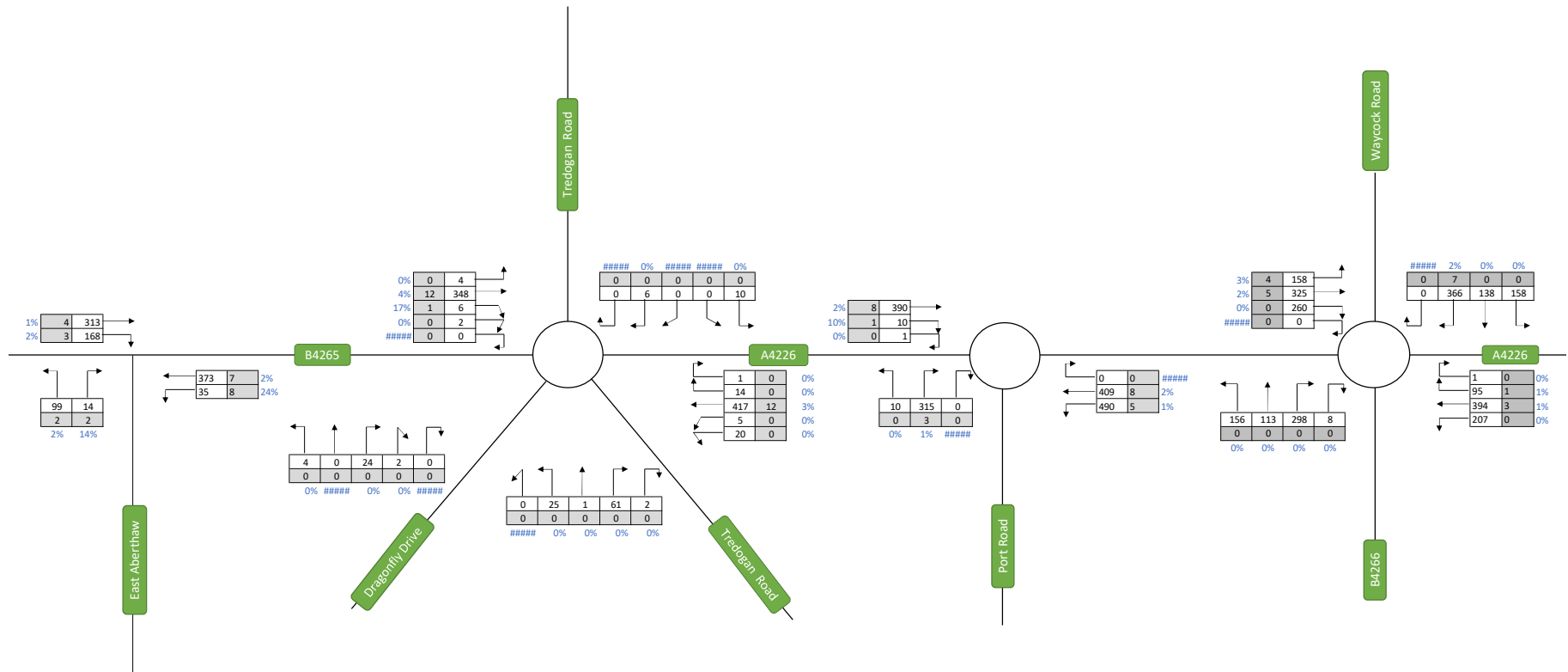
Base 2027 AM



Base 2027 PM



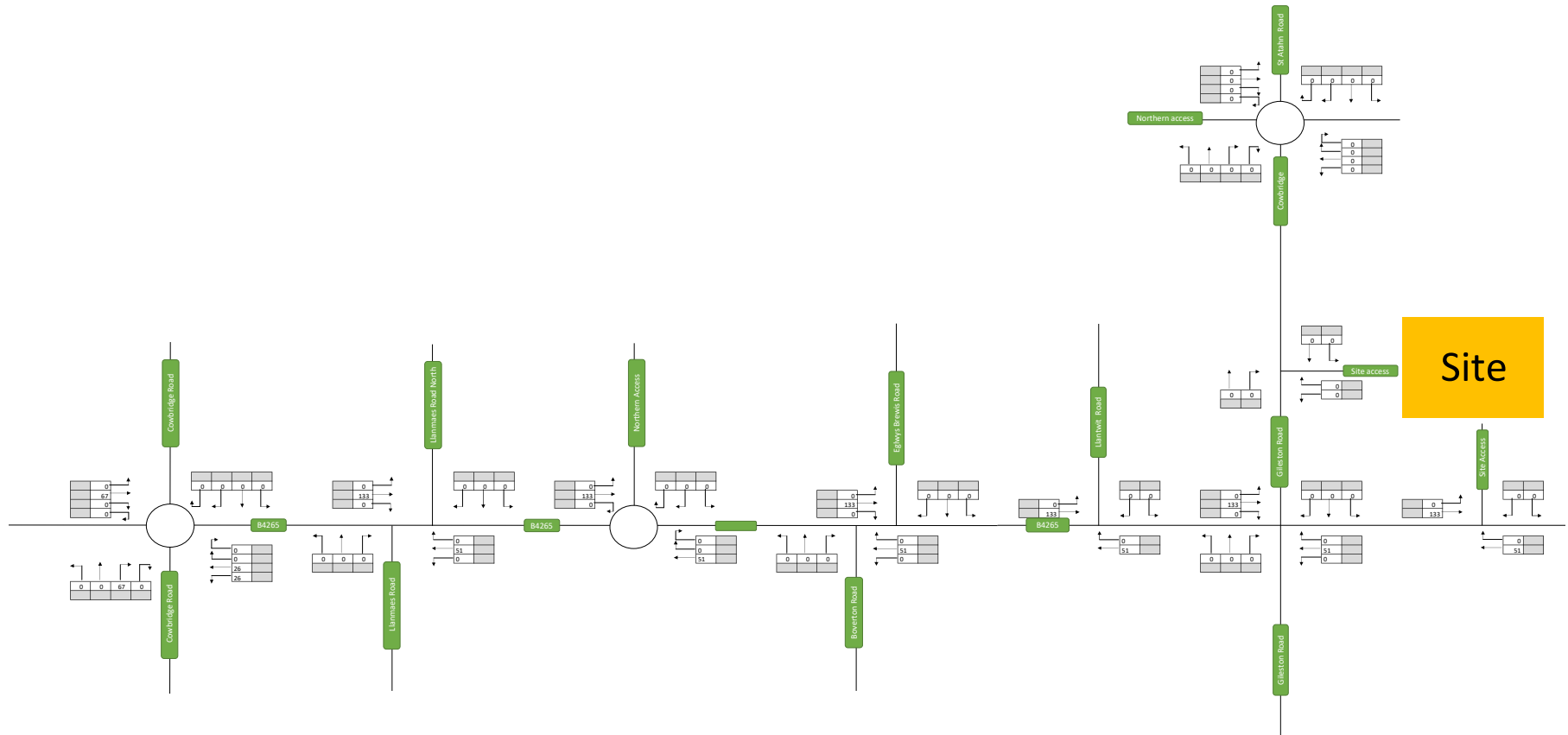
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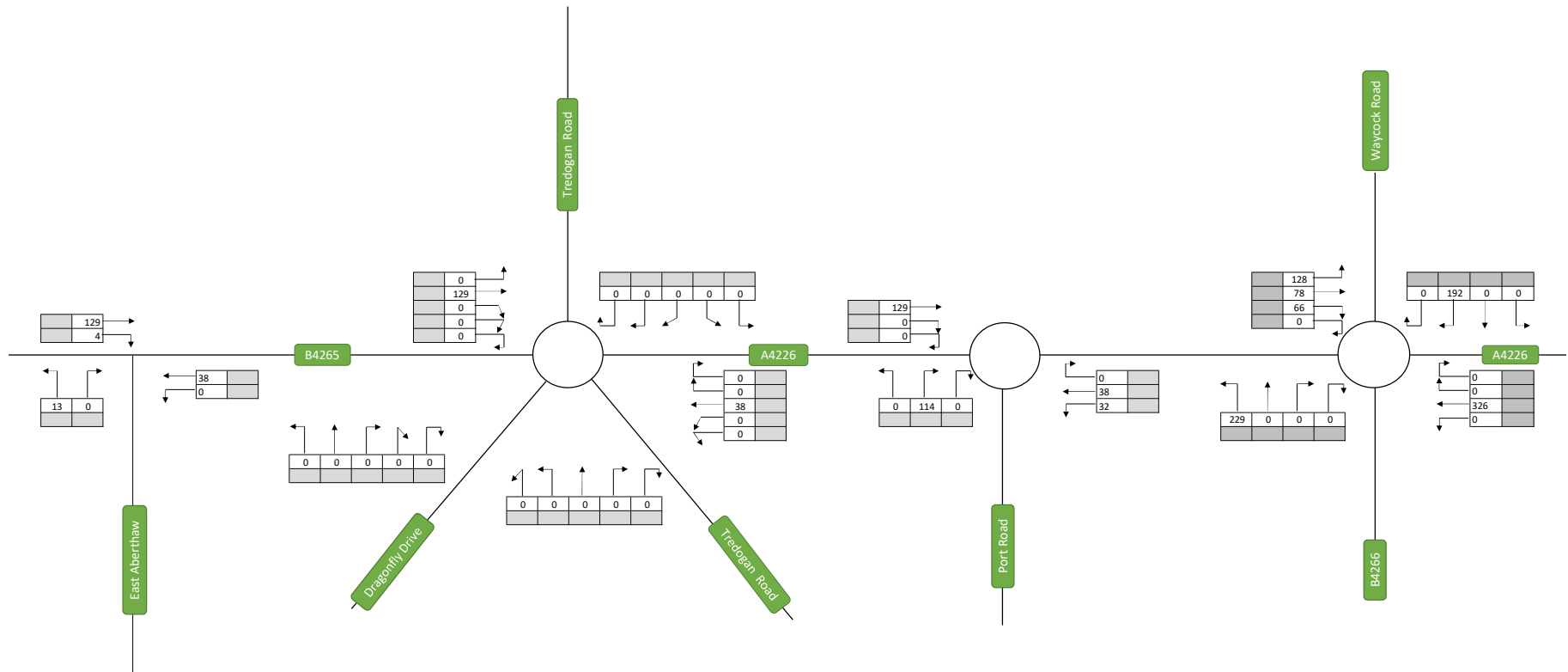
Appendix K



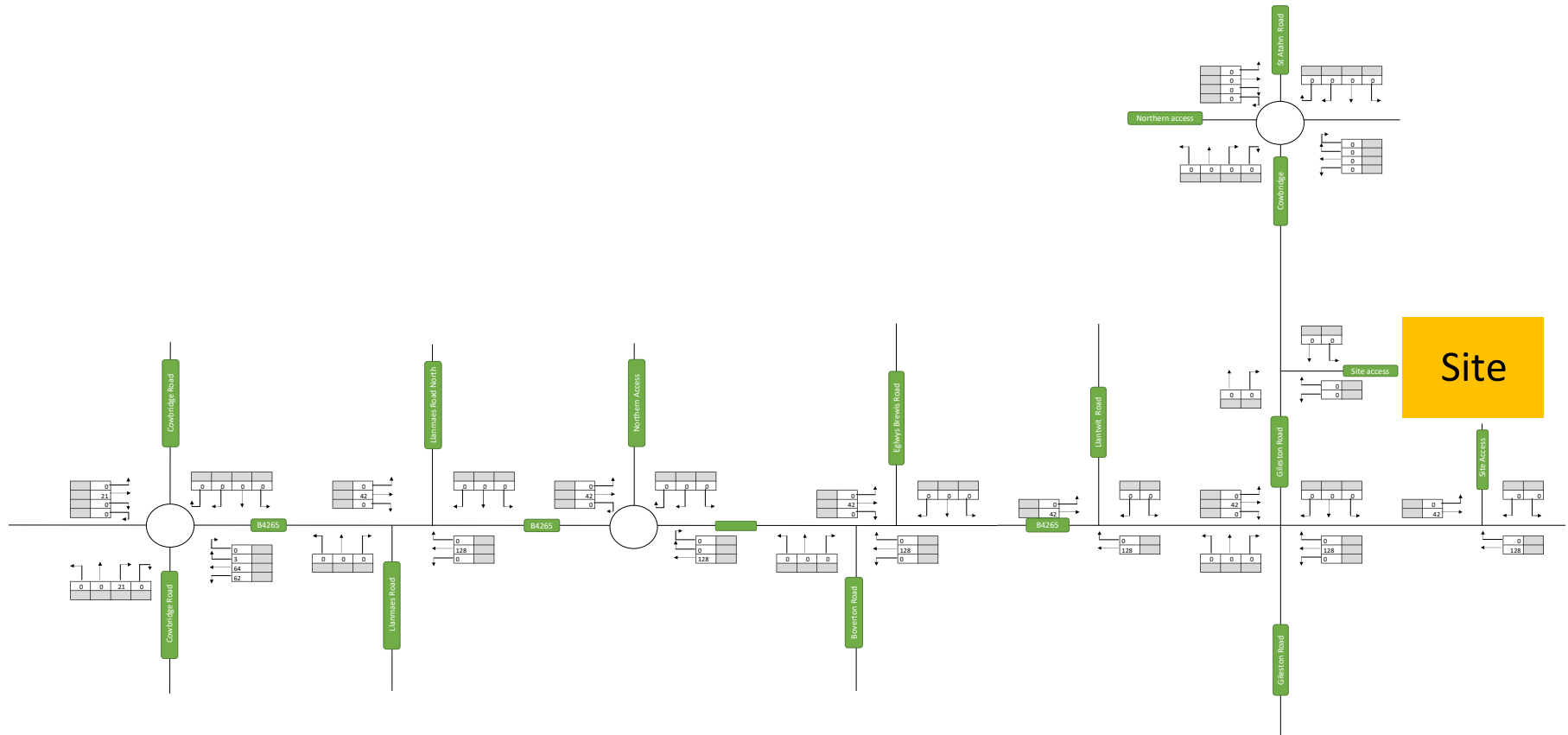
Committed AM



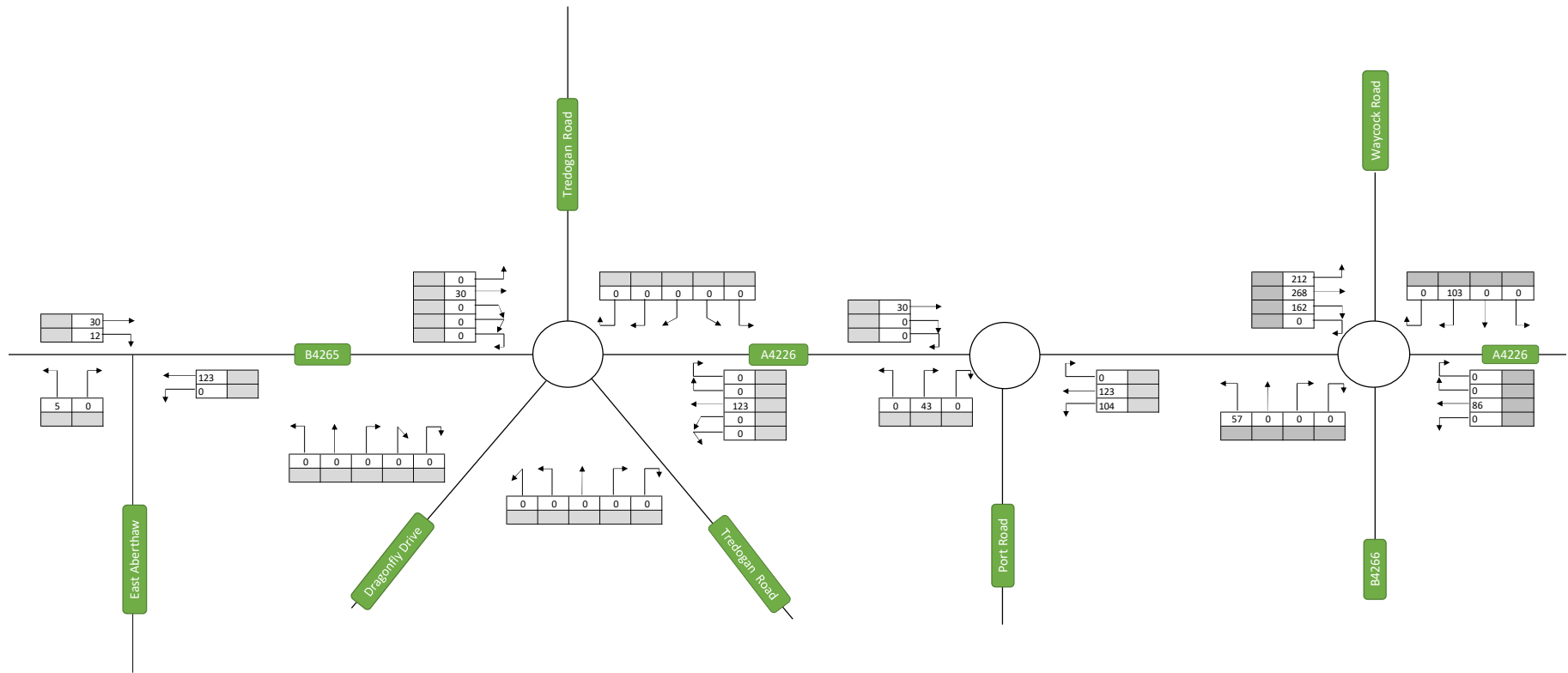
Committed AM



Committed PM



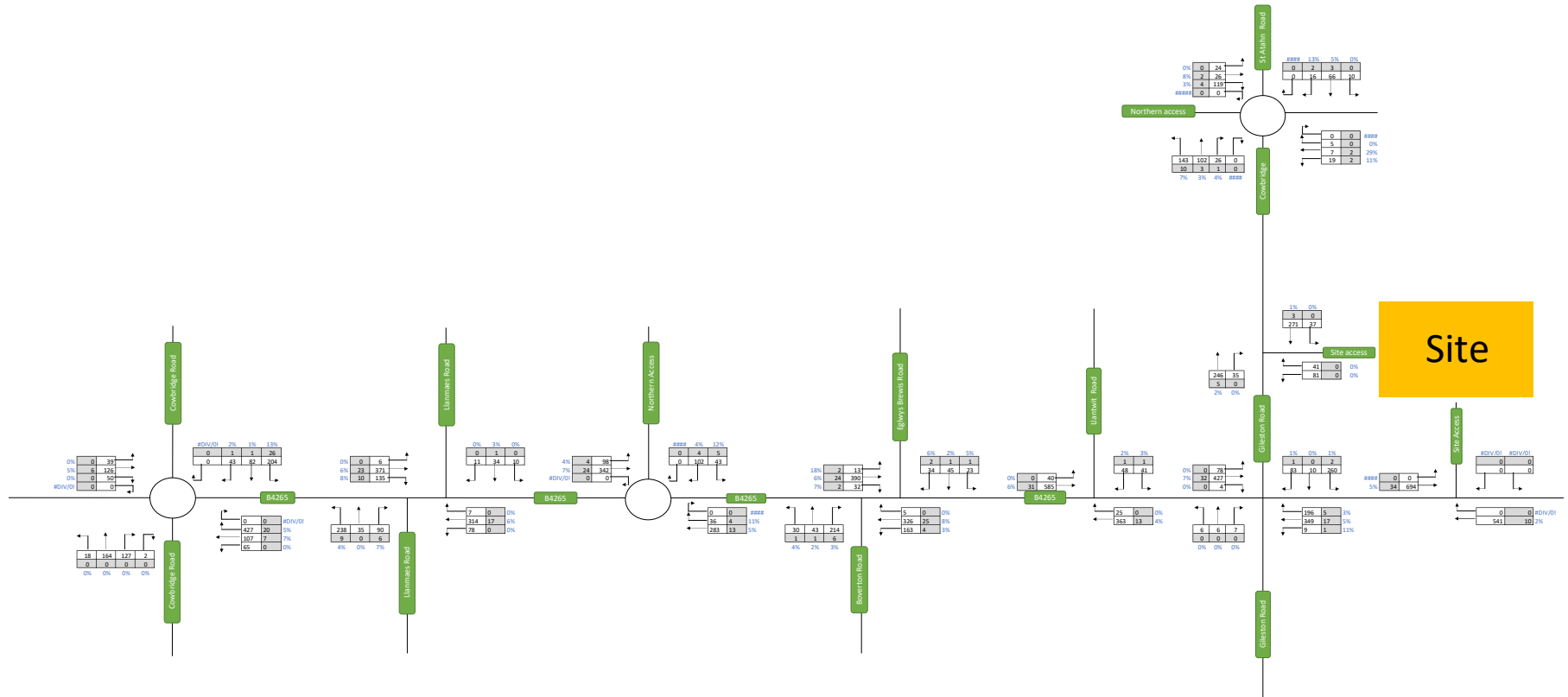
Committed PM



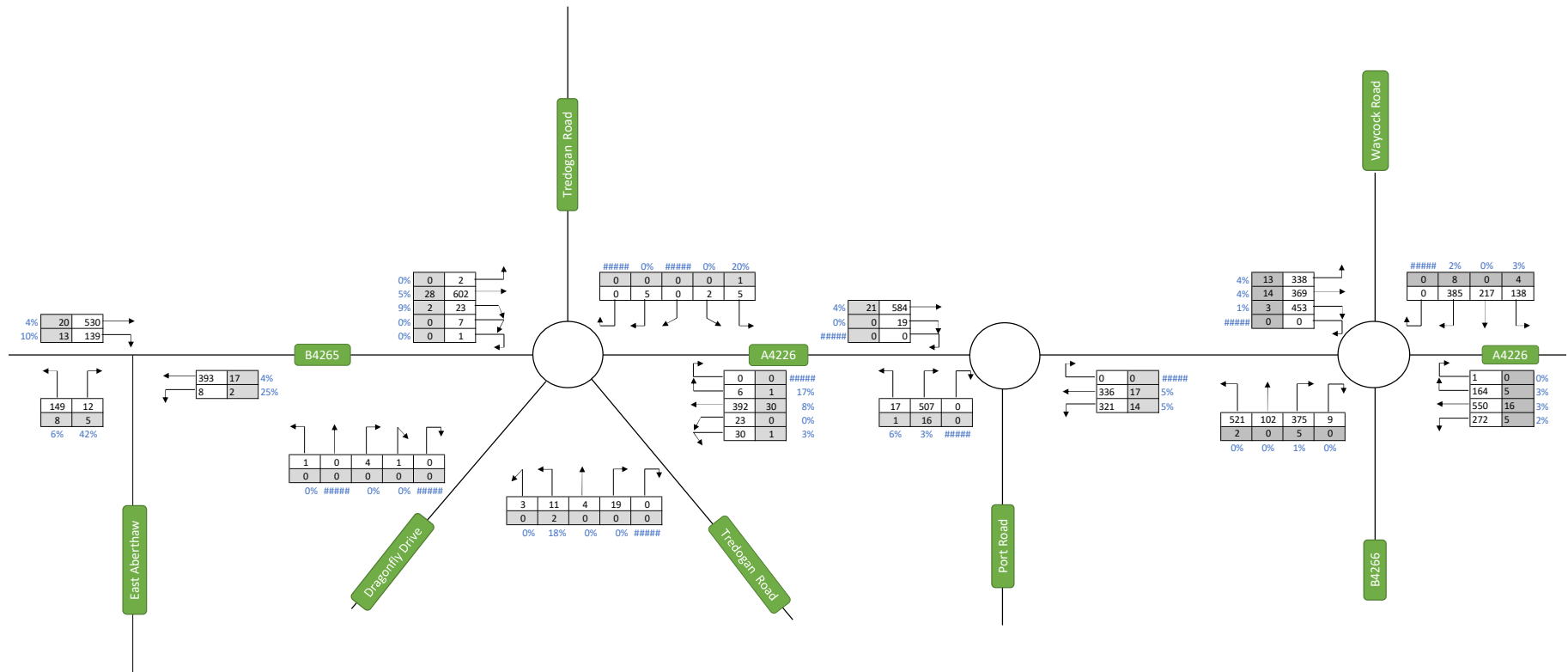
Appendix L



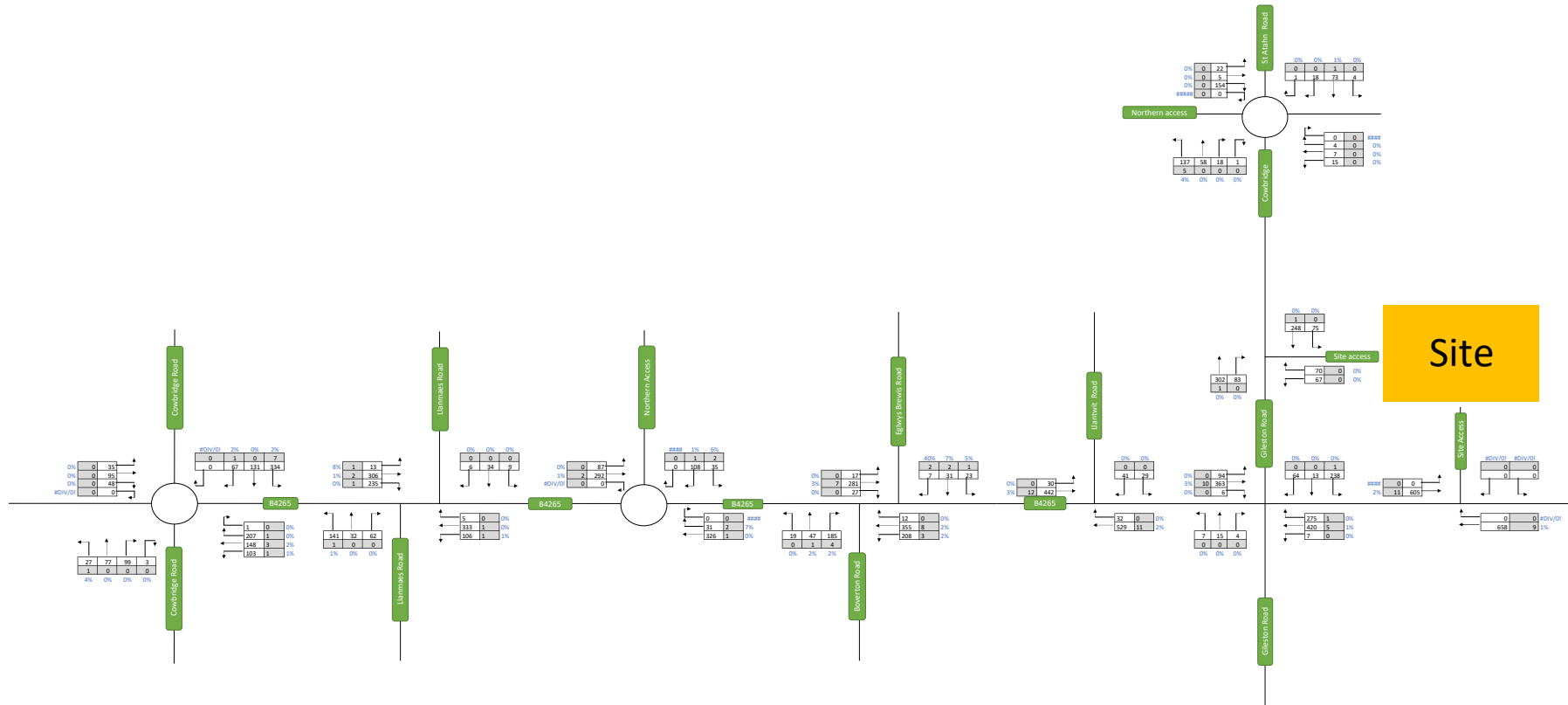
Base 2027 AM + com + dev



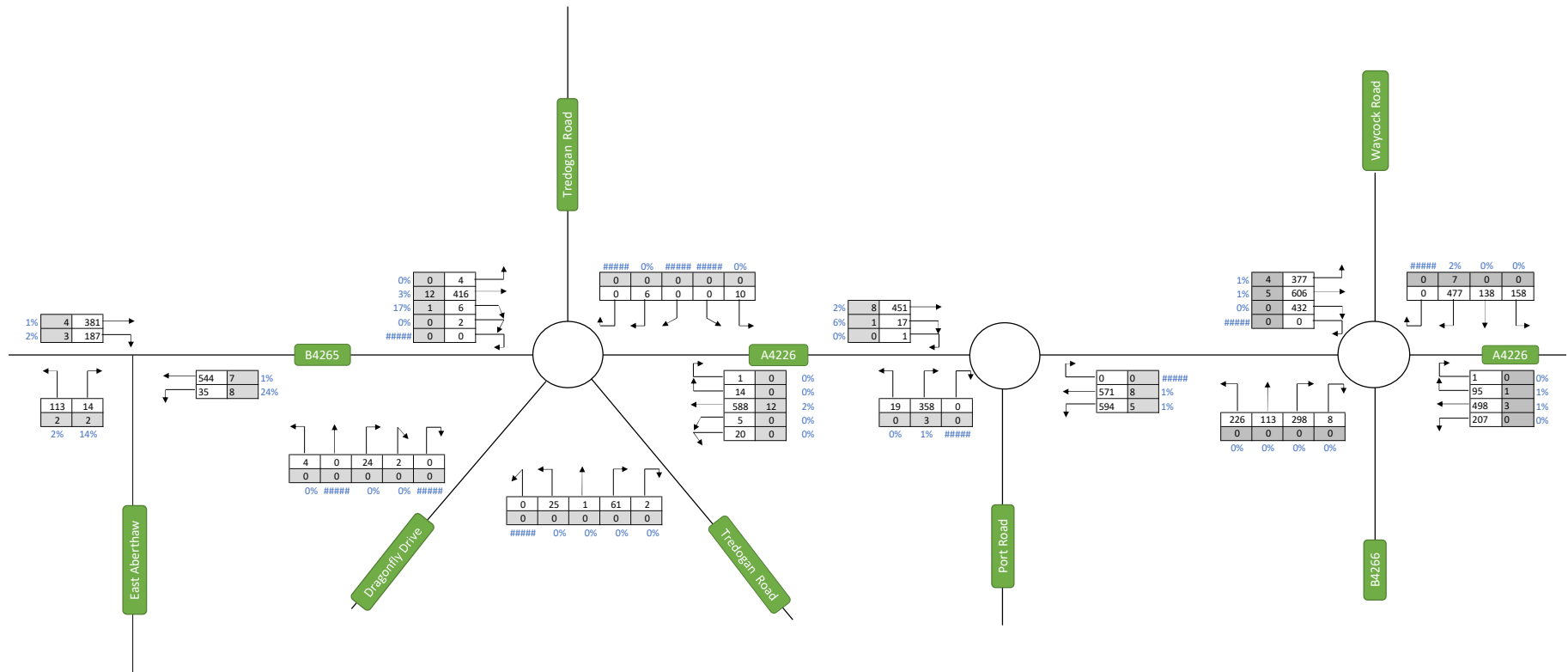
Base 2027 AM + com + dev



Base 2027 PM + com + dev



Base 2027 PM + com + dev



Appendix M



Junction 1 – Cowbridge Road/B4270/B4265 roundabout							Junction 2 – B4265/Llanmaes Road linked traffic signals						
Year		Base	Dev	Com	Base + com	Base + com + dev	%inc. developm ent	Base	Dev	Com	Base + com	Base + com + dev	%inc. developm ent
2024	AM	1223	18	184	1407			1101	18	184	1285		
	PM	1151	25	170	1321			1061	25	170	1231		
2027	AM	1252	18	184	1436	1454	1%	3382	18	184	3566	3584	0%
	PM	1179	25	170	1349	1374	2%	3260	25	170	3430	3456	1%
2032	AM	1298	18	184	1482	1500	1%	3506	18	184	3690	3708	0%
	PM	1222	25	170	1392	1417	2%	3380	25	170	3550	3575	1%
2037	AM	1345	18	184	1529	1547	1%	3634	18	184	3818	3835	0%
	PM	1265	25	170	1435	1461	2%	3499	25	170	3669	3694	1%
Junction 3 – B4265/Northern Access Road roundabout							Junction 4 – B4265/Boverton Road/Eglwys Road linked traffic signal-						
Year		Base	Dev	Com	Base + com	Base + com + dev	%inc. developm ent	Base	Dev	Com	Base + com	Base + com + dev	%inc. developm ent
2024	AM	686	18	184	870			1079	31	184	1263		
	PM	667	25	170	837			970	48	170	1140		
2027	AM	702	18	184	886	904	2%	3314	31	184	3498	3529	1%
	PM	683	25	170	853	879	3%	2981	48	170	3151	3199	2%
2032	AM	728	18	184	912	930	2%	3435	31	184	3619	3650	1%
	PM	708	25	170	878	904	3%	3090	48	170	3260	3308	1%
2037	AM	755	18	184	939	956	2%	3560	31	184	3744	3775	1%
	PM	733	25	170	903	929	3%	3199	48	170	3369	3417	1%
Junction 5 – B4265/Llantwit Major Road priority junction							Junction 6 – B4265/Gileston Road crossroads						
Year		Base	Dev	Com	Base + com	Base + com + dev	%inc. developm ent	Base	Dev	Com	Base + com	Base + com + dev	%inc. developm ent
2024	AM	866	31	184	1050			1109	117	184	1293		
	PM	862	48	170	1032			1159	150	170	1329		
2027	AM	887	31	184	1071	1102	3%	1136	117	184	1320	1436	8%
	PM	883	48	170	1053	1101	4%	1187	150	170	1357	1507	10%
2032	AM	919	31	184	1103	1134	3%	1177	117	184	1361	1478	8%
	PM	915	48	170	1085	1134	4%	1231	150	170	1401	1551	10%
2037	AM	953	31	184	1137	1167	3%	1220	117	184	1404	1521	8%
	PM	948	48	170	1118	1166	4%	1274	150	170	1444	1594	9%
Junction 7 – Cowbridge Road/Eglwys Brewis Road/St Athan roundabout							Junction 8 – East Aberthaw priority junction						
Year		Base	Dev	Com	Base + com	Base + com + dev	%inc. developm ent	Base	Dev	Com	Base + com	Base + com + dev	%inc. developm ent
2024	AM	505	47	0	505			938	86	184	1122		
	PM	429	78	0	429			979	86	170	1149		
2027	AM	2067	47	0	2067	2114	2%	961	86	184	1145	1230	7%
	PM	1758	78	0	1758	1836	4%	1003	86	170	1173	1258	7%
2032	AM	2142	47	0	2142	2190	2%	996	86	184	1180	1265	7%
	PM	1822	78	0	1822	1900	4%	1040	86	170	1210	1295	7%
2037	AM	2220	47	0	2220	2268	2%	1032	86	184	1216	1302	7%
	PM	1886	78	0	1886	1964	4%	1076	86	170	1246	1332	7%
Junction 9 – B4265/Tredogan Road/A4226 roundabout							Junction 10 – Port Road roundabout						
Year		Base	Dev	Com	Base + com	Base + com + dev	%inc. developm ent	Base	Dev	Com	Base + com	Base + com + dev	%inc. developm ent
2024	AM	880	73	167	1047			1366	73	313	1679		
	PM	931	86	153	1084			1587	86	300	1887		
2027	AM	901	73	167	1068	1141	6%	1399	73	313	1712	1785	4%
	PM	954	86	153	1107	1193	7%	1626	86	300	1926	2012	4%
2032	AM	934	73	167	1101	1174	6%	1450	73	313	1763	1836	4%
	PM	989	86	153	1142	1228	7%	1685	86	300	1985	2071	4%
2037	AM	968	73	167	1135	1208	6%	1503	73	313	1816	1889	4%
	PM	1023	86	153	1176	1262	7%	1744	86	300	2044	2130	4%
Junction 11 – Waycock Cross Roundabout (Waycock Road/A4226/B4266 roundabout)													
Year		Base	Dev	Com	Base + com	Base + com + dev	%inc. developm ent						
2024	AM	2751	59	1019	3770								
	PM	2613	70	888	3501								
2027	AM	2817	59	1019	3836	3895	2%						
	PM	2676	70	888	3564	3635	2%						
2032	AM	2920	59	1019	3939	3999	1%						
	PM	2774	70	888	3662	3733	2%						
2037	AM	3026	59	1019	4045	4105	1%						
	PM	2872	70	1019	3891	3962	2%						

Appendix N



Junctions 9							
ARCADY 9 - Roundabout Module							
Version: 9.5.0.6896 © Copyright TRL Limited, 2018							
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk							
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution							

Filename: B4265-Cowbridge Road roundabout.j9

Path: Z:\Lime\Projects\2024\24063 Church Farm, St Athan\Analysis\November 2024 JCA\P1 only

Report generation date: 15/08/2025 10:49:12

- »2024, AM
- »2024, PM
- »2027, AM
- »2027, PM
- »2027 + com, AM
- »2027 + com, PM
- »2027 + com + development, AM
- »2027 + com + development, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2024								
Arm 1	0.5	2.86	0.30	A	0.2	2.42	0.18	A
Arm 2	0.2	2.83	0.17	A	0.1	2.50	0.12	A
Arm 3	0.1	2.60	0.10	A	0.1	2.24	0.09	A
Arm 4	0.3	2.95	0.21	A	0.5	3.35	0.34	A
2027								
Arm 1	0.5	2.90	0.31	A	0.2	2.44	0.19	A
Arm 2	0.2	2.86	0.17	A	0.1	2.51	0.12	A
Arm 3	0.1	2.62	0.10	A	0.1	2.25	0.09	A
Arm 4	0.3	2.97	0.22	A	0.6	3.41	0.35	A
2027 + com								
Arm 1	0.5	3.01	0.34	A	0.4	2.66	0.27	A
Arm 2	0.3	3.07	0.23	A	0.2	2.62	0.14	A
Arm 3	0.2	2.82	0.15	A	0.1	2.31	0.11	A
Arm 4	0.3	3.15	0.23	A	0.6	3.48	0.36	A
2027 + com + development								
Arm 1	0.6	3.04	0.35	A	0.4	2.69	0.27	A
Arm 2	0.3	3.09	0.23	A	0.2	2.64	0.14	A
Arm 3	0.2	2.83	0.15	A	0.1	2.33	0.11	A
Arm 4	0.3	3.16	0.23	A	0.6	3.50	0.36	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	
Location	
Site number	
Date	18/11/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-U7G8RPA\Aimee
Description	

Units

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

Analysis Options

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	2024	AM	ONE HOUR	08:00	09:30	15	✓
D2	2024	PM	ONE HOUR	17:00	18:30	15	✓
D3	2027	AM	ONE HOUR	08:00	09:30	15	✓
D4	2027	PM	ONE HOUR	17:00	18:30	15	✓
D9	2027 + com	AM	ONE HOUR	08:00	09:30	15	✓
D10	2027 + com	PM	ONE HOUR	17:00	18:30	15	✓
D15	2027 + com + development	AM	ONE HOUR	08:00	09:30	15	✓
D16	2027 + com + development	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

2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B4265/Cowbridge Road roundabout	Standard Roundabout		1, 2, 3, 4	2.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	B4265 (east)	
2	Cowbridge Road	
3	B4265 (west)	
4	Cowbridge Road/B4270	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.70	7.50	21.4	22.6	75.0	8.0	
2	3.12	7.48	19.8	40.6	75.0	17.1	
3	3.92	7.14	21.1	40.0	75.0	16.3	
4	3.18	7.22	22.8	23.0	75.0	28.7	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.552	2008
2	0.524	1840
3	0.544	1975
4	0.498	1763

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	2024	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	524	100.000
2		ONE HOUR	✓	237	100.000
3		ONE HOUR	✓	141	100.000
4		ONE HOUR	✓	321	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	34	73	417
	2	57	2	18	160
	3	54	49	0	38
	4	199	80	42	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	0	10	5
	2	0	0	0	0
	3	11	0	0	0
	4	13	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.30	2.86	0.5	A	481	721
2	0.17	2.83	0.2	A	217	326
3	0.10	2.60	0.1	A	129	194
4	0.21	2.95	0.3	A	295	442

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	394	99	130	1936	0.204	393	233	0.0	0.3	2.457	A
2	178	45	399	1631	0.109	178	124	0.0	0.1	2.478	A
3	106	27	478	1716	0.062	106	100	0.0	0.1	2.324	A
4	242	60	122	1703	0.142	241	462	0.0	0.2	2.665	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	471	118	155	1922	0.245	471	279	0.3	0.3	2.612	A
2	213	53	478	1590	0.134	213	148	0.1	0.2	2.614	A
3	127	32	571	1664	0.076	127	119	0.1	0.1	2.433	A
4	289	72	146	1691	0.171	288	553	0.2	0.2	2.779	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	577	144	190	1903	0.303	576	341	0.3	0.5	2.859	A
2	261	65	585	1534	0.170	261	182	0.2	0.2	2.828	A
3	155	39	700	1595	0.097	155	146	0.1	0.1	2.599	A
4	353	88	178	1674	0.211	353	677	0.2	0.3	2.950	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	577	144	190	1903	0.303	577	341	0.5	0.5	2.859	A
2	261	65	586	1533	0.170	261	182	0.2	0.2	2.828	A
3	155	39	700	1594	0.097	155	146	0.1	0.1	2.599	A
4	353	88	178	1674	0.211	353	677	0.3	0.3	2.950	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	471	118	156	1922	0.245	472	279	0.5	0.3	2.614	A
2	213	53	479	1589	0.134	213	148	0.2	0.2	2.615	A
3	127	32	572	1664	0.076	127	120	0.1	0.1	2.436	A
4	289	72	146	1690	0.171	289	553	0.3	0.2	2.780	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	394	99	130	1936	0.204	395	234	0.3	0.3	2.460	A
2	178	45	401	1630	0.109	179	124	0.2	0.1	2.481	A
3	106	27	479	1715	0.062	106	100	0.1	0.1	2.328	A
4	242	60	122	1702	0.142	242	463	0.2	0.2	2.670	A

2024, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B4265/Cowbridge Road roundabout	Standard Roundabout		1, 2, 3, 4	2.83	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2024	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	312	100.000
2		ONE HOUR	✓	176	100.000
3		ONE HOUR	✓	144	100.000
4		ONE HOUR	✓	519	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1	2	3	4
From	1	1	37	74	200
	2	72	3	26	75
	3	63	47	0	34
	4	326	128	65	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	3	4	1
	2	0	0	4	0
	3	0	0	0	0
	4	2	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.18	2.42	0.2	A	286	429
2	0.12	2.50	0.1	A	162	242
3	0.09	2.24	0.1	A	132	198
4	0.34	3.35	0.5	A	476	714

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	235	59	182	1907	0.123	234	347	0.0	0.1	2.193	A
2	133	33	255	1706	0.078	132	161	0.0	0.1	2.300	A
3	108	27	264	1832	0.059	108	124	0.0	0.1	2.088	A
4	391	98	140	1694	0.231	390	232	0.0	0.3	2.799	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	280	70	218	1887	0.149	280	415	0.1	0.2	2.283	A
2	158	40	305	1680	0.094	158	193	0.1	0.1	2.378	A
3	129	32	315	1804	0.072	129	148	0.1	0.1	2.149	A
4	467	117	167	1680	0.278	466	278	0.3	0.4	3.011	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	344	86	267	1860	0.185	343	508	0.2	0.2	2.418	A
2	194	48	374	1644	0.118	194	237	0.1	0.1	2.495	A
3	159	40	386	1765	0.090	158	182	0.1	0.1	2.240	A
4	571	143	205	1661	0.344	571	340	0.4	0.5	3.349	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	344	86	268	1860	0.185	344	509	0.2	0.2	2.418	A
2	194	48	374	1644	0.118	194	237	0.1	0.1	2.496	A
3	159	40	386	1765	0.090	159	182	0.1	0.1	2.240	A
4	571	143	205	1661	0.344	571	340	0.5	0.5	3.352	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	280	70	219	1887	0.149	281	416	0.2	0.2	2.284	A
2	158	40	306	1680	0.094	158	193	0.1	0.1	2.379	A
3	129	32	316	1804	0.072	130	148	0.1	0.1	2.151	A
4	467	117	167	1680	0.278	467	278	0.5	0.4	3.014	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	235	59	183	1907	0.123	235	348	0.2	0.1	2.194	A
2	133	33	256	1706	0.078	133	162	0.1	0.1	2.302	A
3	108	27	264	1832	0.059	108	124	0.1	0.1	2.089	A
4	391	98	140	1693	0.231	391	233	0.4	0.3	2.806	A

2027, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B4265/Cowbridge Road roundabout	Standard Roundabout		1, 2, 3, 4	2.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2027	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	537	100.000
2		ONE HOUR	✓	242	100.000
3		ONE HOUR	✓	144	100.000
4		ONE HOUR	✓	329	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1	2	3	4
	1	0	35	75	427
	2	58	2	18	164
	3	55	50	0	39
	4	204	82	43	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1	2	3	4
	1	0	0	10	5
	2	0	0	0	0
	3	11	0	0	0
	4	13	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.31	2.90	0.5	A	493	739
2	0.17	2.86	0.2	A	222	333
3	0.10	2.62	0.1	A	132	198
4	0.22	2.97	0.3	A	302	453

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	404	101	133	1934	0.209	403	238	0.0	0.3	2.475	A
2	182	46	409	1626	0.112	182	127	0.0	0.1	2.493	A
3	108	27	489	1709	0.063	108	102	0.0	0.1	2.336	A
4	248	62	124	1701	0.146	247	473	0.0	0.2	2.678	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	483	121	159	1920	0.251	482	285	0.3	0.4	2.637	A
2	218	54	490	1584	0.137	217	152	0.1	0.2	2.634	A
3	129	32	585	1657	0.078	129	122	0.1	0.1	2.448	A
4	296	74	148	1689	0.175	296	566	0.2	0.2	2.796	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	591	148	195	1900	0.311	591	349	0.4	0.5	2.895	A
2	266	67	600	1526	0.175	266	186	0.2	0.2	2.857	A
3	159	40	716	1586	0.100	158	150	0.1	0.1	2.621	A
4	362	91	182	1673	0.217	362	693	0.2	0.3	2.973	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	591	148	195	1900	0.311	591	349	0.5	0.5	2.895	A
2	266	67	600	1526	0.175	266	186	0.2	0.2	2.857	A
3	159	40	717	1585	0.100	159	150	0.1	0.1	2.622	A
4	362	91	182	1673	0.217	362	694	0.3	0.3	2.973	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	483	121	159	1920	0.251	483	285	0.5	0.4	2.641	A
2	218	54	490	1583	0.137	218	152	0.2	0.2	2.636	A
3	129	32	586	1657	0.078	130	122	0.1	0.1	2.451	A
4	296	74	148	1689	0.175	296	567	0.3	0.2	2.797	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	404	101	133	1934	0.209	405	239	0.4	0.3	2.480	A
2	182	46	411	1625	0.112	182	127	0.2	0.1	2.496	A
3	108	27	490	1708	0.063	108	102	0.1	0.1	2.338	A
4	248	62	124	1701	0.146	248	475	0.2	0.2	2.683	A

2027, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B4265/Cowbridge Road roundabout	Standard Roundabout		1, 2, 3, 4	2.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2027	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	320	100.000
2		ONE HOUR	✓	181	100.000
3		ONE HOUR	✓	148	100.000
4		ONE HOUR	✓	532	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1	2	3	4
From	1	1	38	76	205
	2	74	3	27	77
	3	65	48	0	35
	4	334	131	67	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	3	4	1
	2	0	0	4	0
	3	0	0	0	0
	4	2	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.19	2.44	0.2	A	294	440
2	0.12	2.51	0.1	A	166	249
3	0.09	2.25	0.1	A	136	204
4	0.35	3.41	0.6	A	488	732

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	241	60	187	1905	0.126	240	356	0.0	0.1	2.205	A
2	136	34	262	1703	0.080	136	165	0.0	0.1	2.310	A
3	111	28	270	1828	0.061	111	128	0.0	0.1	2.096	A
4	401	100	143	1692	0.237	399	238	0.0	0.3	2.825	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	288	72	224	1884	0.153	288	426	0.1	0.2	2.297	A
2	163	41	314	1676	0.097	163	198	0.1	0.1	2.392	A
3	133	33	323	1799	0.074	133	153	0.1	0.1	2.160	A
4	478	120	172	1678	0.285	478	285	0.3	0.4	3.046	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	352	88	274	1857	0.190	352	521	0.2	0.2	2.438	A
2	199	50	384	1639	0.122	199	242	0.1	0.1	2.514	A
3	163	41	396	1760	0.093	163	187	0.1	0.1	2.254	A
4	586	146	210	1658	0.353	585	349	0.4	0.6	3.403	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	352	88	274	1857	0.190	352	522	0.2	0.2	2.439	A
2	199	50	384	1639	0.122	199	242	0.1	0.1	2.514	A
3	163	41	396	1760	0.093	163	187	0.1	0.1	2.254	A
4	586	146	210	1658	0.353	586	349	0.6	0.6	3.405	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	288	72	224	1884	0.153	288	427	0.2	0.2	2.298	A
2	163	41	314	1676	0.097	163	198	0.1	0.1	2.395	A
3	133	33	324	1799	0.074	133	153	0.1	0.1	2.162	A
4	478	120	172	1677	0.285	479	285	0.6	0.4	3.051	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	241	60	188	1904	0.127	241	357	0.2	0.1	2.206	A
2	136	34	263	1702	0.080	136	166	0.1	0.1	2.311	A
3	111	28	271	1828	0.061	111	128	0.1	0.1	2.097	A
4	401	100	144	1691	0.237	401	239	0.4	0.3	2.831	A

2027 + com, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B4265/Cowbridge Road roundabout	Standard Roundabout		1, 2, 3, 4	3.03	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
D9	2027 + com	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	587	100.000
2		ONE HOUR	✓	309	100.000
3		ONE HOUR	✓	211	100.000
4		ONE HOUR	✓	329	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1	2	3	4
From	1	0	60	100	427
	2	125	2	18	164
	3	122	50	0	39
	4	204	82	43	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	0	7	5
	2	0	0	0	0
	3	5	0	0	0
	4	13	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.34	3.01	0.5	A	539	808
2	0.23	3.07	0.3	A	284	425
3	0.15	2.82	0.2	A	194	290
4	0.23	3.15	0.3	A	302	453

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	442	110	133	1934	0.228	441	339	0.0	0.3	2.523	A
2	233	58	428	1616	0.144	232	146	0.0	0.2	2.599	A
3	159	40	539	1682	0.094	158	121	0.0	0.1	2.429	A
4	248	62	224	1651	0.150	247	473	0.0	0.2	2.774	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	528	132	159	1920	0.275	527	405	0.3	0.4	2.709	A
2	278	69	512	1572	0.177	278	174	0.2	0.2	2.781	A
3	190	47	645	1624	0.117	190	145	0.1	0.1	2.579	A
4	296	74	269	1629	0.182	296	566	0.2	0.2	2.922	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	646	162	195	1900	0.340	646	496	0.4	0.5	3.005	A
2	340	85	627	1512	0.225	340	213	0.2	0.3	3.072	A
3	232	58	790	1545	0.150	232	177	0.1	0.2	2.818	A
4	362	91	329	1599	0.227	362	693	0.2	0.3	3.150	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	646	162	195	1900	0.340	646	497	0.5	0.5	3.007	A
2	340	85	628	1511	0.225	340	214	0.3	0.3	3.072	A
3	232	58	791	1545	0.150	232	177	0.2	0.2	2.819	A
4	362	91	329	1599	0.227	362	694	0.3	0.3	3.150	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	528	132	159	1920	0.275	528	406	0.5	0.4	2.711	A
2	278	69	513	1571	0.177	278	175	0.3	0.2	2.783	A
3	190	47	646	1624	0.117	190	145	0.2	0.1	2.583	A
4	296	74	269	1629	0.182	296	567	0.3	0.2	2.924	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	442	110	133	1934	0.228	442	340	0.4	0.3	2.530	A
2	233	58	429	1615	0.144	233	146	0.2	0.2	2.604	A
3	159	40	541	1681	0.095	159	121	0.1	0.1	2.433	A
4	248	62	225	1651	0.150	248	475	0.2	0.2	2.780	A

2027 + com, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B4265/Cowbridge Road roundabout	Standard Roundabout		1, 2, 3, 4	2.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2027 + com	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	447	100.000
2		ONE HOUR	✓	202	100.000
3		ONE HOUR	✓	169	100.000
4		ONE HOUR	✓	532	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	99	140	207	
	2	95	3	27	77
	3	86	48	0	35
	4	334	131	67	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	1	2	0
	2	0	0	4	0
	3	0	0	0	0
	4	2	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.27	2.66	0.4	A	410	615
2	0.14	2.62	0.2	A	185	278
3	0.11	2.31	0.1	A	155	233
4	0.36	3.48	0.6	A	488	732

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	337	84	187	1905	0.177	336	387	0.0	0.2	2.312	A
2	152	38	312	1677	0.091	152	211	0.0	0.1	2.372	A
3	127	32	288	1819	0.070	127	176	0.0	0.1	2.127	A
4	401	100	175	1676	0.239	399	240	0.0	0.3	2.859	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	402	100	224	1884	0.213	402	464	0.2	0.3	2.448	A
2	182	45	373	1645	0.110	181	252	0.1	0.1	2.472	A
3	152	38	344	1788	0.085	152	210	0.1	0.1	2.199	A
4	478	120	209	1659	0.288	478	287	0.3	0.4	3.094	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	492	123	274	1857	0.265	492	568	0.3	0.4	2.659	A
2	222	56	457	1601	0.139	222	309	0.1	0.2	2.624	A
3	186	47	421	1746	0.107	186	257	0.1	0.1	2.307	A
4	586	146	256	1635	0.358	585	351	0.4	0.6	3.477	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	492	123	274	1857	0.265	492	568	0.4	0.4	2.660	A
2	222	56	457	1601	0.139	222	309	0.2	0.2	2.624	A
3	186	47	422	1746	0.107	186	258	0.1	0.1	2.307	A
4	586	146	257	1635	0.358	586	351	0.6	0.6	3.480	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	402	100	224	1884	0.213	402	464	0.4	0.3	2.451	A
2	182	45	373	1645	0.110	182	253	0.2	0.1	2.473	A
3	152	38	345	1788	0.085	152	211	0.1	0.1	2.202	A
4	478	120	210	1659	0.288	479	287	0.6	0.4	3.100	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	337	84	188	1904	0.177	337	389	0.3	0.2	2.317	A
2	152	38	313	1676	0.091	152	212	0.1	0.1	2.375	A
3	127	32	289	1818	0.070	127	176	0.1	0.1	2.128	A
4	401	100	176	1676	0.239	401	240	0.4	0.3	2.868	A

2027 + com + development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B4265/Cowbridge Road roundabout	Standard Roundabout		1, 2, 3, 4	3.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2027 + com + development	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	599	100.000
2		ONE HOUR	✓	311	100.000
3		ONE HOUR	✓	215	100.000
4		ONE HOUR	✓	329	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	65	107	427
	2	127	2	18	164
	3	126	50	0	39
	4	204	82	43	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	0	7	5
	2	0	0	0	0
	3	5	0	0	0
	4	13	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.35	3.04	0.6	A	550	824
2	0.23	3.09	0.3	A	285	428
3	0.15	2.83	0.2	A	197	296
4	0.23	3.16	0.3	A	302	453

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	451	113	133	1934	0.233	450	343	0.0	0.3	2.538	A
2	234	59	433	1613	0.145	233	149	0.0	0.2	2.607	A
3	162	40	541	1681	0.096	161	126	0.0	0.1	2.437	A
4	248	62	229	1649	0.150	247	473	0.0	0.2	2.778	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	538	135	159	1920	0.280	538	411	0.3	0.4	2.729	A
2	280	70	518	1569	0.178	279	179	0.2	0.2	2.792	A
3	193	48	647	1623	0.119	193	151	0.1	0.1	2.589	A
4	296	74	274	1627	0.182	296	566	0.2	0.2	2.928	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	660	165	195	1900	0.347	659	503	0.4	0.6	3.036	A
2	342	86	635	1508	0.227	342	219	0.2	0.3	3.088	A
3	237	59	792	1544	0.153	237	185	0.1	0.2	2.831	A
4	362	91	336	1596	0.227	362	693	0.2	0.3	3.158	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	660	165	195	1900	0.347	660	503	0.6	0.6	3.039	A
2	342	86	635	1507	0.227	342	219	0.3	0.3	3.089	A
3	237	59	793	1544	0.153	237	185	0.2	0.2	2.832	A
4	362	91	336	1596	0.227	362	694	0.3	0.3	3.158	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	538	135	159	1920	0.280	539	411	0.6	0.4	2.732	A
2	280	70	519	1568	0.178	280	179	0.3	0.2	2.796	A
3	193	48	648	1623	0.119	193	151	0.2	0.1	2.590	A
4	296	74	274	1626	0.182	296	567	0.3	0.2	2.929	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	451	113	133	1934	0.233	451	344	0.4	0.3	2.545	A
2	234	59	435	1612	0.145	234	150	0.2	0.2	2.614	A
3	162	40	542	1680	0.096	162	127	0.1	0.1	2.441	A
4	248	62	230	1649	0.150	248	475	0.2	0.2	2.784	A

2027 + com + development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	B4265/Cowbridge Road roundabout	Standard Roundabout		1, 2, 3, 4	2.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2027 + com + development	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	459	100.000
2		ONE HOUR	✓	206	100.000
3		ONE HOUR	✓	178	100.000
4		ONE HOUR	✓	532	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	103	148	207	
	2	99	3	27	77
	3	95	48	0	35
	4	334	131	67	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	1	2	0
	2	0	0	4	0
	3	0	0	0	0
	4	2	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.27	2.69	0.4	A	421	632
2	0.14	2.64	0.2	A	189	284
3	0.11	2.33	0.1	A	163	245
4	0.36	3.50	0.6	A	488	732

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	346	86	187	1905	0.181	345	397	0.0	0.2	2.326	A
2	155	39	318	1674	0.093	155	214	0.0	0.1	2.382	A
3	134	34	291	1817	0.074	134	182	0.0	0.1	2.138	A
4	401	100	185	1671	0.240	399	240	0.0	0.3	2.870	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	413	103	224	1884	0.219	412	475	0.2	0.3	2.466	A
2	185	46	380	1641	0.113	185	256	0.1	0.1	2.484	A
3	160	40	348	1786	0.090	160	217	0.1	0.1	2.213	A
4	478	120	221	1653	0.289	478	287	0.3	0.4	3.109	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	505	126	274	1857	0.272	505	582	0.3	0.4	2.686	A
2	227	57	465	1596	0.142	227	314	0.1	0.2	2.641	A
3	196	49	426	1744	0.112	196	266	0.1	0.1	2.325	A
4	586	146	271	1628	0.360	585	351	0.4	0.6	3.501	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	505	126	274	1857	0.272	505	582	0.4	0.4	2.686	A
2	227	57	466	1596	0.142	227	314	0.2	0.2	2.641	A
3	196	49	426	1743	0.112	196	266	0.1	0.1	2.325	A
4	586	146	271	1628	0.360	586	351	0.6	0.6	3.504	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	413	103	224	1884	0.219	413	476	0.4	0.3	2.470	A
2	185	46	381	1641	0.113	185	256	0.2	0.1	2.485	A
3	160	40	348	1786	0.090	160	218	0.1	0.1	2.214	A
4	478	120	221	1653	0.289	479	287	0.6	0.4	3.113	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	346	86	188	1904	0.181	346	399	0.3	0.2	2.329	A
2	155	39	319	1673	0.093	155	215	0.1	0.1	2.383	A
3	134	34	292	1817	0.074	134	182	0.1	0.1	2.140	A
4	401	100	185	1671	0.240	401	240	0.4	0.3	2.877	A

Appendix O



Junctions 9			
ARCADY 9 - Roundabout Module			
Version: 9.5.0.6896 © Copyright TRL Limited, 2018			
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Filename: Northern Access Road roundabout.j9

Path: Z:\Lime\Projects\2024\24063 Church Farm, St Athan\Analysis\November 2024 JCA\IP1 only

Report generation date: 15/08/2025 10:51:16

- »2024, AM
- »2024, PM
- »2027, AM
- »2027, PM
- »2027 + com, AM
- »2027 + com, PM
- »2027 + com + development, AM
- »2027 + com + development, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2024								
Arm 1	0.1	2.57	0.10	A	0.1	2.51	0.09	A
Arm 2	0.2	2.95	0.17	A	0.2	2.74	0.15	A
Arm 3	0.3	3.07	0.20	A	0.3	2.88	0.22	A
2027								
Arm 1	0.1	2.58	0.10	A	0.1	2.52	0.10	A
Arm 2	0.2	2.97	0.18	A	0.2	2.75	0.15	A
Arm 3	0.3	3.09	0.21	A	0.3	2.90	0.22	A
2027 + com								
Arm 1	0.1	2.75	0.10	A	0.1	2.57	0.10	A
Arm 2	0.3	3.08	0.21	A	0.3	3.04	0.24	A
Arm 3	0.4	3.39	0.30	A	0.3	3.01	0.25	A
2027 + com + development								
Arm 1	0.1	2.76	0.10	A	0.1	2.59	0.10	A
Arm 2	0.3	3.11	0.22	A	0.3	3.08	0.25	A
Arm 3	0.5	3.41	0.30	A	0.4	3.05	0.26	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	
Location	
Site number	
Date	18/11/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-U7G8RPA\Aimee
Description	

Units

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

Analysis Options

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	2024	AM	ONE HOUR	08:00	09:30	15	✓
D2	2024	PM	ONE HOUR	17:00	18:30	15	✓
D3	2027	AM	ONE HOUR	08:00	09:30	15	✓
D4	2027	PM	ONE HOUR	17:00	18:30	15	✓
D9	2027 + com	AM	ONE HOUR	08:00	09:30	15	✓
D10	2027 + com	PM	ONE HOUR	17:00	18:30	15	✓
D15	2027 + com + development	AM	ONE HOUR	08:00	09:30	15	✓
D16	2027 + com + development	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

2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Northern Access Road roundabout	Standard Roundabout		1, 2, 3	2.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Northern Access Road	
2	B4265 (east)	
3	B4265 (west)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.78	6.90	25.3	33.5	49.2	42.8	
2	3.60	7.10	15.5	17.2	49.2	38.9	
3	3.77	7.00	12.7	46.5	49.2	47.3	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.620	1778
2	0.589	1640
3	0.589	1628

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	2024	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	142	100.000
2		ONE HOUR	✓	250	100.000
3		ONE HOUR	✓	294	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1	2	3	
From	1	0	42	100
	2	35	0	215
	3	96	198	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	0	12	4
	2	11	0	6
	3	4	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.10	2.57	0.1	A	130	195
2	0.17	2.95	0.2	A	229	344
3	0.20	3.07	0.3	A	270	405

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	107	27	149	1686	0.063	107	98	0.0	0.1	2.421	A
2	188	47	75	1596	0.118	188	180	0.0	0.1	2.725	A
3	221	55	26	1613	0.137	221	236	0.0	0.2	2.824	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	128	32	178	1668	0.077	128	118	0.1	0.1	2.482	A
2	225	56	90	1587	0.142	225	216	0.1	0.2	2.818	A
3	264	66	31	1610	0.164	264	283	0.2	0.2	2.922	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	156	39	218	1643	0.095	156	144	0.1	0.1	2.571	A
2	275	69	110	1575	0.175	275	264	0.2	0.2	2.953	A
3	324	81	39	1605	0.202	323	347	0.2	0.3	3.067	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	156	39	218	1643	0.095	156	144	0.1	0.1	2.572	A
2	275	69	110	1575	0.175	275	264	0.2	0.2	2.953	A
3	324	81	39	1605	0.202	324	347	0.3	0.3	3.067	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	128	32	178	1668	0.077	128	118	0.1	0.1	2.483	A
2	225	56	90	1587	0.142	225	216	0.2	0.2	2.821	A
3	264	66	31	1610	0.164	265	283	0.3	0.2	2.924	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	107	27	149	1686	0.063	107	99	0.1	0.1	2.422	A
2	188	47	75	1596	0.118	188	181	0.2	0.1	2.730	A
3	221	55	26	1613	0.137	222	237	0.2	0.2	2.827	A

2024, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Northern Access Road roundabout	Standard Roundabout		1, 2, 3	2.75	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2024	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	139	100.000
2		ONE HOUR	✓	212	100.000
3		ONE HOUR	✓	316	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1	2	3	
From	1	0	34	105
	2	30	0	182
	3	85	231	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	0	6	1
	2	7	0	1
	3	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.09	2.51	0.1	A	128	191
2	0.15	2.74	0.2	A	195	292
3	0.22	2.88	0.3	A	290	435

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	173	1671	0.063	104	86	0.0	0.1	2.348	A
2	160	40	79	1593	0.100	159	199	0.0	0.1	2.555	A
3	238	59	23	1615	0.147	237	215	0.0	0.2	2.630	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	125	31	208	1650	0.076	125	103	0.1	0.1	2.412	A
2	191	48	94	1584	0.120	190	238	0.1	0.1	2.629	A
3	284	71	27	1612	0.176	284	258	0.2	0.2	2.729	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	153	38	254	1621	0.094	153	127	0.1	0.1	2.505	A
2	233	58	116	1572	0.149	233	292	0.1	0.2	2.737	A
3	348	87	33	1609	0.216	348	316	0.2	0.3	2.875	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	153	38	254	1621	0.094	153	127	0.1	0.1	2.505	A
2	233	58	116	1572	0.149	233	292	0.2	0.2	2.737	A
3	348	87	33	1609	0.216	348	316	0.3	0.3	2.875	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	125	31	208	1649	0.076	125	103	0.1	0.1	2.412	A
2	191	48	94	1584	0.120	191	238	0.2	0.1	2.629	A
3	284	71	27	1612	0.176	284	258	0.3	0.2	2.732	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	174	1670	0.063	105	87	0.1	0.1	2.350	A
2	160	40	79	1593	0.100	160	200	0.1	0.1	2.558	A
3	238	59	23	1615	0.147	238	216	0.2	0.2	2.635	A

2027, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Northern Access Road roundabout	Standard Roundabout		1, 2, 3	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)	Run automatically
D3	2027	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	145	100.000
2		ONE HOUR	✓	256	100.000
3		ONE HOUR	✓	301	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1	2	3	
From	1	0	43	102
	2	36	0	220
	3	98	203	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	0	12	4
	2	11	0	6
	3	4	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.10	2.58	0.1	A	133	200
2	0.18	2.97	0.2	A	235	352
3	0.21	3.09	0.3	A	276	414

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	109	27	152	1684	0.065	109	101	0.0	0.1	2.428	A
2	193	48	77	1595	0.121	192	185	0.0	0.1	2.736	A
3	227	57	27	1612	0.141	226	242	0.0	0.2	2.835	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	130	33	182	1665	0.078	130	120	0.1	0.1	2.491	A
2	230	58	92	1586	0.145	230	221	0.1	0.2	2.831	A
3	271	68	32	1609	0.168	270	289	0.2	0.2	2.938	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	160	40	223	1640	0.097	160	147	0.1	0.1	2.583	A
2	282	70	112	1574	0.179	282	271	0.2	0.2	2.971	A
3	331	83	40	1605	0.207	331	354	0.2	0.3	3.088	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	160	40	224	1640	0.097	160	148	0.1	0.1	2.583	A
2	282	70	112	1574	0.179	282	271	0.2	0.2	2.971	A
3	331	83	40	1605	0.207	331	355	0.3	0.3	3.088	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	130	33	183	1665	0.078	130	121	0.1	0.1	2.492	A
2	230	58	92	1586	0.145	230	221	0.2	0.2	2.835	A
3	271	68	32	1609	0.168	271	290	0.3	0.2	2.941	A

09:15 - 09:30

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	109	27	153	1683	0.065	109	101	0.1	0.1	2.431	A
2	193	48	77	1595	0.121	193	185	0.2	0.1	2.741	A
3	227	57	27	1612	0.141	227	243	0.2	0.2	2.841	A

2027, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Northern Access Road roundabout	Standard Roundabout		1, 2, 3	2.77	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	2027	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	143	100.000
2		ONE HOUR	✓	217	100.000
3		ONE HOUR	✓	324	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1	2	3	
From	1	0	35	108
	2	31	0	186
	3	87	237	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	0	6	1
	2	7	0	1
	3	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.10	2.52	0.1	A	131	197
2	0.15	2.75	0.2	A	199	299
3	0.22	2.90	0.3	A	297	446

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	178	1668	0.065	107	89	0.0	0.1	2.357	A
2	163	41	81	1592	0.103	163	204	0.0	0.1	2.564	A
3	244	61	23	1614	0.151	243	221	0.0	0.2	2.643	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	129	32	213	1646	0.078	128	106	0.1	0.1	2.423	A
2	195	49	97	1583	0.123	195	244	0.1	0.1	2.640	A
3	291	73	28	1612	0.181	291	264	0.2	0.2	2.745	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	157	39	261	1617	0.097	157	130	0.1	0.1	2.520	A
2	239	60	119	1570	0.152	239	299	0.1	0.2	2.753	A
3	357	89	34	1608	0.222	356	323	0.2	0.3	2.897	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	157	39	261	1617	0.097	157	130	0.1	0.1	2.520	A
2	239	60	119	1570	0.152	239	299	0.2	0.2	2.753	A
3	357	89	34	1608	0.222	357	324	0.3	0.3	2.897	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	129	32	213	1646	0.078	129	106	0.1	0.1	2.423	A
2	195	49	97	1583	0.123	195	245	0.2	0.1	2.641	A
3	291	73	28	1612	0.181	292	265	0.3	0.2	2.746	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	179	1668	0.065	108	89	0.1	0.1	2.359	A
2	163	41	81	1592	0.103	163	205	0.1	0.1	2.565	A
3	244	61	23	1614	0.151	244	221	0.2	0.2	2.648	A

2027 + com, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Northern Access Road roundabout	Standard Roundabout		1, 2, 3	3.18	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
D9	2027 + com	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	145	100.000
2		ONE HOUR	✓	307	100.000
3		ONE HOUR	✓	434	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1	2	3	
From	1	0	43	102
	2	36	0	271
	3	98	336	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	0	12	4
	2	11	0	5
	3	4	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.10	2.75	0.1	A	133	200
2	0.21	3.08	0.3	A	282	423
3	0.30	3.39	0.4	A	398	597

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	109	27	252	1622	0.067	109	101	0.0	0.1	2.527	A
2	231	58	77	1595	0.145	230	284	0.0	0.2	2.786	A
3	327	82	27	1612	0.203	326	280	0.0	0.3	2.971	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	130	33	302	1591	0.082	130	120	0.1	0.1	2.617	A
2	276	69	92	1586	0.174	276	340	0.2	0.2	2.903	A
3	390	98	32	1609	0.242	390	335	0.3	0.3	3.138	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	160	40	370	1549	0.103	160	147	0.1	0.1	2.752	A
2	338	85	112	1574	0.215	338	417	0.2	0.3	3.077	A
3	478	119	40	1605	0.298	477	410	0.3	0.4	3.392	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	160	40	370	1549	0.103	160	148	0.1	0.1	2.752	A
2	338	85	112	1574	0.215	338	417	0.3	0.3	3.077	A
3	478	119	40	1605	0.298	478	411	0.4	0.4	3.395	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	130	33	302	1591	0.082	130	121	0.1	0.1	2.618	A
2	276	69	92	1586	0.174	276	341	0.3	0.2	2.906	A
3	390	98	32	1609	0.242	391	336	0.4	0.3	3.143	A

09:15 - 09:30

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	109	27	253	1621	0.067	109	101	0.1	0.1	2.529	A
2	231	58	77	1595	0.145	231	286	0.2	0.2	2.792	A
3	327	82	27	1612	0.203	327	281	0.3	0.3	2.977	A

2027 + com, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Northern Access Road roundabout	Standard Roundabout		1, 2, 3	2.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2027 + com	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	143	100.000
2		ONE HOUR	✓	345	100.000
3		ONE HOUR	✓	366	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1	2	3	
From	1	0	35	108
	2	31	0	314
	3	87	279	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	0	6	1
	2	7	0	0
	3	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.10	2.57	0.1	A	131	197
2	0.24	3.04	0.3	A	317	475
3	0.25	3.01	0.3	A	336	504

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	209	1648	0.065	107	89	0.0	0.1	2.386	A
2	260	65	81	1592	0.163	259	236	0.0	0.2	2.715	A
3	276	69	23	1614	0.171	275	317	0.0	0.2	2.706	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	129	32	251	1623	0.079	128	106	0.1	0.1	2.461	A
2	310	78	97	1583	0.196	310	282	0.2	0.2	2.844	A
3	329	82	28	1612	0.204	329	379	0.2	0.3	2.827	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	157	39	307	1588	0.099	157	130	0.1	0.1	2.570	A
2	380	95	119	1570	0.242	380	345	0.2	0.3	3.042	A
3	403	101	34	1608	0.251	403	464	0.3	0.3	3.009	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	157	39	307	1588	0.099	157	130	0.1	0.1	2.571	A
2	380	95	119	1570	0.242	380	346	0.3	0.3	3.042	A
3	403	101	34	1608	0.251	403	465	0.3	0.3	3.009	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	129	32	251	1623	0.079	129	106	0.1	0.1	2.461	A
2	310	78	97	1583	0.196	310	283	0.3	0.2	2.846	A
3	329	82	28	1612	0.204	329	380	0.3	0.3	2.830	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	210	1648	0.065	108	89	0.1	0.1	2.387	A
2	260	65	81	1592	0.163	260	237	0.2	0.2	2.720	A
3	276	69	23	1614	0.171	276	318	0.3	0.2	2.709	A

2027 + com + development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Northern Access Road roundabout	Standard Roundabout		1, 2, 3	3.20	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
D15	2027 + com + development	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	145	100.000
2		ONE HOUR	✓	319	100.000
3		ONE HOUR	✓	440	100.000

Origin-Destination Data

Demand (PCU/hr)

	To		
	1	2	3
From	1	0	43
	2	36	0
	3	98	342
			0

Vehicle Mix

Heavy Vehicle Percentages

	To		
	1	2	3
From	1	0	12
	2	11	0
	3	4	7
			0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.10	2.76	0.1	A	133	200
2	0.22	3.11	0.3	A	293	439
3	0.30	3.41	0.5	A	404	606

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	109	27	257	1619	0.067	109	101	0.0	0.1	2.532	A
2	240	60	77	1595	0.151	239	289	0.0	0.2	2.804	A
3	331	83	27	1612	0.205	330	289	0.0	0.3	2.982	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	130	33	307	1588	0.082	130	120	0.1	0.1	2.623	A
2	287	72	92	1586	0.181	287	346	0.2	0.2	2.926	A
3	396	99	32	1609	0.246	395	346	0.3	0.3	3.153	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	160	40	376	1545	0.103	160	147	0.1	0.1	2.760	A
2	351	88	112	1574	0.223	351	424	0.2	0.3	3.110	A
3	484	121	40	1605	0.302	484	424	0.3	0.5	3.412	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	160	40	377	1545	0.103	160	148	0.1	0.1	2.760	A
2	351	88	112	1574	0.223	351	424	0.3	0.3	3.110	A
3	484	121	40	1605	0.302	484	424	0.5	0.5	3.415	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	130	33	308	1587	0.082	130	121	0.1	0.1	2.626	A
2	287	72	92	1586	0.181	287	346	0.3	0.2	2.930	A
3	396	99	32	1609	0.246	396	346	0.5	0.3	3.155	A

09:15 - 09:30

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	109	27	258	1619	0.067	109	101	0.1	0.1	2.535	A
2	240	60	77	1595	0.151	240	290	0.2	0.2	2.810	A
3	331	83	27	1612	0.205	332	290	0.3	0.3	2.991	A

2027 + com + development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Northern Access Road roundabout	Standard Roundabout		1, 2, 3	2.98	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
D16	2027 + com + development	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	143	100.000
2		ONE HOUR	✓	357	100.000
3		ONE HOUR	✓	379	100.000

Origin-Destination Data

Demand (PCU/hr)

	To		
	1	2	3
From	1	0	35
	2	31	0
	3	87	292
			0

Vehicle Mix

Heavy Vehicle Percentages

	To		
	1	2	3
From	1	0	6
	2	7	0
	3	0	1
			0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.10	2.59	0.1	A	131	197
2	0.25	3.08	0.3	A	328	491
3	0.26	3.05	0.4	A	348	522

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	219	1642	0.066	107	89	0.0	0.1	2.396	A
2	269	67	81	1592	0.169	268	245	0.0	0.2	2.733	A
3	285	71	23	1614	0.177	284	326	0.0	0.2	2.726	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	129	32	262	1616	0.080	128	106	0.1	0.1	2.473	A
2	321	80	97	1583	0.203	321	294	0.2	0.3	2.868	A
3	341	85	28	1612	0.211	340	390	0.2	0.3	2.853	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	157	39	321	1579	0.100	157	130	0.1	0.1	2.586	A
2	393	98	119	1570	0.250	393	360	0.3	0.3	3.075	A
3	417	104	34	1608	0.260	417	477	0.3	0.4	3.045	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	157	39	321	1579	0.100	157	130	0.1	0.1	2.587	A
2	393	98	119	1570	0.250	393	360	0.3	0.3	3.075	A
3	417	104	34	1608	0.260	417	478	0.4	0.4	3.045	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	129	32	263	1615	0.080	129	106	0.1	0.1	2.473	A
2	321	80	97	1583	0.203	321	294	0.3	0.3	2.872	A
3	341	85	28	1612	0.211	341	391	0.4	0.3	2.855	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	220	1642	0.066	108	89	0.1	0.1	2.399	A
2	269	67	81	1592	0.169	269	246	0.3	0.2	2.738	A
3	285	71	23	1614	0.177	286	327	0.3	0.2	2.731	A

Appendix P



Junctions 9			
PICADY 9 - Priority Intersection Module			
Version: 9.5.0.6896 © Copyright TRL Limited, 2018			
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Filename: Llantwit Road B4265.j9

Path: Z:\Lime\Projects\2024\24063 Church Farm, St Athan\Analysis\November 2024 JCA\IP1 only

Report generation date: 15/08/2025 10:53:18

- »2024, AM
- »2024, PM
- »2027, AM
- »2027, PM
- »2027 + com, AM
- »2027 + com, PM
- »2027 + com + development, AM
- »2027 + com + development, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2024								
Stream B-C	0.1	6.25	0.07	A	0.0	5.80	0.05	A
Stream B-A	0.1	8.67	0.11	A	0.1	8.19	0.09	A
Stream C-B	0.0	6.17	0.04	A	0.1	6.01	0.05	A
2027								
Stream B-C	0.1	6.32	0.07	A	0.1	5.84	0.05	A
Stream B-A	0.1	8.81	0.11	A	0.1	8.32	0.09	A
Stream C-B	0.0	6.22	0.05	A	0.1	6.05	0.06	A
2027 + com								
Stream B-C	0.1	6.84	0.08	A	0.1	5.98	0.05	A
Stream B-A	0.1	10.18	0.13	B	0.1	9.22	0.10	A
Stream C-B	0.1	6.69	0.05	A	0.1	6.19	0.06	A
2027 + com + development								
Stream B-C	0.1	6.89	0.08	A	0.1	6.07	0.05	A
Stream B-A	0.2	10.42	0.13	B	0.1	9.56	0.11	A
Stream C-B	0.1	6.73	0.05	A	0.1	6.27	0.06	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	
Location	
Site number	
Date	12/12/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-U7G8RPA\Aimee
Description	

Units

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

Analysis Options

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	2024	AM	ONE HOUR	08:00	09:30	15	✓
D2	2024	PM	ONE HOUR	17:00	18:30	15	✓
D3	2027	AM	ONE HOUR	08:00	09:30	15	✓
D4	2027	PM	ONE HOUR	17:00	18:30	15	✓
D9	2027 + com	AM	ONE HOUR	08:00	09:30	15	✓
D10	2027 + com	PM	ONE HOUR	17:00	18:30	15	✓
D15	2027 + com + development	AM	ONE HOUR	08:00	09:30	15	✓
D16	2027 + com + development	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

2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B4265 (w)		Major
B	Llantwit Road		Minor
C	B4265 (e)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.00		✓	3.50	150.0		-

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	One lane plus flare	10.00	10.00	9.00	7.00	6.00	✓	3.00	160	160

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	697	0.121	0.307	0.193	0.438
1	B-C	801	0.117	0.297	-	-
1	C-B	754	0.280	0.280	-	-

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	2024	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	469	100.000
B		ONE HOUR	✓	86	100.000
C		ONE HOUR	✓	310	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	39	430
	B	46	0	40
	C	286	24	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	8
	B	2	0	3
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.07	6.25	0.1	A	37	55
B-A	0.11	8.67	0.1	A	42	63
C-A					262	394
C-B	0.04	6.17	0.0	A	22	33
A-B					36	54
A-C					395	592

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	8	690	0.044	30	0.0	0.0	5.616	A
B-A	35	9	544	0.064	34	0.0	0.1	7.197	A
C-A	215	54			215				
C-B	18	5	656	0.028	18	0.0	0.0	5.645	A
A-B	29	7			29				
A-C	324	81			324				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	9	668	0.054	36	0.0	0.1	5.866	A
B-A	41	10	515	0.080	41	0.1	0.1	7.754	A
C-A	257	64			257				
C-B	22	5	636	0.034	22	0.0	0.0	5.854	A
A-B	35	9			35				
A-C	387	97			387				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	11	637	0.069	44	0.1	0.1	6.249	A
B-A	51	13	474	0.107	51	0.1	0.1	8.670	A
C-A	315	79			315				
C-B	26	7	610	0.043	26	0.0	0.0	6.168	A
A-B	43	11			43				
A-C	473	118			473				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	11	637	0.069	44	0.1	0.1	6.250	A
B-A	51	13	474	0.107	51	0.1	0.1	8.674	A
C-A	315	79			315				
C-B	26	7	610	0.043	26	0.0	0.0	6.168	A
A-B	43	11			43				
A-C	473	118			473				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	9	668	0.054	36	0.1	0.1	5.870	A
B-A	41	10	515	0.080	41	0.1	0.1	7.759	A
C-A	257	64			257				
C-B	22	5	636	0.034	22	0.0	0.0	5.857	A
A-B	35	9			35				
A-C	387	97			387				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	8	690	0.044	30	0.1	0.0	5.622	A
B-A	35	9	544	0.064	35	0.1	0.1	7.207	A
C-A	215	54			215				
C-B	18	5	656	0.028	18	0.0	0.0	5.648	A
A-B	29	7			29				
A-C	324	81			324				

2024, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.78	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	2024	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	394	100.000
B		ONE HOUR	✓	68	100.000
C		ONE HOUR	✓	400	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	29	365
	B	40	0	28
	C	369	31	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.05	5.80	0.0	A	26	39
B-A	0.09	8.19	0.1	A	37	55
C-A					339	508
C-B	0.05	6.01	0.1	A	28	43
A-B					27	40
A-C					335	502

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21	5	695	0.030	21	0.0	0.0	5.337	A
B-A	30	8	554	0.054	30	0.0	0.1	6.860	A
C-A	278	69			278				
C-B	23	6	671	0.035	23	0.0	0.0	5.552	A
A-B	22	5			22				
A-C	275	69			275				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	6	677	0.037	25	0.0	0.0	5.521	A
B-A	36	9	525	0.069	36	0.1	0.1	7.366	A
C-A	332	83			332				
C-B	28	7	655	0.043	28	0.0	0.0	5.736	A
A-B	26	7			26				
A-C	328	82			328				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	31	8	651	0.047	31	0.0	0.0	5.799	A
B-A	44	11	484	0.091	44	0.1	0.1	8.188	A
C-A	406	102			406				
C-B	34	9	633	0.054	34	0.0	0.1	6.010	A
A-B	32	8			32				
A-C	402	100			402				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	31	8	651	0.047	31	0.0	0.0	5.800	A
B-A	44	11	484	0.091	44	0.1	0.1	8.191	A
C-A	406	102			406				
C-B	34	9	633	0.054	34	0.1	0.1	6.010	A
A-B	32	8			32				
A-C	402	100			402				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	6	677	0.037	25	0.0	0.0	5.525	A
B-A	36	9	525	0.069	36	0.1	0.1	7.372	A
C-A	332	83			332				
C-B	28	7	655	0.043	28	0.1	0.0	5.740	A
A-B	26	7			26				
A-C	328	82			328				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21	5	695	0.030	21	0.0	0.0	5.341	A
B-A	30	8	554	0.054	30	0.1	0.1	6.868	A
C-A	278	69			278				
C-B	23	6	671	0.035	23	0.0	0.0	5.554	A
A-B	22	5			22				
A-C	275	69			275				

2027, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2027	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	480	100.000
B		ONE HOUR	✓	89	100.000
C		ONE HOUR	✓	317	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	40	440
	B	48	0	41
	C	292	25	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	8
	B	2	0	3
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.07	6.32	0.1	A	38	56
B-A	0.11	8.81	0.1	A	44	66
C-A					268	402
C-B	0.05	6.22	0.0	A	23	34
A-B					37	55
A-C					404	606

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	31	8	686	0.045	31	0.0	0.0	5.657	A
B-A	36	9	542	0.067	36	0.0	0.1	7.257	A
C-A	220	55			220				
C-B	19	5	653	0.029	19	0.0	0.0	5.673	A
A-B	30	8			30				
A-C	331	83			331				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	9	663	0.056	37	0.0	0.1	5.918	A
B-A	43	11	511	0.084	43	0.1	0.1	7.840	A
C-A	263	66			263				
C-B	22	6	634	0.035	22	0.0	0.0	5.889	A
A-B	36	9			36				
A-C	396	99			396				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	45	11	632	0.071	45	0.1	0.1	6.317	A
B-A	53	13	469	0.113	53	0.1	0.1	8.809	A
C-A	321	80			321				
C-B	28	7	607	0.045	27	0.0	0.0	6.216	A
A-B	44	11			44				
A-C	484	121			484				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	45	11	632	0.071	45	0.1	0.1	6.319	A
B-A	53	13	469	0.113	53	0.1	0.1	8.813	A
C-A	321	80			321				
C-B	28	7	607	0.045	28	0.0	0.0	6.216	A
A-B	44	11			44				
A-C	484	121			484				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	9	663	0.056	37	0.1	0.1	5.923	A
B-A	43	11	511	0.084	43	0.1	0.1	7.847	A
C-A	263	66			263				
C-B	22	6	634	0.035	23	0.0	0.0	5.889	A
A-B	36	9			36				
A-C	396	99			396				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	31	8	686	0.045	31	0.1	0.0	5.663	A
B-A	36	9	542	0.067	36	0.1	0.1	7.264	A
C-A	220	55			220				
C-B	19	5	653	0.029	19	0.0	0.0	5.673	A
A-B	30	8			30				
A-C	331	83			331				

2027, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2027	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	404	100.000
B		ONE HOUR	✓	70	100.000
C		ONE HOUR	✓	410	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	30	374
	B	41	0	29
	C	378	32	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.05	5.84	0.1	A	27	40
B-A	0.09	8.32	0.1	A	38	56
C-A					347	520
C-B	0.06	6.05	0.1	A	29	44
A-B					28	41
A-C					343	515

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	5	694	0.031	22	0.0	0.0	5.358	A
B-A	31	8	550	0.056	31	0.0	0.1	6.926	A
C-A	285	71			285				
C-B	24	6	669	0.036	24	0.0	0.0	5.576	A
A-B	23	6			23				
A-C	282	70			282				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	7	675	0.039	26	0.0	0.0	5.550	A
B-A	37	9	520	0.071	37	0.1	0.1	7.454	A
C-A	340	85			340				
C-B	29	7	653	0.044	29	0.0	0.0	5.768	A
A-B	27	7			27				
A-C	336	84			336				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	8	648	0.049	32	0.0	0.1	5.839	A
B-A	45	11	478	0.095	45	0.1	0.1	8.321	A
C-A	416	104			416				
C-B	35	9	630	0.056	35	0.0	0.1	6.052	A
A-B	33	8			33				
A-C	412	103			412				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	8	648	0.049	32	0.1	0.1	5.840	A
B-A	45	11	478	0.095	45	0.1	0.1	8.324	A
C-A	416	104			416				
C-B	35	9	630	0.056	35	0.1	0.1	6.052	A
A-B	33	8			33				
A-C	412	103			412				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	7	675	0.039	26	0.1	0.0	5.551	A
B-A	37	9	520	0.071	37	0.1	0.1	7.461	A
C-A	340	85			340				
C-B	29	7	653	0.044	29	0.1	0.0	5.769	A
A-B	27	7			27				
A-C	336	84			336				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	5	693	0.031	22	0.0	0.0	5.360	A
B-A	31	8	550	0.056	31	0.1	0.1	6.933	A
C-A	285	71			285				
C-B	24	6	669	0.036	24	0.0	0.0	5.581	A
A-B	23	6			23				
A-C	282	70			282				

2027 + com, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.87	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
D9	2027 + com	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	613	100.000
B		ONE HOUR	✓	89	100.000
C		ONE HOUR	✓	368	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	40	573
	B	48	0	41
	C	343	25	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	6
	B	2	0	3
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.08	6.84	0.1	A	38	56
B-A	0.13	10.18	0.1	B	44	66
C-A					315	472
C-B	0.05	6.69	0.1	A	23	34
A-B					37	55
A-C					526	789

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	31	8	656	0.047	31	0.0	0.1	5.929	A
B-A	36	9	503	0.072	36	0.0	0.1	7.847	A
C-A	258	65			258				
C-B	19	5	625	0.030	19	0.0	0.0	5.932	A
A-B	30	8			30				
A-C	431	108			431				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	9	627	0.059	37	0.1	0.1	6.279	A
B-A	43	11	466	0.093	43	0.1	0.1	8.685	A
C-A	308	77			308				
C-B	22	6	600	0.037	22	0.0	0.0	6.229	A
A-B	36	9			36				
A-C	515	129			515				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	45	11	587	0.077	45	0.1	0.1	6.836	A
B-A	53	13	414	0.128	53	0.1	0.1	10.169	B
C-A	378	94			378				
C-B	28	7	566	0.049	27	0.0	0.1	6.689	A
A-B	44	11			44				
A-C	631	158			631				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	45	11	587	0.077	45	0.1	0.1	6.838	A
B-A	53	13	414	0.128	53	0.1	0.1	10.177	B
C-A	378	94			378				
C-B	28	7	566	0.049	28	0.1	0.1	6.689	A
A-B	44	11			44				
A-C	631	158			631				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	9	627	0.059	37	0.1	0.1	6.286	A
B-A	43	11	466	0.093	43	0.1	0.1	8.695	A
C-A	308	77			308				
C-B	22	6	600	0.037	23	0.1	0.0	6.230	A
A-B	36	9			36				
A-C	515	129			515				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	31	8	656	0.047	31	0.1	0.1	5.936	A
B-A	36	9	504	0.072	36	0.1	0.1	7.860	A
C-A	258	65			258				
C-B	19	5	625	0.030	19	0.0	0.0	5.935	A
A-B	30	8			30				
A-C	431	108			431				

2027 + com, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2027 + com	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	446	100.000
B		ONE HOUR	✓	70	100.000
C		ONE HOUR	✓	538	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	30	416
	B	41	0	29
	C	506	32	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.05	5.98	0.1	A	27	40
B-A	0.10	9.22	0.1	A	38	56
C-A					464	696
C-B	0.06	6.19	0.1	A	29	44
A-B					28	41
A-C					382	573

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	5	684	0.032	22	0.0	0.0	5.434	A
B-A	31	8	521	0.059	31	0.0	0.1	7.331	A
C-A	381	95			381				
C-B	24	6	660	0.036	24	0.0	0.0	5.654	A
A-B	23	6			23				
A-C	313	78			313				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	7	663	0.039	26	0.0	0.0	5.652	A
B-A	37	9	485	0.076	37	0.1	0.1	8.024	A
C-A	455	114			455				
C-B	29	7	642	0.045	29	0.0	0.0	5.867	A
A-B	27	7			27				
A-C	374	93			374				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	8	634	0.050	32	0.0	0.1	5.982	A
B-A	45	11	436	0.104	45	0.1	0.1	9.214	A
C-A	557	139			557				
C-B	35	9	617	0.057	35	0.0	0.1	6.186	A
A-B	33	8			33				
A-C	458	115			458				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	8	634	0.050	32	0.1	0.1	5.983	A
B-A	45	11	436	0.104	45	0.1	0.1	9.219	A
C-A	557	139			557				
C-B	35	9	617	0.057	35	0.1	0.1	6.186	A
A-B	33	8			33				
A-C	458	115			458				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	7	663	0.039	26	0.1	0.0	5.656	A
B-A	37	9	485	0.076	37	0.1	0.1	8.031	A
C-A	455	114			455				
C-B	29	7	642	0.045	29	0.1	0.0	5.868	A
A-B	27	7			27				
A-C	374	93			374				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	5	684	0.032	22	0.0	0.0	5.441	A
B-A	31	8	521	0.059	31	0.1	0.1	7.342	A
C-A	381	95			381				
C-B	24	6	660	0.036	24	0.0	0.0	5.657	A
A-B	23	6			23				
A-C	313	78			313				

2027 + com + development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2027 + com + development	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	625	100.000
B		ONE HOUR	✓	89	100.000
C		ONE HOUR	✓	388	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	40	585
	B	48	0	41
	C	363	25	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	6
	B	2	0	3
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.08	6.89	0.1	A	38	56
B-A	0.13	10.42	0.2	B	44	66
C-A					333	500
C-B	0.05	6.73	0.1	A	23	34
A-B					37	55
A-C					537	805

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	31	8	653	0.047	31	0.0	0.1	5.955	A
B-A	36	9	498	0.073	36	0.0	0.1	7.944	A
C-A	273	68			273				
C-B	19	5	623	0.030	19	0.0	0.0	5.957	A
A-B	30	8			30				
A-C	440	110			440				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	9	624	0.059	37	0.1	0.1	6.315	A
B-A	43	11	459	0.094	43	0.1	0.1	8.827	A
C-A	326	82			326				
C-B	22	6	597	0.038	22	0.0	0.0	6.262	A
A-B	36	9			36				
A-C	526	131			526				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	45	11	583	0.077	45	0.1	0.1	6.889	A
B-A	53	13	405	0.130	53	0.1	0.2	10.409	B
C-A	400	100			400				
C-B	28	7	562	0.049	27	0.0	0.1	6.735	A
A-B	44	11			44				
A-C	644	161			644				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	45	11	583	0.077	45	0.1	0.1	6.891	A
B-A	53	13	405	0.130	53	0.2	0.2	10.418	B
C-A	400	100			400				
C-B	28	7	562	0.049	28	0.1	0.1	6.735	A
A-B	44	11			44				
A-C	644	161			644				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	9	624	0.059	37	0.1	0.1	6.322	A
B-A	43	11	459	0.094	43	0.2	0.1	8.836	A
C-A	326	82			326				
C-B	22	6	597	0.038	23	0.1	0.0	6.266	A
A-B	36	9			36				
A-C	526	131			526				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	31	8	653	0.047	31	0.1	0.1	5.962	A
B-A	36	9	498	0.073	36	0.1	0.1	7.956	A
C-A	273	68			273				
C-B	19	5	623	0.030	19	0.0	0.0	5.960	A
A-B	30	8			30				
A-C	440	110			440				

2027 + com + development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.70	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
D16	2027 + com + development	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	472	100.000
B		ONE HOUR	✓	70	100.000
C		ONE HOUR	✓	561	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A	B	C
	A	0	30	442
	B	41	0	29
	C	529	32	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.05	6.07	0.1	A	27	40
B-A	0.11	9.56	0.1	A	38	56
C-A					485	728
C-B	0.06	6.27	0.1	A	29	44
A-B					28	41
A-C					406	608

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	5	678	0.032	22	0.0	0.0	5.482	A
B-A	31	8	512	0.060	31	0.0	0.1	7.476	A
C-A	398	100			398				
C-B	24	6	655	0.037	24	0.0	0.0	5.703	A
A-B	23	6			23				
A-C	333	83			333				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	7	656	0.040	26	0.0	0.0	5.714	A
B-A	37	9	474	0.078	37	0.1	0.1	8.232	A
C-A	476	119			476				
C-B	29	7	636	0.045	29	0.0	0.0	5.930	A
A-B	27	7			27				
A-C	397	99			397				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	8	625	0.051	32	0.0	0.1	6.070	A
B-A	45	11	422	0.107	45	0.1	0.1	9.554	A
C-A	582	146			582				
C-B	35	9	609	0.058	35	0.0	0.1	6.273	A
A-B	33	8			33				
A-C	487	122			487				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	8	625	0.051	32	0.1	0.1	6.071	A
B-A	45	11	422	0.107	45	0.1	0.1	9.559	A
C-A	582	146			582				
C-B	35	9	609	0.058	35	0.1	0.1	6.273	A
A-B	33	8			33				
A-C	487	122			487				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	7	656	0.040	26	0.1	0.0	5.719	A
B-A	37	9	474	0.078	37	0.1	0.1	8.239	A
C-A	476	119			476				
C-B	29	7	636	0.045	29	0.1	0.0	5.934	A
A-B	27	7			27				
A-C	397	99			397				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	5	678	0.032	22	0.0	0.0	5.489	A
B-A	31	8	512	0.060	31	0.1	0.1	7.487	A
C-A	398	100			398				
C-B	24	6	655	0.037	24	0.0	0.0	5.708	A
A-B	23	6			23				
A-C	333	83			333				

Appendix Q



Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.0.6896
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Filename: Gileston - B4265 X-roads existing.j9

Path: Z:\Lime\Projects\2024\24063 Church Farm, St Athan\Analysis\November 2024 JCA\IP1 only

Report generation date: 15/08/2025 11:00:32

»2024, AM
»2024, PM
»2027, AM
»2027, PM
»2027 + com, AM
»2027 + com, PM
»2027 + com + development, AM
»2027 + com + development, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2024								
Stream B-ACD	0.0	8.29	0.05	A	0.1	7.64	0.06	A
Stream AB-D	0.5	9.02	0.32	A	0.7	10.48	0.42	B
Stream D-ABC	1.0	12.27	0.50	B	0.8	11.05	0.45	B
Stream CD-B	0.0	6.45	0.03	A	0.0	6.64	0.04	A
2027								
Stream B-ACD	0.0	8.38	0.05	A	0.1	7.71	0.06	A
Stream AB-D	0.5	9.18	0.33	A	0.8	10.74	0.43	B
Stream D-ABC	1.0	12.71	0.51	B	0.9	11.44	0.46	B
Stream CD-B	0.0	6.49	0.03	A	0.0	6.68	0.04	A
2027 + com								
Stream B-ACD	0.1	9.03	0.05	A	0.1	8.45	0.06	A
Stream AB-D	0.6	10.14	0.35	B	0.8	11.14	0.44	B
Stream D-ABC	1.3	15.42	0.56	C	0.9	12.46	0.48	B
Stream CD-B	0.0	6.67	0.03	A	0.0	7.18	0.04	A
2027 + com + development								
Stream B-ACD	0.1	9.39	0.05	A	0.1	8.88	0.07	A
Stream AB-D	0.7	11.00	0.40	B	1.2	14.21	0.56	B
Stream D-ABC	2.7	26.15	0.74	D	1.9	19.87	0.66	C
Stream CD-B	0.0	6.75	0.03	A	0.0	7.42	0.04	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	
Location	
Site number	
Date	01/11/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-U7G8RPA\Rusne
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	08:00	09:30	15
D2	2024	PM	ONE HOUR	17:00	18:30	15
D3	2027	AM	ONE HOUR	08:00	09:30	15
D4	2027	PM	ONE HOUR	17:00	18:30	15
D9	2027 + com	AM	ONE HOUR	08:00	09:30	15
D10	2027 + com	PM	ONE HOUR	17:00	18:30	15
D15	2027 + com + development	AM	ONE HOUR	08:00	09:30	15
D16	2027 + com + development	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Gileston Road stagger jctn	Left-Right Stagger	Two-way		2.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B4265 east		Major
B	Gileston Road south		Minor
C	B4265 west		Major
D	Gileston Road north		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	6.92		✓	2.83	150.0		-
C	6.92		✓	2.88	150.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.27	61	85
D	One lane	4.40	102	102

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	706	-	-	-	-	-	0.263	0.263	0.263	-	-
1	B-A	554	0.097	0.245	0.245	-	-	0.154	0.350	-	0.154	0.350
1	B-CD	696	0.102	0.259	0.259	-	-	-	-	-	-	-
1	CD-B	710	0.264	0.264	0.264	-	-	-	-	-	-	-
1	D-AB	785	-	-	-	-	-	0.292	0.292	0.115	-	-
1	D-C	641	-	0.178	0.405	0.178	0.405	0.283	0.283	0.112	-	-

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	2024	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	469	100.000
B		✓	19	100.000
C		✓	356	100.000
D		✓	265	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	9	291	169
	B	7	0	6	6
	C	287	4	0	65
	D	193	10	62	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	11	6	3
	B	0	0	0	0
	C	11	0	0	0
	D	1	0	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.05	8.29	0.0	A
A-B				
A-C				
A-D				
AB-C				
AB-D	0.32	9.02	0.5	A
D-ABC	0.50	12.27	1.0	B
C-D				
C-A				
C-B				
CD-A				
CD-B	0.03	6.45	0.0	A

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	515	0.028	14	0.0	7.191	A
A-B	7			7			
A-C	219			219			
A-D	127			127			
AB-C	224			224			
AB-D	132	636	0.207	131	0.3	7.319	A
D-ABC	200	642	0.311	198	0.5	8.172	A
C-D	49			49			
C-A	216			216			
C-B	3			3			
CD-A	360			360			
CD-B	10	617	0.017	10	0.0	5.939	A

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	490	0.035	17	0.0	7.612	A
A-B	8			8			
A-C	262			262			
A-D	152			152			
AB-C	267			267			
AB-D	157	622	0.253	157	0.3	7.958	A
D-ABC	238	620	0.384	238	0.6	9.511	A
C-D	58			58			
C-A	258			258			
C-B	4			4			
CD-A	431			431			
CD-B	13	598	0.021	13	0.0	6.143	A

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	455	0.046	21	0.0	8.290	A
A-B	10			10			
A-C	320			320			
A-D	186			186			
AB-C	327			327			
AB-D	193	603	0.319	192	0.5	8.999	A
D-ABC	292	589	0.496	290	1.0	12.153	B
C-D	72			72			
C-A	316			316			
C-B	4			4			
CD-A	527			527			
CD-B	15	573	0.027	15	0.0	6.450	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	455	0.046	21	0.0	8.294	A
A-B	10			10			
A-C	320			320			
A-D	186			186			
AB-C	327			327			
AB-D	193	603	0.319	193	0.5	9.022	A
D-ABC	292	589	0.496	292	1.0	12.266	B
C-D	72			72			
C-A	316			316			
C-B	4			4			
CD-A	528			528			
CD-B	15	573	0.027	15	0.0	6.450	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	490	0.035	17	0.0	7.616	A
A-B	8			8			
A-C	262			262			
A-D	152			152			
AB-C	267			267			
AB-D	157	622	0.253	158	0.4	7.989	A
D-ABC	238	620	0.384	240	0.6	9.617	A
C-D	58			58			
C-A	258			258			
C-B	4			4			
CD-A	432			432			
CD-B	13	598	0.021	13	0.0	6.145	A

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	514	0.028	14	0.0	7.197	A
A-B	7			7			
A-C	219			219			
A-D	127			127			
AB-C	224			224			
AB-D	132	636	0.207	132	0.3	7.361	A
D-ABC	200	641	0.311	200	0.5	8.268	A
C-D	49			49			
C-A	216			216			
C-B	3			3			
CD-A	362			362			
CD-B	11	617	0.017	11	0.0	5.940	A

2024, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Gileston Road stagger jctn	Left-Right Stagger	Two-way		2.45	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	2024	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	505	100.000
B		✓	26	100.000
C		✓	386	100.000
D		✓	242	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	7	285	213
	B	4	0	7	15
	C	313	6	0	67
	D	189	13	40	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.06	7.64	0.1	A
A-B				
A-C				
A-D				
AB-C				
AB-D	0.42	10.48	0.7	B
D-ABC	0.45	11.05	0.8	B
C-D				
C-A				
C-B				
CD-A				
CD-B	0.04	6.64	0.0	A

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	555	0.035	19	0.0	6.714	A
A-B	5			5			
A-C	215			215			
A-D	160			160			
AB-C	220			220			
AB-D	172	630	0.272	170	0.4	7.806	A
D-ABC	182	650	0.280	181	0.4	7.702	A
C-D	50			50			
C-A	236			236			
C-B	5			5			
CD-A	377			377			
CD-B	14	609	0.023	14	0.0	6.048	A

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	23	532	0.044	23	0.0	7.072	A
A-B	6			6			
A-C	256			256			
A-D	191			191			
AB-C	262			262			
AB-D	205	615	0.333	204	0.5	8.758	A
D-ABC	218	627	0.347	217	0.5	8.826	A
C-D	60			60			
C-A	281			281			
C-B	5			5			
CD-A	451			451			
CD-B	17	590	0.029	17	0.0	6.283	A

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	29	500	0.057	29	0.1	7.641	A
A-B	8			8			
A-C	314			314			
A-D	235			235			
AB-C	321			321			
AB-D	251	595	0.422	250	0.7	10.423	B
D-ABC	266	595	0.448	265	0.8	10.978	B
C-D	74			74			
C-A	345			345			
C-B	7			7			
CD-A	552			552			
CD-B	21	563	0.037	21	0.0	6.640	A

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	29	500	0.057	29	0.1	7.642	A
A-B	8			8			
A-C	314			314			
A-D	235			235			
AB-C	321			321			
AB-D	251	595	0.422	251	0.7	10.478	B
D-ABC	266	595	0.448	266	0.8	11.053	B
C-D	74			74			
C-A	345			345			
C-B	7			7			
CD-A	553			553			
CD-B	21	563	0.037	21	0.0	6.640	A

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	23	532	0.044	23	0.0	7.077	A
A-B	6			6			
A-C	256			256			
A-D	191			191			
AB-C	263			263			
AB-D	205	615	0.333	206	0.5	8.819	A
D-ABC	218	627	0.347	219	0.5	8.903	A
C-D	60			60			
C-A	281			281			
C-B	5			5			
CD-A	452			452			
CD-B	17	590	0.029	17	0.0	6.287	A

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	555	0.035	20	0.0	6.719	A
A-B	5			5			
A-C	215			215			
A-D	160			160			
AB-C	220			220			
AB-D	172	630	0.273	172	0.4	7.875	A
D-ABC	182	650	0.280	183	0.4	7.776	A
C-D	50			50			
C-A	236			236			
C-B	5			5			
CD-A	378			378			
CD-B	14	609	0.024	14	0.0	6.052	A

2027, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Gileston Road stagger jctn	Left-Right Stagger	Two-way		2.51	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	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	480	100.000
B		✓	19	100.000
C		✓	365	100.000
D		✓	271	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	9	298	173
	B	7	0	6	6
	C	294	4	0	67
	D	198	10	63	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	11	6	3
	B	0	0	0	0
	C	11	0	0	4
	D	1	0	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.05	8.38	0.0	A
A-B				
A-C				
A-D				
AB-C				
AB-D	0.33	9.18	0.5	A
D-ABC	0.51	12.71	1.0	B
C-D				
C-A				
C-B				
CD-A				
CD-B	0.03	6.49	0.0	A

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	512	0.028	14	0.0	7.234	A
A-B	7			7			
A-C	224			224			
A-D	130			130			
AB-C	229			229			
AB-D	135	634	0.213	134	0.3	7.387	A
D-ABC	204	640	0.319	202	0.5	8.294	A
C-D	50			50			
C-A	221			221			
C-B	3			3			
CD-A	369			369			
CD-B	10	614	0.017	10	0.0	5.960	A

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	486	0.035	17	0.0	7.671	A
A-B	8			8			
A-C	268			268			
A-D	156			156			
AB-C	273			273			
AB-D	161	620	0.260	161	0.4	8.058	A
D-ABC	244	617	0.395	243	0.6	9.716	A
C-D	60			60			
C-A	264			264			
C-B	4			4			
CD-A	442			442			
CD-B	13	596	0.021	13	0.0	6.171	A

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	450	0.046	21	0.0	8.378	A
A-B	10			10			
A-C	328			328			
A-D	190			190			
AB-C	335			335			
AB-D	197	601	0.328	197	0.5	9.154	A
D-ABC	298	585	0.510	297	1.0	12.574	B
C-D	74			74			
C-A	324			324			
C-B	4			4			
CD-A	541			541			
CD-B	15	570	0.027	15	0.0	6.487	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	450	0.046	21	0.0	8.382	A
A-B	10			10			
A-C	328			328			
A-D	190			190			
AB-C	335			335			
AB-D	197	601	0.328	197	0.5	9.179	A
D-ABC	298	585	0.510	298	1.0	12.706	B
C-D	74			74			
C-A	324			324			
C-B	4			4			
CD-A	542			542			
CD-B	15	570	0.027	15	0.0	6.487	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	486	0.035	17	0.0	7.678	A
A-B	8			8			
A-C	268			268			
A-D	156			156			
AB-C	273			273			
AB-D	161	620	0.260	161	0.4	8.088	A
D-ABC	244	617	0.395	245	0.7	9.837	A
C-D	60			60			
C-A	264			264			
C-B	4			4			
CD-A	443			443			
CD-B	13	596	0.021	13	0.0	6.175	A

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	511	0.028	14	0.0	7.243	A
A-B	7			7			
A-C	224			224			
A-D	130			130			
AB-C	229			229			
AB-D	135	634	0.213	135	0.3	7.429	A
D-ABC	204	639	0.319	205	0.5	8.399	A
C-D	50			50			
C-A	221			221			
C-B	3			3			
CD-A	371			371			
CD-B	11	614	0.017	11	0.0	5.962	A

2027, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Gileston Road stagger jctn	Left-Right Stagger	Two-way		2.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2027	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	517	100.000
B		✓	26	100.000
C		✓	396	100.000
D		✓	248	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	7	292	218
	B	4	0	7	15
	C	321	6	0	69
	D	194	13	41	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.06	7.71	0.1	A
A-B				
A-C				
A-D				
AB-C				
AB-D	0.43	10.74	0.8	B
D-ABC	0.46	11.44	0.9	B
C-D				
C-A				
C-B				
CD-A				
CD-B	0.04	6.68	0.0	A

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	553	0.035	19	0.0	6.750	A
A-B	5			5			
A-C	220			220			
A-D	164			164			
AB-C	225			225			
AB-D	175	628	0.279	174	0.4	7.901	A
D-ABC	187	647	0.288	185	0.4	7.821	A
C-D	52			52			
C-A	242			242			
C-B	5			5			
CD-A	386			386			
CD-B	14	607	0.023	14	0.0	6.072	A

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	23	529	0.044	23	0.0	7.120	A
A-B	6			6			
A-C	263			263			
A-D	196			196			
AB-C	269			269			
AB-D	209	613	0.342	209	0.5	8.905	A
D-ABC	223	624	0.357	222	0.6	9.020	A
C-D	62			62			
C-A	289			289			
C-B	5			5			
CD-A	463			463			
CD-B	17	587	0.029	17	0.0	6.315	A

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	29	495	0.058	29	0.1	7.711	A
A-B	8			8			
A-C	321			321			
A-D	240			240			
AB-C	329			329			
AB-D	257	592	0.434	256	0.8	10.680	B
D-ABC	273	590	0.463	272	0.8	11.355	B
C-D	76			76			
C-A	353			353			
C-B	7			7			
CD-A	566			566			
CD-B	21	559	0.037	21	0.0	6.683	A

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	29	495	0.058	29	0.1	7.714	A
A-B	8			8			
A-C	321			321			
A-D	240			240			
AB-C	329			329			
AB-D	257	592	0.434	257	0.8	10.740	B
D-ABC	273	590	0.463	273	0.9	11.442	B
C-D	76			76			
C-A	353			353			
C-B	7			7			
CD-A	567			567			
CD-B	21	559	0.037	21	0.0	6.683	A

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	23	529	0.044	23	0.0	7.123	A
A-B	6			6			
A-C	263			263			
A-D	196			196			
AB-C	269			269			
AB-D	209	613	0.342	210	0.5	8.970	A
D-ABC	223	624	0.357	224	0.6	9.106	A
C-D	62			62			
C-A	289			289			
C-B	5			5			
CD-A	464			464			
CD-B	17	587	0.029	17	0.0	6.316	A

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	553	0.035	20	0.0	6.757	A
A-B	5			5			
A-C	220			220			
A-D	164			164			
AB-C	225			225			
AB-D	175	628	0.279	176	0.4	7.976	A
D-ABC	187	647	0.289	187	0.4	7.903	A
C-D	52			52			
C-A	242			242			
C-B	5			5			
CD-A	388			388			
CD-B	14	607	0.024	14	0.0	6.076	A

2027 + com, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Gileston Road stagger jctn	Left-Right Stagger	Two-way		2.51	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	2027 + com	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	531	100.000
B		✓	19	100.000
C		✓	498	100.000
D		✓	271	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	9	349	173
	B	7	0	6	6
	C	427	4	0	67
	D	198	10	63	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	11	5	3
	B	0	0	0	0
	C	7	0	0	0
	D	1	0	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.05	9.03	0.1	A
A-B				
A-C				
A-D				
AB-C				
AB-D	0.35	10.14	0.6	B
D-ABC	0.56	15.42	1.3	C
C-D				
C-A				
C-B				
CD-A				
CD-B	0.03	6.67	0.0	A

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	492	0.029	14	0.0	7.526	A
A-B	7			7			
A-C	263			263			
A-D	130			130			
AB-C	267			267			
AB-D	135	608	0.222	134	0.3	7.795	A
D-ABC	204	607	0.336	202	0.5	8.960	A
C-D	50			50			
C-A	321			321			
C-B	3			3			
CD-A	469			469			
CD-B	10	604	0.017	10	0.0	6.062	A

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	462	0.037	17	0.0	8.081	A
A-B	8			8			
A-C	314			314			
A-D	156			156			
AB-C	319			319			
AB-D	161	589	0.273	161	0.4	8.646	A
D-ABC	244	577	0.422	243	0.7	10.867	B
C-D	60			60			
C-A	384			384			
C-B	4			4			
CD-A	561			561			
CD-B	13	584	0.022	13	0.0	6.302	A

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	420	0.050	21	0.1	9.022	A
A-B	10			10			
A-C	384			384			
A-D	190			190			
AB-C	391			391			
AB-D	197	562	0.351	196	0.5	10.110	B
D-ABC	298	534	0.558	296	1.2	15.166	C
C-D	74			74			
C-A	470			470			
C-B	4			4			
CD-A	687			687			
CD-B	15	555	0.028	15	0.0	6.665	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	420	0.050	21	0.1	9.028	A
A-B	10			10			
A-C	384			384			
A-D	190			190			
AB-C	391			391			
AB-D	197	562	0.351	197	0.6	10.144	B
D-ABC	298	534	0.558	298	1.3	15.418	C
C-D	74			74			
C-A	470			470			
C-B	4			4			
CD-A	688			688			
CD-B	15	555	0.028	15	0.0	6.665	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	462	0.037	17	0.0	8.090	A
A-B	8			8			
A-C	314			314			
A-D	156			156			
AB-C	319			319			
AB-D	161	589	0.273	162	0.4	8.688	A
D-ABC	244	577	0.422	246	0.8	11.065	B
C-D	60			60			
C-A	384			384			
C-B	4			4			
CD-A	563			563			
CD-B	13	584	0.022	13	0.0	6.303	A

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	492	0.029	14	0.0	7.537	A
A-B	7			7			
A-C	263			263			
A-D	130			130			
AB-C	267			267			
AB-D	135	608	0.222	135	0.3	7.847	A
D-ABC	204	606	0.337	205	0.5	9.099	A
C-D	50			50			
C-A	321			321			
C-B	3			3			
CD-A	471			471			
CD-B	11	604	0.018	11	0.0	6.064	A

2027 + com, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Gileston Road stagger jctn	Left-Right Stagger	Two-way		2.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2027 + com	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	645	100.000
B		✓	26	100.000
C		✓	438	100.000
D		✓	248	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	7	420	218
	B	4	0	7	15
	C	363	6	0	69
	D	194	13	41	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	0	1	0
	B	0	0	0	0
	C	3	0	0	0
	D	1	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.06	8.45	0.1	A
A-B				
A-C				
A-D				
AB-C				
AB-D	0.44	11.14	0.8	B
D-ABC	0.48	12.46	0.9	B
C-D				
C-A				
C-B				
CD-A				
CD-B	0.04	7.18	0.0	A

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	526	0.037	19	0.0	7.107	A
A-B	5			5			
A-C	316			316			
A-D	164			164			
AB-C	321			321			
AB-D	175	620	0.283	174	0.4	8.048	A
D-ABC	187	632	0.295	185	0.4	8.090	A
C-D	52			52			
C-A	273			273			
C-B	5			5			
CD-A	418			418			
CD-B	14	582	0.024	14	0.0	6.344	A

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	23	496	0.047	23	0.0	7.608	A
A-B	6			6			
A-C	378			378			
A-D	196			196			
AB-C	384			384			
AB-D	209	603	0.347	209	0.5	9.128	A
D-ABC	223	605	0.369	222	0.6	9.475	A
C-D	62			62			
C-A	326			326			
C-B	5			5			
CD-A	500			500			
CD-B	17	557	0.031	17	0.0	6.670	A

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	29	455	0.063	29	0.1	8.449	A
A-B	8			8			
A-C	462			462			
A-D	240			240			
AB-C	470			470			
AB-D	256	579	0.443	255	0.8	11.075	B
D-ABC	273	564	0.484	272	0.9	12.342	B
C-D	76			76			
C-A	400			400			
C-B	7			7			
CD-A	612			612			
CD-B	21	522	0.040	21	0.0	7.178	A

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	29	455	0.063	29	0.1	8.452	A
A-B	8			8			
A-C	462			462			
A-D	240			240			
AB-C	470			470			
AB-D	257	579	0.443	257	0.8	11.141	B
D-ABC	273	564	0.484	273	0.9	12.461	B
C-D	76			76			
C-A	400			400			
C-B	7			7			
CD-A	613			613			
CD-B	21	522	0.040	21	0.0	7.179	A

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	23	496	0.047	23	0.0	7.615	A
A-B	6			6			
A-C	378			378			
A-D	196			196			
AB-C	384			384			
AB-D	210	603	0.348	210	0.5	9.202	A
D-ABC	223	604	0.369	224	0.6	9.581	A
C-D	62			62			
C-A	326			326			
C-B	5			5			
CD-A	502			502			
CD-B	17	557	0.031	17	0.0	6.672	A

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	526	0.037	20	0.0	7.116	A
A-B	5			5			
A-C	316			316			
A-D	164			164			
AB-C	321			321			
AB-D	175	620	0.283	176	0.4	8.128	A
D-ABC	187	632	0.296	187	0.4	8.182	A
C-D	52			52			
C-A	273			273			
C-B	5			5			
CD-A	420			420			
CD-B	14	582	0.025	14	0.0	6.346	A

2027 + com + development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Gileston Road stagger jctn	Left-Right Stagger	Two-way		4.36	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)
D15	2027 + com + development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	554	100.000
B		✓	19	100.000
C		✓	509	100.000
D		✓	353	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	9	349	196
	B	7	0	6	6
	C	427	4	0	78
	D	260	10	83	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	11	5	3
	B	0	0	0	0
	C	7	0	0	0
	D	1	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.05	9.39	0.1	A
A-B				
A-C				
A-D				
AB-C				
AB-D	0.40	11.00	0.7	B
D-ABC	0.74	26.15	2.7	D
C-D				
C-A				
C-B				
CD-A				
CD-B	0.03	6.75	0.0	A

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	483	0.030	14	0.0	7.671	A
A-B	7			7			
A-C	263			263			
A-D	148			148			
AB-C	267			267			
AB-D	152	605	0.251	151	0.3	8.121	A
D-ABC	266	602	0.442	263	0.8	10.627	B
C-D	59			59			
C-A	321			321			
C-B	3			3			
CD-A	515			515			
CD-B	10	600	0.017	10	0.0	6.109	A

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	451	0.038	17	0.0	8.292	A
A-B	8			8			
A-C	314			314			
A-D	176			176			
AB-C	319			319			
AB-D	182	586	0.310	181	0.5	9.141	A
D-ABC	317	571	0.556	316	1.2	14.138	B
C-D	70			70			
C-A	384			384			
C-B	4			4			
CD-A	616			616			
CD-B	13	578	0.022	13	0.0	6.362	A

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	405	0.052	21	0.1	9.371	A
A-B	10			10			
A-C	384			384			
A-D	216			216			
AB-C	391			391			
AB-D	222	559	0.398	222	0.7	10.951	B
D-ABC	389	526	0.739	383	2.6	24.516	C
C-D	86			86			
C-A	470			470			
C-B	4			4			
CD-A	752			752			
CD-B	15	549	0.028	15	0.0	6.747	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	404	0.052	21	0.1	9.385	A
A-B	10			10			
A-C	384			384			
A-D	216			216			
AB-C	391			391			
AB-D	222	559	0.398	222	0.7	11.005	B
D-ABC	389	526	0.739	388	2.7	26.149	D
C-D	86			86			
C-A	470			470			
C-B	4			4			
CD-A	756			756			
CD-B	15	549	0.028	15	0.0	6.749	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	451	0.038	17	0.0	8.309	A
A-B	8			8			
A-C	314			314			
A-D	176			176			
AB-C	319			319			
AB-D	182	586	0.310	182	0.5	9.200	A
D-ABC	317	571	0.556	323	1.3	14.990	B
C-D	70			70			
C-A	384			384			
C-B	4			4			
CD-A	622			622			
CD-B	13	578	0.022	13	0.0	6.368	A

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	483	0.030	14	0.0	7.684	A
A-B	7			7			
A-C	263			263			
A-D	148			148			
AB-C	267			267			
AB-D	152	605	0.251	153	0.3	8.187	A
D-ABC	266	601	0.442	268	0.8	10.959	B
C-D	59			59			
C-A	321			321			
C-B	3			3			
CD-A	519			519			
CD-B	11	600	0.018	11	0.0	6.113	A

2027 + com + development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Gileston Road stagger jctn	Left-Right Stagger	Two-way		3.78	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)
D16	2027 + com + development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	702	100.000
B		✓	26	100.000
C		✓	463	100.000
D		✓	315	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	7	420	275
	B	4	0	7	15
	C	363	6	0	94
	D	238	13	64	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	0	1	0
	B	0	0	0	0
	C	3	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.07	8.88	0.1	A
A-B				
A-C				
A-D				
AB-C				
AB-D	0.56	14.21	1.2	B
D-ABC	0.66	19.87	1.9	C
C-D				
C-A				
C-B				
CD-A				
CD-B	0.04	7.42	0.0	A

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	513	0.038	19	0.0	7.294	A
A-B	5			5			
A-C	316			316			
A-D	207			207			
AB-C	321			321			
AB-D	218	615	0.355	216	0.5	8.986	A
D-ABC	237	609	0.390	235	0.6	9.561	A
C-D	71			71			
C-A	273			273			
C-B	5			5			
CD-A	451			451			
CD-B	14	570	0.025	14	0.0	6.473	A

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	23	481	0.049	23	0.1	7.872	A
A-B	6			6			
A-C	378			378			
A-D	247			247			
AB-C	384			384			
AB-D	261	597	0.437	260	0.8	10.652	B
D-ABC	283	576	0.491	282	0.9	12.173	B
C-D	85			85			
C-A	326			326			
C-B	5			5			
CD-A	539			539			
CD-B	17	543	0.031	17	0.0	6.841	A

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	29	434	0.066	29	0.1	8.875	A
A-B	8			8			
A-C	462			462			
A-D	303			303			
AB-C	470			470			
AB-D	319	572	0.558	317	1.2	14.022	B
D-ABC	347	528	0.657	343	1.8	19.170	C
C-D	103			103			
C-A	400			400			
C-B	7			7			
CD-A	659			659			
CD-B	21	506	0.041	21	0.0	7.422	A

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	29	434	0.066	29	0.1	8.880	A
A-B	8			8			
A-C	462			462			
A-D	303			303			
AB-C	470			470			
AB-D	319	572	0.558	319	1.2	14.214	B
D-ABC	347	527	0.658	347	1.9	19.870	C
C-D	103			103			
C-A	400			400			
C-B	7			7			
CD-A	662			662			
CD-B	21	506	0.041	21	0.0	7.424	A

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	23	480	0.049	23	0.1	7.880	A
A-B	6			6			
A-C	378			378			
A-D	247			247			
AB-C	384			384			
AB-D	261	597	0.437	263	0.8	10.828	B
D-ABC	283	576	0.492	287	1.0	12.596	B
C-D	85			85			
C-A	326			326			
C-B	5			5			
CD-A	543			543			
CD-B	17	543	0.032	17	0.0	6.845	A

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	513	0.038	20	0.0	7.301	A
A-B	5			5			
A-C	316			316			
A-D	207			207			
AB-C	321			321			
AB-D	218	615	0.355	219	0.6	9.128	A
D-ABC	237	608	0.390	239	0.7	9.775	A
C-D	71			71			
C-A	273			273			
C-B	5			5			
CD-A	454			454			
CD-B	14	570	0.025	14	0.0	6.476	A

Appendix R



Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.0.6896
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Filename: Gileston-B4265 X-roads previous.j9

Path: Z:\Lime\Projects\2024\24063 Church Farm, St Athan\Analysis\November 2024 JCA\IP1 only

Report generation date: 15/08/2025 10:56:56

»2024, AM
»2024, PM
»2027, AM
»2027, PM
»2027 + com, AM
»2027 + com, PM
»2027 + com + development, AM
»2027 + com + development, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2024								
Stream B-ACD	0.0	8.29	0.05	A	0.1	7.64	0.06	A
Stream AB-D	0.5	9.02	0.32	A	0.7	10.48	0.42	B
Stream D-AB	0.5	8.66	0.35	A	0.5	8.51	0.34	A
Stream D-C	0.2	13.28	0.20	B	0.2	13.38	0.14	B
Stream CD-B	0.0	6.45	0.03	A	0.0	6.64	0.04	A
2027								
Stream B-ACD	0.0	8.38	0.05	A	0.1	7.71	0.06	A
Stream AB-D	0.5	9.18	0.33	A	0.8	10.74	0.43	B
Stream D-AB	0.6	8.85	0.36	A	0.5	8.70	0.35	A
Stream D-C	0.3	13.60	0.20	B	0.2	13.73	0.15	B
Stream CD-B	0.0	6.49	0.03	A	0.0	6.68	0.04	A
2027 + com								
Stream B-ACD	0.1	9.02	0.05	A	0.1	8.45	0.06	A
Stream AB-D	0.6	10.14	0.35	B	0.8	11.14	0.44	B
Stream D-AB	0.6	9.97	0.39	A	0.6	9.05	0.36	A
Stream D-C	0.3	16.32	0.24	C	0.2	15.66	0.16	C
Stream CD-B	0.0	6.67	0.03	A	0.0	7.18	0.04	A
2027 + com + development								
Stream B-ACD	0.1	9.37	0.05	A	0.1	8.88	0.07	A
Stream AB-D	0.7	11.00	0.40	B	1.2	14.21	0.56	B
Stream D-AB	1.1	13.16	0.52	B	0.8	11.07	0.46	B
Stream D-C	0.5	19.86	0.33	C	0.4	20.30	0.28	C
Stream CD-B	0.0	6.75	0.03	A	0.0	7.42	0.04	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	
Location	
Site number	
Date	01/11/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-U7G8RPA\Rusne
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	08:00	09:30	15
D2	2024	PM	ONE HOUR	17:00	18:30	15
D3	2027	AM	ONE HOUR	08:00	09:30	15
D4	2027	PM	ONE HOUR	17:00	18:30	15
D9	2027 + com	AM	ONE HOUR	08:00	09:30	15
D10	2027 + com	PM	ONE HOUR	17:00	18:30	15
D15	2027 + com + development	AM	ONE HOUR	08:00	09:30	15
D16	2027 + com + development	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Gileston Road stagger jctn	Left-Right Stagger	Two-way		2.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B4265 east		Major
B	Gileston Road south		Minor
C	B4265 west		Major
D	Gileston Road north		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	6.92		✓	2.83	150.0		-
C	6.92		✓	2.88	150.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.27								61	85
D	One lane plus flare		9.00	8.00	6.00	4.00	3.00	✓	2.00	102	102

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for AB	Slope for AC	Slope for AD	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	706	-	-	-	-	-	0.263	0.263	0.263	-	-
1	B-A	554	0.097	0.245	0.245	-	-	0.154	0.350	-	0.154	0.350
1	B-CD	696	0.102	0.259	0.259	-	-	-	-	-	-	-
1	CD-B	710	0.264	0.264	0.264	-	-	-	-	-	-	-
1	D-AB	779	-	-	-	-	-	0.290	0.290	0.115	-	-
1	D-C	551	-	0.153	0.348	0.153	0.348	0.244	0.244	0.096	-	-

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	2024	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	469	100.000
B		✓	19	100.000
C		✓	356	100.000
D		✓	265	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	9	291	169
	B	7	0	6	6
	C	287	4	0	65
	D	193	10	62	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	11	6	3
	B	0	0	0	0
	C	11	0	0	0
	D	1	0	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.05	8.29	0.0	A
A-B				
A-C				
A-D				
AB-C				
AB-D	0.32	9.02	0.5	A
D-AB	0.35	8.66	0.5	A
D-C	0.20	13.28	0.2	B
C-D				
C-A				
C-B				
CD-A				
CD-B	0.03	6.45	0.0	A

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	515	0.028	14	0.0	7.191	A
A-B	7			7			
A-C	219			219			
A-D	127			127			
AB-C	224			224			
AB-D	132	636	0.207	131	0.3	7.319	A
D-AB	153	690	0.222	152	0.3	6.741	A
D-C	47	412	0.113	46	0.1	10.014	B
C-D	49			49			
C-A	216			216			
C-B	3			3			
CD-A	360			360			
CD-B	10	617	0.017	10	0.0	5.939	A

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	490	0.035	17	0.0	7.612	A
A-B	8			8			
A-C	262			262			
A-D	152			152			
AB-C	267			267			
AB-D	157	622	0.253	157	0.3	7.958	A
D-AB	182	671	0.272	182	0.4	7.434	A
D-C	56	384	0.145	56	0.2	11.163	B
C-D	58			58			
C-A	258			258			
C-B	4			4			
CD-A	431			431			
CD-B	13	598	0.021	13	0.0	6.144	A

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	455	0.046	21	0.0	8.289	A
A-B	10			10			
A-C	320			320			
A-D	186			186			
AB-C	327			327			
AB-D	193	603	0.319	192	0.5	8.999	A
D-AB	224	643	0.348	223	0.5	8.633	A
D-C	68	345	0.198	68	0.2	13.240	B
C-D	72			72			
C-A	316			316			
C-B	4			4			
CD-A	528			528			
CD-B	15	573	0.027	15	0.0	6.450	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	455	0.046	21	0.0	8.292	A
A-B	10			10			
A-C	320			320			
A-D	186			186			
AB-C	327			327			
AB-D	193	603	0.319	193	0.5	9.022	A
D-AB	224	643	0.348	223	0.5	8.663	A
D-C	68	345	0.198	68	0.2	13.279	B
C-D	72			72			
C-A	316			316			
C-B	4			4			
CD-A	528			528			
CD-B	15	573	0.027	15	0.0	6.450	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	490	0.035	17	0.0	7.618	A
A-B	8			8			
A-C	262			262			
A-D	152			152			
AB-C	267			267			
AB-D	157	622	0.253	158	0.4	7.989	A
D-AB	182	670	0.272	183	0.4	7.466	A
D-C	56	384	0.145	56	0.2	11.204	B
C-D	58			58			
C-A	258			258			
C-B	4			4			
CD-A	432			432			
CD-B	13	598	0.021	13	0.0	6.145	A

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	514	0.028	14	0.0	7.197	A
A-B	7			7			
A-C	219			219			
A-D	127			127			
AB-C	224			224			
AB-D	132	636	0.207	132	0.3	7.358	A
D-AB	153	689	0.222	153	0.3	6.785	A
D-C	47	412	0.113	47	0.1	10.066	B
C-D	49			49			
C-A	216			216			
C-B	3			3			
CD-A	362			362			
CD-B	11	617	0.017	11	0.0	5.940	A

2024, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Gileston Road stagger jctn	Left-Right Stagger	Two-way		2.26	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	2024	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	505	100.000
B		✓	26	100.000
C		✓	386	100.000
D		✓	242	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	7	285	213
	B	4	0	7	15
	C	313	6	0	67
	D	189	13	40	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.06	7.64	0.1	A
A-B				
A-C				
A-D				
AB-C				
AB-D	0.42	10.48	0.7	B
D-AB	0.34	8.51	0.5	A
D-C	0.14	13.38	0.2	B
C-D				
C-A				
C-B				
CD-A				
CD-B	0.04	6.64	0.0	A

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	555	0.035	19	0.0	6.714	A
A-B	5			5			
A-C	215			215			
A-D	160			160			
AB-C	220			220			
AB-D	172	630	0.272	170	0.4	7.806	A
D-AB	152	695	0.219	151	0.3	6.666	A
D-C	30	388	0.078	30	0.1	10.030	B
C-D	50			50			
C-A	236			236			
C-B	5			5			
CD-A	377			377			
CD-B	14	609	0.023	14	0.0	6.048	A

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	23	532	0.044	23	0.0	7.072	A
A-B	6			6			
A-C	256			256			
A-D	191			191			
AB-C	262			262			
AB-D	205	615	0.333	204	0.5	8.758	A
D-AB	182	676	0.269	181	0.4	7.336	A
D-C	36	357	0.101	36	0.1	11.204	B
C-D	60			60			
C-A	281			281			
C-B	5			5			
CD-A	451			451			
CD-B	17	590	0.029	17	0.0	6.283	A

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	29	500	0.057	29	0.1	7.641	A
A-B	8			8			
A-C	314			314			
A-D	235			235			
AB-C	321			321			
AB-D	251	595	0.422	250	0.7	10.423	B
D-AB	222	649	0.342	222	0.5	8.484	A
D-C	44	314	0.140	44	0.2	13.340	B
C-D	74			74			
C-A	345			345			
C-B	7			7			
CD-A	552			552			
CD-B	21	563	0.037	21	0.0	6.640	A

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	29	500	0.057	29	0.1	7.641	A
A-B	8			8			
A-C	314			314			
A-D	235			235			
AB-C	321			321			
AB-D	251	595	0.422	251	0.7	10.478	B
D-AB	222	649	0.343	222	0.5	8.510	A
D-C	44	313	0.141	44	0.2	13.376	B
C-D	74			74			
C-A	345			345			
C-B	7			7			
CD-A	553			553			
CD-B	21	563	0.037	21	0.0	6.640	A

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	23	532	0.044	23	0.0	7.074	A
A-B	6			6			
A-C	256			256			
A-D	191			191			
AB-C	263			263			
AB-D	205	615	0.333	206	0.5	8.819	A
D-AB	182	676	0.269	182	0.4	7.368	A
D-C	36	357	0.101	36	0.1	11.243	B
C-D	60			60			
C-A	281			281			
C-B	5			5			
CD-A	452			452			
CD-B	17	590	0.029	17	0.0	6.287	A

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	555	0.035	20	0.0	6.722	A
A-B	5			5			
A-C	215			215			
A-D	160			160			
AB-C	220			220			
AB-D	172	630	0.273	172	0.4	7.876	A
D-AB	152	695	0.219	152	0.3	6.704	A
D-C	30	388	0.078	30	0.1	10.076	B
C-D	50			50			
C-A	236			236			
C-B	5			5			
CD-A	378			378			
CD-B	14	609	0.024	14	0.0	6.052	A

2027, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Gileston Road stagger jctn	Left-Right Stagger	Two-way		2.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2027	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	480	100.000
B		✓	19	100.000
C		✓	365	100.000
D		✓	271	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	9	298	173
	B	7	0	6	6
	C	294	4	0	67
	D	198	10	63	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	11	6	3
	B	0	0	0	0
	C	11	0	0	4
	D	1	0	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.05	8.38	0.0	A
A-B				
A-C				
A-D				
AB-C				
AB-D	0.33	9.18	0.5	A
D-AB	0.36	8.85	0.6	A
D-C	0.20	13.60	0.3	B
C-D				
C-A				
C-B				
CD-A				
CD-B	0.03	6.49	0.0	A

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	512	0.028	14	0.0	7.234	A
A-B	7			7			
A-C	224			224			
A-D	130			130			
AB-C	229			229			
AB-D	135	634	0.213	134	0.3	7.387	A
D-AB	157	688	0.228	155	0.3	6.812	A
D-C	47	409	0.116	47	0.1	10.131	B
C-D	50			50			
C-A	221			221			
C-B	3			3			
CD-A	369			369			
CD-B	10	614	0.017	10	0.0	5.961	A

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	486	0.035	17	0.0	7.670	A
A-B	8			8			
A-C	268			268			
A-D	156			156			
AB-C	273			273			
AB-D	161	620	0.260	161	0.4	8.058	A
D-AB	187	668	0.280	187	0.4	7.540	A
D-C	57	380	0.149	56	0.2	11.339	B
C-D	60			60			
C-A	264			264			
C-B	4			4			
CD-A	442			442			
CD-B	13	596	0.021	13	0.0	6.171	A

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	451	0.046	21	0.0	8.377	A
A-B	10			10			
A-C	328			328			
A-D	190			190			
AB-C	335			335			
AB-D	197	601	0.328	197	0.5	9.154	A
D-AB	229	640	0.358	228	0.6	8.820	A
D-C	69	340	0.204	69	0.3	13.553	B
C-D	74			74			
C-A	324			324			
C-B	4			4			
CD-A	541			541			
CD-B	15	570	0.027	15	0.0	6.487	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	450	0.046	21	0.0	8.380	A
A-B	10			10			
A-C	328			328			
A-D	190			190			
AB-C	335			335			
AB-D	197	601	0.328	197	0.5	9.179	A
D-AB	229	640	0.358	229	0.6	8.852	A
D-C	69	339	0.204	69	0.3	13.596	B
C-D	74			74			
C-A	324			324			
C-B	4			4			
CD-A	542			542			
CD-B	15	570	0.027	15	0.0	6.487	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	486	0.035	17	0.0	7.677	A
A-B	8			8			
A-C	268			268			
A-D	156			156			
AB-C	273			273			
AB-D	161	620	0.260	161	0.4	8.088	A
D-AB	187	668	0.280	188	0.4	7.577	A
D-C	57	380	0.149	57	0.2	11.384	B
C-D	60			60			
C-A	264			264			
C-B	4			4			
CD-A	443			443			
CD-B	13	596	0.021	13	0.0	6.174	A

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	512	0.028	14	0.0	7.240	A
A-B	7			7			
A-C	224			224			
A-D	130			130			
AB-C	229			229			
AB-D	135	634	0.213	135	0.3	7.432	A
D-AB	157	687	0.228	157	0.3	6.860	A
D-C	47	408	0.116	48	0.1	10.183	B
C-D	50			50			
C-A	221			221			
C-B	3			3			
CD-A	371			371			
CD-B	11	614	0.017	11	0.0	5.962	A

2027, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Gileston Road stagger jctn	Left-Right Stagger	Two-way		2.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2027	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	517	100.000
B		✓	26	100.000
C		✓	396	100.000
D		✓	248	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	7	292	218
	B	4	0	7	15
	C	321	6	0	69
	D	194	13	41	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.06	7.71	0.1	A
A-B				
A-C				
A-D				
AB-C				
AB-D	0.43	10.74	0.8	B
D-AB	0.35	8.70	0.5	A
D-C	0.15	13.73	0.2	B
C-D				
C-A				
C-B				
CD-A				
CD-B	0.04	6.68	0.0	A

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	553	0.035	19	0.0	6.750	A
A-B	5			5			
A-C	220			220			
A-D	164			164			
AB-C	225			225			
AB-D	175	628	0.279	174	0.4	7.901	A
D-AB	156	693	0.225	155	0.3	6.743	A
D-C	31	385	0.080	31	0.1	10.158	B
C-D	52			52			
C-A	242			242			
C-B	5			5			
CD-A	387			387			
CD-B	14	607	0.023	14	0.0	6.072	A

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	23	529	0.044	23	0.0	7.120	A
A-B	6			6			
A-C	263			263			
A-D	196			196			
AB-C	269			269			
AB-D	209	613	0.342	209	0.5	8.905	A
D-AB	186	673	0.276	186	0.4	7.448	A
D-C	37	352	0.105	37	0.1	11.398	B
C-D	62			62			
C-A	289			289			
C-B	5			5			
CD-A	463			463			
CD-B	17	587	0.029	17	0.0	6.315	A

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	29	495	0.058	29	0.1	7.711	A
A-B	8			8			
A-C	321			321			
A-D	240			240			
AB-C	329			329			
AB-D	257	592	0.434	256	0.8	10.680	B
D-AB	228	646	0.353	227	0.5	8.670	A
D-C	45	308	0.147	45	0.2	13.686	B
C-D	76			76			
C-A	353			353			
C-B	7			7			
CD-A	566			566			
CD-B	21	559	0.037	21	0.0	6.683	A

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	29	495	0.058	29	0.1	7.713	A
A-B	8			8			
A-C	321			321			
A-D	240			240			
AB-C	329			329			
AB-D	257	592	0.434	257	0.8	10.740	B
D-AB	228	646	0.353	228	0.5	8.701	A
D-C	45	307	0.147	45	0.2	13.727	B
C-D	76			76			
C-A	353			353			
C-B	7			7			
CD-A	567			567			
CD-B	21	559	0.037	21	0.0	6.683	A

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	23	529	0.044	23	0.0	7.122	A
A-B	6			6			
A-C	263			263			
A-D	196			196			
AB-C	269			269			
AB-D	209	613	0.342	210	0.5	8.970	A
D-AB	186	673	0.276	187	0.4	7.482	A
D-C	37	352	0.105	37	0.1	11.440	B
C-D	62			62			
C-A	289			289			
C-B	5			5			
CD-A	464			464			
CD-B	17	587	0.029	17	0.0	6.316	A

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	553	0.035	20	0.0	6.755	A
A-B	5			5			
A-C	220			220			
A-D	164			164			
AB-C	225			225			
AB-D	175	628	0.279	176	0.4	7.978	A
D-AB	156	692	0.225	156	0.3	6.784	A
D-C	31	384	0.080	31	0.1	10.208	B
C-D	52			52			
C-A	242			242			
C-B	5			5			
CD-A	388			388			
CD-B	14	607	0.024	14	0.0	6.076	A

2027 + com, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Gileston Road stagger jctn	Left-Right Stagger	Two-way		2.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2027 + com	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	531	100.000
B		✓	19	100.000
C		✓	498	100.000
D		✓	271	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	9	349	173
	B	7	0	6	6
	C	427	4	0	67
	D	198	10	63	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	11	5	3
	B	0	0	0	0
	C	7	0	0	0
	D	1	0	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.05	9.02	0.1	A
A-B				
A-C				
A-D				
AB-C				
AB-D	0.35	10.14	0.6	B
D-AB	0.39	9.97	0.6	A
D-C	0.24	16.32	0.3	C
C-D				
C-A				
C-B				
CD-A				
CD-B	0.03	6.67	0.0	A

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	492	0.029	14	0.0	7.526	A
A-B	7			7			
A-C	263			263			
A-D	130			130			
AB-C	267			267			
AB-D	135	608	0.222	134	0.3	7.795	A
D-AB	157	658	0.238	155	0.3	7.214	A
D-C	47	379	0.125	47	0.1	11.053	B
C-D	50			50			
C-A	321			321			
C-B	3			3			
CD-A	469			469			
CD-B	10	604	0.017	10	0.0	6.062	A

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	463	0.037	17	0.0	8.081	A
A-B	8			8			
A-C	314			314			
A-D	156			156			
AB-C	319			319			
AB-D	161	589	0.273	161	0.4	8.646	A
D-AB	187	632	0.296	187	0.4	8.149	A
D-C	57	344	0.165	56	0.2	12.772	B
C-D	60			60			
C-A	384			384			
C-B	4			4			
CD-A	561			561			
CD-B	13	584	0.022	13	0.0	6.302	A

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	420	0.050	21	0.1	9.020	A
A-B	10			10			
A-C	384			384			
A-D	190			190			
AB-C	391			391			
AB-D	197	562	0.351	196	0.5	10.110	B
D-AB	229	594	0.386	228	0.6	9.914	A
D-C	69	295	0.235	69	0.3	16.229	C
C-D	74			74			
C-A	470			470			
C-B	4			4			
CD-A	687			687			
CD-B	15	555	0.028	15	0.0	6.665	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	420	0.050	21	0.1	9.025	A
A-B	10			10			
A-C	384			384			
A-D	190			190			
AB-C	391			391			
AB-D	197	562	0.351	197	0.6	10.144	B
D-AB	229	594	0.386	229	0.6	9.966	A
D-C	69	294	0.236	69	0.3	16.316	C
C-D	74			74			
C-A	470			470			
C-B	4			4			
CD-A	688			688			
CD-B	15	555	0.028	15	0.0	6.666	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	462	0.037	17	0.0	8.086	A
A-B	8			8			
A-C	314			314			
A-D	156			156			
AB-C	319			319			
AB-D	161	589	0.273	162	0.4	8.689	A
D-AB	187	632	0.296	188	0.4	8.205	A
D-C	57	343	0.165	57	0.2	12.846	B
C-D	60			60			
C-A	384			384			
C-B	4			4			
CD-A	563			563			
CD-B	13	584	0.022	13	0.0	6.303	A

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	492	0.029	14	0.0	7.536	A
A-B	7			7			
A-C	263			263			
A-D	130			130			
AB-C	267			267			
AB-D	135	608	0.222	135	0.3	7.847	A
D-AB	157	657	0.238	157	0.3	7.271	A
D-C	47	378	0.125	48	0.1	11.125	B
C-D	50			50			
C-A	321			321			
C-B	3			3			
CD-A	471			471			
CD-B	11	604	0.017	11	0.0	6.066	A

2027 + com, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Gileston Road stagger jctn	Left-Right Stagger	Two-way		2.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2027 + com	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	645	100.000
B		✓	26	100.000
C		✓	438	100.000
D		✓	248	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	7	420	218
	B	4	0	7	15
	C	363	6	0	69
	D	194	13	41	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	0	1	0
	B	0	0	0	0
	C	3	0	0	0
	D	1	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.06	8.45	0.1	A
A-B				
A-C				
A-D				
AB-C				
AB-D	0.44	11.14	0.8	B
D-AB	0.36	9.05	0.6	A
D-C	0.16	15.66	0.2	C
C-D				
C-A				
C-B				
CD-A				
CD-B	0.04	7.18	0.0	A

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	526	0.037	19	0.0	7.107	A
A-B	5			5			
A-C	316			316			
A-D	164			164			
AB-C	321			321			
AB-D	175	620	0.283	174	0.4	8.048	A
D-AB	156	683	0.228	155	0.3	6.867	A
D-C	31	362	0.085	30	0.1	10.832	B
C-D	52			52			
C-A	273			273			
C-B	5			5			
CD-A	418			418			
CD-B	14	582	0.024	14	0.0	6.344	A

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	23	496	0.047	23	0.0	7.608	A
A-B	6			6			
A-C	378			378			
A-D	196			196			
AB-C	384			384			
AB-D	209	603	0.347	209	0.5	9.128	A
D-AB	186	661	0.281	186	0.4	7.636	A
D-C	37	326	0.113	37	0.1	12.438	B
C-D	62			62			
C-A	326			326			
C-B	5			5			
CD-A	500			500			
CD-B	17	557	0.031	17	0.0	6.670	A

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	29	455	0.063	29	0.1	8.448	A
A-B	8			8			
A-C	462			462			
A-D	240			240			
AB-C	470			470			
AB-D	256	579	0.443	255	0.8	11.075	B
D-AB	228	630	0.362	227	0.6	9.014	A
D-C	45	275	0.164	45	0.2	15.592	C
C-D	76			76			
C-A	400			400			
C-B	7			7			
CD-A	613			613			
CD-B	21	522	0.040	21	0.0	7.179	A

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	29	455	0.063	29	0.1	8.451	A
A-B	8			8			
A-C	462			462			
A-D	240			240			
AB-C	470			470			
AB-D	257	579	0.443	257	0.8	11.141	B
D-AB	228	629	0.362	228	0.6	9.049	A
D-C	45	275	0.164	45	0.2	15.660	C
C-D	76			76			
C-A	400			400			
C-B	7			7			
CD-A	613			613			
CD-B	21	522	0.040	21	0.0	7.179	A

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	23	496	0.047	23	0.0	7.614	A
A-B	6			6			
A-C	378			378			
A-D	196			196			
AB-C	384			384			
AB-D	210	603	0.348	210	0.5	9.200	A
D-AB	186	661	0.282	187	0.4	7.677	A
D-C	37	325	0.113	37	0.1	12.496	B
C-D	62			62			
C-A	326			326			
C-B	5			5			
CD-A	501			501			
CD-B	17	557	0.031	17	0.0	6.672	A

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	526	0.037	20	0.0	7.113	A
A-B	5			5			
A-C	316			316			
A-D	164			164			
AB-C	321			321			
AB-D	175	620	0.283	176	0.4	8.128	A
D-AB	156	682	0.228	156	0.3	6.913	A
D-C	31	362	0.085	31	0.1	10.894	B
C-D	52			52			
C-A	273			273			
C-B	5			5			
CD-A	420			420			
CD-B	14	582	0.025	14	0.0	6.349	A

2027 + com + development,

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Gileston Road stagger jctn	Left-Right Stagger	Two-way		2.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D15	2027 + com + development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	554	100.000
B		✓	19	100.000
C		✓	509	100.000
D		✓	353	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	9	349	196
	B	7	0	6	6
	C	427	4	0	78
	D	260	10	83	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	11	5	3
	B	0	0	0	0
	C	7	0	0	0
	D	1	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.05	9.37	0.1	A
A-B				
A-C				
A-D				
AB-C				
AB-D	0.40	11.00	0.7	B
D-AB	0.52	13.16	1.1	B
D-C	0.33	19.86	0.5	C
C-D				
C-A				
C-B				
CD-A				
CD-B	0.03	6.75	0.0	A

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	483	0.030	14	0.0	7.671	A
A-B	7			7			
A-C	263			263			
A-D	148			148			
AB-C	267			267			
AB-D	152	605	0.251	151	0.3	8.121	A
D-AB	203	649	0.313	201	0.5	8.088	A
D-C	62	370	0.169	62	0.2	11.755	B
C-D	59			59			
C-A	321			321			
C-B	3			3			
CD-A	515			515			
CD-B	10	600	0.017	10	0.0	6.109	A

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	451	0.038	17	0.0	8.291	A
A-B	8			8			
A-C	314			314			
A-D	176			176			
AB-C	319			319			
AB-D	182	586	0.310	181	0.5	9.141	A
D-AB	243	620	0.392	242	0.6	9.599	A
D-C	75	332	0.225	74	0.3	14.097	B
C-D	70			70			
C-A	384			384			
C-B	4			4			
CD-A	617			617			
CD-B	13	578	0.022	13	0.0	6.363	A

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	405	0.052	21	0.1	9.367	A
A-B	10			10			
A-C	384			384			
A-D	216			216			
AB-C	391			391			
AB-D	222	559	0.398	222	0.7	10.951	B
D-AB	297	574	0.518	296	1.1	12.973	B
D-C	91	275	0.332	91	0.5	19.636	C
C-D	86			86			
C-A	470			470			
C-B	4			4			
CD-A	755			755			
CD-B	15	549	0.028	15	0.0	6.748	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	405	0.052	21	0.1	9.374	A
A-B	10			10			
A-C	384			384			
A-D	216			216			
AB-C	391			391			
AB-D	222	559	0.398	222	0.7	11.005	B
D-AB	297	573	0.519	297	1.1	13.155	B
D-C	91	274	0.333	91	0.5	19.864	C
C-D	86			86			
C-A	470			470			
C-B	4			4			
CD-A	756			756			
CD-B	15	549	0.028	15	0.0	6.749	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	451	0.038	17	0.0	8.299	A
A-B	8			8			
A-C	314			314			
A-D	176			176			
AB-C	319			319			
AB-D	182	586	0.310	182	0.5	9.200	A
D-AB	243	619	0.392	244	0.7	9.743	A
D-C	75	331	0.225	75	0.3	14.258	B
C-D	70			70			
C-A	384			384			
C-B	4			4			
CD-A	619			619			
CD-B	13	578	0.022	13	0.0	6.364	A

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	483	0.030	14	0.0	7.682	A
A-B	7			7			
A-C	263			263			
A-D	148			148			
AB-C	267			267			
AB-D	152	605	0.251	153	0.3	8.187	A
D-AB	203	648	0.314	204	0.5	8.194	A
D-C	62	369	0.169	63	0.2	11.874	B
C-D	59			59			
C-A	321			321			
C-B	3			3			
CD-A	518			518			
CD-B	11	600	0.018	11	0.0	6.113	A

2027 + com + development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Gileston Road stagger jctn	Left-Right Stagger	Two-way		3.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D16	2027 + com + development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	702	100.000
B		✓	26	100.000
C		✓	463	100.000
D		✓	315	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	7	420	275
	B	4	0	7	15
	C	363	6	0	94
	D	238	13	64	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	0	1	0
	B	0	0	0	0
	C	3	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.07	8.88	0.1	A
A-B				
A-C				
A-D				
AB-C				
AB-D	0.56	14.21	1.2	B
D-AB	0.46	11.07	0.8	B
D-C	0.28	20.30	0.4	C
C-D				
C-A				
C-B				
CD-A				
CD-B	0.04	7.42	0.0	A

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	513	0.038	19	0.0	7.294	A
A-B	5			5			
A-C	316			316			
A-D	207			207			
AB-C	321			321			
AB-D	218	615	0.355	216	0.5	8.986	A
D-AB	189	668	0.283	187	0.4	7.460	A
D-C	48	348	0.139	48	0.2	11.967	B
C-D	71			71			
C-A	273			273			
C-B	5			5			
CD-A	451			451			
CD-B	14	570	0.025	14	0.0	6.474	A

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	23	481	0.049	23	0.1	7.871	A
A-B	6			6			
A-C	378			378			
A-D	247			247			
AB-C	384			384			
AB-D	261	597	0.437	260	0.8	10.652	B
D-AB	226	643	0.351	225	0.5	8.608	A
D-C	58	307	0.188	57	0.2	14.418	B
C-D	85			85			
C-A	326			326			
C-B	5			5			
CD-A	540			540			
CD-B	17	543	0.031	17	0.0	6.842	A

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	29	434	0.066	29	0.1	8.873	A
A-B	8			8			
A-C	462			462			
A-D	303			303			
AB-C	470			470			
AB-D	319	572	0.558	317	1.2	14.022	B
D-AB	276	602	0.459	275	0.8	10.974	B
D-C	70	248	0.284	70	0.4	20.081	C
C-D	103			103			
C-A	400			400			
C-B	7			7			
CD-A	661			661			
CD-B	21	506	0.041	21	0.0	7.424	A

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	29	434	0.066	29	0.1	8.876	A
A-B	8			8			
A-C	462			462			
A-D	303			303			
AB-C	470			470			
AB-D	319	572	0.558	319	1.2	14.214	B
D-AB	276	601	0.460	276	0.8	11.074	B
D-C	70	248	0.284	70	0.4	20.301	C
C-D	103			103			
C-A	400			400			
C-B	7			7			
CD-A	662			662			
CD-B	21	506	0.041	21	0.0	7.425	A

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	23	480	0.049	23	0.1	7.878	A
A-B	6			6			
A-C	378			378			
A-D	247			247			
AB-C	384			384			
AB-D	261	597	0.437	263	0.8	10.828	B
D-AB	226	642	0.352	227	0.5	8.698	A
D-C	58	306	0.188	58	0.2	14.581	B
C-D	85			85			
C-A	326			326			
C-B	5			5			
CD-A	541			541			
CD-B	17	543	0.032	17	0.0	6.847	A

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	513	0.038	20	0.0	7.303	A
A-B	5			5			
A-C	316			316			
A-D	207			207			
AB-C	321			321			
AB-D	218	615	0.355	219	0.6	9.129	A
D-AB	189	668	0.283	190	0.4	7.539	A
D-C	48	347	0.139	48	0.2	12.088	B
C-D	71			71			
C-A	273			273			
C-B	5			5			
CD-A	453			453			
CD-B	14	570	0.025	14	0.0	6.476	A

Appendix S



Junctions 9							
ARCADY 9 - Roundabout Module							
Version: 9.5.0.6896 © Copyright TRL Limited, 2018							
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk							
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Filename: Cowbridge Rd-St Athan Rd-Eglwys Brewis Rd.j9

Path: Z:\Lime\Projects\2024\24063 Church Farm, St Athan\Analysis\November 2024 JCA\IP1 only

Report generation date: 15/08/2025 11:03:01

»2024, AM
»2024, PM
»2027, AM
»2027, PM
»2027 + com, AM
»2027 + com, PM
»2027 + com + development, AM
»2027 + com + development, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2024								
Arm 1	0.3	3.79	0.21	A	0.2	3.45	0.15	A
Arm 2	0.2	4.03	0.16	A	0.2	3.79	0.16	A
Arm 3	0.1	3.73	0.08	A	0.1	3.51	0.07	A
Arm 4	0.0	3.89	0.03	A	0.0	3.44	0.02	A
2027								
Arm 1	0.3	3.82	0.21	A	0.2	3.46	0.15	A
Arm 2	0.2	4.08	0.17	A	0.2	3.81	0.17	A
Arm 3	0.1	3.72	0.08	A	0.1	3.52	0.07	A
Arm 4	0.0	3.80	0.03	A	0.0	3.44	0.02	A
2027 + com								
Arm 1	0.3	3.82	0.21	A	0.2	3.46	0.15	A
Arm 2	0.2	4.06	0.17	A	0.2	3.82	0.17	A
Arm 3	0.1	3.75	0.08	A	0.1	3.52	0.07	A
Arm 4	0.0	3.90	0.03	A	0.0	3.44	0.02	A
2027 + com + development								
Arm 1	0.3	3.91	0.24	A	0.2	3.59	0.19	A
Arm 2	0.2	4.11	0.17	A	0.2	3.91	0.18	A
Arm 3	0.1	3.79	0.09	A	0.1	3.64	0.10	A
Arm 4	0.0	3.90	0.03	A	0.0	3.54	0.03	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	
Location	
Site number	
Date	01/11/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-U7G8RPA\Rusne
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	08:00	09:30	15
D2	2024	PM	ONE HOUR	17:00	18:30	15
D3	2027	AM	ONE HOUR	08:00	09:30	15
D4	2027	PM	ONE HOUR	17:00	18:30	15
D9	2027 + com	AM	ONE HOUR	08:00	09:30	15
D10	2027 + com	PM	ONE HOUR	17:00	18:30	15
D15	2027 + com + development	AM	ONE HOUR	08:00	09:30	15
D16	2027 + com + development	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2024, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Cowbridge Road/St Athan Road/Eglwys Brewis Road roundabout	Standard Roundabout		1, 2, 3, 4	3.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cowbridge Road	
2	Eglwys Brewis Road	
3	St Athan Road	
4	Access	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.03	5.31	7.2	27.0	38.6	28.6	
2	2.76	6.57	11.1	6.1	29.2	44.2	
3	3.03	4.20	43.1	14.0	38.6	32.5	
4	2.95	4.63	10.7	20.1	29.2	39.3	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.567	1283
2	0.499	1164
3	0.537	1207
4	0.545	1193

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	238	100.000
2		✓	161	100.000
3		✓	78	100.000
4		✓	27	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1	2	3	4
From	1	0	137	78	23
	2	113	0	23	25
	3	53	15	0	10
	4	15	7	5	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	7	4	4
	2	4	0	0	8
	3	6	13	0	0
	4	13	29	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.21	3.79	0.3	A
2	0.16	4.03	0.2	A
3	0.08	3.73	0.1	A
4	0.03	3.89	0.0	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	179	20	1272	0.141	178	0.2	3.479	A
2	121	79	1125	0.108	121	0.1	3.727	A
3	59	121	1143	0.051	58	0.1	3.534	A
4	20	136	1119	0.018	20	0.0	3.731	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	214	24	1270	0.169	214	0.2	3.603	A
2	145	95	1117	0.130	145	0.2	3.851	A
3	70	145	1130	0.062	70	0.1	3.615	A
4	24	163	1104	0.022	24	0.0	3.795	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	262	30	1267	0.207	262	0.3	3.787	A
2	177	117	1106	0.160	177	0.2	4.030	A
3	86	177	1112	0.077	86	0.1	3.732	A
4	30	199	1085	0.027	30	0.0	3.887	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	262	30	1266	0.207	262	0.3	3.787	A
2	177	117	1106	0.160	177	0.2	4.030	A
3	86	177	1112	0.077	86	0.1	3.733	A
4	30	199	1084	0.027	30	0.0	3.888	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	214	24	1270	0.169	214	0.2	3.605	A
2	145	95	1117	0.130	145	0.2	3.853	A
3	70	145	1130	0.062	70	0.1	3.619	A
4	24	163	1104	0.022	24	0.0	3.796	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	179	20	1272	0.141	179	0.2	3.483	A
2	121	80	1124	0.108	121	0.1	3.734	A
3	59	121	1142	0.051	59	0.1	3.536	A
4	20	136	1119	0.018	20	0.0	3.733	A

2024, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Cowbridge Road/St Athan Road/Eglwys Brewis Road roundabout	Standard Roundabout		1, 2, 3, 4	3.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2024	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	173	100.000
2		✓	170	100.000
3		✓	67	100.000
4		✓	19	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	127	34	11	
	2	144	0	21	5
	3	44	18	1	4
	4	8	7	4	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	4	0	0
	2	0	0	0	0
	3	2	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.15	3.45	0.2	A
2	0.16	3.79	0.2	A
3	0.07	3.51	0.1	A
4	0.02	3.44	0.0	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	130	23	1271	0.103	130	0.1	3.245	A
2	128	38	1145	0.112	127	0.1	3.535	A
3	50	121	1143	0.044	50	0.0	3.338	A
4	14	156	1108	0.013	14	0.0	3.290	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	156	27	1268	0.123	155	0.1	3.329	A
2	153	46	1141	0.134	153	0.2	3.640	A
3	60	145	1130	0.053	60	0.1	3.409	A
4	17	187	1091	0.016	17	0.0	3.350	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	190	33	1265	0.151	190	0.2	3.447	A
2	187	56	1136	0.165	187	0.2	3.792	A
3	74	177	1112	0.066	74	0.1	3.510	A
4	21	229	1068	0.020	21	0.0	3.436	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	190	33	1265	0.151	190	0.2	3.448	A
2	187	56	1136	0.165	187	0.2	3.792	A
3	74	177	1112	0.066	74	0.1	3.511	A
4	21	229	1068	0.020	21	0.0	3.436	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	156	27	1268	0.123	156	0.1	3.330	A
2	153	46	1141	0.134	153	0.2	3.641	A
3	60	145	1130	0.053	60	0.1	3.410	A
4	17	187	1091	0.016	17	0.0	3.354	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	130	23	1271	0.103	130	0.1	3.248	A
2	128	38	1145	0.112	128	0.1	3.542	A
3	50	121	1142	0.044	50	0.0	3.342	A
4	14	157	1108	0.013	14	0.0	3.292	A

2027, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Cowbridge Road/St Athan Road/Eglwys Brewis Road roundabout	Standard Roundabout		1, 2, 3, 4	3.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2027	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	245	100.000
2		✓	166	100.000
3		✓	80	100.000
4		✓	28	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	141	80	24
	2	116	0	24	26
	3	54	16	0	10
	4	16	7	5	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1	2	3	4
	1	0	7	4	4
	2	3	0	9	7
	3	5	11	0	0
	4	11	20	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.21	3.82	0.3	A
2	0.17	4.08	0.2	A
3	0.08	3.72	0.1	A
4	0.03	3.80	0.0	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	184	21	1271	0.145	184	0.2	3.497	A
2	125	82	1123	0.111	124	0.1	3.761	A
3	60	124	1141	0.053	60	0.1	3.514	A
4	21	139	1117	0.019	21	0.0	3.642	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	220	25	1269	0.174	220	0.2	3.627	A
2	149	98	1115	0.134	149	0.2	3.891	A
3	72	149	1127	0.064	72	0.1	3.597	A
4	25	167	1102	0.023	25	0.0	3.706	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	270	31	1266	0.213	269	0.3	3.819	A
2	183	120	1104	0.165	183	0.2	4.077	A
3	88	183	1109	0.079	88	0.1	3.717	A
4	31	205	1082	0.029	31	0.0	3.798	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	270	31	1266	0.213	270	0.3	3.819	A
2	183	120	1104	0.165	183	0.2	4.079	A
3	88	183	1109	0.079	88	0.1	3.717	A
4	31	205	1081	0.029	31	0.0	3.799	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	220	25	1269	0.174	220	0.2	3.631	A
2	149	98	1115	0.134	149	0.2	3.894	A
3	72	149	1127	0.064	72	0.1	3.601	A
4	25	167	1102	0.023	25	0.0	3.710	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	184	21	1271	0.145	185	0.2	3.501	A
2	125	82	1123	0.111	125	0.1	3.766	A
3	60	125	1140	0.053	60	0.1	3.518	A
4	21	140	1117	0.019	21	0.0	3.646	A

2027, 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Cowbridge Road/St Athan Road/Eglwys Brewis Road roundabout	Standard Roundabout		1, 2, 3, 4	3.61	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	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	177	100.000
2		✓	174	100.000
3		✓	68	100.000
4		✓	19	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	130	35	11	
	2	147	0	22	5
	3	45	18	1	4
	4	8	7	4	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	1	4	0	0
	2	0	0	0	0
	3	2	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.15	3.46	0.2	A
2	0.17	3.81	0.2	A
3	0.07	3.52	0.1	A
4	0.02	3.44	0.0	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	133	23	1271	0.105	133	0.1	3.254	A
2	131	39	1145	0.114	130	0.1	3.547	A
3	51	123	1141	0.045	51	0.0	3.344	A
4	14	159	1106	0.013	14	0.0	3.295	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	159	27	1268	0.125	159	0.1	3.340	A
2	156	47	1141	0.137	156	0.2	3.655	A
3	61	147	1128	0.054	61	0.1	3.417	A
4	17	190	1089	0.016	17	0.0	3.356	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	195	33	1265	0.154	195	0.2	3.462	A
2	192	57	1136	0.169	191	0.2	3.811	A
3	75	180	1110	0.067	75	0.1	3.521	A
4	21	233	1066	0.020	21	0.0	3.444	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	195	33	1265	0.154	195	0.2	3.462	A
2	192	57	1136	0.169	192	0.2	3.812	A
3	75	181	1110	0.067	75	0.1	3.521	A
4	21	233	1066	0.020	21	0.0	3.444	A

File summary

File Description

Title	
Location	
Site number	
Date	13/11/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-U7G8RPA\Aimee
Description	

Units

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

Analysis Options

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	2024	AM	ONE HOUR	08:00	09:30	15	✓
D2	2024	PM	ONE HOUR	17:00	18:30	15	✓
D3	2027	AM	ONE HOUR	08:00	09:30	15	✓
D4	2027	PM	ONE HOUR	17:00	18:30	15	✓
D9	2027 + com	AM	ONE HOUR	08:00	09:30	15	✓
D10	2027 + com	PM	ONE HOUR	17:00	18:30	15	✓
D15	2027 + com + development	AM	ONE HOUR	08:00	09:30	15	✓
D16	2027 + com + development	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

2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	East Aberthaw/B4265 priority junction	T-Junction	Two-way		1.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B4265 (east)		Major
B	East Aberthaw		Minor
C	B4265 (west)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.40		✓	3.70	250.0		-

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	Two lanes	5.00	4.40	150	150

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	689	0.118	0.298	0.187	0.426
1	B-C	862	0.124	0.314	-	-
1	C-B	836	0.304	0.304	-	-

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	2024	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	335	100.000
B		ONE HOUR	✓	141	100.000
C		ONE HOUR	✓	462	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	8	327
	B	12	0	129
	C	340	122	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	25	5
	B	42	0	6
	C	6	11	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.19	6.35	0.2	A	118	178
B-A	0.03	11.62	0.0	B	11	17
C-A					312	468
C-B	0.19	6.78	0.3	A	112	168
A-B					7	11
A-C					300	450

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	97	24	781	0.124	97	0.0	0.1	5.571	A
B-A	9	2	528	0.017	9	0.0	0.0	9.846	A
C-A	256	64			256				
C-B	92	23	759	0.121	91	0.0	0.2	5.976	A
A-B	6	2			6				
A-C	246	62			246				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	116	29	765	0.152	116	0.1	0.2	5.877	A
B-A	11	3	497	0.022	11	0.0	0.0	10.521	B
C-A	306	76			306				
C-B	110	27	744	0.147	110	0.2	0.2	6.291	A
A-B	7	2			7				
A-C	294	73			294				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	142	36	743	0.191	142	0.2	0.2	6.347	A
B-A	13	3	453	0.029	13	0.0	0.0	11.613	B
C-A	374	94			374				
C-B	134	34	724	0.186	134	0.2	0.3	6.771	A
A-B	9	2			9				
A-C	360	90			360				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	142	36	743	0.191	142	0.2	0.2	6.352	A
B-A	13	3	453	0.029	13	0.0	0.0	11.618	B
C-A	374	94			374				
C-B	134	34	724	0.186	134	0.3	0.3	6.777	A
A-B	9	2			9				
A-C	360	90			360				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	116	29	765	0.152	116	0.2	0.2	5.886	A
B-A	11	3	496	0.022	11	0.0	0.0	10.529	B
C-A	306	76			306				
C-B	110	27	744	0.147	110	0.3	0.2	6.301	A
A-B	7	2			7				
A-C	294	73			294				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	97	24	781	0.124	97	0.2	0.2	5.583	A
B-A	9	2	528	0.017	9	0.0	0.0	9.854	A
C-A	256	64			256				
C-B	92	23	759	0.121	92	0.2	0.2	5.991	A
A-B	6	2			6				
A-C	246	62			246				

2024, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	East Aberthaw/B4265 priority junction	T-Junction	Two-way		1.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2024	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	398	100.000
B		ONE HOUR	✓	111	100.000
C		ONE HOUR	✓	470	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	34	364
	B	14	0	97
	C	306	164	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	24	2
	B	14	0	2
	C	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.15	5.94	0.2	A	89	134
B-A	0.04	10.02	0.0	B	13	19
C-A					281	421
C-B	0.26	7.03	0.4	A	150	226
A-B					31	47
A-C					334	501

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	73	18	769	0.095	73	0.0	0.1	5.268	A
B-A	11	3	509	0.021	10	0.0	0.0	8.234	A
C-A	230	58			230				
C-B	123	31	745	0.166	123	0.0	0.2	5.894	A
A-B	26	6			26				
A-C	274	69			274				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	87	22	751	0.116	87	0.1	0.1	5.533	A
B-A	13	3	474	0.027	13	0.0	0.0	8.903	A
C-A	275	69			275				
C-B	147	37	727	0.203	147	0.2	0.3	6.326	A
A-B	31	8			31				
A-C	327	82			327				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	107	27	725	0.147	107	0.1	0.2	5.935	A
B-A	15	4	425	0.036	15	0.0	0.0	10.017	B
C-A	337	84			337				
C-B	181	45	703	0.257	180	0.3	0.3	7.022	A
A-B	37	9			37				
A-C	401	100			401				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	107	27	725	0.147	107	0.2	0.2	5.937	A
B-A	15	4	425	0.036	15	0.0	0.0	10.023	B
C-A	337	84			337				
C-B	181	45	703	0.257	181	0.3	0.4	7.030	A
A-B	37	9			37				
A-C	401	100			401				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	87	22	751	0.116	87	0.2	0.1	5.538	A
B-A	13	3	473	0.027	13	0.0	0.0	8.911	A
C-A	275	69			275				
C-B	147	37	727	0.203	148	0.4	0.3	6.340	A
A-B	31	8			31				
A-C	327	82			327				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	73	18	769	0.095	73	0.1	0.1	5.277	A
B-A	11	3	508	0.021	11	0.0	0.0	8.243	A
C-A	230	58			230				
C-B	123	31	745	0.166	124	0.3	0.2	5.912	A
A-B	26	6			26				
A-C	274	69			274				

2027, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	East Aberthaw/B4265 priority junction	T-Junction	Two-way		1.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2027	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	343	100.000
B		ONE HOUR	✓	144	100.000
C		ONE HOUR	✓	473	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	8	335
	B	12	0	132
	C	348	125	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	25	5
	B	42	0	6
	C	6	11	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.20	6.42	0.3	A	121	182
B-A	0.03	11.77	0.0	B	11	17
C-A					319	479
C-B	0.19	6.85	0.3	A	115	172
A-B					7	11
A-C					307	461

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	99	25	779	0.128	99	0.0	0.2	5.605	A
B-A	9	2	524	0.017	9	0.0	0.0	9.920	A
C-A	262	65			262				
C-B	94	24	758	0.124	93	0.0	0.2	6.013	A
A-B	6	2			6				
A-C	252	63			252				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	119	30	763	0.156	119	0.2	0.2	5.923	A
B-A	11	3	492	0.022	11	0.0	0.0	10.623	B
C-A	313	78			313				
C-B	112	28	742	0.151	112	0.2	0.2	6.340	A
A-B	7	2			7				
A-C	301	75			301				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	145	36	740	0.196	145	0.2	0.3	6.412	A
B-A	13	3	448	0.030	13	0.0	0.0	11.765	B
C-A	383	96			383				
C-B	138	34	721	0.191	137	0.2	0.3	6.841	A
A-B	9	2			9				
A-C	369	92			369				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	145	36	740	0.196	145	0.3	0.3	6.418	A
B-A	13	3	447	0.030	13	0.0	0.0	11.770	B
C-A	383	96			383				
C-B	138	34	721	0.191	138	0.3	0.3	6.846	A
A-B	9	2			9				
A-C	369	92			369				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	119	30	763	0.156	119	0.3	0.2	5.932	A
B-A	11	3	492	0.022	11	0.0	0.0	10.629	B
C-A	313	78			313				
C-B	112	28	742	0.151	113	0.3	0.2	6.348	A
A-B	7	2			7				
A-C	301	75			301				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	99	25	779	0.128	100	0.2	0.2	5.617	A
B-A	9	2	524	0.017	9	0.0	0.0	9.930	A
C-A	262	65			262				
C-B	94	24	758	0.124	94	0.2	0.2	6.025	A
A-B	6	2			6				
A-C	252	63			252				

2027, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	East Aberthaw/B4265 priority junction	T-Junction	Two-way		1.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2027	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	408	100.000
B		ONE HOUR	✓	113	100.000
C		ONE HOUR	✓	481	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	35	373
	B	14	0	99
	C	313	168	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	24	2
	B	14	0	2
	C	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.15	5.99	0.2	A	91	136
B-A	0.04	10.18	0.0	B	13	19
C-A					287	431
C-B	0.26	7.14	0.4	A	154	231
A-B					32	48
A-C					342	513

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	75	19	767	0.097	74	0.0	0.1	5.297	A
B-A	11	3	505	0.021	10	0.0	0.0	8.307	A
C-A	236	59			236				
C-B	126	32	743	0.170	126	0.0	0.2	5.944	A
A-B	26	7			26				
A-C	281	70			281				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	89	22	748	0.119	89	0.1	0.1	5.571	A
B-A	13	3	468	0.027	13	0.0	0.0	9.005	A
C-A	281	70			281				
C-B	151	38	724	0.208	151	0.2	0.3	6.397	A
A-B	31	8			31				
A-C	335	84			335				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	109	27	722	0.151	109	0.1	0.2	5.988	A
B-A	15	4	419	0.037	15	0.0	0.0	10.176	B
C-A	345	86			345				
C-B	185	46	699	0.264	185	0.3	0.4	7.128	A
A-B	39	10			39				
A-C	411	103			411				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	109	27	722	0.151	109	0.2	0.2	5.991	A
B-A	15	4	418	0.037	15	0.0	0.0	10.183	B
C-A	345	86			345				
C-B	185	46	699	0.264	185	0.4	0.4	7.136	A
A-B	39	10			39				
A-C	411	103			411				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	89	22	748	0.119	89	0.2	0.1	5.576	A
B-A	13	3	468	0.027	13	0.0	0.0	9.012	A
C-A	281	70			281				
C-B	151	38	724	0.208	151	0.4	0.3	6.413	A
A-B	31	8			31				
A-C	335	84			335				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	75	19	767	0.097	75	0.1	0.1	5.307	A
B-A	11	3	504	0.021	11	0.0	0.0	8.318	A
C-A	236	59			236				
C-B	126	32	743	0.170	127	0.3	0.2	5.965	A
A-B	26	7			26				
A-C	281	70			281				

Appendix T



Junctions 9			
PICADY 9 - Priority Intersection Module			
Version: 9.5.0.6896 © Copyright TRL Limited, 2018			
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk			
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Filename: East Aberthaw B4265.j9

Path: Z:\Lime\Projects\2024\24063 Church Farm, St Athan\Analysis\November 2024 JCA\P1 only

Report generation date: 15/08/2025 11:05:04

- »2024, AM
- »2024, PM
- »2027, AM
- »2027, PM
- »2027 + com, AM
- »2027 + com, PM
- »2027 + com + development, AM
- »2027 + com + development, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2024								
Stream B-C	0.2	6.35	0.19	A	0.2	5.94	0.15	A
Stream B-A	0.0	11.62	0.03	B	0.0	10.02	0.04	B
Stream C-B	0.3	6.78	0.19	A	0.4	7.03	0.26	A
2027								
Stream B-C	0.3	6.42	0.20	A	0.2	5.99	0.15	A
Stream B-A	0.0	11.77	0.03	B	0.0	10.18	0.04	B
Stream C-B	0.3	6.85	0.19	A	0.4	7.14	0.26	A
2027 + com								
Stream B-C	0.3	6.73	0.22	A	0.2	6.51	0.17	A
Stream B-A	0.0	13.00	0.03	B	0.0	11.70	0.04	B
Stream C-B	0.3	6.99	0.20	A	0.4	7.98	0.30	A
2027 + com + development								
Stream B-C	0.3	6.87	0.23	A	0.2	6.83	0.19	A
Stream B-A	0.1	13.78	0.03	B	0.1	12.67	0.05	B
Stream C-B	0.3	7.22	0.22	A	0.5	8.42	0.32	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	
Location	
Site number	
Date	13/11/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-U7G8RPA\Aimee
Description	

Units

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

Analysis Options

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	2024	AM	ONE HOUR	08:00	09:30	15	✓
D2	2024	PM	ONE HOUR	17:00	18:30	15	✓
D3	2027	AM	ONE HOUR	08:00	09:30	15	✓
D4	2027	PM	ONE HOUR	17:00	18:30	15	✓
D9	2027 + com	AM	ONE HOUR	08:00	09:30	15	✓
D10	2027 + com	PM	ONE HOUR	17:00	18:30	15	✓
D15	2027 + com + development	AM	ONE HOUR	08:00	09:30	15	✓
D16	2027 + com + development	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

2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	East Aberthaw/B4265 priority junction	T-Junction	Two-way		1.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B4265 (east)		Major
B	East Aberthaw		Minor
C	B4265 (west)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.40		✓	3.70	250.0		-

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	Two lanes	5.00	4.40	150	150

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	689	0.118	0.298	0.187	0.426
1	B-C	862	0.124	0.314	-	-
1	C-B	836	0.304	0.304	-	-

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	2024	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	335	100.000
B		ONE HOUR	✓	141	100.000
C		ONE HOUR	✓	462	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	8	327
	B	12	0	129
	C	340	122	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	25	5
	B	42	0	6
	C	6	11	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.19	6.35	0.2	A	118	178
B-A	0.03	11.62	0.0	B	11	17
C-A					312	468
C-B	0.19	6.78	0.3	A	112	168
A-B					7	11
A-C					300	450

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	97	24	781	0.124	97	0.0	0.1	5.571	A
B-A	9	2	528	0.017	9	0.0	0.0	9.846	A
C-A	256	64			256				
C-B	92	23	759	0.121	91	0.0	0.2	5.976	A
A-B	6	2			6				
A-C	246	62			246				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	116	29	765	0.152	116	0.1	0.2	5.877	A
B-A	11	3	497	0.022	11	0.0	0.0	10.521	B
C-A	306	76			306				
C-B	110	27	744	0.147	110	0.2	0.2	6.291	A
A-B	7	2			7				
A-C	294	73			294				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	142	36	743	0.191	142	0.2	0.2	6.347	A
B-A	13	3	453	0.029	13	0.0	0.0	11.613	B
C-A	374	94			374				
C-B	134	34	724	0.186	134	0.2	0.3	6.771	A
A-B	9	2			9				
A-C	360	90			360				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	142	36	743	0.191	142	0.2	0.2	6.352	A
B-A	13	3	453	0.029	13	0.0	0.0	11.618	B
C-A	374	94			374				
C-B	134	34	724	0.186	134	0.3	0.3	6.777	A
A-B	9	2			9				
A-C	360	90			360				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	116	29	765	0.152	116	0.2	0.2	5.886	A
B-A	11	3	496	0.022	11	0.0	0.0	10.529	B
C-A	306	76			306				
C-B	110	27	744	0.147	110	0.3	0.2	6.301	A
A-B	7	2			7				
A-C	294	73			294				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	97	24	781	0.124	97	0.2	0.2	5.583	A
B-A	9	2	528	0.017	9	0.0	0.0	9.854	A
C-A	256	64			256				
C-B	92	23	759	0.121	92	0.2	0.2	5.991	A
A-B	6	2			6				
A-C	246	62			246				

2024, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	East Aberthaw/B4265 priority junction	T-Junction	Two-way		1.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2024	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	398	100.000
B		ONE HOUR	✓	111	100.000
C		ONE HOUR	✓	470	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	34	364
	B	14	0	97
	C	306	164	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	24	2
	B	14	0	2
	C	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.15	5.94	0.2	A	89	134
B-A	0.04	10.02	0.0	B	13	19
C-A					281	421
C-B	0.26	7.03	0.4	A	150	226
A-B					31	47
A-C					334	501

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	73	18	769	0.095	73	0.0	0.1	5.268	A
B-A	11	3	509	0.021	10	0.0	0.0	8.234	A
C-A	230	58			230				
C-B	123	31	745	0.166	123	0.0	0.2	5.894	A
A-B	26	6			26				
A-C	274	69			274				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	87	22	751	0.116	87	0.1	0.1	5.533	A
B-A	13	3	474	0.027	13	0.0	0.0	8.903	A
C-A	275	69			275				
C-B	147	37	727	0.203	147	0.2	0.3	6.326	A
A-B	31	8			31				
A-C	327	82			327				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	107	27	725	0.147	107	0.1	0.2	5.935	A
B-A	15	4	425	0.036	15	0.0	0.0	10.017	B
C-A	337	84			337				
C-B	181	45	703	0.257	180	0.3	0.3	7.022	A
A-B	37	9			37				
A-C	401	100			401				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	107	27	725	0.147	107	0.2	0.2	5.937	A
B-A	15	4	425	0.036	15	0.0	0.0	10.023	B
C-A	337	84			337				
C-B	181	45	703	0.257	181	0.3	0.4	7.030	A
A-B	37	9			37				
A-C	401	100			401				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	87	22	751	0.116	87	0.2	0.1	5.538	A
B-A	13	3	473	0.027	13	0.0	0.0	8.911	A
C-A	275	69			275				
C-B	147	37	727	0.203	148	0.4	0.3	6.340	A
A-B	31	8			31				
A-C	327	82			327				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	73	18	769	0.095	73	0.1	0.1	5.277	A
B-A	11	3	508	0.021	11	0.0	0.0	8.243	A
C-A	230	58			230				
C-B	123	31	745	0.166	124	0.3	0.2	5.912	A
A-B	26	6			26				
A-C	274	69			274				

2027, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	East Aberthaw/B4265 priority junction	T-Junction	Two-way		1.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2027	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	343	100.000
B		ONE HOUR	✓	144	100.000
C		ONE HOUR	✓	473	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	8	335
	B	12	0	132
	C	348	125	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	25	5
	B	42	0	6
	C	6	11	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.20	6.42	0.3	A	121	182
B-A	0.03	11.77	0.0	B	11	17
C-A					319	479
C-B	0.19	6.85	0.3	A	115	172
A-B					7	11
A-C					307	461

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	99	25	779	0.128	99	0.0	0.2	5.605	A
B-A	9	2	524	0.017	9	0.0	0.0	9.920	A
C-A	262	65			262				
C-B	94	24	758	0.124	93	0.0	0.2	6.013	A
A-B	6	2			6				
A-C	252	63			252				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	119	30	763	0.156	119	0.2	0.2	5.923	A
B-A	11	3	492	0.022	11	0.0	0.0	10.623	B
C-A	313	78			313				
C-B	112	28	742	0.151	112	0.2	0.2	6.340	A
A-B	7	2			7				
A-C	301	75			301				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	145	36	740	0.196	145	0.2	0.3	6.412	A
B-A	13	3	448	0.030	13	0.0	0.0	11.765	B
C-A	383	96			383				
C-B	138	34	721	0.191	137	0.2	0.3	6.841	A
A-B	9	2			9				
A-C	369	92			369				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	145	36	740	0.196	145	0.3	0.3	6.418	A
B-A	13	3	447	0.030	13	0.0	0.0	11.770	B
C-A	383	96			383				
C-B	138	34	721	0.191	138	0.3	0.3	6.846	A
A-B	9	2			9				
A-C	369	92			369				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	119	30	763	0.156	119	0.3	0.2	5.932	A
B-A	11	3	492	0.022	11	0.0	0.0	10.629	B
C-A	313	78			313				
C-B	112	28	742	0.151	113	0.3	0.2	6.348	A
A-B	7	2			7				
A-C	301	75			301				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	99	25	779	0.128	100	0.2	0.2	5.617	A
B-A	9	2	524	0.017	9	0.0	0.0	9.930	A
C-A	262	65			262				
C-B	94	24	758	0.124	94	0.2	0.2	6.025	A
A-B	6	2			6				
A-C	252	63			252				

2027, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	East Aberthaw/B4265 priority junction	T-Junction	Two-way		1.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2027	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	408	100.000
B		ONE HOUR	✓	113	100.000
C		ONE HOUR	✓	481	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	35	373
	B	14	0	99
	C	313	168	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	24	2
	B	14	0	2
	C	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.15	5.99	0.2	A	91	136
B-A	0.04	10.18	0.0	B	13	19
C-A					287	431
C-B	0.26	7.14	0.4	A	154	231
A-B					32	48
A-C					342	513

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	75	19	767	0.097	74	0.0	0.1	5.297	A
B-A	11	3	505	0.021	10	0.0	0.0	8.307	A
C-A	236	59			236				
C-B	126	32	743	0.170	126	0.0	0.2	5.944	A
A-B	26	7			26				
A-C	281	70			281				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	89	22	748	0.119	89	0.1	0.1	5.571	A
B-A	13	3	468	0.027	13	0.0	0.0	9.005	A
C-A	281	70			281				
C-B	151	38	724	0.208	151	0.2	0.3	6.397	A
A-B	31	8			31				
A-C	335	84			335				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	109	27	722	0.151	109	0.1	0.2	5.988	A
B-A	15	4	419	0.037	15	0.0	0.0	10.176	B
C-A	345	86			345				
C-B	185	46	699	0.264	185	0.3	0.4	7.128	A
A-B	39	10			39				
A-C	411	103			411				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	109	27	722	0.151	109	0.2	0.2	5.991	A
B-A	15	4	418	0.037	15	0.0	0.0	10.183	B
C-A	345	86			345				
C-B	185	46	699	0.264	185	0.4	0.4	7.136	A
A-B	39	10			39				
A-C	411	103			411				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	89	22	748	0.119	89	0.2	0.1	5.576	A
B-A	13	3	468	0.027	13	0.0	0.0	9.012	A
C-A	281	70			281				
C-B	151	38	724	0.208	151	0.4	0.3	6.413	A
A-B	31	8			31				
A-C	335	84			335				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	75	19	767	0.097	75	0.1	0.1	5.307	A
B-A	11	3	504	0.021	11	0.0	0.0	8.318	A
C-A	236	59			236				
C-B	126	32	743	0.170	127	0.3	0.2	5.965	A
A-B	26	7			26				
A-C	281	70			281				

2027 + com, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	East Aberthaw/B4265 priority junction	T-Junction	Two-way		1.78	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
D9	2027 + com	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	381	100.000
B		ONE HOUR	✓	157	100.000
C		ONE HOUR	✓	606	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	8	373
	B	12	0	145
	C	477	129	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	25	5
	B	42	0	6
	C	4	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.22	6.73	0.3	A	133	200
B-A	0.03	13.00	0.0	B	11	17
C-A					438	657
C-B	0.20	6.99	0.3	A	118	178
A-B					7	11
A-C					342	513

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	109	27	770	0.142	108	0.0	0.2	5.763	A
B-A	9	2	496	0.018	9	0.0	0.0	10.487	B
C-A	359	90			359				
C-B	97	24	749	0.130	96	0.0	0.2	6.063	A
A-B	6	2			6				
A-C	281	70			281				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	130	33	752	0.173	130	0.2	0.2	6.139	A
B-A	11	3	459	0.024	11	0.0	0.0	11.417	B
C-A	429	107			429				
C-B	116	29	732	0.158	116	0.2	0.2	6.426	A
A-B	7	2			7				
A-C	335	84			335				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	160	40	726	0.220	159	0.2	0.3	6.728	A
B-A	13	3	407	0.032	13	0.0	0.0	12.991	B
C-A	525	131			525				
C-B	142	36	708	0.200	142	0.2	0.3	6.984	A
A-B	9	2			9				
A-C	411	103			411				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	160	40	726	0.220	160	0.3	0.3	6.734	A
B-A	13	3	406	0.033	13	0.0	0.0	12.997	B
C-A	525	131			525				
C-B	142	36	708	0.200	142	0.3	0.3	6.990	A
A-B	9	2			9				
A-C	411	103			411				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	130	33	752	0.173	131	0.3	0.2	6.147	A
B-A	11	3	458	0.024	11	0.0	0.0	11.424	B
C-A	429	107			429				
C-B	116	29	732	0.158	116	0.3	0.2	6.436	A
A-B	7	2			7				
A-C	335	84			335				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	109	27	770	0.142	109	0.2	0.2	5.779	A
B-A	9	2	496	0.018	9	0.0	0.0	10.500	B
C-A	359	90			359				
C-B	97	24	749	0.130	97	0.2	0.2	6.081	A
A-B	6	2			6				
A-C	281	70			281				

2027 + com, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	East Aberthaw/B4265 priority junction	T-Junction	Two-way		1.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2027 + com	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	531	100.000
B		ONE HOUR	✓	118	100.000
C		ONE HOUR	✓	523	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	35	496
	B	14	0	104
	C	343	180	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	24	1
	B	14	0	2
	C	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.17	6.51	0.2	A	95	143
B-A	0.04	11.70	0.0	B	13	19
C-A					315	472
C-B	0.30	7.98	0.4	A	165	248
A-B					32	48
A-C					455	683

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	78	20	738	0.106	78	0.0	0.1	5.562	A
B-A	11	3	469	0.022	10	0.0	0.0	8.951	A
C-A	258	65			258				
C-B	136	34	714	0.190	135	0.0	0.2	6.321	A
A-B	26	7			26				
A-C	373	93			373				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	93	23	713	0.131	93	0.1	0.2	5.923	A
B-A	13	3	426	0.030	13	0.0	0.0	9.935	A
C-A	308	77			308				
C-B	162	40	691	0.234	162	0.2	0.3	6.934	A
A-B	31	8			31				
A-C	446	111			446				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	115	29	679	0.169	114	0.2	0.2	6.503	A
B-A	15	4	366	0.042	15	0.0	0.0	11.692	B
C-A	378	94			378				
C-B	198	50	658	0.301	198	0.3	0.4	7.964	A
A-B	39	10			39				
A-C	546	137			546				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	115	29	679	0.169	115	0.2	0.2	6.506	A
B-A	15	4	366	0.042	15	0.0	0.0	11.701	B
C-A	378	94			378				
C-B	198	50	658	0.301	198	0.4	0.4	7.981	A
A-B	39	10			39				
A-C	546	137			546				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	93	23	713	0.131	94	0.2	0.2	5.932	A
B-A	13	3	425	0.030	13	0.0	0.0	9.946	A
C-A	308	77			308				
C-B	162	40	691	0.234	162	0.4	0.3	6.952	A
A-B	31	8			31				
A-C	446	111			446				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	78	20	738	0.106	78	0.2	0.1	5.571	A
B-A	11	3	468	0.023	11	0.0	0.0	8.966	A
C-A	258	65			258				
C-B	136	34	714	0.190	136	0.3	0.2	6.348	A
A-B	26	7			26				
A-C	373	93			373				

2027 + com + development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	East Aberthaw/B4265 priority junction	T-Junction	Two-way		1.78	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
D15	2027 + com + development	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	401	100.000
B		ONE HOUR	✓	161	100.000
C		ONE HOUR	✓	669	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A	B	C
	A	0	8	393
	B	12	0	149
	C	530	139	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A	B	C
	A	0	25	4
	B	42	0	6
	C	4	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.23	6.87	0.3	A	137	205
B-A	0.03	13.78	0.1	B	11	17
C-A					486	730
C-B	0.22	7.22	0.3	A	128	191
A-B					7	11
A-C					361	541

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	112	28	765	0.147	111	0.0	0.2	5.833	A
B-A	9	2	481	0.019	9	0.0	0.0	10.824	B
C-A	399	100			399				
C-B	105	26	744	0.141	104	0.0	0.2	6.178	A
A-B	6	2			6				
A-C	296	74			296				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	134	33	746	0.180	134	0.2	0.2	6.233	A
B-A	11	3	440	0.025	11	0.0	0.0	11.899	B
C-A	476	119			476				
C-B	125	31	726	0.172	125	0.2	0.2	6.580	A
A-B	7	2			7				
A-C	353	88			353				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	164	41	719	0.228	164	0.2	0.3	6.866	A
B-A	13	3	384	0.034	13	0.0	0.0	13.768	B
C-A	584	146			584				
C-B	153	38	702	0.218	153	0.2	0.3	7.210	A
A-B	9	2			9				
A-C	433	108			433				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	164	41	719	0.228	164	0.3	0.3	6.874	A
B-A	13	3	384	0.034	13	0.0	0.1	13.776	B
C-A	584	146			584				
C-B	153	38	702	0.218	153	0.3	0.3	7.215	A
A-B	9	2			9				
A-C	433	108			433				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	134	33	746	0.180	134	0.3	0.2	6.242	A
B-A	11	3	440	0.025	11	0.1	0.0	11.908	B
C-A	476	119			476				
C-B	125	31	726	0.172	125	0.3	0.2	6.589	A
A-B	7	2			7				
A-C	353	88			353				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	112	28	765	0.147	112	0.2	0.2	5.850	A
B-A	9	2	481	0.019	9	0.0	0.0	10.841	B
C-A	399	100			399				
C-B	105	26	744	0.141	105	0.2	0.2	6.194	A
A-B	6	2			6				
A-C	296	74			296				

2027 + com + development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	East Aberthaw/B4265 priority junction	T-Junction	Two-way		1.98	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
D16	2027 + com + development	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	579	100.000
B		ONE HOUR	✓	127	100.000
C		ONE HOUR	✓	568	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	35	544
	B	14	0	113
	C	381	187	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	24	1
	B	14	0	2
	C	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.19	6.83	0.2	A	104	156
B-A	0.05	12.67	0.1	B	13	19
C-A					350	524
C-B	0.32	8.42	0.5	A	172	257
A-B					32	48
A-C					499	749

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	85	21	726	0.117	85	0.0	0.1	5.718	A
B-A	11	3	450	0.023	10	0.0	0.0	9.325	A
C-A	287	72			287				
C-B	141	35	703	0.200	140	0.0	0.3	6.502	A
A-B	26	7			26				
A-C	410	102			410				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	102	25	699	0.145	101	0.1	0.2	6.139	A
B-A	13	3	404	0.031	13	0.0	0.0	10.493	B
C-A	343	86			343				
C-B	168	42	678	0.248	168	0.3	0.3	7.195	A
A-B	31	8			31				
A-C	489	122			489				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	124	31	662	0.188	124	0.2	0.2	6.826	A
B-A	15	4	339	0.045	15	0.0	0.1	12.661	B
C-A	419	105			419				
C-B	206	51	642	0.321	205	0.3	0.5	8.395	A
A-B	39	10			39				
A-C	599	150			599				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	124	31	662	0.188	124	0.2	0.2	6.832	A
B-A	15	4	339	0.045	15	0.1	0.1	12.675	B
C-A	419	105			419				
C-B	206	51	642	0.321	206	0.5	0.5	8.416	A
A-B	39	10			39				
A-C	599	150			599				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	102	25	699	0.145	102	0.2	0.2	6.147	A
B-A	13	3	403	0.031	13	0.1	0.0	10.509	B
C-A	343	86			343				
C-B	168	42	678	0.248	169	0.5	0.3	7.222	A
A-B	31	8			31				
A-C	489	122			489				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	85	21	726	0.117	85	0.2	0.1	5.732	A
B-A	11	3	450	0.023	11	0.0	0.0	9.342	A
C-A	287	72			287				
C-B	141	35	703	0.200	141	0.3	0.3	6.532	A
A-B	26	7			26				
A-C	410	102			410				

Appendix U



Junctions 9	
ARCADY 9 - Roundabout Module	
Version: 9.5.0.6896 © Copyright TRL Limited, 2018	
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Filename: Tredogan Road roundabout.j9

Path: Z:\Lime\Projects\2024\24063 Church Farm, St Athan\Analysis\November 2024 JCA\IP1 only

Report generation date: 15/08/2025 10:39:47

-
- »2024, AM
 - »2024, PM
 - »2027, AM
 - »2027, PM
 - »2027 + com, AM
 - »2027 + com, PM
 - »2027 + com + development, AM
 - »2027 + com + development, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2024								
Arm 1	0.3	2.64	0.22	A	0.4	2.62	0.26	A
Arm 2	0.0	2.43	0.03	A	0.1	2.47	0.06	A
Arm 3	0.0	2.29	0.00	A	0.0	2.44	0.02	A
Arm 4	0.4	2.79	0.26	A	0.3	2.60	0.21	A
Arm 5	0.0	1.92	0.01	A	0.0	1.78	0.01	A
2027								
Arm 1	0.4	2.64	0.26	A	0.4	2.64	0.26	A
Arm 2	0.1	2.48	0.06	A	0.1	2.59	0.09	A
Arm 3	0.0	2.45	0.02	A	0.0	2.46	0.01	A
Arm 4	0.3	2.62	0.22	A	0.3	2.68	0.24	A
Arm 5	0.0	1.78	0.01	A	0.0	1.80	0.01	A
2027 + com								
Arm 1	0.4	2.72	0.25	A	0.5	2.89	0.34	A
Arm 2	0.0	2.47	0.03	A	0.1	2.59	0.07	A
Arm 3	0.0	2.32	0.00	A	0.0	2.56	0.02	A
Arm 4	0.5	3.09	0.34	A	0.3	2.66	0.24	A
Arm 5	0.0	2.01	0.01	A	0.0	1.80	0.01	A
2027 + com + development								
Arm 1	0.4	2.76	0.26	A	0.6	3.02	0.36	A
Arm 2	0.0	2.40	0.03	A	0.1	2.64	0.07	A
Arm 3	0.0	2.34	0.00	A	0.0	2.61	0.02	A
Arm 4	0.6	3.25	0.38	A	0.4	2.74	0.26	A
Arm 5	0.0	2.05	0.01	A	0.0	1.82	0.01	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	
Location	
Site number	
Date	01/11/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-U7G8RPA\Rusne
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	08:00	09:30	15
D2	2024	PM	ONE HOUR	17:00	18:30	15
D3	2027	AM	ONE HOUR	08:00	09:30	15
D4	2027	PM	ONE HOUR	17:00	18:30	15
D9	2027 + com	AM	ONE HOUR	08:00	09:30	15
D10	2027 + com	PM	ONE HOUR	17:00	18:30	15
D15	2027 + com + development	AM	ONE HOUR	08:00	09:30	15
D16	2027 + com + development	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2024, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Tredogan Road roundabout	Standard Roundabout		1, 2, 3, 4, 5	2.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A4226	
2	Tredogan Road south	
3	Dragonfly Drive	
4	B4265	
5	Tredogan Road north	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.92	6.91	33.5	39.8	91.6	33.5	
2	3.65	7.77	16.7	20.8	87.6	34.4	
3	4.23	8.76	8.5	22.9	90.7	35.3	
4	3.57	7.25	26.1	44.6	91.6	32.8	
5	4.34	7.66	28.0	999.0	87.6	4.8	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.488	1915
2	0.467	1779
3	0.463	1768
4	0.484	1882
5	0.577	2321

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	383	100.000
2		✓	37	100.000
3		✓	6	100.000
4		✓	442	100.000
5		✓	12	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	29	22	326	6
	2	19	0	3	11	4
	3	4	1	0	1	0
	4	410	22	7	1	2
	5	5	2	0	5	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
	1	2	3	4	5	
From	1	0	3	0	9	17
	2	0	0	0	18	0
	3	0	0	0	0	0
	4	7	9	0	0	0
	5	20	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.22	2.64	0.3	A
2	0.03	2.43	0.0	A
3	0.00	2.29	0.0	A
4	0.26	2.79	0.4	A
5	0.01	1.92	0.0	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	288	29	1901	0.152	288	0.2	2.409	A
2	28	276	1651	0.017	28	0.0	2.323	A
3	5	279	1639	0.003	5	0.0	2.201	A
4	333	26	1870	0.178	332	0.2	2.501	A
5	9	348	2120	0.004	9	0.0	1.831	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	344	34	1899	0.181	344	0.2	2.502	A
2	33	330	1625	0.020	33	0.0	2.368	A
3	5	334	1614	0.003	5	0.0	2.237	A
4	397	31	1867	0.213	397	0.3	2.617	A
5	11	417	2081	0.005	11	0.0	1.868	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	422	42	1895	0.223	421	0.3	2.640	A
2	41	404	1591	0.026	41	0.0	2.432	A
3	7	409	1579	0.004	7	0.0	2.288	A
4	487	37	1864	0.261	486	0.4	2.793	A
5	13	511	2027	0.007	13	0.0	1.921	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	422	42	1895	0.223	422	0.3	2.640	A
2	41	404	1591	0.026	41	0.0	2.432	A
3	7	410	1579	0.004	7	0.0	2.289	A
4	487	37	1864	0.261	487	0.4	2.793	A
5	13	511	2026	0.007	13	0.0	1.921	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	344	34	1899	0.181	345	0.2	2.505	A
2	33	330	1625	0.020	33	0.0	2.368	A
3	5	335	1614	0.003	5	0.0	2.238	A
4	397	31	1867	0.213	398	0.3	2.621	A
5	11	417	2080	0.005	11	0.0	1.868	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	288	29	1901	0.152	289	0.2	2.412	A
2	28	276	1650	0.017	28	0.0	2.324	A
3	5	280	1639	0.003	5	0.0	2.202	A
4	333	26	1870	0.178	333	0.2	2.504	A
5	9	350	2119	0.004	9	0.0	1.832	A

2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Tredogan Road roundabout	Standard Roundabout		1, 2, 3, 4, 5	2.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2024	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	447	100.000
2		✓	87	100.000
3		✓	29	100.000
4		✓	352	100.000
5		✓	16	100.000

Origin-Destination Data

Demand (PCU/hr)

		To					
From		1	2	3	4	5	
	1	1	20	5	407	14	
	2	60	2	0	24	1	
	3	23	2	0	4	0	
	4	340	6	2	0	4	
	5	10	0	0	6	0	

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1	2	3	4	5
From	1	0	0	0	3	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	4	17	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.26	2.62	0.4	A
2	0.06	2.47	0.1	A
3	0.02	2.44	0.0	A
4	0.21	2.60	0.3	A
5	0.01	1.78	0.0	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	337	14	1909	0.176	336	0.2	2.349	A
2	65	327	1627	0.040	65	0.0	2.305	A
3	22	387	1590	0.014	22	0.0	2.295	A
4	265	77	1845	0.144	264	0.2	2.370	A
5	12	327	2132	0.006	12	0.0	1.697	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	402	16	1907	0.211	402	0.3	2.455	A
2	78	391	1597	0.049	78	0.1	2.370	A
3	26	463	1554	0.017	26	0.0	2.355	A
4	316	93	1837	0.172	316	0.2	2.464	A
5	14	392	2095	0.007	14	0.0	1.729	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	492	20	1906	0.258	492	0.4	2.615	A
2	96	479	1556	0.062	96	0.1	2.465	A
3	32	567	1506	0.021	32	0.0	2.441	A
4	388	113	1827	0.212	387	0.3	2.602	A
5	18	480	2044	0.009	18	0.0	1.775	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	492	20	1906	0.258	492	0.4	2.615	A
2	96	479	1556	0.062	96	0.1	2.465	A
3	32	567	1506	0.021	32	0.0	2.441	A
4	388	113	1827	0.212	388	0.3	2.603	A
5	18	480	2044	0.009	18	0.0	1.775	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	402	16	1907	0.211	402	0.3	2.456	A
2	78	391	1597	0.049	78	0.1	2.372	A
3	26	463	1554	0.017	26	0.0	2.355	A
4	316	93	1837	0.172	317	0.2	2.464	A
5	14	392	2095	0.007	14	0.0	1.729	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	337	14	1909	0.176	337	0.2	2.354	A
2	65	328	1626	0.040	66	0.0	2.306	A
3	22	388	1589	0.014	22	0.0	2.296	A
4	265	78	1845	0.144	265	0.2	2.373	A
5	12	328	2132	0.006	12	0.0	1.700	A

2027, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Tredogan Road roundabout	Standard Roundabout		1, 2, 3, 4, 5	2.60	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	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	457	100.000
2		✓	89	100.000
3		✓	30	100.000
4		✓	360	100.000
5		✓	16	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
		1	2	3	4	5
From	1	1	20	5	417	14
	2	61	2	0	25	1
	3	24	2	0	4	0
	4	348	6	2	0	4
	5	10	0	0	6	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1	2	3	4	5
From	1	0	0	0	3	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	4	17	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.26	2.64	0.4	A
2	0.06	2.48	0.1	A
3	0.02	2.45	0.0	A
4	0.22	2.62	0.3	A
5	0.01	1.78	0.0	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	344	14	1909	0.180	343	0.2	2.361	A
2	67	334	1623	0.041	67	0.0	2.312	A
3	23	396	1585	0.014	23	0.0	2.303	A
4	271	79	1844	0.147	270	0.2	2.380	A
5	12	335	2128	0.006	12	0.0	1.700	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	411	16	1907	0.215	411	0.3	2.470	A
2	80	400	1593	0.050	80	0.1	2.379	A
3	27	474	1549	0.017	27	0.0	2.364	A
4	324	94	1837	0.176	323	0.2	2.477	A
5	14	401	2090	0.007	14	0.0	1.733	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	503	20	1906	0.264	503	0.4	2.636	A
2	98	490	1551	0.063	98	0.1	2.477	A
3	33	580	1500	0.022	33	0.0	2.453	A
4	396	116	1826	0.217	396	0.3	2.620	A
5	18	491	2038	0.009	18	0.0	1.781	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	503	20	1906	0.264	503	0.4	2.636	A
2	98	490	1550	0.063	98	0.1	2.478	A
3	33	580	1500	0.022	33	0.0	2.453	A
4	396	116	1826	0.217	396	0.3	2.620	A
5	18	491	2038	0.009	18	0.0	1.781	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	411	16	1907	0.215	411	0.3	2.471	A
2	80	400	1592	0.050	80	0.1	2.382	A
3	27	474	1549	0.017	27	0.0	2.364	A
4	324	94	1837	0.176	324	0.2	2.478	A
5	14	401	2090	0.007	14	0.0	1.736	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	344	14	1909	0.180	344	0.2	2.363	A
2	67	335	1623	0.041	67	0.0	2.313	A
3	23	397	1585	0.014	23	0.0	2.305	A
4	271	79	1844	0.147	271	0.2	2.383	A
5	12	336	2127	0.006	12	0.0	1.701	A

2027, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Tredogan Road roundabout	Standard Roundabout		1, 2, 3, 4, 5	2.62	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	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	456	100.000
2		✓	121	100.000
3		✓	13	100.000
4		✓	394	100.000
5		✓	23	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
		1	2	3	4	5
From	1	0	10	0	429	17
	2	77	0	0	43	1
	3	6	2	0	5	0
	4	371	18	0	1	4
	5	14	6	1	2	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
From		1	2	3	4	5
	1	0	0	0	2	13
	2	0	0	0	5	0
	3	0	0	0	0	0
	4	3	20	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.26	2.64	0.4	A
2	0.09	2.59	0.1	A
3	0.01	2.46	0.0	A
4	0.24	2.68	0.3	A
5	0.01	1.80	0.0	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	343	23	1904	0.180	342	0.2	2.357	A
2	91	338	1622	0.056	91	0.1	2.392	A
3	10	428	1570	0.006	10	0.0	2.306	A
4	297	77	1845	0.161	296	0.2	2.407	A
5	17	357	2115	0.008	17	0.0	1.715	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	410	27	1902	0.216	410	0.3	2.468	A
2	109	404	1590	0.068	109	0.1	2.471	A
3	12	512	1532	0.008	12	0.0	2.368	A
4	354	93	1837	0.193	354	0.2	2.514	A
5	21	427	2075	0.010	21	0.0	1.751	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	502	33	1899	0.264	502	0.4	2.636	A
2	133	495	1548	0.086	133	0.1	2.587	A
3	14	627	1478	0.010	14	0.0	2.458	A
4	434	113	1827	0.237	434	0.3	2.676	A
5	25	523	2020	0.013	25	0.0	1.804	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	502	33	1899	0.264	502	0.4	2.636	A
2	133	495	1548	0.086	133	0.1	2.588	A
3	14	628	1478	0.010	14	0.0	2.458	A
4	434	113	1827	0.237	434	0.3	2.676	A
5	25	523	2019	0.013	25	0.0	1.804	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	410	27	1902	0.216	410	0.3	2.471	A
2	109	405	1590	0.068	109	0.1	2.471	A
3	12	513	1531	0.008	12	0.0	2.368	A
4	354	93	1837	0.193	354	0.2	2.517	A
5	21	427	2074	0.010	21	0.0	1.751	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	343	23	1904	0.180	344	0.2	2.362	A
2	91	339	1621	0.056	91	0.1	2.395	A
3	10	429	1570	0.006	10	0.0	2.307	A
4	297	78	1845	0.161	297	0.2	2.411	A
5	17	358	2115	0.008	17	0.0	1.718	A

2027 + com, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Tredogan Road roundabout	Standard Roundabout		1, 2, 3, 4, 5	2.90	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	2027 + com	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	431	100.000
2		✓	37	100.000
3		✓	6	100.000
4		✓	582	100.000
5		✓	12	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
		1	2	3	4	5
From	1	0	30	23	372	6
	2	19	0	3	11	4
	3	4	1	0	1	0
	4	549	23	7	1	2
	5	5	2	0	5	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1	2	3	4	5
From	1	0	3	0	8	17
	2	0	0	0	18	0
	3	0	0	0	0	0
	4	5	9	0	0	0
	5	20	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.25	2.72	0.4	A
2	0.03	2.47	0.0	A
3	0.00	2.32	0.0	A
4	0.34	3.09	0.5	A
5	0.01	2.01	0.0	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	324	29	1901	0.171	324	0.2	2.447	A
2	28	311	1634	0.017	28	0.0	2.347	A
3	5	314	1623	0.003	5	0.0	2.223	A
4	438	26	1870	0.234	437	0.3	2.637	A
5	9	453	2059	0.004	9	0.0	1.885	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	387	35	1898	0.204	387	0.3	2.556	A
2	33	372	1606	0.021	33	0.0	2.397	A
3	5	376	1595	0.003	5	0.0	2.264	A
4	523	31	1867	0.280	523	0.4	2.813	A
5	11	543	2008	0.005	11	0.0	1.936	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	475	43	1894	0.251	474	0.4	2.719	A
2	41	456	1567	0.026	41	0.0	2.471	A
3	7	460	1556	0.004	7	0.0	2.323	A
4	641	37	1864	0.344	640	0.5	3.088	A
5	13	664	1938	0.007	13	0.0	2.009	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	475	43	1894	0.251	475	0.4	2.719	A
2	41	456	1566	0.026	41	0.0	2.471	A
3	7	460	1556	0.004	7	0.0	2.323	A
4	641	37	1864	0.344	641	0.5	3.091	A
5	13	665	1937	0.007	13	0.0	2.010	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	387	35	1898	0.204	388	0.3	2.557	A
2	33	372	1605	0.021	33	0.0	2.398	A
3	5	376	1594	0.003	5	0.0	2.266	A
4	523	31	1867	0.280	524	0.4	2.815	A
5	11	544	2007	0.005	11	0.0	1.938	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	324	29	1901	0.171	325	0.2	2.450	A
2	28	312	1634	0.017	28	0.0	2.347	A
3	5	315	1623	0.003	5	0.0	2.225	A
4	438	26	1870	0.234	439	0.3	2.642	A
5	9	455	2059	0.004	9	0.0	1.889	A

2027 + com, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Tredogan Road roundabout	Standard Roundabout		1, 2, 3, 4, 5	2.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2027 + com	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	580	100.000
2		✓	89	100.000
3		✓	30	100.000
4		✓	390	100.000
5		✓	16	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
		1	2	3	4	5
From	1	1	20	5	540	14
	2	61	2	0	25	1
	3	24	2	0	4	0
	4	378	6	2	0	4
	5	10	0	0	6	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1	2	3	4	5
From	1	0	0	0	2	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	3	17	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.34	2.89	0.5	A
2	0.07	2.59	0.1	A
3	0.02	2.56	0.0	A
4	0.24	2.66	0.3	A
5	0.01	1.80	0.0	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	437	14	1909	0.229	435	0.3	2.486	A
2	67	426	1580	0.042	67	0.0	2.378	A
3	23	488	1543	0.015	23	0.0	2.367	A
4	294	79	1844	0.159	293	0.2	2.392	A
5	12	357	2115	0.006	12	0.0	1.711	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	521	16	1907	0.273	521	0.4	2.645	A
2	80	510	1541	0.052	80	0.1	2.463	A
3	27	584	1498	0.018	27	0.0	2.446	A
4	351	94	1837	0.191	350	0.2	2.498	A
5	14	428	2074	0.007	14	0.0	1.746	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	639	20	1906	0.335	638	0.5	2.891	A
2	98	625	1487	0.066	98	0.1	2.590	A
3	33	715	1438	0.023	33	0.0	2.562	A
4	429	116	1826	0.235	429	0.3	2.657	A
5	18	524	2019	0.009	18	0.0	1.797	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	639	20	1906	0.335	639	0.5	2.893	A
2	98	625	1487	0.066	98	0.1	2.590	A
3	33	716	1437	0.023	33	0.0	2.562	A
4	429	116	1826	0.235	429	0.3	2.657	A
5	18	524	2019	0.009	18	0.0	1.798	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	521	16	1907	0.273	522	0.4	2.647	A
2	80	511	1541	0.052	80	0.1	2.466	A
3	27	585	1498	0.018	27	0.0	2.448	A
4	351	94	1837	0.191	351	0.2	2.499	A
5	14	428	2074	0.007	14	0.0	1.749	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	437	14	1909	0.229	437	0.3	2.493	A
2	67	428	1579	0.042	67	0.0	2.381	A
3	23	490	1542	0.015	23	0.0	2.370	A
4	294	79	1844	0.159	294	0.2	2.395	A
5	12	359	2114	0.006	12	0.0	1.711	A

2027 + com + development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Tredogan Road roundabout	Standard Roundabout		1, 2, 3, 4, 5	3.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D15	2027 + com + development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	451	100.000
2		✓	37	100.000
3		✓	6	100.000
4		✓	635	100.000
5		✓	12	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
		1	2	3	4	5
From	1	0	30	23	392	6
	2	19	0	3	11	4
	3	4	1	0	1	0
	4	602	23	7	1	2
	5	5	2	0	5	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
From		1	2	3	4	5
	1	0	3	0	8	17
	2	0	0	18	0	0
	3	0	0	0	0	0
	4	5	9	0	0	0
	5	20	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.26	2.76	0.4	A
2	0.03	2.40	0.0	A
3	0.00	2.34	0.0	A
4	0.38	3.25	0.6	A
5	0.01	2.05	0.0	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	340	29	1901	0.179	339	0.2	2.472	A
2	28	326	1627	0.017	28	0.0	2.278	A
3	5	329	1616	0.003	5	0.0	2.233	A
4	478	26	1870	0.256	477	0.4	2.712	A
5	9	493	2037	0.004	9	0.0	1.907	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	405	35	1898	0.214	405	0.3	2.587	A
2	33	390	1597	0.021	33	0.0	2.330	A
3	5	394	1586	0.003	5	0.0	2.276	A
4	571	31	1867	0.306	570	0.5	2.916	A
5	11	590	1981	0.005	11	0.0	1.963	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	497	43	1894	0.262	496	0.4	2.763	A
2	41	477	1556	0.026	41	0.0	2.404	A
3	7	482	1546	0.004	7	0.0	2.338	A
4	699	37	1864	0.375	698	0.6	3.243	A
5	13	723	1904	0.007	13	0.0	2.045	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	497	43	1894	0.262	497	0.4	2.763	A
2	41	478	1556	0.026	41	0.0	2.404	A
3	7	482	1545	0.004	7	0.0	2.339	A
4	699	37	1864	0.375	699	0.6	3.245	A
5	13	723	1904	0.007	13	0.0	2.046	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	405	35	1898	0.214	406	0.3	2.591	A
2	33	390	1597	0.021	33	0.0	2.332	A
3	5	394	1586	0.003	5	0.0	2.277	A
4	571	31	1867	0.306	572	0.5	2.921	A
5	11	591	1980	0.005	11	0.0	1.964	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	340	29	1901	0.179	340	0.2	2.474	A
2	28	327	1627	0.017	28	0.0	2.279	A
3	5	330	1616	0.003	5	0.0	2.233	A
4	478	26	1870	0.256	478	0.4	2.720	A
5	9	495	2035	0.004	9	0.0	1.908	A

2027 + com + development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Tredogan Road roundabout	Standard Roundabout		1, 2, 3, 4, 5	2.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D16	2027 + com + development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	628	100.000
2		✓	89	100.000
3		✓	30	100.000
4		✓	428	100.000
5		✓	16	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
		1	2	3	4	5
From	1	1	20	5	588	14
	2	61	2	0	25	1
	3	24	2	0	4	0
	4	416	6	2	0	4
	5	10	0	0	6	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
From		1	2	3	4	5
	1	0	0	0	2	0
	2	0	0	0	0	0
	3	0	0	0	0	0
	4	3	17	0	0	0
	5	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.36	3.02	0.6	A
2	0.07	2.64	0.1	A
3	0.02	2.61	0.0	A
4	0.26	2.74	0.4	A
5	0.01	1.82	0.0	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	473	14	1909	0.248	471	0.3	2.549	A
2	67	462	1563	0.043	67	0.0	2.405	A
3	23	524	1526	0.015	23	0.0	2.394	A
4	322	79	1844	0.175	321	0.2	2.437	A
5	12	386	2098	0.006	12	0.0	1.724	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	565	16	1907	0.296	564	0.4	2.730	A
2	80	553	1521	0.053	80	0.1	2.498	A
3	27	627	1478	0.018	27	0.0	2.479	A
4	385	94	1837	0.210	385	0.3	2.556	A
5	14	462	2055	0.007	14	0.0	1.763	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	691	20	1906	0.363	691	0.6	3.017	A
2	98	678	1463	0.067	98	0.1	2.637	A
3	33	768	1413	0.023	33	0.0	2.607	A
4	471	116	1826	0.258	471	0.4	2.739	A
5	18	566	1995	0.009	18	0.0	1.819	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	691	20	1906	0.363	691	0.6	3.019	A
2	98	678	1462	0.067	98	0.1	2.637	A
3	33	769	1413	0.023	33	0.0	2.608	A
4	471	116	1826	0.258	471	0.4	2.739	A
5	18	566	1995	0.009	18	0.0	1.820	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	565	16	1907	0.296	565	0.4	2.732	A
2	80	554	1520	0.053	80	0.1	2.499	A
3	27	628	1478	0.018	27	0.0	2.480	A
4	385	94	1837	0.210	385	0.3	2.560	A
5	14	462	2054	0.007	14	0.0	1.763	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	473	14	1909	0.248	473	0.3	2.554	A
2	67	464	1563	0.043	67	0.0	2.408	A
3	23	526	1525	0.015	23	0.0	2.395	A
4	322	79	1844	0.175	322	0.2	2.441	A
5	12	387	2098	0.006	12	0.0	1.725	A

Appendix V



Junctions 9			
ARCADY 9 - Roundabout Module			
Version: 9.5.0.6896 © Copyright TRL Limited, 2018			
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Filename: Port Road roundabout.j9

Path: Z:\Lime\Projects\2024\24063 Church Farm, St Athan\Analysis\November 2024 JCA\P1 only

Report generation date: 15/08/2025 10:43:33

- »2024, AM
- »2024, PM
- »2027, AM
- »2027, PM
- »2027 + com, AM
- »2027 + com, PM
- »2027 + com + dev, AM
- »2027 + com + dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2024								
Arm 1	0.5	2.75	0.31	A	0.9	3.55	0.48	A
Arm 2	0.6	4.69	0.35	A	0.4	4.49	0.30	A
Arm 3	0.4	3.56	0.30	A	0.4	3.23	0.27	A
2027								
Arm 1	0.5	2.78	0.32	A	1.0	3.64	0.50	A
Arm 2	0.6	4.78	0.36	A	0.5	4.57	0.31	A
Arm 3	0.5	3.62	0.31	A	0.4	3.27	0.28	A
2027 + com								
Arm 1	0.6	2.93	0.35	A	1.7	4.84	0.62	A
Arm 2	0.9	5.85	0.47	A	0.6	5.40	0.38	A
Arm 3	0.8	4.58	0.43	A	0.5	3.47	0.31	A
2027 + com + development								
Arm 1	0.6	2.99	0.36	A	1.8	5.15	0.65	A
Arm 2	1.0	5.98	0.48	A	0.7	5.69	0.39	A
Arm 3	0.9	4.93	0.47	A	0.5	3.62	0.34	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	
Location	
Site number	
Date	18/11/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-U7G8RPA\Aimee
Description	

Units

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

Analysis Options

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	2024	AM	ONE HOUR	08:00	09:30	15	✓
D2	2024	PM	ONE HOUR	17:00	18:30	15	✓
D3	2027	AM	ONE HOUR	08:00	09:30	15	✓
D4	2027	PM	ONE HOUR	17:00	18:30	15	✓
D9	2027 + com	AM	ONE HOUR	08:00	09:30	15	✓
D10	2027 + com	PM	ONE HOUR	17:00	18:30	15	✓
D15	2027 + com + development	AM	ONE HOUR	08:00	09:30	15	✓
D16	2027 + com + development	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

2024, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Port Road roundabout	Standard Roundabout		1, 2, 3	3.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A4226/Port Road	
2	Port Road	
3	A4226	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	4.17	7.33	31.2	14.8	35.0	22.7	
2	3.90	8.37	6.5	8.9	35.0	49.0	
3	4.00	7.60	13.7	50.9	35.0	39.7	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.715	2003
2	0.552	1402
3	0.670	1797

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	2024	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	558	100.000
2		ONE HOUR	✓	396	100.000
3		ONE HOUR	✓	412	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	283	275
	2	383	0	13
	3	403	9	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	5	6
	2	4	0	8
	3	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.31	2.75	0.5	A	512	768
2	0.35	4.69	0.6	A	363	545
3	0.30	3.56	0.4	A	378	567

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	420	105	7	1998	0.210	419	590	0.0	0.3	2.404	A
2	298	75	206	1288	0.231	297	219	0.0	0.3	3.777	A
3	310	78	287	1605	0.193	309	216	0.0	0.3	2.914	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	502	125	8	1997	0.251	501	706	0.3	0.4	2.539	A
2	356	89	247	1265	0.281	356	262	0.3	0.4	4.118	A
3	370	93	344	1567	0.236	370	259	0.3	0.3	3.155	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	614	154	10	1995	0.308	614	864	0.4	0.5	2.749	A
2	436	109	303	1235	0.353	435	321	0.4	0.6	4.684	A
3	454	113	421	1515	0.299	453	317	0.3	0.4	3.554	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	614	154	10	1995	0.308	614	865	0.5	0.5	2.749	A
2	436	109	303	1235	0.353	436	321	0.6	0.6	4.692	A
3	454	113	422	1514	0.300	454	317	0.4	0.4	3.558	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	502	125	8	1997	0.251	502	708	0.5	0.4	2.543	A
2	356	89	247	1265	0.281	357	263	0.6	0.4	4.127	A
3	370	93	345	1566	0.237	371	259	0.4	0.3	3.160	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	420	105	7	1998	0.210	420	592	0.4	0.3	2.407	A
2	298	75	207	1288	0.232	299	220	0.4	0.3	3.790	A
3	310	78	289	1604	0.193	310	217	0.3	0.3	2.922	A

2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Port Road roundabout	Standard Roundabout		1, 2, 3	3.66	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	2024	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	877	100.000
2		ONE HOUR	✓	318	100.000
3		ONE HOUR	✓	392	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
	1	0	478	399
	2	308	0	10
	3	381	10	1

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	1	2
	2	1	0	0
	3	2	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.48	3.55	0.9	A	805	1207
2	0.30	4.49	0.4	A	292	438
3	0.27	3.23	0.4	A	360	540

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	660	165	8	1997	0.331	658	517	0.0	0.5	2.725	A
2	239	60	300	1236	0.194	238	366	0.0	0.2	3.640	A
3	295	74	231	1642	0.180	294	308	0.0	0.2	2.727	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	788	197	10	1995	0.395	788	619	0.5	0.7	3.022	A
2	286	71	359	1204	0.238	286	438	0.2	0.3	3.959	A
3	352	88	277	1612	0.219	352	368	0.2	0.3	2.920	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	966	241	12	1994	0.484	964	758	0.7	0.9	3.545	A
2	350	88	440	1159	0.302	350	537	0.3	0.4	4.488	A
3	432	108	339	1570	0.275	431	451	0.3	0.4	3.230	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	966	241	12	1994	0.484	966	759	0.9	0.9	3.550	A
2	350	88	440	1159	0.302	350	537	0.4	0.4	4.494	A
3	432	108	339	1570	0.275	432	451	0.4	0.4	3.231	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	788	197	10	1995	0.395	790	620	0.9	0.7	3.030	A
2	286	71	360	1203	0.238	286	439	0.4	0.3	3.968	A
3	352	88	277	1611	0.219	353	369	0.4	0.3	2.925	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	660	165	8	1997	0.331	661	519	0.7	0.5	2.735	A
2	239	60	301	1235	0.194	240	368	0.3	0.2	3.653	A
3	295	74	232	1641	0.180	295	309	0.3	0.2	2.734	A

2027, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Port Road roundabout	Standard Roundabout		1, 2, 3	3.61	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	2027	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	571	100.000
2		ONE HOUR	✓	406	100.000
3		ONE HOUR	✓	421	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
	1	0	289	282
	2	393	0	13
	3	412	9	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	5	6
	2	4	0	8
	3	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.32	2.78	0.5	A	524	786
2	0.36	4.78	0.6	A	373	559
3	0.31	3.62	0.5	A	386	579

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	430	107	7	1998	0.215	429	604	0.0	0.3	2.419	A
2	306	76	212	1285	0.238	304	224	0.0	0.3	3.817	A
3	317	79	295	1600	0.198	316	221	0.0	0.3	2.938	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	513	128	8	1997	0.257	513	723	0.3	0.4	2.559	A
2	365	91	253	1262	0.289	365	268	0.3	0.4	4.175	A
3	378	95	353	1561	0.243	378	265	0.3	0.3	3.193	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	629	157	10	1995	0.315	628	885	0.4	0.5	2.777	A
2	447	112	310	1231	0.363	446	328	0.4	0.6	4.775	A
3	464	116	432	1508	0.307	463	325	0.3	0.5	3.613	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	629	157	10	1995	0.315	629	886	0.5	0.5	2.777	A
2	447	112	310	1230	0.363	447	328	0.6	0.6	4.784	A
3	464	116	433	1507	0.308	464	325	0.5	0.5	3.617	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	513	128	8	1997	0.257	514	725	0.5	0.4	2.561	A
2	365	91	254	1262	0.289	366	268	0.6	0.4	4.187	A
3	378	95	354	1560	0.243	379	265	0.5	0.3	3.200	A

09:15 - 09:30

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	430	107	7	1998	0.215	430	607	0.4	0.3	2.424	A
2	306	76	212	1285	0.238	306	225	0.4	0.3	3.831	A
3	317	79	296	1599	0.198	317	222	0.3	0.3	2.949	A

2027, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Port Road roundabout	Standard Roundabout		1, 2, 3	3.73	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	2027	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	899	100.000
2		ONE HOUR	✓	325	100.000
3		ONE HOUR	✓	401	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
	1	0	490	409
	2	315	0	10
	3	390	10	1

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	1	2
	2	1	0	0
	3	2	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.50	3.64	1.0	A	825	1237
2	0.31	4.57	0.5	A	298	447
3	0.28	3.27	0.4	A	368	552

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	677	169	8	1997	0.339	675	529	0.0	0.5	2.763	A
2	245	61	308	1232	0.199	244	375	0.0	0.2	3.674	A
3	302	75	236	1639	0.184	301	315	0.0	0.2	2.748	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	808	202	10	1995	0.405	808	633	0.5	0.7	3.073	A
2	292	73	368	1199	0.244	292	449	0.2	0.3	4.008	A
3	360	90	283	1607	0.224	360	377	0.2	0.3	2.949	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	990	247	12	1994	0.496	989	775	0.7	1.0	3.628	A
2	358	89	451	1153	0.310	357	550	0.3	0.5	4.565	A
3	442	110	346	1565	0.282	441	462	0.3	0.4	3.273	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	990	247	12	1994	0.496	990	776	1.0	1.0	3.636	A
2	358	89	451	1153	0.310	358	551	0.5	0.5	4.572	A
3	442	110	347	1565	0.282	442	462	0.4	0.4	3.274	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	808	202	10	1995	0.405	809	635	1.0	0.7	3.084	A
2	292	73	369	1198	0.244	293	450	0.5	0.3	4.018	A
3	360	90	284	1607	0.224	361	378	0.4	0.3	2.952	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	677	169	8	1997	0.339	678	531	0.7	0.5	2.769	A
2	245	61	309	1231	0.199	245	377	0.3	0.3	3.685	A
3	302	75	237	1638	0.184	302	317	0.3	0.2	2.753	A

2027 + com, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Port Road roundabout	Standard Roundabout		1, 2, 3	4.35	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
D9	2027 + com	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	641	100.000
2		ONE HOUR	✓	520	100.000
3		ONE HOUR	✓	550	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
	1	0	321	320
	2	507	0	13
	3	541	9	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	5	5
	2	3	0	8
	3	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.35	2.93	0.6	A	588	882
2	0.47	5.85	0.9	A	477	716
3	0.43	4.58	0.8	A	505	757

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	483	121	7	1998	0.242	481	786	0.0	0.3	2.490	A
2	391	98	240	1269	0.308	390	248	0.0	0.5	4.212	A
3	414	104	380	1542	0.268	413	250	0.0	0.4	3.307	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	576	144	8	1997	0.289	576	941	0.3	0.4	2.660	A
2	467	117	287	1243	0.376	467	296	0.5	0.6	4.777	A
3	494	124	455	1492	0.331	494	299	0.4	0.5	3.746	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	706	176	10	1995	0.354	705	1152	0.4	0.6	2.927	A
2	573	143	352	1208	0.474	571	363	0.6	0.9	5.825	A
3	606	151	557	1424	0.425	605	366	0.5	0.8	4.561	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	706	176	10	1995	0.354	706	1154	0.6	0.6	2.930	A
2	573	143	352	1207	0.474	573	363	0.9	0.9	5.847	A
3	606	151	558	1423	0.426	606	367	0.8	0.8	4.576	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	576	144	8	1997	0.289	577	944	0.6	0.4	2.664	A
2	467	117	288	1243	0.376	469	297	0.9	0.6	4.801	A
3	494	124	457	1491	0.332	495	300	0.8	0.5	3.761	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	483	121	7	1998	0.242	483	790	0.4	0.3	2.495	A
2	391	98	241	1269	0.309	392	249	0.6	0.5	4.237	A
3	414	104	382	1541	0.269	415	251	0.5	0.4	3.325	A

2027 + com, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Port Road roundabout	Standard Roundabout		1, 2, 3	4.64	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
D10	2027 + com	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	1126	100.000
2		ONE HOUR	✓	368	100.000
3		ONE HOUR	✓	431	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	594	532
	2	358	0	10
	3	420	10	1

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	1	2
	2	1	0	0
	3	2	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.62	4.84	1.7	A	1033	1550
2	0.38	5.40	0.6	A	338	507
3	0.31	3.47	0.5	A	395	593

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	848	212	8	1997	0.425	845	584	0.0	0.7	3.163	A
2	277	69	400	1181	0.235	276	453	0.0	0.3	4.011	A
3	324	81	268	1617	0.201	323	407	0.0	0.3	2.838	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1012	253	10	1995	0.507	1011	699	0.7	1.0	3.705	A
2	331	83	479	1138	0.291	330	542	0.3	0.4	4.501	A
3	387	97	321	1582	0.245	387	488	0.3	0.3	3.079	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1240	310	12	1994	0.622	1237	855	1.0	1.6	4.813	A
2	405	101	586	1078	0.376	404	664	0.4	0.6	5.387	A
3	475	119	393	1533	0.309	474	597	0.3	0.5	3.469	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1240	310	12	1994	0.622	1240	857	1.6	1.7	4.843	A
2	405	101	587	1078	0.376	405	665	0.6	0.6	5.403	A
3	475	119	394	1533	0.310	475	598	0.5	0.5	3.474	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1012	253	10	1995	0.507	1015	701	1.7	1.1	3.735	A
2	331	83	480	1137	0.291	332	544	0.6	0.4	4.520	A
3	387	97	323	1581	0.245	388	489	0.5	0.3	3.083	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	848	212	8	1997	0.425	849	586	1.1	0.8	3.185	A
2	277	69	402	1180	0.235	277	455	0.4	0.3	4.029	A
3	324	81	270	1616	0.201	325	409	0.3	0.3	2.848	A

2027 + com + development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Port Road roundabout	Standard Roundabout		1, 2, 3	4.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2027 + com + development	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	657	100.000
2		ONE HOUR	✓	524	100.000
3		ONE HOUR	✓	603	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
	1	0	321	336
	2	507	0	17
	3	584	19	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	5	5
	2	3	0	6
	3	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.36	2.99	0.6	A	603	904
2	0.48	5.98	1.0	A	481	721
3	0.47	4.93	0.9	A	553	830

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	495	124	14	1992	0.248	493	818	0.0	0.3	2.519	A
2	394	99	252	1263	0.312	393	255	0.0	0.5	4.258	A
3	454	113	380	1542	0.294	452	265	0.0	0.4	3.419	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	591	148	17	1990	0.297	590	980	0.3	0.4	2.699	A
2	471	118	302	1235	0.381	470	305	0.5	0.6	4.848	A
3	542	136	455	1492	0.363	541	317	0.4	0.6	3.931	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	723	181	21	1988	0.364	723	1199	0.4	0.6	2.986	A
2	577	144	370	1198	0.482	576	374	0.6	0.9	5.953	A
3	664	166	557	1424	0.466	663	388	0.6	0.9	4.904	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	723	181	21	1988	0.364	723	1201	0.6	0.6	2.989	A
2	577	144	370	1198	0.482	577	374	0.9	1.0	5.978	A
3	664	166	558	1423	0.467	664	389	0.9	0.9	4.925	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	591	148	17	1990	0.297	591	983	0.6	0.4	2.702	A
2	471	118	302	1235	0.381	472	306	1.0	0.6	4.874	A
3	542	136	457	1491	0.364	543	318	0.9	0.6	3.951	A

09:15 - 09:30

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	495	124	14	1992	0.248	495	823	0.4	0.3	2.526	A
2	394	99	253	1262	0.313	395	256	0.6	0.5	4.283	A
3	454	113	382	1541	0.295	455	266	0.6	0.4	3.446	A

2027 + com + development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Port Road roundabout	Standard Roundabout		1, 2, 3	4.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2027 + com + development	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	1165	100.000
2		ONE HOUR	✓	377	100.000
3		ONE HOUR	✓	469	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
	1	0	594	571
	2	358	0	19
	3	451	17	1

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	1	1
	2	1	0	0
	3	2	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.65	5.15	1.8	A	1069	1604
2	0.39	5.69	0.7	A	346	519
3	0.34	3.62	0.5	A	430	646

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	877	219	14	1993	0.440	874	607	0.0	0.8	3.240	A
2	284	71	429	1165	0.244	283	458	0.0	0.3	4.112	A
3	353	88	268	1617	0.218	352	443	0.0	0.3	2.903	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1047	262	16	1991	0.526	1046	727	0.8	1.1	3.842	A
2	339	85	514	1118	0.303	338	549	0.3	0.4	4.658	A
3	422	105	321	1582	0.267	421	531	0.3	0.4	3.168	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1283	321	20	1988	0.645	1280	889	1.1	1.8	5.111	A
2	415	104	628	1055	0.394	414	671	0.4	0.6	5.666	A
3	516	129	393	1533	0.337	516	649	0.4	0.5	3.611	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1283	321	20	1988	0.645	1283	891	1.8	1.8	5.151	A
2	415	104	630	1054	0.394	415	673	0.6	0.7	5.686	A
3	516	129	394	1533	0.337	516	651	0.5	0.5	3.616	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1047	262	16	1991	0.526	1050	729	1.8	1.1	3.876	A
2	339	85	516	1117	0.303	340	551	0.7	0.4	4.681	A
3	422	105	323	1581	0.267	422	533	0.5	0.4	3.176	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	877	219	14	1993	0.440	878	610	1.1	0.8	3.265	A
2	284	71	431	1164	0.244	284	461	0.4	0.3	4.135	A
3	353	88	270	1616	0.218	353	446	0.4	0.3	2.912	A

Appendix W



Junctions 9			
ARCADY 9 - Roundabout Module			
Version: 9.5.0.6896 © Copyright TRL Limited, 2018			
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Filename: Waycock Rd A4226 with lane simulation.j9

Path: Z:\Lime\Projects\2024\24063 Church Farm, St Athan\Analysis\November 2024 JCA\IP1 only

Report generation date: 15/08/2025 14:23:52

- »2024, AM
- »2024, PM
- »2027, AM
- »2027, PM
- »2027 + com, AM
- »2027 + com, PM
- »2027 + com + development, AM
- »2027 + com + development, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
[Lane Simulation] - 2024								
Arm 1	6.6	32.15		D	24.9	108.43		F
Arm 2	2.6	9.85		A	1.9	9.91		A
Arm 3	3.7	13.14		B	2.0	8.53		A
Arm 4	2.1	13.14		B	3.3	16.15		C
[Lane Simulation] - 2027								
Arm 1	8.4	40.38		E	32.8	137.41		F
Arm 2	2.5	10.27		B	1.9	9.73		A
Arm 3	3.7	13.91		B	2.0	8.19		A
Arm 4	2.3	14.20		B	3.5	16.59		C
[Lane Simulation] - 2027 + com								
Arm 1	318.2	1348.45		F	141.8	750.15		F
Arm 2	26.3	83.10		F	2.6	11.21		B
Arm 3	9.4	28.15		D	70.5	148.34		F
Arm 4	35.1	140.16		F	53.8	221.45		F
[Lane Simulation] - 2027 + com + development								
Arm 1	330.6	1400.73		F	155.3	814.15		F
Arm 2	28.5	85.84		F	2.4	11.83		B
Arm 3	13.7	37.57		E	99.2	204.41		F
Arm 4	40.3	159.69		F	59.5	263.91		F

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. Arm and junction delays are averages for all movements, including movements with zero delay.

File summary

File Description

Title	
Location	
Site number	
Date	13/12/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-U7G8RPA\Aimee
Description	

Units

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

Analysis Options

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

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	1.00	100000	100000	-1	3	1	60	✓			1620681900	314	45.30

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	2024	AM	ONE HOUR	08:00	09:30	15	✓
D2	2024	PM	ONE HOUR	17:00	18:30	15	✓
D3	2027	AM	ONE HOUR	08:00	09:30	15	✓
D4	2027	PM	ONE HOUR	17:00	18:30	15	✓
D9	2027 + com	AM	ONE HOUR	08:00	09:30	15	✓
D10	2027 + com	PM	ONE HOUR	17:00	18:30	15	✓
D15	2027 + com + development	AM	ONE HOUR	08:00	09:30	15	✓
D16	2027 + com + development	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

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

2024, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	16.64	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A4226 east	
2	Pontypridd Road (south)	
3	A4226 west	
4	Waycock Road (north)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.64	6.68	20.2	49.6	38.1	18.6	
2	5.19	6.64	23.7	49.6	29.7	23.6	
3	3.88	8.70	50.3	49.6	18.1	9.0	
4	3.65	7.67	57.9	49.6	39.2	21.3	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.696	1843
2	0.744	2040
3	0.868	2527
4	0.767	2227

The slope and intercept shown above include any corrections and adjustments.

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
1	Evenly split	10.00
2	Evenly split	10.00
3	Evenly split	10.00
4	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1	Entry	1	1	2, 3	✓	8.00		0	99999	
			2	1, 4	✓	8.00		0	99999	
	Exit	1	1	(1, 2, 3, 4)		Infinity				
			1			Infinity				
2	Entry	1	1	3, 4	✓	8.00		0	99999	
			2	1, 2	✓	8.00		0	99999	
	Exit	1	1	(1, 2, 3, 4)		Infinity				
			1			Infinity				
3	Entry	1	1	4	✓	8.00		0	99999	
			2	1, 2, 3	✓	8.00		0	99999	
	Exit	1	1	(1, 2, 3, 4)		Infinity				
			1			Infinity				
4	Entry	1	1	1	✓	8.00		0	99999	
			2	2, 3, 4	✓	8.00		0	99999	
	Exit	1	1	(1, 2, 3, 4)		Infinity				
			1			Infinity				

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1	Entry	1	1	0.348	922
			2	0.348	922
2	Entry	1	1	0.372	1020
			2	0.372	1020
3	Entry	1	1	0.434	1264
			2	0.434	1264
4	Entry	1	1	0.384	1114
			2	0.384	1114

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			1	2	3	4
1	1	1		✓	✓	
		2	✓			✓
2	1	1	✓	✓	✓	✓
		2	✓	✓		
3	1	1			✓	✓
		2	✓	✓	✓	
4	1	1	✓			
		2		✓	✓	✓
4	2	1	✓	✓	✓	✓

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	2024	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	639	100.000
2		ONE HOUR	✓	755	100.000
3		ONE HOUR	✓	825	100.000
4		ONE HOUR	✓	532	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1	2	3	4
From	1	1	266	212	160
	2	366	9	280	100
	3	265	364	0	196
	4	135	212	185	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	2	8	3
	2	1	0	1	0
	3	5	1	0	7
	4	3	0	4	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	32.15	6.6	D	585	877
2	9.85	2.6	A	691	1037
3	13.14	3.7	B	760	1141
4	13.14	2.1	B	489	734

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	478	119	574	477	478	580	0.0	1.3	9.569	A
2	572	143	417	574	566	633	0.0	0.9	6.382	A
3	624	156	480	624	617	512	0.0	1.1	5.939	A
4	393	98	761	393	397	343	0.0	0.8	6.599	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	571	143	695	570	566	692	1.3	2.1	12.299	B
2	679	170	502	678	674	762	0.9	1.4	7.300	A
3	753	188	575	750	742	605	1.1	1.7	7.598	A
4	477	119	910	477	476	415	0.8	1.1	8.037	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	699	175	847	695	685	847	2.1	6.1	25.563	D
2	824	206	610	823	825	932	1.4	2.3	9.418	A
3	913	228	691	907	896	742	1.7	3.6	11.663	B
4	592	148	1104	590	581	494	1.1	2.1	11.825	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	711	178	839	707	703	848	6.1	6.6	32.150	D
2	834	208	618	831	830	929	2.3	2.6	9.848	A
3	911	228	701	906	903	748	3.6	3.7	13.145	B
4	582	146	1104	584	583	502	2.1	2.0	13.138	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	571	143	710	568	593	687	6.6	2.5	17.786	C
2	676	169	498	677	687	780	2.6	1.4	7.684	A
3	745	186	567	745	747	609	3.7	1.7	8.299	A
4	488	122	907	490	486	405	2.0	1.0	8.832	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	478	120	578	477	483	573	2.5	1.4	9.932	A
2	562	141	417	561	570	638	1.4	1.0	6.314	A
3	616	154	475	618	622	504	1.7	1.0	6.024	A
4	402	100	750	401	398	343	1.0	0.8	6.758	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	357	722	0.495	356	358	0.0	1.1	10.562	B
			2	1, 4	120	722	0.167	120	120	0.0	0.2	6.335	A
	Exit	1	1	(1, 2, 3, 4)	478			478	483	0.0	0.0	0.075	A
			1		580			580	578	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	289	865	0.334	290	283	0.0	0.4	6.304	A
			2	1, 2	283	865	0.327	284	283	0.0	0.5	6.459	A
	Exit	1	1	(1, 2, 3, 4)	572			572	570	0.0	0.0	0.001	A
			1		633			633	633	0.0	0.0	0.000	A
3	Entry	1	1	4	148	1055	0.141	148	148	0.0	0.2	4.317	A
			2	1, 2, 3	476	1055	0.451	476	469	0.0	0.9	6.407	A
	Exit	1	1	(1, 2, 3, 4)	624			624	621	0.0	0.0	0.014	A
			1		512			512	505	0.0	0.0	0.000	A
4	Entry	1	1	1	99	822	0.121	99	101	0.0	0.2	5.222	A
			2	2, 3, 4	294	822	0.358	294	296	0.0	0.6	7.064	A
	Exit	1	1	(1, 2, 3, 4)	393			393	400	0.0	0.0	0.001	A
			1		343			343	342	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	422	680	0.621	422	422	1.1	1.8	13.624	B
			2	1, 4	147	680	0.217	148	144	0.2	0.3	6.848	A
	Exit	1	1	(1, 2, 3, 4)	571			570	569	0.0	0.1	0.402	A
			1		692			692	689	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	344	833	0.413	342	340	0.4	0.7	7.179	A
			2	1, 2	335	833	0.403	335	334	0.5	0.7	7.382	A
	Exit	1	1	(1, 2, 3, 4)	679			679	676	0.0	0.0	0.021	A
			1		762			762	760	0.0	0.0	0.000	A
3	Entry	1	1	4	177	1014	0.174	177	175	0.2	0.2	4.590	A
			2	1, 2, 3	576	1014	0.568	574	567	0.9	1.5	8.329	A
	Exit	1	1	(1, 2, 3, 4)	753			753	744	0.0	0.0	0.119	A
			1		605			605	601	0.0	0.0	0.000	A
4	Entry	1	1	1	120	765	0.157	120	122	0.2	0.2	5.680	A
			2	2, 3, 4	357	765	0.467	357	354	0.6	0.9	8.809	A
	Exit	1	1	(1, 2, 3, 4)	477			477	478	0.0	0.0	0.022	A
			1		415			415	408	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	520	627	0.829	519	509	1.8	4.1	24.237	C
			2	1, 4	175	627	0.280	176	176	0.3	0.4	8.348	A
	Exit	1	1	(1, 2, 3, 4)	699			695	695	0.1	1.6	5.253	A
			1		847			847	839	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	415	793	0.523	414	415	0.7	1.2	9.415	A
			2	1, 2	409	793	0.516	409	410	0.7	1.1	9.207	A
	Exit	1	1	(1, 2, 3, 4)	824			824	829	0.0	0.0	0.103	A
			1		932			932	921	0.0	0.0	0.000	A
3	Entry	1	1	4	213	964	0.221	213	211	0.2	0.4	5.201	A
			2	1, 2, 3	697	964	0.723	694	685	1.5	2.7	12.400	B
	Exit	1	1	(1, 2, 3, 4)	913			911	902	0.0	0.5	0.869	A
			1		742			742	734	0.0	0.0	0.000	A
4	Entry	1	1	1	148	690	0.215	149	148	0.2	0.3	6.741	A
			2	2, 3, 4	443	690	0.642	441	433	0.9	1.7	13.148	B
	Exit	1	1	(1, 2, 3, 4)	592			592	585	0.0	0.0	0.282	A
			1		494			494	495	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	533	630	0.847	528	526	4.1	4.3	27.583	D
			2	1, 4	180	630	0.286	179	177	0.4	0.5	8.727	A
	Exit	1	1	(1, 2, 3, 4)	711			713	705	1.6	1.7	9.328	A
			1		848			848	843	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	419	790	0.531	417	418	1.2	1.2	9.753	A
			2	1, 2	415	790	0.525	414	412	1.1	1.3	9.636	A
	Exit	1	1	(1, 2, 3, 4)	834			834	831	0.0	0.0	0.154	A
			1		929			929	930	0.0	0.0	0.000	A
3	Entry	1	1	4	216	960	0.225	216	214	0.4	0.3	5.276	A
			2	1, 2, 3	694	960	0.723	689	688	2.7	2.8	13.055	B
	Exit	1	1	(1, 2, 3, 4)	911			910	903	0.5	0.6	1.878	A
			1		748			748	745	0.0	0.0	0.000	A
4	Entry	1	1	1	148	690	0.214	149	147	0.3	0.3	6.895	A
			2	2, 3, 4	435	690	0.630	435	436	1.7	1.6	14.486	B
	Exit	1	1	(1, 2, 3, 4)	582			583	582	0.0	0.1	0.546	A
			1		502			502	500	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	430	675	0.637	427	446	4.3	2.0	17.733	C
			2	1, 4	142	675	0.210	141	147	0.5	0.3	7.142	A
	Exit	1	1	(1, 2, 3, 4)	571			571	583	1.7	0.1	3.020	A
			1		687			687	693	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	342	835	0.409	342	346	1.2	0.7	7.593	A
			2	1, 2	335	835	0.401	335	340	1.3	0.7	7.748	A
	Exit	1	1	(1, 2, 3, 4)	676			676	682	0.0	0.0	0.017	A
			1		780			780	786	0.0	0.0	0.000	A
3	Entry	1	1	4	174	1018	0.171	174	176	0.3	0.3	4.695	A
			2	1, 2, 3	572	1018	0.562	571	571	2.8	1.5	9.012	A
	Exit	1	1	(1, 2, 3, 4)	745			746	741	0.6	0.0	0.328	A
			1		609			609	620	0.0	0.0	0.000	A
4	Entry	1	1	1	122	766	0.160	123	123	0.3	0.2	5.827	A
			2	2, 3, 4	366	766	0.478	367	363	1.6	0.8	9.805	A
	Exit	1	1	(1, 2, 3, 4)	488			488	483	0.1	0.0	0.043	A
			1		405			405	414	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	358	720	0.497	356	363	2.0	1.2	11.037	B
			2	1, 4	120	720	0.167	120	120	0.3	0.2	6.140	A
	Exit	1	1	(1, 2, 3, 4)	478			478	479	0.1	0.0	0.165	A
			1		573			573	579	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	282	865	0.326	280	286	0.7	0.5	6.317	A
			2	1, 2	280	865	0.324	281	284	0.7	0.4	6.310	A
	Exit	1	1	(1, 2, 3, 4)	562			562	568	0.0	0.0	0.000	A
			1		638			638	640	0.0	0.0	0.000	A
3	Entry	1	1	4	149	1057	0.141	150	149	0.3	0.2	4.313	A
			2	1, 2, 3	467	1057	0.442	468	473	1.5	0.8	6.515	A
	Exit	1	1	(1, 2, 3, 4)	616			616	619	0.0	0.0	0.020	A
			1		504			504	511	0.0	0.0	0.000	A
4	Entry	1	1	1	103	826	0.125	102	103	0.2	0.2	5.263	A
			2	2, 3, 4	298	826	0.361	299	296	0.8	0.6	7.271	A
	Exit	1	1	(1, 2, 3, 4)	402			402	398	0.0	0.0	0.002	A
			1		343			343	343	0.0	0.0	0.000	A

2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	36.72	E

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	2024	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	681	100.000
2		ONE HOUR	✓	561	100.000
3		ONE HOUR	✓	725	100.000
4		ONE HOUR	✓	646	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1	2	3	4
From	1	1	202	385	93
	2	291	8	152	110
	3	317	254	0	154
	4	154	135	357	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	4
From	1	0	0	1
	2	0	0	0
	3	2	0	0
	4	0	0	2

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	108.43	24.9	F	626	939
2	9.91	1.9	A	516	774
3	8.53	2.0	A	667	1000
4	16.15	3.3	C	596	894

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	513	128	583	513	508	573	0.0	1.8	11.805	B
2	410	103	634	415	420	462	0.0	0.5	6.267	A
3	558	140	373	560	551	676	0.0	0.8	5.174	A
4	501	125	659	496	488	273	0.0	1.1	6.795	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	630	157	679	629	611	691	1.8	4.3	21.217	C
2	510	127	761	512	508	547	0.5	0.9	7.154	A
3	648	162	464	651	652	809	0.8	1.0	5.900	A
4	576	144	795	575	576	320	1.1	1.4	8.711	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	744	186	818	702	698	854	4.3	17.0	58.511	F
2	632	158	877	628	621	643	0.9	1.7	9.443	A
3	801	200	547	798	793	958	1.0	2.0	7.867	A
4	717	179	957	714	709	388	1.4	3.2	14.767	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	747	187	821	723	718	842	17.0	24.9	108.425	F
2	614	154	891	614	619	653	1.7	1.9	9.914	A
3	798	200	552	801	801	954	2.0	1.8	8.533	A
4	711	178	957	706	711	395	3.2	3.3	16.147	C

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	609	152	669	648	678	686	24.9	7.9	75.580	F
2	506	127	774	507	507	543	1.9	1.1	8.029	A
3	644	161	454	643	656	827	1.8	1.1	6.316	A
4	578	144	778	578	591	319	3.3	1.3	9.883	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	511	128	575	515	535	569	7.9	1.6	18.729	C
2	422	106	632	423	427	458	1.1	0.6	6.518	A
3	550	138	378	547	552	678	1.1	1.0	5.339	A
4	492	123	651	493	494	274	1.3	1.0	7.081	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment
17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	441	719	0.614	441	438	0.0	1.7	12.612	B
			2	1, 4	72	719	0.101	72	70	0.0	0.1	5.594	A
	Exit	1	1	(1, 2, 3, 4)	513			514	515	0.0	0.0	0.142	A
			1		573			573	576	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	192	784	0.245	197	196	0.0	0.2	6.112	A
			2	1, 2	218	784	0.278	218	224	0.0	0.4	6.397	A
	Exit	1	1	(1, 2, 3, 4)	410			410	422	0.0	0.0	0.002	A
			1		462			462	454	0.0	0.0	0.000	A
3	Entry	1	1	4	119	1102	0.108	119	116	0.0	0.1	3.738	A
			2	1, 2, 3	440	1102	0.399	440	435	0.0	0.7	5.539	A
	Exit	1	1	(1, 2, 3, 4)	558			558	554	0.0	0.0	0.007	A
			1		676			676	669	0.0	0.0	0.000	A
4	Entry	1	1	1	117	861	0.136	116	116	0.0	0.2	4.846	A
			2	2, 3, 4	384	861	0.446	380	372	0.0	1.0	7.404	A
	Exit	1	1	(1, 2, 3, 4)	501			501	493	0.0	0.0	0.004	A
			1		273			273	268	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	540	685	0.788	541	526	1.7	3.1	19.618	C
			2	1, 4	88	685	0.128	87	85	0.1	0.2	6.108	A
	Exit	1	1	(1, 2, 3, 4)	630			627	617	0.0	1.0	3.336	A
			1		691			691	688	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	229	737	0.311	232	234	0.2	0.4	6.907	A
			2	1, 2	280	737	0.380	281	273	0.4	0.5	7.346	A
	Exit	1	1	(1, 2, 3, 4)	510			510	509	0.0	0.0	0.009	A
			1		547			547	539	0.0	0.0	0.000	A
3	Entry	1	1	4	136	1062	0.128	138	138	0.1	0.1	3.957	A
			2	1, 2, 3	512	1062	0.482	513	514	0.7	0.9	6.385	A
	Exit	1	1	(1, 2, 3, 4)	648			648	653	0.0	0.0	0.022	A
			1		809			809	800	0.0	0.0	0.000	A
4	Entry	1	1	1	136	809	0.168	135	138	0.2	0.3	5.340	A
			2	2, 3, 4	440	809	0.544	440	438	1.0	1.2	9.679	A
	Exit	1	1	(1, 2, 3, 4)	576			576	577	0.0	0.0	0.077	A
			1		320			320	318	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	612	637	0.960	608	601	3.1	6.6	33.215	D
			2	1, 4	94	637	0.148	94	97	0.2	0.2	6.647	A
	Exit	1	1	(1, 2, 3, 4)	744			706	712	1.0	10.3	28.432	D
			1		854			854	847	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	303	694	0.437	302	292	0.4	0.8	9.082	A
			2	1, 2	328	694	0.473	326	329	0.5	0.9	9.710	A
	Exit	1	1	(1, 2, 3, 4)	632			632	624	0.0	0.0	0.026	A
			1		643			643	638	0.0	0.0	0.000	A
3	Entry	1	1	4	169	1026	0.164	168	167	0.1	0.3	4.335	A
			2	1, 2, 3	632	1026	0.616	630	626	0.9	1.7	8.597	A
	Exit	1	1	(1, 2, 3, 4)	801			801	796	0.0	0.1	0.146	A
			1		958			958	948	0.0	0.0	0.000	A
4	Entry	1	1	1	179	746	0.239	178	173	0.3	0.3	6.262	A
			2	2, 3, 4	540	746	0.723	536	536	1.2	2.7	16.008	C
	Exit	1	1	(1, 2, 3, 4)	717			718	715	0.0	0.2	1.123	A
			1		388			388	387	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	628	636	0.987	625	617	6.6	7.0	39.854	E
			2	1, 4	97	636	0.152	98	101	0.2	0.2	7.340	A
	Exit	1	1	(1, 2, 3, 4)	747			725	719	10.3	17.8	72.818	F
			1		842			842	846	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	285	688	0.414	283	288	0.8	0.9	9.399	A
			2	1, 2	330	688	0.479	331	331	0.9	1.0	10.146	B
	Exit	1	1	(1, 2, 3, 4)	614			615	620	0.0	0.0	0.114	A
			1		653			653	650	0.0	0.0	0.000	A
3	Entry	1	1	4	176	1024	0.172	176	171	0.3	0.2	4.192	A
			2	1, 2, 3	622	1024	0.608	625	630	1.7	1.5	9.358	A
	Exit	1	1	(1, 2, 3, 4)	798			798	801	0.1	0.0	0.270	A
			1		954			954	960	0.0	0.0	0.000	A
4	Entry	1	1	1	173	747	0.232	173	172	0.3	0.3	6.328	A
			2	2, 3, 4	535	747	0.717	533	539	2.7	2.6	17.093	C
	Exit	1	1	(1, 2, 3, 4)	711			708	711	0.2	0.4	1.689	A
			1		395			395	393	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	552	689	0.801	560	587	7.0	3.9	31.879	D
			2	1, 4	88	689	0.127	88	91	0.2	0.1	6.781	A
	Exit	1	1	(1, 2, 3, 4)	609			639	666	17.8	3.9	48.288	E
			1		686			686	694	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	238	732	0.325	239	239	0.9	0.5	7.670	A
			2	1, 2	268	732	0.366	268	269	1.0	0.6	8.333	A
	Exit	1	1	(1, 2, 3, 4)	506			506	504	0.0	0.0	0.006	A
			1		543			543	561	0.0	0.0	0.000	A
3	Entry	1	1	4	134	1067	0.126	134	138	0.2	0.1	4.124	A
			2	1, 2, 3	510	1067	0.478	509	518	1.5	0.9	6.847	A
	Exit	1	1	(1, 2, 3, 4)	644			644	653	0.0	0.0	0.035	A
			1		827			827	849	0.0	0.0	0.000	A
4	Entry	1	1	1	136	815	0.166	136	140	0.3	0.2	5.497	A
			2	2, 3, 4	442	815	0.542	442	451	2.6	1.1	10.918	B
	Exit	1	1	(1, 2, 3, 4)	578			578	584	0.4	0.0	0.320	A
			1		319			319	328	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	440	722	0.610	441	463	3.9	1.5	15.387	C
			2	1, 4	73	722	0.102	74	73	0.1	0.1	5.883	A
	Exit	1	1	(1, 2, 3, 4)	511			513	526	3.9	0.0	5.347	A
			1		569			569	580	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	201	785	0.257	202	202	0.5	0.3	6.519	A
			2	1, 2	221	785	0.282	221	225	0.6	0.3	6.516	A
	Exit	1	1	(1, 2, 3, 4)	422			422	425	0.0	0.0	0.000	A
			1		458			458	466	0.0	0.0	0.000	A
3	Entry	1	1	4	119	1100	0.108	118	117	0.1	0.1	3.844	A
			2	1, 2, 3	432	1100	0.392	429	435	0.9	0.9	5.732	A
	Exit	1	1	(1, 2, 3, 4)	550			550	552	0.0	0.0	0.003	A
			1		678			678	690	0.0	0.0	0.000	A
4	Entry	1	1	1	117	864	0.135	117	119	0.2	0.2	4.841	A
			2	2, 3, 4	375	864	0.435	377	374	1.1	0.8	7.801	A
	Exit	1	1	(1, 2, 3, 4)	492			492	492	0.0	0.0	0.006	A
			1		274			274	272	0.0	0.0	0.000	A

2027, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	19.11	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2027	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	654	100.000
2		ONE HOUR	✓	773	100.000
3		ONE HOUR	✓	845	100.000
4		ONE HOUR	✓	544	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	272	217	164	
	2	375	9	287	102
	3	271	373	0	201
	4	138	217	189	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	2	8	3
	2	1	0	1	0
	3	5	1	0	7
	4	3	0	4	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	40.38	8.4	E	602	902
2	10.27	2.5	B	715	1072
3	13.91	3.7	B	775	1162
4	14.20	2.3	B	499	748

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	493	123	596	491	491	586	0.0	1.4	9.426	A
2	572	143	426	574	574	661	0.0	1.0	6.441	A
3	635	159	488	634	634	512	0.0	1.1	6.239	A
4	412	103	770	412	409	352	0.0	0.8	6.754	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	581	145	726	578	579	708	1.4	2.3	13.418	B
2	700	175	521	698	691	783	1.0	1.6	7.384	A
3	762	191	583	764	755	636	1.1	1.6	7.597	A
4	503	126	931	503	491	415	0.8	1.3	8.414	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	720	180	864	716	705	873	2.3	7.0	29.024	D
2	854	214	625	855	854	955	1.6	2.5	10.275	B
3	933	233	724	929	923	757	1.6	3.7	12.660	B
4	600	150	1133	604	592	520	1.3	2.3	14.197	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	723	181	854	721	714	865	7.0	8.4	40.383	E
2	859	215	629	863	863	946	2.5	2.3	10.152	B
3	925	231	718	929	935	775	3.7	3.5	13.909	B
4	586	147	1133	586	595	513	2.3	2.2	13.862	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	589	147	715	588	611	710	8.4	2.7	20.552	C
2	706	177	514	704	706	789	2.3	1.5	7.953	A
3	758	189	596	763	764	623	3.5	1.6	8.511	A
4	490	122	935	491	494	424	2.2	1.2	9.168	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	503	126	596	503	498	587	2.7	1.3	10.325	B
2	595	149	432	594	587	667	1.5	1.1	6.459	A
3	637	159	499	635	633	527	1.6	1.2	6.053	A
4	401	100	781	401	408	353	1.2	0.8	6.861	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	367	714	0.514	365	366	0.0	1.1	10.487	B
			2	1, 4	126	714	0.177	126	125	0.0	0.3	6.219	A
	Exit	1	1	(1, 2, 3, 4)	493			493	497	0.0	0.0	0.030	A
			1		586			586	585	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	287	862	0.333	290	292	0.0	0.5	6.501	A
			2	1, 2	285	862	0.331	285	282	0.0	0.5	6.379	A
	Exit	1	1	(1, 2, 3, 4)	572			572	578	0.0	0.0	0.000	A
			1		661			661	653	0.0	0.0	0.000	A
3	Entry	1	1	4	150	1052	0.143	150	151	0.0	0.2	4.413	A
			2	1, 2, 3	484	1052	0.460	484	484	0.0	0.9	6.763	A
	Exit	1	1	(1, 2, 3, 4)	635			635	639	0.0	0.0	0.016	A
			1		512			512	518	0.0	0.0	0.000	A
4	Entry	1	1	1	105	818	0.129	105	104	0.0	0.2	5.271	A
			2	2, 3, 4	306	818	0.374	307	305	0.0	0.6	7.252	A
	Exit	1	1	(1, 2, 3, 4)	412			412	412	0.0	0.0	0.003	A
			1		352			352	353	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	432	669	0.646	430	433	1.1	1.9	14.801	B
			2	1, 4	147	669	0.220	148	146	0.3	0.2	7.168	A
	Exit	1	1	(1, 2, 3, 4)	581			580	582	0.0	0.1	0.542	A
			1		708			708	703	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	354	826	0.429	353	348	0.5	0.9	7.470	A
			2	1, 2	346	826	0.418	345	343	0.5	0.6	7.254	A
	Exit	1	1	(1, 2, 3, 4)	700			700	694	0.0	0.0	0.016	A
			1		783			783	774	0.0	0.0	0.000	A
3	Entry	1	1	4	178	1011	0.176	178	180	0.2	0.3	4.508	A
			2	1, 2, 3	584	1011	0.578	586	575	0.9	1.3	8.336	A
	Exit	1	1	(1, 2, 3, 4)	762			762	757	0.0	0.0	0.145	A
			1		636			636	625	0.0	0.0	0.000	A
4	Entry	1	1	1	120	756	0.158	121	123	0.2	0.2	5.985	A
			2	2, 3, 4	383	756	0.506	382	368	0.6	1.1	9.116	A
	Exit	1	1	(1, 2, 3, 4)	503			503	493	0.0	0.0	0.072	A
			1		415			415	415	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	532	621	0.857	531	524	1.9	4.5	26.045	D
			2	1, 4	185	621	0.298	185	181	0.2	0.4	8.739	A
	Exit	1	1	(1, 2, 3, 4)	720			717	716	0.1	2.1	7.181	A
			1		873			873	860	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	429	787	0.545	430	431	0.9	1.1	10.109	B
			2	1, 2	425	787	0.540	425	423	0.6	1.4	10.078	B
	Exit	1	1	(1, 2, 3, 4)	854			854	858	0.0	0.0	0.181	A
			1		955			955	944	0.0	0.0	0.000	A
3	Entry	1	1	4	222	950	0.234	222	223	0.3	0.4	5.357	A
			2	1, 2, 3	711	950	0.749	707	700	1.3	3.0	13.054	B
	Exit	1	1	(1, 2, 3, 4)	933			933	930	0.0	0.3	1.379	A
			1		757			757	754	0.0	0.0	0.000	A
4	Entry	1	1	1	156	679	0.230	157	151	0.2	0.3	6.986	A
			2	2, 3, 4	444	679	0.654	447	441	1.1	1.9	15.468	C
	Exit	1	1	(1, 2, 3, 4)	600			600	595	0.0	0.1	0.849	A
			1		520			520	517	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	544	624	0.872	543	533	4.5	5.0	31.051	D
			2	1, 4	178	624	0.285	177	182	0.4	0.5	9.056	A
	Exit	1	1	(1, 2, 3, 4)	723			722	717	2.1	3.0	15.017	C
			1		865			865	873	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	434	786	0.553	437	432	1.1	1.2	9.841	A
			2	1, 2	425	786	0.541	427	431	1.4	1.1	10.301	B
	Exit	1	1	(1, 2, 3, 4)	859			859	863	0.0	0.0	0.085	A
			1		946			946	949	0.0	0.0	0.000	A
3	Entry	1	1	4	223	952	0.234	223	225	0.4	0.3	5.633	A
			2	1, 2, 3	703	952	0.739	706	710	3.0	2.7	14.093	B
	Exit	1	1	(1, 2, 3, 4)	925			926	933	0.3	0.4	1.772	A
			1		775			775	767	0.0	0.0	0.000	A
4	Entry	1	1	1	149	679	0.219	149	153	0.3	0.3	7.486	A
			2	2, 3, 4	437	679	0.644	437	442	1.9	1.8	15.133	C
	Exit	1	1	(1, 2, 3, 4)	586			586	594	0.1	0.1	0.680	A
			1		513			513	518	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	440	673	0.654	437	459	5.0	2.2	20.009	C
			2	1, 4	150	673	0.223	151	152	0.5	0.3	7.781	A
	Exit	1	1	(1, 2, 3, 4)	589			590	599	3.0	0.2	4.044	A
			1		710			710	716	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	354	829	0.427	352	354	1.2	0.8	8.246	A
			2	1, 2	352	829	0.425	352	352	1.1	0.7	7.610	A
	Exit	1	1	(1, 2, 3, 4)	706			706	703	0.0	0.0	0.023	A
			1		789			789	802	0.0	0.0	0.000	A
3	Entry	1	1	4	182	1005	0.181	182	180	0.3	0.3	4.765	A
			2	1, 2, 3	576	1005	0.573	581	584	2.7	1.3	9.243	A
	Exit	1	1	(1, 2, 3, 4)	758			758	759	0.4	0.0	0.345	A
			1		623			623	634	0.0	0.0	0.000	A
4	Entry	1	1	1	122	755	0.161	122	125	0.3	0.2	6.080	A
			2	2, 3, 4	368	755	0.487	369	369	1.8	0.9	10.066	B
	Exit	1	1	(1, 2, 3, 4)	490			490	491	0.1	0.0	0.127	A
			1		424			424	424	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	377	714	0.528	378	374	2.2	1.0	11.500	B
			2	1, 4	125	714	0.175	125	124	0.3	0.3	6.332	A
	Exit	1	1	(1, 2, 3, 4)	503			502	493	0.2	0.1	0.180	A
			1		587			587	591	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	299	859	0.348	299	295	0.8	0.4	6.278	A
			2	1, 2	296	859	0.345	294	292	0.7	0.7	6.640	A
	Exit	1	1	(1, 2, 3, 4)	595			595	586	0.0	0.0	0.001	A
			1		667			667	661	0.0	0.0	0.000	A
3	Entry	1	1	4	149	1047	0.142	149	149	0.3	0.2	4.247	A
			2	1, 2, 3	488	1047	0.467	487	484	1.3	0.9	6.555	A
	Exit	1	1	(1, 2, 3, 4)	637			637	631	0.0	0.0	0.026	A
			1		527			527	526	0.0	0.0	0.000	A
4	Entry	1	1	1	101	814	0.124	101	104	0.2	0.2	5.237	A
			2	2, 3, 4	301	814	0.369	300	305	0.9	0.7	7.405	A
	Exit	1	1	(1, 2, 3, 4)	401			401	407	0.0	0.0	0.003	A
			1		353			353	350	0.0	0.0	0.000	A

2027, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	44.32	E

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	2027	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	697	100.000
2		ONE HOUR	✓	575	100.000
3		ONE HOUR	✓	743	100.000
4		ONE HOUR	✓	662	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1	2	3	4
From	1	1	207	394	95
	2	298	8	156	113
	3	325	260	0	158
	4	158	138	366	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	4
From	1	0	0	1
	2	0	0	0
	3	2	0	0
	4	0	0	2

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	137.41	32.8	F	640	961
2	9.73	1.9	A	529	793
3	8.19	2.0	A	678	1017
4	16.59	3.5	C	607	911

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	527	132	586	524	520	587	0.0	2.1	12.396	B
2	434	108	647	435	430	463	0.0	0.7	6.534	A
3	557	139	382	556	554	700	0.0	0.9	5.126	A
4	502	126	667	505	498	271	0.0	0.7	7.146	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	633	158	690	630	625	707	2.1	4.2	21.534	C
2	526	132	770	525	514	550	0.7	1.2	7.440	A
3	661	165	465	666	667	830	0.9	0.9	6.020	A
4	598	149	802	595	594	329	0.7	1.5	9.091	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	771	193	847	709	699	845	4.2	20.0	66.522	F
2	625	156	907	623	626	648	1.2	1.8	9.680	A
3	800	200	558	802	809	972	0.9	1.8	8.189	A
4	735	184	959	733	719	401	1.5	3.5	15.758	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	749	187	840	701	708	860	20.0	32.8	137.412	F
2	643	161	887	640	634	654	1.8	1.9	9.731	A
3	829	207	557	827	819	970	1.8	2.0	8.027	A
4	723	181	981	719	721	403	3.5	3.4	16.594	C

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	637	159	702	691	715	701	32.8	12.7	104.648	F
2	511	128	819	512	522	574	1.9	1.1	8.328	A
3	673	168	473	671	673	858	2.0	1.4	6.463	A
4	587	147	811	592	607	333	3.4	1.2	10.755	B

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	525	131	579	532	566	581	12.7	2.0	27.042	D
2	431	108	650	432	433	461	1.1	0.8	6.642	A
3	547	137	382	548	557	700	1.4	0.8	5.250	A
4	499	125	660	500	502	270	1.2	1.0	6.986	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment
17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	459	718	0.639	457	449	0.0	1.8	12.978	B
			2	1, 4	67	718	0.093	67	71	0.0	0.1	5.726	A
	Exit	1	1	(1, 2, 3, 4)	527			526	528	0.0	0.1	0.372	A
			1		587			587	584	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	205	779	0.263	205	202	0.0	0.4	6.321	A
			2	1, 2	229	779	0.294	230	228	0.0	0.4	6.722	A
	Exit	1	1	(1, 2, 3, 4)	434			434	433	0.0	0.0	0.000	A
			1		463			463	459	0.0	0.0	0.000	A
3	Entry	1	1	4	120	1098	0.109	120	120	0.0	0.1	3.710	A
			2	1, 2, 3	438	1098	0.399	436	434	0.0	0.8	5.500	A
	Exit	1	1	(1, 2, 3, 4)	557			557	557	0.0	0.0	0.006	A
			1		700			700	685	0.0	0.0	0.000	A
4	Entry	1	1	1	122	858	0.142	121	120	0.0	0.1	4.790	A
			2	2, 3, 4	380	858	0.443	384	378	0.0	0.6	7.877	A
	Exit	1	1	(1, 2, 3, 4)	502			502	501	0.0	0.0	0.023	A
			1		271			271	275	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	549	681	0.805	546	536	1.8	3.4	20.340	C
			2	1, 4	84	681	0.123	84	88	0.1	0.2	6.223	A
	Exit	1	1	(1, 2, 3, 4)	633			633	631	0.1	0.7	3.086	A
			1		707			707	700	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	246	734	0.335	245	239	0.4	0.5	7.131	A
			2	1, 2	280	734	0.382	280	275	0.4	0.7	7.708	A
	Exit	1	1	(1, 2, 3, 4)	526			526	515	0.0	0.0	0.000	A
			1		550			550	550	0.0	0.0	0.000	A
3	Entry	1	1	4	143	1062	0.135	145	144	0.1	0.1	4.018	A
			2	1, 2, 3	518	1062	0.488	521	523	0.8	0.8	6.548	A
	Exit	1	1	(1, 2, 3, 4)	661			661	667	0.0	0.0	0.009	A
			1		830			830	817	0.0	0.0	0.000	A
4	Entry	1	1	1	143	806	0.178	142	141	0.1	0.2	5.333	A
			2	2, 3, 4	455	806	0.564	453	453	0.6	1.2	10.161	B
	Exit	1	1	(1, 2, 3, 4)	598			598	597	0.0	0.0	0.086	A
			1		329			329	332	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	615	627	0.980	608	600	3.4	7.1	35.488	E
			2	1, 4	100	627	0.160	100	99	0.2	0.2	7.448	A
	Exit	1	1	(1, 2, 3, 4)	771			715	715	0.7	12.7	34.281	D
			1		845			845	850	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	297	683	0.436	295	294	0.5	0.9	9.149	A
			2	1, 2	327	683	0.479	328	333	0.7	0.9	10.140	B
	Exit	1	1	(1, 2, 3, 4)	625			625	629	0.0	0.0	0.003	A
			1		648			648	645	0.0	0.0	0.000	A
3	Entry	1	1	4	172	1021	0.168	171	174	0.1	0.2	4.334	A
			2	1, 2, 3	630	1021	0.617	630	635	0.8	1.6	8.942	A
	Exit	1	1	(1, 2, 3, 4)	800			802	813	0.0	0.0	0.223	A
			1		972			972	961	0.0	0.0	0.000	A
4	Entry	1	1	1	172	746	0.230	173	173	0.2	0.3	6.319	A
			2	2, 3, 4	561	746	0.752	560	546	1.2	2.7	16.713	C
	Exit	1	1	(1, 2, 3, 4)	735			732	725	0.0	0.5	1.513	A
			1		401			401	398	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	606	629	0.963	607	611	7.1	7.5	43.051	E
			2	1, 4	94	629	0.150	94	98	0.2	0.2	7.387	A
	Exit	1	1	(1, 2, 3, 4)	749			700	710	12.7	25.1	99.306	F
			1		860			860	857	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	301	690	0.437	302	299	0.9	0.8	9.306	A
			2	1, 2	342	690	0.496	338	335	0.9	1.1	10.048	B
	Exit	1	1	(1, 2, 3, 4)	643			643	634	0.0	0.0	0.034	A
			1		654			654	655	0.0	0.0	0.000	A
3	Entry	1	1	4	184	1022	0.180	185	177	0.2	0.2	4.470	A
			2	1, 2, 3	645	1022	0.631	642	642	1.6	1.8	8.861	A
	Exit	1	1	(1, 2, 3, 4)	829			829	819	0.0	0.0	0.097	A
			1		970			970	970	0.0	0.0	0.000	A
4	Entry	1	1	1	177	737	0.240	177	175	0.3	0.3	6.498	A
			2	2, 3, 4	547	737	0.742	542	546	2.7	2.8	17.385	C
	Exit	1	1	(1, 2, 3, 4)	723			724	722	0.5	0.3	1.894	A
			1		403			403	399	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	590	677	0.871	595	617	7.5	5.0	35.582	E
			2	1, 4	97	677	0.144	96	98	0.2	0.2	7.062	A
	Exit	1	1	(1, 2, 3, 4)	637			687	705	25.1	7.4	73.919	F
			1		701			701	711	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	238	715	0.332	238	243	0.8	0.4	8.040	A
			2	1, 2	274	715	0.383	274	279	1.1	0.6	8.580	A
	Exit	1	1	(1, 2, 3, 4)	511			512	519	0.0	0.0	0.000	A
			1		574			574	583	0.0	0.0	0.000	A
3	Entry	1	1	4	134	1058	0.127	134	140	0.2	0.2	4.083	A
			2	1, 2, 3	538	1058	0.509	536	533	1.8	1.2	7.027	A
	Exit	1	1	(1, 2, 3, 4)	673			672	671	0.0	0.0	0.041	A
			1		858			858	884	0.0	0.0	0.000	A
4	Entry	1	1	1	139	803	0.173	140	143	0.3	0.1	5.542	A
			2	2, 3, 4	449	803	0.559	452	464	2.8	1.1	11.963	B
	Exit	1	1	(1, 2, 3, 4)	587			588	600	0.3	0.0	0.370	A
			1		333			333	339	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	458	720	0.637	461	491	5.0	1.7	18.968	C
			2	1, 4	71	720	0.099	70	75	0.2	0.2	5.742	A
	Exit	1	1	(1, 2, 3, 4)	525			530	552	7.4	0.2	11.000	B
			1		581			581	594	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	205	778	0.263	206	203	0.4	0.3	6.404	A
			2	1, 2	227	778	0.291	227	231	0.6	0.4	6.852	A
	Exit	1	1	(1, 2, 3, 4)	431			431	432	0.0	0.0	0.000	A
			1		461			461	474	0.0	0.0	0.000	A
3	Entry	1	1	4	114	1098	0.104	115	117	0.2	0.1	3.847	A
			2	1, 2, 3	433	1098	0.394	433	439	1.2	0.7	5.615	A
	Exit	1	1	(1, 2, 3, 4)	547			547	554	0.0	0.0	0.006	A
			1		700			700	714	0.0	0.0	0.000	A
4	Entry	1	1	1	116	860	0.135	117	121	0.1	0.1	4.814	A
			2	2, 3, 4	383	860	0.445	383	381	1.1	0.9	7.686	A
	Exit	1	1	(1, 2, 3, 4)	499			499	501	0.0	0.0	0.003	A
			1		270			270	276	0.0	0.0	0.000	A

2027 + com, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	Arm 1 - Lane Simulation	Arm 1: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	400.40	F

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
D9	2027 + com	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	980	100.000
2		ONE HOUR	✓	1002	100.000
3		ONE HOUR	✓	1117	100.000
4		ONE HOUR	✓	736	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	272	543	164	
	2	375	9	516	102
	3	349	439	0	329
	4	138	217	381	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
	1	11	2	3	3
	2	1	0	0	0
	3	4	1	0	4
	4	3	0	2	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1348.45	318.2	F	896	1344
2	83.10	26.3	F	915	1373
3	28.15	9.4	D	1028	1543
4	140.16	35.1	F	678	1017

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	717	179	787	696	684	644	0.0	11.6	42.383	E
2	749	187	784	750	741	698	0.0	2.4	11.498	B
3	840	210	474	843	837	1060	0.0	1.6	7.036	A
4	550	138	880	551	552	437	0.0	1.8	10.446	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	875	219	937	725	722	765	11.6	51.2	165.655	F
2	890	222	865	891	884	797	2.4	4.7	18.043	C
3	1008	252	553	1012	1004	1203	1.6	2.8	10.107	B
4	661	165	1051	651	653	514	1.8	4.2	17.888	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1088	272	1089	642	660	940	51.2	156.0	575.125	F
2	1115	279	835	1084	1052	896	4.7	18.5	45.915	E
3	1237	309	638	1229	1213	1282	2.8	8.8	20.178	C
4	817	204	1292	737	740	575	4.2	22.5	67.071	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1084	271	1112	648	646	944	156.0	264.7	1149.842	F
2	1089	272	861	1095	1069	899	18.5	26.3	83.104	F
3	1236	309	642	1249	1228	1314	8.8	9.4	28.153	D
4	809	202	1306	750	762	585	22.5	35.1	140.161	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	878	220	1018	676	667	804	264.7	318.2	1348.449	F
2	893	223	877	929	968	817	26.3	8.6	53.191	F
3	1010	253	559	1013	1031	1247	9.4	3.0	13.460	B
4	661	165	1069	753	758	503	35.1	12.1	108.742	F

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	735	184	799	782	749	660	318.2	315.3	891.419	F
2	754	189	857	757	782	724	8.6	2.8	17.369	C
3	840	210	498	842	851	1116	3.0	1.6	7.741	A
4	569	142	887	572	602	453	12.1	1.7	21.629	C

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	583	648	0.900	581	564	0.0	5.6	29.542	D
			2	1, 4	114	648	0.176	115	120	0.0	0.2	7.407	A
	Exit	1	1	(1, 2, 3, 4)	717			697	707	0.0	5.8	16.092	C
			1		644			644	641	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	462	728	0.635	465	453	0.0	1.6	12.974	B
			2	1, 2	285	728	0.392	286	288	0.0	0.6	8.195	A
	Exit	1	1	(1, 2, 3, 4)	749			748	750	0.0	0.1	0.347	A
			1		698			698	688	0.0	0.0	0.000	A
3	Entry	1	1	4	249	1058	0.235	249	249	0.0	0.4	4.745	A
			2	1, 2, 3	591	1058	0.559	594	588	0.0	1.2	7.862	A
	Exit	1	1	(1, 2, 3, 4)	840			840	843	0.0	0.0	0.091	A
			1		1060			1060	1042	0.0	0.0	0.000	A
4	Entry	1	1	1	102	776	0.132	102	104	0.0	0.2	5.522	A
			2	2, 3, 4	448	776	0.577	448	448	0.0	1.6	11.325	B
	Exit	1	1	(1, 2, 3, 4)	550			550	559	0.0	0.0	0.183	A
			1		437			437	443	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	603	596	1.013	603	598	5.6	7.9	45.034	E
			2	1, 4	122	596	0.205	122	124	0.2	0.3	8.775	A
	Exit	1	1	(1, 2, 3, 4)	875			725	731	5.8	43.0	125.803	F
			1		765			765	767	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	556	698	0.796	555	544	1.6	3.2	19.020	C
			2	1, 2	336	698	0.480	336	340	0.6	0.9	10.358	B
	Exit	1	1	(1, 2, 3, 4)	890			891	891	0.1	0.6	2.275	A
			1		797			797	795	0.0	0.0	0.000	A
3	Entry	1	1	4	298	1024	0.291	298	295	0.4	0.5	5.220	A
			2	1, 2, 3	712	1024	0.695	714	709	1.2	2.1	11.248	B
	Exit	1	1	(1, 2, 3, 4)	1008			1010	1008	0.0	0.2	0.602	A
			1		1203			1203	1192	0.0	0.0	0.000	A
4	Entry	1	1	1	122	710	0.171	121	123	0.2	0.3	6.482	A
			2	2, 3, 4	538	710	0.758	530	530	1.6	3.2	17.571	C
	Exit	1	1	(1, 2, 3, 4)	661			660	660	0.0	0.7	2.290	A
			1		514			514	509	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	536	543	0.988	536	553	7.9	8.0	51.920	F
			2	1, 4	108	543	0.199	106	107	0.3	0.3	9.738	A
	Exit	1	1	(1, 2, 3, 4)	1088			644	661	43.0	147.7	529.227	F
			1		940			940	917	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	664	709	0.936	661	645	3.2	6.0	29.816	D
			2	1, 2	421	709	0.594	423	407	0.9	1.5	13.633	B
	Exit	1	1	(1, 2, 3, 4)	1115			1084	1065	0.6	11.0	21.965	C
			1		896			896	888	0.0	0.0	0.000	A
3	Entry	1	1	4	360	987	0.365	360	360	0.5	0.6	6.277	A
			2	1, 2, 3	867	987	0.879	869	852	2.1	4.6	17.215	C
	Exit	1	1	(1, 2, 3, 4)	1237			1227	1223	0.2	3.5	6.053	A
			1		1282			1282	1287	0.0	0.0	0.000	A
4	Entry	1	1	1	143	618	0.231	143	142	0.3	0.3	7.957	A
			2	2, 3, 4	600	618	0.972	595	598	3.2	7.1	35.534	E
	Exit	1	1	(1, 2, 3, 4)	817			743	756	0.7	15.1	35.989	E
			1		575			575	572	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	539	535	1.009	539	538	8.0	8.0	53.560	F
			2	1, 4	109	535	0.204	108	108	0.3	0.3	9.687	A
	Exit	1	1	(1, 2, 3, 4)	1084			648	646	147.7	256.4	1106.692	F
			1		944			944	928	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	672	700	0.961	670	658	6.0	6.3	34.523	D
			2	1, 2	426	700	0.609	424	411	1.5	1.9	14.973	B
	Exit	1	1	(1, 2, 3, 4)	1089			1099	1072	11.0	18.1	55.999	F
			1		899			899	891	0.0	0.0	0.000	A
3	Entry	1	1	4	367	985	0.373	367	366	0.6	0.7	6.436	A
			2	1, 2, 3	879	985	0.893	881	863	4.6	4.8	19.713	C
	Exit	1	1	(1, 2, 3, 4)	1236			1247	1229	3.5	4.0	12.339	B
			1		1314			1314	1306	0.0	0.0	0.000	A
4	Entry	1	1	1	140	613	0.228	139	144	0.3	0.4	8.790	A
			2	2, 3, 4	611	613	0.998	611	618	7.1	7.5	42.543	E
	Exit	1	1	(1, 2, 3, 4)	809			751	764	15.1	27.3	103.865	F
			1		585			585	580	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	561	567	0.989	562	554	8.0	8.0	51.871	F
			2	1, 4	114	567	0.202	114	114	0.3	0.3	9.552	A
	Exit	1	1	(1, 2, 3, 4)	878			676	667	256.4	309.9	1316.934	F
			1		804			804	821	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	573	694	0.826	578	600	6.3	3.7	28.448	D
			2	1, 2	349	694	0.503	351	368	1.9	1.1	13.050	B
	Exit	1	1	(1, 2, 3, 4)	893			922	954	18.1	3.8	31.128	D
			1		817			817	827	0.0	0.0	0.000	A
3	Entry	1	1	4	295	1021	0.289	296	298	0.7	0.5	5.660	A
			2	1, 2, 3	715	1021	0.701	716	732	4.8	2.2	13.129	B
	Exit	1	1	(1, 2, 3, 4)	1010			1011	1020	4.0	0.3	2.646	A
			1		1247			1247	1265	0.0	0.0	0.000	A
4	Entry	1	1	1	142	704	0.202	142	139	0.4	0.2	7.913	A
			2	2, 3, 4	598	704	0.850	611	619	7.5	4.6	35.832	E
	Exit	1	1	(1, 2, 3, 4)	661			740	746	27.3	7.2	79.188	F
			1		503			503	511	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	647	644	1.005	647	624	8.0	8.0	45.648	E
			2	1, 4	136	644	0.211	135	125	0.3	0.3	8.293	A
	Exit	1	1	(1, 2, 3, 4)	735			783	749	309.9	307.0	885.578	F
			1		660			660	675	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	467	701	0.666	468	482	3.7	1.8	16.512	C
			2	1, 2	290	701	0.414	289	300	1.1	0.7	9.484	A
	Exit	1	1	(1, 2, 3, 4)	754			757	772	3.8	0.3	3.901	A
			1		724			724	728	0.0	0.0	0.000	A
3	Entry	1	1	4	245	1047	0.234	245	248	0.5	0.4	4.704	A
			2	1, 2, 3	595	1047	0.568	597	603	2.2	1.3	8.635	A
	Exit	1	1	(1, 2, 3, 4)	840			840	846	0.3	0.0	0.263	A
			1		1116			1116	1130	0.0	0.0	0.000	A
4	Entry	1	1	1	111	773	0.144	111	113	0.2	0.2	5.991	A
			2	2, 3, 4	461	773	0.596	461	488	4.6	1.5	16.506	C
	Exit	1	1	(1, 2, 3, 4)	569			572	589	7.2	0.0	8.003	A
			1		453			453	450	0.0	0.0	0.000	A

2027 + com, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	Arm 1 - Lane Simulation	Arm 1: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	272.36	F

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
D10	2027 + com	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	783	100.000
2		ONE HOUR	✓	632	100.000
3		ONE HOUR	✓	1385	100.000
4		ONE HOUR	✓	765	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	1	207	480	95
	2	298	8	213	113
	3	593	422	0	370
	4	158	138	469	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
	1	0	0	1	1
	2	0	0	0	0
	3	1	0	0	1
	4	0	0	2	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	750.15	141.8	F	720	1079
2	11.21	2.6	B	580	869
3	148.34	70.5	F	1263	1895
4	221.45	53.8	F	703	1055

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	578	145	782	580	570	782	0.0	4.0	21.453	C
2	480	120	784	478	473	578	0.0	1.1	7.362	A
3	1026	257	388	1025	1029	874	0.0	2.7	9.146	A
4	575	144	984	580	571	429	0.0	1.6	11.434	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	705	176	925	663	652	937	4.0	17.5	65.501	F
2	571	143	899	568	566	689	1.1	1.4	8.770	A
3	1232	308	459	1238	1222	1008	2.7	6.5	17.549	C
4	678	169	1186	676	670	511	1.6	4.8	21.452	C

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	861	215	1017	644	651	1083	17.5	71.4	254.262	F
2	681	170	925	680	684	735	1.4	2.0	10.519	B
3	1520	380	531	1386	1376	1074	6.5	42.8	67.615	F
4	853	213	1348	751	747	569	4.8	28.6	82.674	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	873	218	1019	650	644	1080	71.4	128.2	563.846	F
2	701	175	928	698	692	742	2.0	2.6	11.214	B
3	1518	379	537	1405	1409	1088	42.8	70.5	148.339	F
4	843	211	1361	738	737	582	28.6	53.8	203.910	F

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	702	175	1010	647	650	1016	128.2	141.8	750.150	F
2	571	143	925	572	573	732	2.6	1.4	9.418	A
3	1241	310	453	1370	1385	1044	70.5	35.0	133.553	F
4	693	173	1286	741	749	537	53.8	39.1	221.450	F

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	598	149	875	684	663	823	141.8	124.4	608.755	F
2	474	119	909	479	474	650	1.4	0.9	8.148	A
3	1041	260	400	1083	1160	988	35.0	4.2	36.309	E
4	578	144	1030	668	710	452	39.1	8.3	98.396	F

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment
17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	510	650	0.785	511	499	0.0	3.4	20.476	C
			2	1, 4	70	650	0.108	70	71	0.0	0.1	6.501	A
	Exit	1	1	(1, 2, 3, 4)	578			580	584	0.0	0.5	2.613	A
			1		782			782	783	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	248	728	0.341	246	243	0.0	0.6	7.487	A
			2	1, 2	232	728	0.318	232	231	0.0	0.5	7.228	A
	Exit	1	1	(1, 2, 3, 4)	480			480	478	0.0	0.0	0.001	A
			1		578			578	572	0.0	0.0	0.000	A
3	Entry	1	1	4	274	1095	0.250	274	276	0.0	0.4	4.424	A
			2	1, 2, 3	751	1095	0.686	751	753	0.0	2.1	10.013	B
	Exit	1	1	(1, 2, 3, 4)	1026			1025	1039	0.0	0.2	0.608	A
			1		874			874	857	0.0	0.0	0.000	A
4	Entry	1	1	1	120	736	0.163	120	116	0.0	0.2	5.820	A
			2	2, 3, 4	455	736	0.618	460	455	0.0	1.4	12.577	B
	Exit	1	1	(1, 2, 3, 4)	575			575	577	0.0	0.0	0.242	A
			1		429			429	431	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	583	600	0.972	580	570	3.4	6.7	36.148	E
			2	1, 4	83	600	0.139	83	82	0.1	0.2	7.529	A
	Exit	1	1	(1, 2, 3, 4)	705			666	666	0.5	10.5	32.248	D
			1		937			937	936	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	295	685	0.430	295	292	0.6	0.8	8.862	A
			2	1, 2	276	685	0.402	273	274	0.5	0.7	8.552	A
	Exit	1	1	(1, 2, 3, 4)	571			571	567	0.0	0.0	0.058	A
			1		689			689	673	0.0	0.0	0.000	A
3	Entry	1	1	4	326	1064	0.307	326	323	0.4	0.5	5.035	A
			2	1, 2, 3	908	1064	0.853	912	899	2.1	3.9	15.485	C
	Exit	1	1	(1, 2, 3, 4)	1232			1234	1230	0.2	2.1	4.757	A
			1		1008			1008	996	0.0	0.0	0.000	A
4	Entry	1	1	1	142	659	0.215	141	141	0.2	0.3	6.758	A
			2	2, 3, 4	536	659	0.813	535	529	1.4	3.5	21.139	C
	Exit	1	1	(1, 2, 3, 4)	678			677	679	0.0	0.9	3.221	A
			1		511			511	506	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	562	568	0.990	562	569	6.7	8.0	49.252	E
			2	1, 4	80	568	0.141	81	81	0.2	0.2	8.035	A
	Exit	1	1	(1, 2, 3, 4)	861			642	655	10.5	63.3	209.445	F
			1		1083			1083	1070	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	354	676	0.524	353	352	0.8	1.2	10.846	B
			2	1, 2	327	676	0.483	327	331	0.7	0.8	10.062	B
	Exit	1	1	(1, 2, 3, 4)	681			681	686	0.0	0.0	0.052	A
			1		735			735	734	0.0	0.0	0.000	A
3	Entry	1	1	4	366	1033	0.355	366	373	0.5	0.7	6.292	A
			2	1, 2, 3	1022	1033	0.989	1020	1002	3.9	7.6	24.618	C
	Exit	1	1	(1, 2, 3, 4)	1520			1388	1391	2.1	34.6	47.740	E
			1		1074			1074	1075	0.0	0.0	0.000	A
4	Entry	1	1	1	164	596	0.274	164	161	0.3	0.4	8.846	A
			2	2, 3, 4	591	596	0.991	587	586	3.5	7.5	38.597	E
	Exit	1	1	(1, 2, 3, 4)	853			755	763	0.9	20.6	49.720	E
			1		569			569	577	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	571	567	1.008	572	567	8.0	8.0	50.451	F
			2	1, 4	77	567	0.136	78	76	0.2	0.2	8.075	A
	Exit	1	1	(1, 2, 3, 4)	873			649	644	63.3	120.1	518.674	F
			1		1080			1080	1083	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	367	675	0.544	364	357	1.2	1.3	11.553	B
			2	1, 2	333	675	0.493	334	335	0.8	1.1	10.618	B
	Exit	1	1	(1, 2, 3, 4)	701			700	694	0.0	0.1	0.101	A
			1		742			742	740	0.0	0.0	0.000	A
3	Entry	1	1	4	376	1030	0.365	379	379	0.7	0.6	6.438	A
			2	1, 2, 3	1026	1030	0.996	1026	1030	7.6	7.8	26.720	D
	Exit	1	1	(1, 2, 3, 4)	1518			1402	1409	34.6	62.1	127.003	F
			1		1088			1088	1081	0.0	0.0	0.000	A
4	Entry	1	1	1	152	592	0.257	151	150	0.4	0.4	9.449	A
			2	2, 3, 4	588	592	0.995	587	587	7.5	7.8	46.997	E
	Exit	1	1	(1, 2, 3, 4)	843			740	738	20.6	45.5	164.594	F
			1		582			582	578	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	571	570	1.002	571	571	8.0	8.0	50.496	F
			2	1, 4	77	570	0.135	76	79	0.2	0.3	7.910	A
	Exit	1	1	(1, 2, 3, 4)	702			648	650	120.1	133.5	707.190	F
			1		1016			1016	1020	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	298	676	0.441	300	296	1.3	0.7	9.617	A
			2	1, 2	273	676	0.403	272	277	1.1	0.7	9.186	A
	Exit	1	1	(1, 2, 3, 4)	571			571	569	0.1	0.0	0.029	A
			1		732			732	738	0.0	0.0	0.000	A
3	Entry	1	1	4	356	1067	0.334	357	366	0.6	0.7	6.152	A
			2	1, 2, 3	1002	1067	0.940	1013	1019	7.8	6.0	24.624	C
	Exit	1	1	(1, 2, 3, 4)	1241			1359	1378	62.1	28.3	114.158	F
			1		1044			1044	1050	0.0	0.0	0.000	A
4	Entry	1	1	1	152	620	0.245	153	154	0.4	0.4	8.903	A
			2	2, 3, 4	585	620	0.943	587	595	7.8	7.1	45.113	E
	Exit	1	1	(1, 2, 3, 4)	693			737	745	45.5	31.6	184.480	F
			1		537			537	547	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	601	617	0.974	602	581	8.0	8.0	49.250	E
			2	1, 4	82	617	0.132	82	82	0.3	0.2	7.880	A
	Exit	1	1	(1, 2, 3, 4)	598			683	662	133.5	116.3	576.271	F
			1		823			823	865	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	244	682	0.359	246	242	0.7	0.6	8.217	A
			2	1, 2	230	682	0.337	233	232	0.7	0.3	8.074	A
	Exit	1	1	(1, 2, 3, 4)	474			474	472	0.0	0.0	0.001	A
			1		650			650	672	0.0	0.0	0.000	A
3	Entry	1	1	4	288	1090	0.264	287	305	0.7	0.4	5.146	A
			2	1, 2, 3	791	1090	0.726	796	855	6.0	2.5	15.665	C
	Exit	1	1	(1, 2, 3, 4)	1041			1079	1144	28.3	1.3	24.139	C
			1		988			988	1001	0.0	0.0	0.000	A
4	Entry	1	1	1	135	719	0.188	136	144	0.4	0.2	7.406	A
			2	2, 3, 4	513	719	0.714	533	566	7.1	3.0	32.376	D
	Exit	1	1	(1, 2, 3, 4)	578			649	693	31.6	5.1	73.334	F
			1		452			452	468	0.0	0.0	0.000	A

2027 + com + development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	Arm 1 - Lane Simulation	Arm 1: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	418.59	F

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
D15	2027 + com + development	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	987	100.000
2		ONE HOUR	✓	1007	100.000
3		ONE HOUR	✓	1160	100.000
4		ONE HOUR	✓	740	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1	2	3	4
From	1	1	272	550	164
	2	375	9	521	102
	3	369	453	0	338
	4	138	217	385	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	4
From	1	0	2	3
	2	1	0	0
	3	4	1	0
	4	3	0	2

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1400.73	330.6	F	904	1356
2	85.84	28.5	F	924	1386
3	37.57	13.7	E	1062	1593
4	159.69	40.3	F	678	1017

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	753	188	806	726	697	662	0.0	13.0	45.827	E
2	755	189	819	750	748	714	0.0	3.0	11.746	B
3	877	219	482	876	868	1087	0.0	1.9	7.392	A
4	557	139	912	556	551	445	0.0	1.9	10.554	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	884	221	946	705	714	778	13.0	56.4	180.685	F
2	908	227	849	907	894	802	3.0	5.5	20.783	C
3	1037	259	551	1031	1033	1205	1.9	3.6	10.810	B
4	657	164	1070	654	654	513	1.9	4.0	18.079	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1090	273	1101	647	662	922	56.4	163.5	614.012	F
2	1125	281	856	1074	1053	893	5.5	20.4	50.504	F
3	1273	318	627	1244	1239	1303	3.6	11.4	25.015	D
4	819	205	1292	732	731	579	4.0	24.3	72.105	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1077	269	1107	637	637	946	163.5	275.8	1207.607	F
2	1104	276	845	1083	1073	899	20.4	28.5	85.838	F
3	1269	317	627	1262	1265	1301	11.4	13.7	37.573	E
4	814	204	1305	748	751	584	24.3	40.3	159.690	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	878	220	1026	672	664	814	275.8	330.0	1400.729	F
2	903	226	879	937	977	819	28.5	10.7	60.253	F
3	1048	262	562	1050	1087	1254	13.7	3.9	19.095	C
4	670	168	1099	741	751	513	40.3	18.6	133.202	F

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	742	185	813	768	738	668	330.0	330.6	898.915	F
2	751	188	851	760	791	729	10.7	3.2	20.166	C
3	869	217	499	871	882	1113	3.9	1.7	8.016	A
4	551	138	913	568	623	457	18.6	2.0	30.910	D

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	609	641	0.951	606	579	0.0	6.0	30.986	D
			2	1, 4	120	641	0.188	121	119	0.0	0.2	7.690	A
	Exit	1	1	(1, 2, 3, 4)	753			730	722	0.0	6.7	18.234	C
			1		662			662	660	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	467	715	0.653	464	462	0.0	2.0	13.177	B
			2	1, 2	284	715	0.398	285	287	0.0	0.7	8.118	A
	Exit	1	1	(1, 2, 3, 4)	755			751	759	0.0	0.3	0.452	A
			1		714			714	699	0.0	0.0	0.000	A
3	Entry	1	1	4	250	1055	0.237	250	250	0.0	0.3	4.809	A
			2	1, 2, 3	627	1055	0.594	625	618	0.0	1.5	8.310	A
	Exit	1	1	(1, 2, 3, 4)	877			877	875	0.0	0.0	0.077	A
			1		1087			1087	1062	0.0	0.0	0.000	A
4	Entry	1	1	1	98	764	0.128	98	102	0.0	0.2	5.513	A
			2	2, 3, 4	460	764	0.602	459	450	0.0	1.6	11.307	B
	Exit	1	1	(1, 2, 3, 4)	557			557	559	0.0	0.0	0.288	A
			1		445			445	444	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	588	592	0.992	586	592	6.0	8.0	45.590	E
			2	1, 4	118	592	0.199	118	123	0.2	0.2	8.668	A
	Exit	1	1	(1, 2, 3, 4)	884			705	722	6.7	48.2	140.366	F
			1		778			778	784	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	569	704	0.808	567	552	2.0	3.3	20.942	C
			2	1, 2	341	704	0.484	340	342	0.7	1.2	10.564	B
	Exit	1	1	(1, 2, 3, 4)	908			910	902	0.3	1.1	3.735	A
			1		802			802	801	0.0	0.0	0.000	A
3	Entry	1	1	4	303	1024	0.296	302	304	0.3	0.4	5.340	A
			2	1, 2, 3	732	1024	0.715	730	730	1.5	2.7	11.775	B
	Exit	1	1	(1, 2, 3, 4)	1037			1035	1039	0.0	0.4	0.884	A
			1		1205			1205	1196	0.0	0.0	0.000	A
4	Entry	1	1	1	121	703	0.173	121	123	0.2	0.3	6.448	A
			2	2, 3, 4	533	703	0.758	533	531	1.6	3.1	18.150	C
	Exit	1	1	(1, 2, 3, 4)	657			654	660	0.0	0.7	1.985	A
			1		513			513	516	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	540	538	1.003	540	552	8.0	8.0	52.260	F
			2	1, 4	109	538	0.202	108	110	0.2	0.4	9.626	A
	Exit	1	1	(1, 2, 3, 4)	1090			649	663	48.2	155.0	567.741	F
			1		922			922	920	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	669	702	0.954	666	650	3.3	6.1	30.476	D
			2	1, 2	410	702	0.584	408	403	1.2	1.6	13.681	B
	Exit	1	1	(1, 2, 3, 4)	1125			1079	1066	1.1	12.7	26.058	D
			1		893			893	888	0.0	0.0	0.000	A
3	Entry	1	1	4	359	991	0.362	361	365	0.4	0.6	6.320	A
			2	1, 2, 3	884	991	0.891	883	874	2.7	4.8	18.841	C
	Exit	1	1	(1, 2, 3, 4)	1273			1242	1248	0.4	6.0	9.645	A
			1		1303			1303	1297	0.0	0.0	0.000	A
4	Entry	1	1	1	136	618	0.220	135	138	0.3	0.4	8.022	A
			2	2, 3, 4	606	618	0.981	596	593	3.1	7.3	35.364	E
	Exit	1	1	(1, 2, 3, 4)	819			742	748	0.7	16.6	40.997	E
			1		579			579	581	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	531	537	0.989	531	531	8.0	8.0	54.140	F
			2	1, 4	107	537	0.199	106	106	0.4	0.3	9.968	A
	Exit	1	1	(1, 2, 3, 4)	1077			637	637	155.0	267.5	1164.322	F
			1		946			946	943	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	671	706	0.951	672	664	6.1	6.3	33.944	D
			2	1, 2	414	706	0.587	411	409	1.6	1.9	14.950	B
	Exit	1	1	(1, 2, 3, 4)	1104			1085	1075	12.7	20.3	59.007	F
			1		899			899	899	0.0	0.0	0.000	A
3	Entry	1	1	4	369	991	0.372	369	371	0.6	0.7	6.657	A
			2	1, 2, 3	895	991	0.903	893	894	4.8	5.2	20.814	C
	Exit	1	1	(1, 2, 3, 4)	1269			1264	1267	6.0	7.8	20.835	C
			1		1301			1301	1300	0.0	0.0	0.000	A
4	Entry	1	1	1	140	613	0.229	140	141	0.4	0.4	8.684	A
			2	2, 3, 4	607	613	0.989	608	611	7.3	7.5	43.883	E
	Exit	1	1	(1, 2, 3, 4)	814			747	752	16.6	32.4	122.167	F
			1		584			584	584	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	560	565	0.991	559	553	8.0	8.0	51.907	F
			2	1, 4	112	565	0.198	112	111	0.3	0.3	9.686	A
	Exit	1	1	(1, 2, 3, 4)	878			672	664	267.5	321.7	1369.983	F
			1		814			814	844	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	578	693	0.834	583	607	6.3	4.1	28.968	D
			2	1, 2	354	693	0.511	355	369	1.9	1.1	13.111	B
	Exit	1	1	(1, 2, 3, 4)	903			932	965	20.3	5.4	37.783	E
			1		819			819	840	0.0	0.0	0.000	A
3	Entry	1	1	4	307	1020	0.301	306	315	0.7	0.4	5.606	A
			2	1, 2, 3	742	1020	0.728	744	772	5.2	2.9	15.078	C
	Exit	1	1	(1, 2, 3, 4)	1048			1049	1077	7.8	0.6	7.036	A
			1		1254			1254	1270	0.0	0.0	0.000	A
4	Entry	1	1	1	137	692	0.198	138	139	0.4	0.3	8.181	A
			2	2, 3, 4	595	692	0.860	603	612	7.5	5.3	37.208	E
	Exit	1	1	(1, 2, 3, 4)	670			732	742	32.4	13.0	102.613	F
			1		513			513	525	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	636	639	0.996	636	614	8.0	8.0	46.433	E
			2	1, 4	132	639	0.206	132	125	0.3	0.3	8.566	A
	Exit	1	1	(1, 2, 3, 4)	742			768	738	321.7	322.3	897.675	F
			1		668			668	686	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	468	703	0.665	471	493	4.1	2.2	17.780	C
			2	1, 2	288	703	0.410	290	298	1.1	0.7	10.113	B
	Exit	1	1	(1, 2, 3, 4)	751			756	781	5.4	0.3	5.711	A
			1		729			729	738	0.0	0.0	0.000	A
3	Entry	1	1	4	248	1047	0.237	248	255	0.4	0.4	4.799	A
			2	1, 2, 3	621	1047	0.593	622	627	2.9	1.4	8.846	A
	Exit	1	1	(1, 2, 3, 4)	869			870	876	0.6	0.0	0.384	A
			1		1113			1113	1149	0.0	0.0	0.000	A
4	Entry	1	1	1	107	764	0.140	108	114	0.3	0.1	6.071	A
			2	2, 3, 4	456	764	0.597	460	509	5.3	1.7	19.139	C
	Exit	1	1	(1, 2, 3, 4)	551			563	608	13.0	0.2	15.757	C
			1		457			457	460	0.0	0.0	0.000	A

2027 + com + development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	Arm 1 - Lane Simulation	Arm 1: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Last Run	Lane Simulation	Arm 3 - Lane Simulation	Arm 3: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Last Run	Lane Simulation	Arm 4 - Lane Simulation	Arm 4: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	316.29	F

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
D16	2027 + com + development	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	801	100.000
2		ONE HOUR	✓	645	100.000
3		ONE HOUR	✓	1415	100.000
4		ONE HOUR	✓	773	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	207	498	95	
	2	298	8	226	113
	3	606	432	0	377
	4	158	138	477	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
	1	2	3	4	
	1	0	0	1	1
	2	0	0	0	0
	3	1	0	0	1
	4	0	0	2	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	814.15	155.3	F	729	1094
2	11.83	2.4	B	592	888
3	204.41	99.2	F	1303	1954
4	263.91	59.5	F	710	1065

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	590	148	805	589	582	813	0.0	5.3	25.923	D
2	480	120	793	482	486	601	0.0	1.0	7.421	A
3	1084	271	382	1087	1065	893	0.0	2.8	9.656	A
4	588	147	1033	586	574	437	0.0	2.3	11.963	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	723	181	942	651	654	948	5.3	22.1	78.921	F
2	577	144	904	577	577	688	1.0	1.4	8.930	A
3	1273	318	453	1253	1245	1028	2.8	8.9	20.128	C
4	697	174	1200	690	682	506	2.3	5.6	23.316	C

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	882	221	1023	660	652	1072	22.1	77.1	278.186	F
2	718	179	944	719	715	739	1.4	2.1	11.830	B
3	1570	393	549	1381	1380	1114	8.9	57.2	89.520	F
4	845	211	1357	738	739	573	5.6	33.4	99.833	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	878	219	1027	638	641	1081	77.1	135.8	605.347	F
2	712	178	937	711	714	728	2.1	2.4	11.739	B
3	1558	389	541	1379	1393	1107	57.2	99.2	203.635	F
4	859	215	1358	750	748	563	33.4	59.5	226.939	F

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	696	174	1034	642	638	1023	135.8	155.3	814.148	F
2	578	145	935	577	584	741	2.4	1.6	9.680	A
3	1267	317	451	1422	1432	1062	99.2	60.9	204.409	F
4	693	173	1313	744	744	560	59.5	48.1	263.909	F

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	607	152	907	673	659	860	155.3	143.0	696.293	F
2	485	121	924	486	486	655	1.6	1.0	8.445	A
3	1063	266	395	1165	1266	1015	60.9	11.0	74.942	F
4	579	145	1090	677	720	470	48.1	13.1	122.432	F

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment
17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	524	641	0.817	520	512	0.0	3.9	22.358	C
			2	1, 4	68	641	0.106	68	70	0.0	0.1	6.317	A
	Exit	1	1	(1, 2, 3, 4)	590			592	598	0.0	1.3	5.275	A
			1		813			813	803	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	250	725	0.345	251	254	0.0	0.5	7.611	A
			2	1, 2	230	725	0.318	231	232	0.0	0.4	7.207	A
	Exit	1	1	(1, 2, 3, 4)	480			480	490	0.0	0.0	0.003	A
			1		601			601	583	0.0	0.0	0.000	A
3	Entry	1	1	4	286	1098	0.260	287	285	0.0	0.3	4.529	A
			2	1, 2, 3	798	1098	0.727	800	780	0.0	2.2	10.591	B
	Exit	1	1	(1, 2, 3, 4)	1084			1084	1075	0.0	0.2	0.664	A
			1		893			893	883	0.0	0.0	0.000	A
4	Entry	1	1	1	118	717	0.164	118	118	0.0	0.2	5.825	A
			2	2, 3, 4	469	717	0.654	468	455	0.0	2.0	13.063	B
	Exit	1	1	(1, 2, 3, 4)	588			587	582	0.0	0.1	0.387	A
			1		437			437	438	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	580	594	0.977	576	575	3.9	7.2	38.788	E
			2	1, 4	75	594	0.127	75	78	0.1	0.2	7.382	A
	Exit	1	1	(1, 2, 3, 4)	723			656	667	1.3	14.8	43.012	E
			1		948			948	940	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	299	684	0.438	299	302	0.5	0.7	9.125	A
			2	1, 2	278	684	0.407	278	274	0.4	0.7	8.638	A
	Exit	1	1	(1, 2, 3, 4)	577			577	579	0.0	0.0	0.037	A
			1		688			688	676	0.0	0.0	0.000	A
3	Entry	1	1	4	334	1067	0.313	332	334	0.3	0.7	5.044	A
			2	1, 2, 3	925	1067	0.867	921	911	2.2	4.6	16.740	C
	Exit	1	1	(1, 2, 3, 4)	1273			1260	1256	0.2	3.6	6.409	A
			1		1028			1028	1031	0.0	0.0	0.000	A
4	Entry	1	1	1	141	653	0.216	141	140	0.2	0.3	7.056	A
			2	2, 3, 4	552	653	0.845	549	542	2.0	3.9	22.078	C
	Exit	1	1	(1, 2, 3, 4)	697			693	690	0.1	1.3	4.199	A
			1		506			506	510	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	579	566	1.023	579	573	7.2	8.0	49.638	E
			2	1, 4	81	566	0.144	82	78	0.2	0.2	7.963	A
	Exit	1	1	(1, 2, 3, 4)	882			660	655	14.8	68.9	233.310	F
			1		1072			1072	1071	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	378	669	0.565	380	377	0.7	1.0	12.358	B
			2	1, 2	340	669	0.508	339	338	0.7	1.1	10.858	B
	Exit	1	1	(1, 2, 3, 4)	718			718	718	0.0	0.0	0.181	A
			1		739			739	731	0.0	0.0	0.000	A
3	Entry	1	1	4	365	1025	0.356	364	369	0.7	0.7	6.305	A
			2	1, 2, 3	1018	1025	0.993	1017	1011	4.6	7.7	25.405	D
	Exit	1	1	(1, 2, 3, 4)	1570			1383	1392	3.6	48.9	68.967	F
			1		1114			1114	1110	0.0	0.0	0.000	A
4	Entry	1	1	1	157	593	0.265	154	155	0.3	0.5	9.232	A
			2	2, 3, 4	587	593	0.990	585	584	3.9	7.5	40.666	E
	Exit	1	1	(1, 2, 3, 4)	845			744	754	1.3	25.4	65.006	F
			1		573			573	574	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	563	564	0.998	563	564	8.0	8.0	50.918	F
			2	1, 4	75	564	0.133	75	77	0.2	0.2	8.124	A
	Exit	1	1	(1, 2, 3, 4)	878			639	642	68.9	127.5	559.192	F
			1		1081			1081	1091	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	369	671	0.550	370	372	1.0	1.2	12.035	B
			2	1, 2	342	671	0.510	341	342	1.1	1.1	11.242	B
	Exit	1	1	(1, 2, 3, 4)	712			712	715	0.0	0.1	0.075	A
			1		728			728	731	0.0	0.0	0.000	A
3	Entry	1	1	4	363	1029	0.353	363	368	0.7	0.7	6.508	A
			2	1, 2, 3	1017	1029	0.988	1016	1025	7.7	7.8	27.266	D
	Exit	1	1	(1, 2, 3, 4)	1558			1380	1394	48.9	90.7	181.966	F
			1		1107			1107	1106	0.0	0.0	0.000	A
4	Entry	1	1	1	155	593	0.261	154	157	0.5	0.5	9.811	A
			2	2, 3, 4	596	593	1.005	596	591	7.5	7.9	47.393	E
	Exit	1	1	(1, 2, 3, 4)	859			750	749	25.4	51.1	187.486	F
			1		563			563	569	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	565	562	1.006	565	561	8.0	8.0	51.221	F
			2	1, 4	78	562	0.138	77	77	0.2	0.2	8.167	A
	Exit	1	1	(1, 2, 3, 4)	696			643	638	127.5	147.1	771.850	F
			1		1023			1023	1033	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	307	672	0.456	305	306	1.2	0.9	9.918	A
			2	1, 2	272	672	0.405	272	278	1.1	0.7	9.411	A
	Exit	1	1	(1, 2, 3, 4)	578			578	581	0.1	0.0	0.014	A
			1		741			741	743	0.0	0.0	0.000	A
3	Entry	1	1	4	381	1068	0.357	382	383	0.7	0.6	6.220	A
			2	1, 2, 3	1034	1068	0.968	1040	1049	7.8	7.0	25.976	D
	Exit	1	1	(1, 2, 3, 4)	1267			1415	1429	90.7	53.3	183.799	F
			1		1062			1062	1061	0.0	0.0	0.000	A
4	Entry	1	1	1	151	610	0.247	153	151	0.5	0.4	9.853	A
			2	2, 3, 4	588	610	0.965	590	593	7.9	7.4	46.647	E
	Exit	1	1	(1, 2, 3, 4)	693			739	741	51.1	40.3	225.397	F
			1		560			560	561	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	589	606	0.972	589	579	8.0	8.0	49.414	E
			2	1, 4	84	606	0.138	83	80	0.2	0.2	7.920	A
	Exit	1	1	(1, 2, 3, 4)	607			673	659	147.1	134.9	666.967	F
			1		860			860	913	0.0	0.0	0.000	A
2	Entry	1	1	3, 4	257	676	0.380	257	256	0.9	0.5	8.795	A
			2	1, 2	228	676	0.338	228	230	0.7	0.5	8.050	A
	Exit	1	1	(1, 2, 3, 4)	485			485	483	0.0	0.0	0.002	A
			1		655			655	690	0.0	0.0	0.000	A
3	Entry	1	1	4	305	1092	0.279	304	334	0.6	0.5	5.603	A
			2	1, 2, 3	842	1092	0.771	861	932	7.0	2.9	19.148	C
	Exit	1	1	(1, 2, 3, 4)	1063			1146	1249	53.3	7.6	60.408	F
			1		1015			1015	1029	0.0	0.0	0.000	A
4	Entry	1	1	1	133	696	0.191	134	144	0.4	0.2	8.038	A
			2	2, 3, 4	531	696	0.763	543	576	7.4	4.1	35.498	E
	Exit	1	1	(1, 2, 3, 4)	579			664	706	40.3	8.8	94.717	F
			1		470			470	498	0.0	0.0	0.000	A

Appendix X



Junctions 9							
ARCADY 9 - Roundabout Module							
Version: 9.5.0.6896 © Copyright TRL Limited, 2018							
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk							
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution							

Filename: Modified Waycock Rd A4226 with lane simulation.j9

Path: Z:\Lime\Projects\2024\24063 Church Farm, St Athan\Analysis\November 2024 JCA\IP1 only

Report generation date: 15/08/2025 14:26:39

»2024, AM
»2024, PM
»2027, AM
»2027, PM
»2027 + com, AM
»2027 + com, PM
»2027 + com + development, AM
»2027 + com + development, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
[Lane Simulation] - 2024								
Arm 1	2.4	11.89		B	2.3	10.90		B
Arm 2	2.8	9.98		A	2.1	10.38		B
Arm 3	2.0	6.68		A	1.2	5.15		A
Arm 4	2.4	14.02		B	3.1	15.64		C
[Lane Simulation] - 2027								
Arm 1	2.8	12.65		B	2.5	11.15		B
Arm 2	2.7	10.49		B	2.0	10.19		B
Arm 3	1.9	7.15		A	1.4	5.25		A
Arm 4	2.5	14.61		B	4.4	20.58		C
[Lane Simulation] - 2027 + com								
Arm 1	34.3	101.88		F	5.0	18.65		C
Arm 2	81.2	273.33		F	2.7	13.08		B
Arm 3	3.0	8.25		A	4.7	10.17		B
Arm 4	29.4	117.17		F	74.3	291.53		F
[Lane Simulation] - 2027 + com + development								
Arm 1	38.5	113.30		F	5.5	20.72		C
Arm 2	84.6	304.00		F	2.9	14.13		B
Arm 3	3.4	8.93		A	4.7	10.45		B
Arm 4	37.0	144.92		F	87.2	356.78		F

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. Arm and junction delays are averages for all movements, including movements with zero delay.

File summary

File Description

Title	
Location	
Site number	
Date	13/12/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-U7G8RPA\Aimee
Description	

Units

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

Analysis Options

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

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	1.00	100000	100000	-1	3	1	60	✓			791305542	81	10.93

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	2024	AM	ONE HOUR	08:00	09:30	15	✓
D2	2024	PM	ONE HOUR	17:00	18:30	15	✓
D3	2027	AM	ONE HOUR	08:00	09:30	15	✓
D4	2027	PM	ONE HOUR	17:00	18:30	15	✓
D9	2027 + com	AM	ONE HOUR	08:00	09:30	15	✓
D10	2027 + com	PM	ONE HOUR	17:00	18:30	15	✓
D15	2027 + com + development	AM	ONE HOUR	08:00	09:30	15	✓
D16	2027 + com + development	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

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

2024, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	10.23	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A4226 east	
2	Pontypridd Road (south)	
3	A4226 west	
4	Waycock Road (north)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.64	6.68	20.2	49.6	38.1	18.6	
2	5.19	6.64	23.7	49.6	29.7	23.6	
3	3.88	8.70	50.3	49.6	18.1	9.0	
4	3.65	7.67	57.9	49.6	39.2	21.3	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.696	1843
2	0.744	2040
3	0.868	2527
4	0.767	2227

The slope and intercept shown above include any corrections and adjustments.

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
1	Evenly split	10.00
2	Evenly split	10.00
3	Evenly split	10.00
4	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1	Entry	1	1	2, 3	✓	8.00		0	99999	
			2	1, 3, 4	✓	8.00		0	99999	
	Exit	1	1	(1, 2, 3, 4)		Infinity				
			1			Infinity				
2	Entry	1	1	3, 4	✓	8.00		0	99999	
			2	1, 2	✓	8.00		0	99999	
	Exit	1	1	(1, 2, 3, 4)		Infinity				
			1			Infinity				
3	Entry	1	1	1, 4	✓	8.00		0	99999	
			2	1, 2, 3	✓	8.00		0	99999	
	Exit	1	1	(1, 2, 3, 4)		Infinity				
			1			Infinity				
4	Entry	1	1	1	✓	8.00		0	99999	
			2	2, 3, 4	✓	8.00		0	99999	
	Exit	1	1	(1, 2, 3, 4)		Infinity				
			1			Infinity				

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1	Entry	1	1	0.348	922
			2	0.348	922
2	Entry	1	1	0.372	1020
			2	0.372	1020
3	Entry	1	1	0.434	1264
			2	0.434	1264
4	Entry	1	1	0.384	1114
			2	0.384	1114

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			1	2	3	4
1	1	1		✓	✓	
		2	✓		✓	✓
	2	1	✓	✓	✓	✓
2	1	1			✓	✓
		2	✓	✓		
	2	1	✓	✓	✓	✓
3	1	1	✓			✓
		2	✓	✓	✓	
	2	1	✓	✓	✓	✓
4	1	1	✓			
		2		✓	✓	✓
	2	1	✓	✓	✓	✓

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	2024	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	639	100.000
2		ONE HOUR	✓	755	100.000
3		ONE HOUR	✓	825	100.000
4		ONE HOUR	✓	532	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1	2	3	4
From	1	1	266	212	160
	2	366	9	280	100
	3	265	364	0	196
	4	135	212	185	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	2	8	3
	2	1	0	1	0
	3	5	1	0	7
	4	3	0	4	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	11.89	2.4	B	589	884
2	9.98	2.8	A	700	1050
3	6.68	2.0	A	760	1140
4	14.02	2.4	B	497	746

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	10.38	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2024	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	681	100.000
2		ONE HOUR	✓	561	100.000
3		ONE HOUR	✓	725	100.000
4		ONE HOUR	✓	646	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1	2	3	4
From	1	1	202	385	93
	2	291	8	152	110
	3	317	254	0	154
	4	154	135	357	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
	1	0	0	1	1
	2	0	0	0	3
	3	2	0	0	3
From	4	0	0	2	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	10.90	2.3	B	626	939
2	10.38	2.1	B	519	778
3	5.15	1.2	A	659	989
4	15.64	3.1	C	593	890

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment
17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

2027, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	10.79	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2027	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	654	100.000
2		ONE HOUR	✓	773	100.000
3		ONE HOUR	✓	845	100.000
4		ONE HOUR	✓	544	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	272	217	164	
	2	375	9	287	102
	3	271	373	0	201
	4	138	217	189	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
	1	0	2	8	3
	2	1	0	1	0
	3	5	1	0	7
From	4	3	0	4	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	12.65	2.8	B	605	908
2	10.49	2.7	B	710	1066
3	7.15	1.9	A	777	1166
4	14.61	2.5	B	502	753

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

2027, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	11.65	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2027	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	697	100.000
2		ONE HOUR	✓	575	100.000
3		ONE HOUR	✓	743	100.000
4		ONE HOUR	✓	662	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1	2	3	4
From	1	1	207	394	95
	2	298	8	156	113
	3	325	260	0	158
	4	158	138	366	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1	2	3	4
	1	0	0	1	1
	2	0	0	0	0
	3	2	0	0	3
	4	0	0	2	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	11.15	2.5	B	642	962
2	10.19	2.0	B	525	788
3	5.25	1.4	A	676	1014
4	20.58	4.4	C	607	911

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment
17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

2027 + com, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	122.15	F

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
D9	2027 + com	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	980	100.000
2		ONE HOUR	✓	1002	100.000
3		ONE HOUR	✓	1117	100.000
4		ONE HOUR	✓	736	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1	2	3	4
From	1	1	272	543	164
	2	375	9	516	102
	3	349	439	0	329
	4	138	217	381	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
	1	11	2	3	3
	2	1	0	0	0
	3	4	1	0	4
	4	3	0	2	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	101.88	34.3	F	902	1354
2	273.33	81.2	F	916	1374
3	8.25	3.0	A	1026	1539
4	117.17	29.4	F	674	1010

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

2027 + com, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	73.13	F

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
D10	2027 + com	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	783	100.000
2		ONE HOUR	✓	632	100.000
3		ONE HOUR	✓	1385	100.000
4		ONE HOUR	✓	765	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1	2	3	4
From	1	1	207	480	95
	2	298	8	213	113
	3	593	422	0	370
	4	158	138	469	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
	1	0	0	1	1
	2	0	0	0	0
	3	1	0	0	1
From	4	0	0	2	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	18.65	5.0	C	717	1075
2	13.08	2.7	B	575	862
3	10.17	4.7	B	1274	1911
4	291.53	74.3	F	704	1056

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment
17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

2027 + com + development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	137.27	F

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
D15	2027 + com + development	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	987	100.000
2		ONE HOUR	✓	1007	100.000
3		ONE HOUR	✓	1160	100.000
4		ONE HOUR	✓	740	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1	2	3	4
From	1	1	272	550	164
	2	375	9	521	102
	3	369	453	0	338
	4	138	217	385	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	2	3	3
	2	1	0	0	0
	3	4	1	0	4
	4	3	0	2	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	113.30	38.5	F	906	1359
2	304.00	84.6	F	919	1379
3	8.93	3.4	A	1066	1599
4	144.92	37.0	F	686	1028

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

2027 + com + development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	87.23	F

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
D16	2027 + com + development	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	801	100.000
2		ONE HOUR	✓	645	100.000
3		ONE HOUR	✓	1415	100.000
4		ONE HOUR	✓	773	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1	2	3	4
From	1	1	207	498	95
	2	298	8	226	113
	3	606	432	0	377
	4	158	138	477	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	0	1	1
	2	0	0	0	0
	3	1	0	0	1
	4	0	0	2	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	20.72	5.5	C	734	1101
2	14.13	2.9	B	590	885
3	10.45	4.7	B	1297	1945
4	356.78	87.2	F	711	1066

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	0	0	0	0	0	0	0.0	0.0	0.000	
2	0	0	0	0	0	0	0.0	0.0	0.000	
3	0	0	0	0	0	0	0.0	0.0	0.000	
4	0	0	0	0	0	0	0.0	0.0	0.000	

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment
17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
2	Entry	1	1	3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
3	Entry	1	1	1, 4	0	0	0.000	0	0	0.0	0.0	0.000	
			2	1, 2, 3	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	
4	Entry	1	1	1	0	0	0.000	0	0	0.0	0.0	0.000	
			2	2, 3, 4	0	0	0.000	0	0	0.0	0.0	0.000	
	Exit	1	1	(1, 2, 3, 4)	0			0	0	0.0	0.0	0.000	
			1		0			0	0	0.0	0.0	0.000	

Appendix Y



Junctions 9				
PICADY 9 - Priority Intersection Module				
Version: 9.5.0.6896 © Copyright TRL Limited, 2018				
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk				
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution				

Filename: Site access-Gileston Road.j9

Path: Z:\Lime\Projects\2024\24063 Church Farm, St Athan\Analysis\November 2024 JCA\P1 only

Report generation date: 15/08/2025 10:47:13

»2027 + com + development, AM

»2027 + com + development, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2027 + com + development								
Stream B-AC	0.4	9.93	0.27	A	0.5	12.17	0.34	B
Stream C-B	0.1	6.60	0.07	A	0.2	7.37	0.16	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	
Location	
Site number	
Date	05/12/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-U7G8RPAIMegan
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2027 + com + development	AM	ONE HOUR	08:00	09:30	15
D2	2027 + com + development	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2027 + com + development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site access (Gileston Road)	T-Junction	Two-way		2.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Gileston Rd north		Major
B	Site access		Minor
C	Gileston Rd north		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.06		✓	2.90	80.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.00	43	43

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	513	0.089	0.225	0.142	0.322
1	B-C	651	0.095	0.241	-	-
1	C-B	668	0.247	0.247	-	-

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	2027 + com + development	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	308	100.000
B		✓	122	100.000
C		✓	281	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	37	271
	B	41	0	81
	C	246	35	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.27	9.93	0.4	A
C-A				
C-B	0.07	6.60	0.1	A
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	92	529	0.174	91	0.2	8.203	A
C-A	185			185			
C-B	26	610	0.043	26	0.0	6.161	A
A-B	28			28			
A-C	204			204			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	110	516	0.213	109	0.3	8.859	A
C-A	221			221			
C-B	31	599	0.053	31	0.1	6.340	A
A-B	33			33			
A-C	244			244			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	134	497	0.270	134	0.4	9.913	A
C-A	271			271			
C-B	39	584	0.066	38	0.1	6.600	A
A-B	41			41			
A-C	298			298			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	134	497	0.270	134	0.4	9.935	A
C-A	271			271			
C-B	39	584	0.066	39	0.1	6.600	A
A-B	41			41			
A-C	298			298			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	110	516	0.213	110	0.3	8.888	A
C-A	221			221			
C-B	31	599	0.053	32	0.1	6.343	A
A-B	33			33			
A-C	244			244			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	92	529	0.174	92	0.2	8.245	A
C-A	185			185			
C-B	26	610	0.043	26	0.0	6.164	A
A-B	28			28			
A-C	204			204			

2027 + com + development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site access (Gileston Road)	T-Junction	Two-way		2.70	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	2027 + com + development	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	323	100.000
B		✓	137	100.000
C		✓	385	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	75	248
	B	70	0	67
	C	302	83	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.34	12.17	0.5	B
C-A				
C-B	0.16	7.37	0.2	A
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	103	488	0.211	102	0.3	9.310	A
C-A	227			227			
C-B	62	608	0.103	62	0.1	6.593	A
A-B	56			56			
A-C	187			187			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	123	471	0.262	123	0.3	10.339	B
C-A	271			271			
C-B	75	596	0.125	75	0.1	6.902	A
A-B	67			67			
A-C	223			223			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	151	447	0.338	150	0.5	12.116	B
C-A	333			333			
C-B	91	580	0.158	91	0.2	7.367	A
A-B	83			83			
A-C	273			273			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	151	447	0.338	151	0.5	12.165	B
C-A	333			333			
C-B	91	580	0.158	91	0.2	7.370	A
A-B	83			83			
A-C	273			273			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	123	471	0.262	124	0.4	10.396	B
C-A	271			271			
C-B	75	596	0.125	75	0.1	6.909	A
A-B	67			67			
A-C	223			223			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	103	488	0.212	103	0.3	9.382	A
C-A	227			227			
C-B	62	608	0.103	63	0.1	6.606	A
A-B	56			56			
A-C	187			187			