



Land off Readers Way, Rhoose

Transport Assessment

PMG Limited

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1.0 Introduction

- 1.1 SLR Consulting Ltd is retained by PMG Limited to provide transport and highways advice in relation to the development proposals on Land Off of Readers Way, Rhoose.
- 1.2 The site forms a natural extension to the existing settlement of Rhoose which has a range of existing community facilities and amenities as well as a number of public transport facilities including Rhoose (Cardiff International Airport) Railway Station and a number of local bus stops.
- 1.3 The proposed development would comprise around 450 residential dwellings as well as some community facilities, country park and sports facilities and the site has been identified in the Draft Vale of Glamorgan Replacement Local Development Plan Preferred Strategy.
- 1.4 The site is located to the south of Cardiff Airport within the settlement of Rhoose. The site is located in the northwest of the settlement. The land surrounding the proposed development includes Cardiff Airport to the east, the Fontygary residential area of Rhoose to the south and west, and agricultural land and Port Road to the north. The strategic site location is shown in **Figure 1.1**.



Figure 1.1 – Site Location (Strategic)



- 1.5 Vehicular access will be taken by extending the existing Celtic Way and Readers Way residential roads, acting as natural extension from the existing settlement into the proposed development.
- 1.6 This Transport Assessment (TA) follows the scope and proposed approach for the site that was agreed in the Scoping Note (dated January 2024). Further comments were also provided by the highway officer and have been addressed in this report. This TA has been prepared in support of the proposed allocation and any subsequent planning application.
- 1.7 The Vale of Glamorgan's (VoG) Councils Preferred Strategy Masterplan is provided as **Appendix A**



Report Structure

1.8 The remainder of this TA is structured as follows:

- **Section 2 - Existing Conditions** – this section details the current accessibility of the site by all modes of travel, and the proximity to local public transport services and facilities.
- **Section 3 - Policy Context** – this section provides a review of the national and local policies applicable to the site.
- **Section 4 - Development Proposals** – this section details the proposed scheme and access arrangements.
- **Section 5 - Trip Generation** – this section analyses the forecast trip generation associated with the development proposals.
- **Section 6 – Trip Distribution and Assignment** – this section sets out the approach to distribution and assignment of trips on the local highway network.
- **Section 7 - Highway Network Assessment** – this section provides a forecast of the distribution of development trips through the local highway network and the subsequent impact of the proposed vehicular trip generation on the local highway.
- **Section 8 - Transport Implementation Strategy** – this section sets out objectives and targets relating to managing travel demand.
- **Section 9 - Summary and Conclusions** – this section provides a summary and conclusion of the report.



2.0 Existing Conditions

Introduction

- 2.1 The existing situation, transport conditions and accessibility within the vicinity of the site is set out in this section, with a specific focus on the quality and extent of provision of the sustainable travel options, including public transport links and suitable infrastructure.

Site Location

- 2.2 The site forms a natural extension to the existing settlement of Rhoose which has a range of community facilities and amenities as well as a number of public transport nodes such as Rhoose (Cardiff International Airport) Railway Station and numerous local bus stops.
- 2.3 The site connects to Rhoose via Readers Way and Celtic Way both of which are located at the southern edge of the site. The site is bound to the north by Port Road, Cardiff Airport to the east, and residential dwellings to the south and west. The site can broadly be divided into two parcels, the residential western component, and the green eastern component. These parcels are divided by a public right of way connecting Readers Way to Port Road.
- 2.4 The site location in relation to the surrounding area is shown in **Figure 2.1**.

Local Facilities and Amenities

- 2.5 There are a number of local facilities and amenities available within Rhoose and the surrounding area including shops, a primary school, leisure facilities, a pharmacy as well as access to public transport opportunities such as buses and trains.
- 2.6 Existing residents of Rhoose often walk or cycle to local destinations, there are good connections in the form of footways primarily along Readers Way, Rhoose Road and Fontygary Road leading to most facilities. There are a few facilities to the southwest of the site being more accessible via Celtic Way, which has footways on either side of the carriageway to the junction with Fonmon Road. The facilities within the vicinity of the site are detailed in **Table 2.1**. All distances and times are calculated using google maps, which accounts for gradients and road crossings, and are taken from the centre of the site via either Readers Way or Celtic Way, depending on the location of the destination.



Table 2.1 – Local Facilities

Public Transport	Distance (m)	Walk Time(mins)	Cycle Time(mins)
'Mayflower' Bus Stops	1,050-1100	14-15	4
Station Road/Romily Road Bus Stops	1,100-1250	15-17	4
Rhoose (Cardiff International Airport) Railway Station	1,300m	17	5
Education	Distance (m)	Walk Time(mins)	Cycle Time(mins)
Rhws Primary School	1,050	14	4
Passport to Play Day Nursery	1,500	19	6
South Point Primary School	1,900	24	7
Retail, Food & Drink, Other	Distance (m)	Walk Time(mins)	Cycle Time(mins)
Rhoose Post Office	900	10	4
Fontygary Inn	820	10	4
Fontygary Fish Bar	870	11	4
Rhoose Community Library	1,000	12	4
Golden Star	1,000	12	4
Premier	1,050	13	5
Raj Kinara	1,070	13	5
Spar Rhoose	1,100	14	5
Tesco Express	1,100	14	5
The Highwayman Inn	1,350	17	7
Rhoose Cafe	1,400	17	7
The Flying Club	1,700	22	8
Healthcare	Distance (m)	Walk Time(mins)	Cycle Time(mins)
Rhoose Medical Centre	900	10	5
Rhoose Pharmacy	900	10	5
Rhoose Surgery	1,000	12	5
Sport & Leisure	Distance (m)	Walk Time(mins)	Cycle Time(mins)
Rhoose Community Centre	1,100	13	6
Ceri Road Playing Fields	1,800	22	7
Celtic Way Community Centre	1,800	22	8
Rhoose Point Nature Reserve	1,900	22	8
Nurston Close Play Area	2,100	25	9

2.7 The location of these facilities in the context of the site is set out in **Figure 2.1**.



Figure 2.1 – Local Facilities and Amenities



- 2.8 As well as being well located to make use of existing facilities in a community which is typically centred around being able to walk to these amenities, the site will also provide its own facilities which will enhance the surrounding area and minimise some trips off-site.

Active Travel Network

- 2.9 It is generally accepted that walking and cycling provide important alternatives to the private car and should also be encouraged to form part of longer journeys via public transport. For example, research undertaken by the Chartered Institution of Highways and Transportation (CIHT) outlines that most people would walk to a destination within one mile or cycle for a journey within five miles.
- 2.10 Moreover, Manual for Streets (MfS) identifies 'walkable neighbourhoods' as being:
- "characterised by having a range of facilities within 10 minutes (up to about 800m) walking distance of residential areas which residents may access comfortably on foot."*
- 2.11 However, it is important to recognise that MfS does not consider 800 metres to be a maximum walking distance. Indeed, MfS contends that walking can be used to access a variety of destinations within a range of up to 2 kilometres.
- 2.12 More recently, there has been an emergence of 20-minute neighbourhoods, based on a design ethos of creating complete, compact and connected neighbourhood, where people can meet their everyday needs within a short walk or cycle. This concept builds upon the notion of walkable neighbourhoods and places design at pedestrian scale and is supported by a 20-minute neighbourhood guide published by the Town and Country Planning Association in March 2021.



- 2.13 The concept of walkable neighbourhoods is further captured within Placemaking Wales' Placemaking Guide (2020). Within the guide it is noted that walkable neighbourhoods provide opportunities for reducing car travel to tackle climate change whilst simultaneously improving mental wellbeing and boosting local economies.
- 2.14 **Figure 2.2** shows the active travel network around the site which demonstrate there are good connections between the site and the centre of Rhoose, as well as further afield towards NCN route 88.

Figure 2.2 – Active Travel Network



Pedestrian Network

- 2.15 There are numerous pedestrian facilities provided adjacent to the carriageways surrounding the site, which will be discussed in more detail in the following sections. **Figure 2.3** shows the 'less than 1 kilometre', 'up to 3 kilometres' and 'up to 5 kilometres' walking isochrones from the site, in line with Table 4.1 of the Active Travel Act.



Figure 2.3 – Walking Isochrones



- 2.16 The figure above shows that the centre of Rhoose can be comfortably accessed from the site within a 15-minute walk which contains amenities such as convenience stores, school and medical facilities. Further afield is Rhoose Railway Station as well as Rhoose Point Nature Reserve.

Readers Way

- 2.17 Footways are provided on both sides of Readers Way in the vicinity of the site serving the amenities of Rhoose and Rhoose (Cardiff International Airport) Railway Station. These footways are approximately 2m in width, with consistent street lighting along the carriageway. The footways are of good quality, with dropped kerbs at crossing points and some tactile paving at significant crossing points such as on roundabouts and large junctions.

Celtic Way / Fonmon Road

- 2.18 Celtic Way connects to Fonmon Road to the west. The road is residential in nature and has footways on either side of the carriageway, with dropped kerbs at crossing points and junctions. The footways are approximately 1.5-2m in width and it is illuminated throughout.
- 2.19 The short segment of Fonmon Road heading south connects to Fontygary Road via a signalised junction, the footway terminates approximately 25 metres from the approach to the signals, however, an alternative low trafficked route is available between Celtic Way / Kenson Close / Fontygary Road and this avoids pedestrians potentially walking in the carriageway.



Fontygary Road

- 2.20 Fontygary Road is the primary road running through the centre of Rhoose, providing access to the facilities and amenities available there, including a pharmacy, convenience store and Rhws Primary School, a Welsh medium primary school. There is a zebra crossing on Fontygary Road, just to the west of the junction with Station Road and directly opposite the Spar convenience store. This crossing provides pedestrian access to amenities in Rhoose and access along Station Road towards Rhoose Point and the railway station. There is also a signalised pedestrian crossing to the west, within the vicinity of Rhws Primary School.
- 2.21 **Photograph 2.1** shows the layout of Fontygary Road looking west from Rhws Primary School, with a shared foot/cycleway on the southern edge of the carriageway running to the primary school, by the signalised pedestrian crossing.

Photograph 2.1 – Fontygary Road



Rhoose Road

- 2.22 Rhoose Road runs between the Readers Way/Rhoose Road/Porthkerry Road roundabout to the east and the junction with Station Road, to the west. This road then becomes Fontygary Road, providing access to the centre of Rhoose. On the eastern side of the carriageway, within the vicinity of the roundabout, a dropped kerb with tactile paving is provided. On the southern side of the carriageway, there is a shared cycle/footway running for 50m from the roundabout, where the footway narrows and the cycleway rejoins the carriageway, demarked by lines on the carriageway.
- 2.23 **Photograph 2.2** shows end of the shared route and the cycleway onroad markings.



Photograph 2.2 – Rhoose Road South Footway



- 2.24 The footway continues towards the centre of Rhoose, with footways on either side of the carriageway for 40m, where the continuous footway to the north of the carriageway terminates and allows access to private dwellings. Following the private dwellings, the footway continues on both sides of the carriageway towards Rhoose, and measures around 1.5m in width. On the southern edge of the carriageway, the footway features dropped kerbs and tactile paving at crossing locations.

Porthkerry Road

- 2.25 Porthkerry Road connects to Readers Way at its western end and continues towards the main entrance to Cardiff International Airport.
- 2.26 From the roundabout with Rhoose Road and Readers Way, to the south of the carriageway is a shared foot/cycleway, which continues towards Rhoose Way connecting to the nearby primary school.



- 2.27 There is also a footway running along the northern edge of the carriageway which measures around 2 meters in width for the majority of its length.

Rhoose Way

- 2.28 Rhoose Way is primarily a residential area, connecting Porthkerry Road to the north and heads towards South Point Primary School. There is a shared cycle/footway running adjacent to the edge of the carriageway adjacent to the junction to the north. This is shown in **Photograph 2.3**.

Photograph 2.3 – Rhoose Way Cycle / Footway



- 2.29 There is a footway adjacent to Rhoose Way towards the South Point Primary School, with dropped kerbs and tactile paving provided. The footway is 1.5-2m in width, is well lit and in good condition. There is also a footway on the southern/eastern edge of Rhoose Way, which is also lit and in good condition.



Station Road

- 2.30 Station Road links Fontygary Road to Rhoose (Cardiff International Airport) Railway Station and has footways on either side of the carriageway. The footways provide dropped kerbs and tactile paving for the majority of its length, however there are short sections where there are no dropped kerbs or tactiles provided.

Footpaths

- 2.31 Throughout the area surrounding Readers Way and Celtic Way there is a plethora of footpaths through the residential areas which allow users to reduce walking times and have a traffic free link from the site towards amenities located around Fontygary Road. The location of these footpaths is shown in **Figure 2.2**.
- 2.32 There is a footpath between Fonmon Road and Whittan Close, providing access from the residential area around Celtic Way and Fonmon Road, which accesses Fontygary Road to the south and Port Road to the north. The path is in a good condition, as shown in **Photograph 2.4**.

Photograph 2.4 – Fonmon Road / Whittan Close Footpath



- 2.33 To the east of Whittan Close, there is a footpath between Celtic Way, Smeaton Close and Kenson Close. This footpath runs past a children's play area and heads south towards Fontygary Road and the centre of Rhoose. The route is shown in **Photograph 2.5**.



Photograph 2.5 – Celtic Way, Smeaton Close and Kenson Close Footpath



- 2.34 From Kenson Close, a route connects to Fontygary Road, approximately 500m west of the junction with Station Road, towards the centre of Rhoose. The footpath is shown as **Photograph 2.6**.



Photograph 2.6 – Smeaton Close and Fontygary Road Footpath



- 2.35 There is a footpath running between St Siors Meade and Wesley Avenue, as shown in **Photograph 2.7**. The footpath runs adjacent to a private drive, separated by a grass verge.
- 2.36 Future secondary school residents could continue along this route along Wesley Avenue to access the Cowbridge Comprehensive school service from the post office bus stop. A raised, build out with dropped kerb and tactile paving is provided at the junction with Wesley Avenue and across Fontygary Road, with speeds marked as 20mph.



Photograph 2.7 – St Siors Meade and Wesley Avenue Footpath



- 2.37 A footpath connects Wesley Avenue to Speedwell Drive, to the south of Readers Way. The route runs between two private properties and is a continuation of the footway. **Photograph 2.8** below shows the condition of the footpath.



Photograph 2.8 – Wesley Avenue / Speedwell Drive Footpath



- 2.38 A footway connects Kemeys Road and Mayflower Way, providing pedestrian access to Fontygary Road which avoids using Readers Way, as shown in **Photograph 2.9**.



Photograph 2.9 – Kemeys Road/Mayflower Way Footpath



- 2.39 There is a footpath between Readers Way to the north and Brendon View Close to the south, which connects to Fontygary Road, just east of the junction with Station Road and close to the amenities. The route is overgrown, and image of the condition of the path is shown below as **Photograph 2.10**.



Photograph 2.10 – Readers Way / Brendon View Close Footway



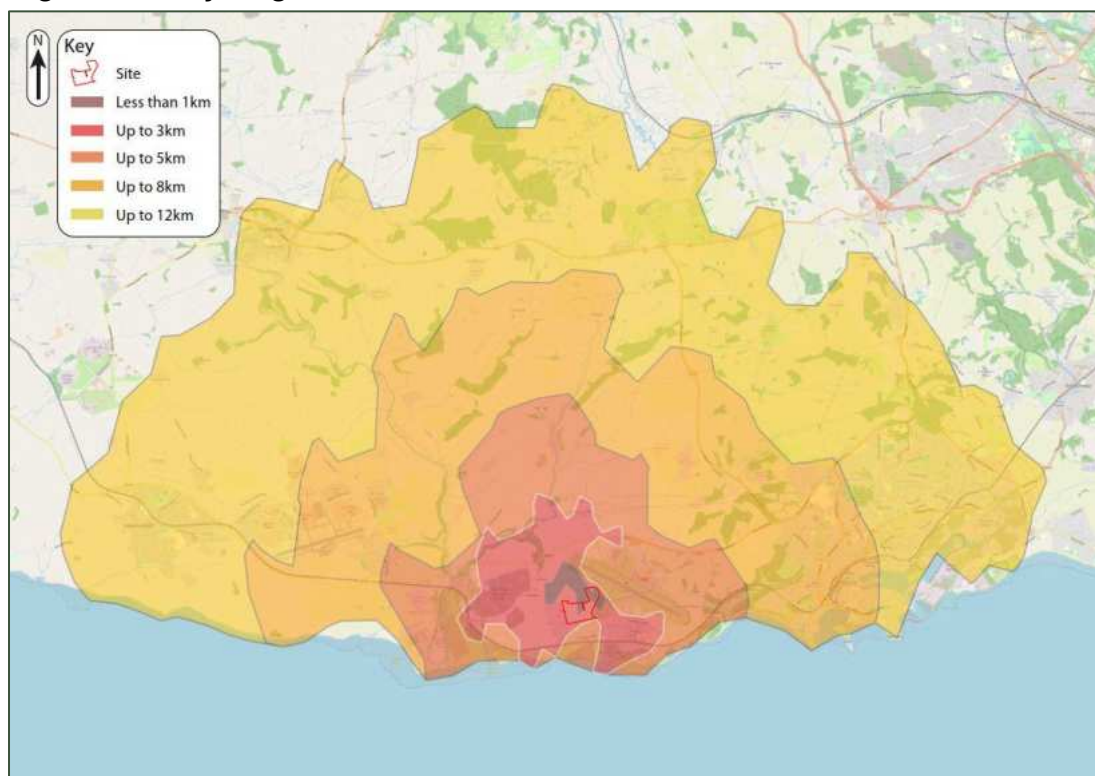
- 2.40 These routes link up to the surrounding pedestrian network and proposed improvement schemes in the area along Station Road.

Cycle Network

- 2.41 Route 88 of the National Cycle Network (NCN) can be accessed at the junction between Porthkerry Road and an unnamed road, approximately 3.0km from the centre of the site and a 10-minute cycle. This route runs between Barry and Llantwit Major but originates in Newport and finishes in Bridgend to the west. The route is approximately 50km in length.
- 2.42 Journey times to Barry via NCN Route 88 is approximately 20 minutes, and to Llantwit Major, the journey time is approximately 40 minutes.
- 2.43 **Figure 2.4** below shows the 'less than 1 kilometre', 'up to 3 kilometres', 'up to 5 kilometres', 'up to 8 kilometres' and 'up to 12 kilometres' cycling isochrones from the centre of the site, in line with Table 4.1 of the Active Travel Act.



Figure 2.4 – Cycling Isochrones



Proposed & Future Improvements

- 2.44 There are a number of Active Travel and Safe Routes in Communities (SRiC) schemes being developed by Vale of Glamorgan (VoG) Council.
- 2.45 Active Travel funding comes from Welsh Government in the form of a dedicated grant, known as 'core allocation', and larger grants for specific projects which local authorities must bid for in a competitive process. In addition, the Council receives sustainable transport S106 financial contributions which is used to improve active travel and public transport services in a local area.
- 2.46 The schemes VoG are currently working on, or have been working on in recent years relevant to Rhoose are as follows:

Waycock Cross to Cardiff Airport Active Travel Route

- 2.47 Welsh Government Core Active Travel Funding has been provided in the financial year (FY) 2022/2023 to undertake investigatory works including surveys and design work for a proposed active travel route from Waycock Cross in Barry to Cardiff Airport. By providing this route it would link the Culverhouse Cross to Barry foot/cycleway, with the Rhoose link to Cardiff Airport as well as connecting Five Mile Lane to A48.



St Athan to Rhoose Active Travel Route

- 2.48 Additional Welsh Government Active Travel funding was received in September 2021 to explore active travel route options between St Athan and Rhoose. Core Allocation funding was granted for FY 2022/2023 to continue with the route development.
- 2.49 Three potential routes were provided for public consultation during July 2022 and work for Phase 1 started in October 2022 and was due to take 24 weeks. As of 2024 works have delivered widened pedestrian footways, and improved pedestrian crossings with dropped kerbs and tactile paving.

Station Road, Rhoose

- 2.50 The proposed Station Road improvements include plans to have a shared cycle/footway along both sides of the carriageway. There will also be dropped kerbs and tactile paving at crossing points, as well as grass verges separating the carriageway and footway in places. This will allow easier connections for pedestrian and cycles between the station and the centre of the village. These works were undertaken in July 2023, and are now complete.

Porthkerry Road, Rhoose

- 2.51 Porthkerry Road has also had some recent pedestrian improvements, with a 3m shared cycle/footways installed on the southern edge of the carriageway.
- 2.52 **Figure 2.5** illustrates where upgrades could be made to Readers Way (further to investigatory works) to connect with the recent Porthkerry Road improvements.

Figure 2.5 – Potential Improvements to Readers Way



Public Transport Network

- 2.53 The site is well placed to make good use of the local existing public transport infrastructure, including bus and rail.

Bus

- 2.54 The nearest bus stops to the site are the 'Mayflower' stops on Fontygary Road, with the eastbound stop being approximately 1,000m from the centre of the site and the westbound stop being approximately 1,050m from the centre of the site.
- 2.55 The eastbound bus stop benefits from a shelter and bench with timetabling information. The westbound stop has a flagpole and timetabling information. Both stops are served by the 304 service.
- 2.56 An additional pair of bus stop are located between 1,100m and 1,250m from the centre of the site, along Rhoose Road. The westbound bus stop benefits from a shelter and bench with timetabling information. The eastbound stop has a flagpole. These bus stops are served by the 905-bus service.
- 2.57 The bus services and frequencies are summarised in **Table 2.2.** below.

Table 2.2 –Bus Services

Number	Route	Frequency			Operator
		Mon-Fri	Saturday	Sunday	
304	Llantwit Major – Cardiff	60	60	120	Adventure Travel
	Cardiff – Llantwit Major	60	60	120	
905	Cardiff Airport - Rhoose Railway Station	60	60	60	Adventure Travel
	Cardiff – Llantwit Major	60	60	60	

Rail

- 2.58 Rhoose benefits from having Rhoose (Cardiff International Airport) Railway Station. The station is located approximately 1,300m from the centre of the site.
- 2.59 Station facilities include self-service ticket machines, a station car park with 66 car parking spaces and customer information points.
- 2.60 Cycle parking at the station is CCTV monitored and provided in the form of five Sheffield stands located in the car park. An additional six Sheffield stands under shelter, are also located in the car park.
- 2.61 Passenger services are operated by Transport for Wales. Typical services are hourly journeys between Bridgend and Mountain Ash, via Barry, Dinas Powys, Cardiff Central and Pontypridd, among others. There is also an hourly bus service from the railway station to Cardiff International Airport.



Personal Injury Collision (PIC) Data

- 2.62 To determine the likely safety of the local highway, Personal Injury Collision (PIC) data was requested from Stats Wales, a Welsh Government organisation that maintains a record of Collision data within Wales. The data requested has been used to ascertain the level of PICs that have occurred in the vicinity of the site over the most recent 5-year period. **Figure 2.6** provides an extract summary of the registered collisions within the study area.

Figure 2.6 – CrashMap Collision Data



- 2.63 As highlighted in **Figure 2.6**, during the most recent five-year period, a total of 5 collisions were recorded comprising 1 serious and 4 slight incidents with no fatalities were recorded. A majority of the collisions were recorded on Fontygary Road.
- 2.64 According to Statistics for Wales a cluster of collisions is identified as at least four personal injury accidents in a 3-year period within a 100m diameter. Of the PICs identified no collision is located within a 100m of another incidents, suggesting there are no cluster or patterns which would indicate a highways-based safety concern is present.
- 2.65 No collisions were recorded within the vicinity of the potential access points.
- 2.66 A review of contributory factors identified for each incidents suggest all PICs within the study area were as a result of driver/pedestrian error.
- 2.67 On the basis of the above, that there are no inherent safety issues associated with the existing highway network and junction arrangements in the vicinity of the site.



Baseline Traffic Data

- 2.68 Baseline traffic data has been obtained for the study area surrounding the site and is summarised in the following section. The study area has been developed in accordance with the TA scoping note attached as **Appendix B** and has been agreed with highway officers at VoGC. The B4265 / Fontygary Road junction was added to the to the scope of traffic surveys following discussions with VoGC officers.

Manual Classified Counts

- 2.69 In addition to manual classified count (MCC) surveys undertaken in 2024. A series of MCC have been utilised from a nearby application. The nearby application of the Cardiff Vale and College ATC site was submitted in April 2024 (Ref: 2024/00329/FUL).
- 2.70 **Figure 2.7** provides an outline of the surveys, and the source the data.

Figure 2.7 – MCC Survey Summary



CAVC Surveys

- 2.71 The surveys undertaken for the CAVC ATC site were conducted on the 24th of October 2023 from 07:00-19:00. This provided AM and PM peak flows for the:
- Port Road roundabout;
 - Waycock Cross roundabout:
 - B4265 / Fontygary Road priority junction.



2.72 A summary of the results is provided in **Table 2.3**.

Table 2.3 – CAVC MCC Summary

Junction	AM Peak Flows	PM Peak Flows
B4265 / Font-y-Garry Rd	913	1,140
Port Road Roundabout	1,361	1,504
Waycock Cross Roundabout	2,829	2,671

2.73 The full traffic surveys associated with the CAVC application are provided in **Appendix C**

Observed Baseline Surveys

2.74 The baseline traffic data includes a series of MCC surveys at the following locations on a Thursday 8th February 2024 for a 12-hour period between 07:00 and 19:00:

- Fonmon Road / Fontygary Road signalised crossroads
- Rhoose Road roundabout;
- Pentir-y-De roundabout;
- Dragonfly Drive roundabout.

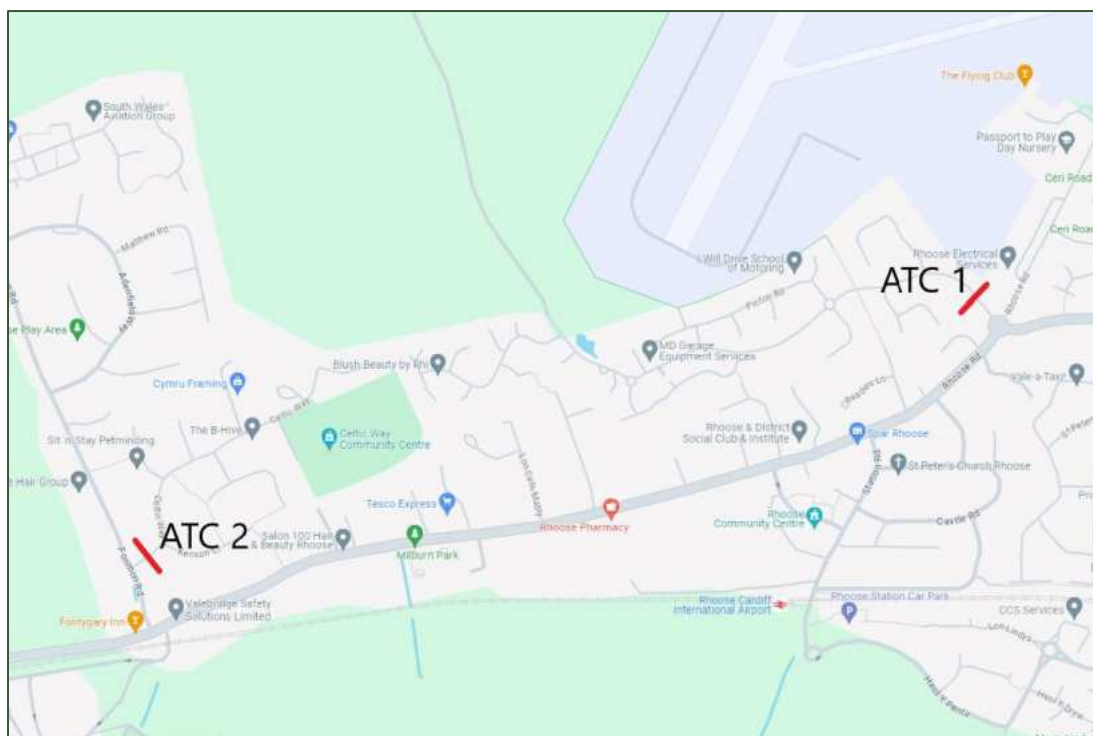
2.75 The full traffic surveys, including the Automatic Traffic Counts (ATCs) mentioned below are provided in **Appendix D**.

Automatic Traffic Counts

2.76 ATC surveys were also undertaken on Readers Way and Celtic Way. The location of each survey is shown on **Figure 2.7**.



Figure 2.5 – ATC Survey Summary



2.77 The ATC surveys were taken over a Wednesday to the following Tuesday in July of 2023.

2.78 **Table 2.4** and **Table 2.5** shows the recorded traffic flows recorded on Readers Way and Celtic Way, respectively.

Table 2.4 – Existing Traffic Flows on Readers Way

Time Period	N-bound traffic flow (vehicles)	S-bound traffic flow (vehicles)	Two-way vehicle flow
0700-0800	16	65	81
0800-0900	31	73	104
0900-1000	35	56	92
1600-1700	84	49	134
1700-1800	92	59	151
1800-1900	72	55	127
Average 24-hour (weekday)	823	821	1,643

2.79 Two-way traffic flows on Readers Way were recorded as 1,643 vehicles per day, with peak hour flows recorded as 104 two-way flows in the AM peak hour (08:00-09:00) and 151 in the PM peak hour (17:00-18:00).



Table 2.5 – Existing Traffic Flows on Celtic Way

Time Period	N-bound traffic flow (vehicles)	S-bound traffic flow (vehicles)	Two-way vehicle flow
0700-0800	32	14	45
0800-0900	45	25	70
0900-1000	47	33	80
1600-1700	33	57	90
1700-1800	37	59	96
1800-1900	38	46	84
Average 24-hour (weekday)	562	565	1,127

- 2.80 Two-way traffic flows on Celtic Way were recorded as 1,127, with peak flows recorded as 70 two-way flows in the AM peak hour (08:00-09:00) and 96 in the PM peak hour (17:00-18:00).
- 2.81 Speeds were also recorded by the ATCs under free flow conditions, with no exceptional weather conditions reported. These are summarised in **Table 2.6** and **Table 2.7**.

Table 2.6 – Existing Traffic Speeds on Readers Way

Time Period	Average (mph)		85 th percentile	
	N-bound	S-bound	N-bound	S-bound
0700-0800	19.9	23.4	23.2	27.1
0800-0900	19.1	23.5	22.3	27.6
0900-1000	19.8	23.4	22.9	27.3
1600-1700	19.7	23.2	22.7	27.7
1700-1800	18.3	22.5	21.4	26.7
1800-1900	18.2	23.1	21.3	27.4
24-hour weekday	22.1	23.1	25.9	27.3

- 2.82 The posted speed limit on Readers Way is 20mph. The average speed of traffic on Port Road is 19.1mph in both directions.
- 2.83 The northbound maximum average speed is between 18.2mph and 22.1mph, and the maximum 85th percentile is between 21.3mph and 25.9mph.
- 2.84 The maximum southbound average speed is between 22.5mph and 23.5mph and the maximum 85th percentile is between 26.7mph and 27.3mph.
- 2.85 **Table 2.7** summarises the existing traffic speeds on Celtic Way



Table 2.7 – Existing Traffic Speeds on Celtic Way

Time Period	Average (mph)		85 th ile	
	E-bound	W-bound	E-bound	W-bound
0700-0800	17.5	17.3	19.9	20.8
0800-0900	16.9	18.0	20.3	21.3
0900-1000	16.9	18.4	20.3	22.3
1600-1700	17.7	17.6	20.1	21.4
1700-1800	17.1	18.0	20.3	21.4
1800-1900	17.1	17.2	21.0	20.4
24-hour weekday	17.2	17.5	20.2	21.1

- 2.86 The posted speed limit on this section of Celtic Way is 20mph. The average speed of traffic on Celtic Way is 17.3mph in both directions.
- 2.87 The eastbound ATC maximum average speed is between 16.9mph and 17.5mph, and the maximum 85th percentile is between 19.9mph and 21mph.
- 2.88 The westbound maximum average speed is between 17.2mph and 18.4mph and the maximum 85th percentile is between 20.4mph and 22.3mph.
- 2.89 The site well located to take advantage of local facilities, and benefits from a good surrounding active travel network. A plethora of footpaths and footways exist, some of which are traffic free that support the Welsh Governments aspirations for more local journeys to be made on foot. There are a good range of public transport options, including local bus services to neighbouring towns and villages as well as Rhoose (Cardiff International Airport) Railway Station. This provides a regular and direct connection to Barry and onwards to Cardiff Central. The site is sustainably located and forms a natural extension to the existing settlement of Rhoose.



3.0 Policy Context

Overview

- 3.1 This section reviews relevant national and local policies in the context of the proposed development at Readers Way, Rhose, in the Vale of Glamorgan (VoG).

National Policy

Planning Policy Wales (Edition 12, February 2024)

- 3.2 Planning Policy Wales Edition 12 (PPW) sets out the land use planning policies of the Welsh Government.
- 3.3 With regards to sustainable transport, PPW advises that, in the context of active and social places, developments should encourage modal shift and be easily accessible by walking, cycling and public transport, by virtue of their location, design and provision of on and off-site sustainable transport infrastructure.
- 3.4 Furthermore, the 'active and social' theme within PPW aims to ensure new development is located and designed in a way which minimises the need to travel, reduces dependency on the private car and enables sustainable access to employment, local services, and community facilities.
- 3.5 A key theme throughout PPW is the aim of reducing reliance on travel by private car, and the adverse impacts of motorised transport on the environment and people's health, by prioritising and increasing active travel and public transport. Additionally, it states that development proposals must seek to maximise accessibility by walking, cycling and public transport, by prioritising the provision of appropriate on-site infrastructure and, where necessary, mitigating transport impacts through the provision of off-site measures, such as the development of active travel routes, bus priority infrastructure and financial support for public transport services.
- 3.6 These themes of emphasis on sustainable transport and active travel are supported by the 'Sustainable Transport Hierarchy for Planning' included within PPW.



Technical Advice Note:18 - Transport

3.7 TAN18: Transport describes how to integrate land use and transport planning and explains how transport impacts should be assessed and mitigated. The document states that a sustainable development approach includes:

- Integration of transport and land use planning;
- Integration between different types of transport; and
- Integration of transport policy with policies for the environment, education, social justice, health, economic development, and wealth creation.

3.8 In relation to parking, TAN states that:

“Maximum car parking should be used at regional and local level as a form of demand management and that for new development, regard should be given to alternative transport modes, economic objectives, public and shared parking arrangements”.

3.9 TAN 18 states that the integration of land use planning and development of transport infrastructure can help Welsh Government achieve its wider sustainable development policy objectives through managing parking provision and ensuring that new developments include appropriate provision for pedestrians (including the users with special access and mobility requirements), cycling, public transport, and traffic management and parking/servicing.

Placemaking Wales – Placemaking Guide 2020

3.10 The Placemaking Guide outlines the importance of the following principles in placemaking:

- **People and Community** - The local community are involved in the development of proposals. The needs, aspirations, health, and well-being of all people are considered at the outset. Proposals are shaped to help to meet these needs as well as create, integrate, protect and/or enhance a sense of community and promote equality.
- **Location** - Places grow and develop in a way that uses land efficiently, supports and enhances existing places and is well connected. The location of housing, employment, leisure, and other facilities are planned to help reduce the need to travel.
- **Movement** - Walking, cycling and public transport are prioritised to provide a choice of transport modes and avoid dependence on private vehicles. Well designed and safe active travel routes connect to the wider active travel and public transport network, and public transport stations and stops are positively integrated.
- **Mix of Uses** - Places have a range of purposes which provide opportunities for community development, local business growth and access to jobs, services, and facilities via walking, cycling or public transport. Development density and a mix of uses and tenures helps to support a diverse community and vibrant public realm.
- **Public Realm** – streets and public spaces are well defined, welcoming, safe, and inclusive with a distinct identity. They are designed to be robust and adaptable with landscape, green infrastructure, and sustainable drainage well integrated. They are well connected to existing places and promote opportunities for social interaction and a range of activities for all people.
- **Identity** - the positive, distinctive qualities of existing places are valued and respected. The unique features and opportunities of a location, including heritage, culture, language, built and natural physical attributes, are identified and responded to.



Future Wales: The National Plan 2040 (February 2021)

- 3.11 This document is a National Development Framework for Wales. It influences all levels of the planning system in Wales and will help to shape Strategic and Local Development Plans prepared by councils and national park authorities.
- 3.12 The document highlights the importance of reducing emissions to protect well-being and to demonstrate global responsibility. The planning system needs to focus on delivering a decarbonised and resilient Wales through the places that are created, the energy generated and the natural resources and materials that are used and how people live and travel.
- 3.13 The document recognises that there has been a significant change in the way people live and travel as a result of the COVID-19 pandemic. The pandemic has highlighted the quality and accessibility of people's local areas as being important for people's health and well-being during the pandemic.
- 3.14 The Welsh Government will work with Transport for Wales, local authorities, operators, and partners to deliver the following:
- Active Travel – Prioritising walking and cycling for all local travel;
 - Bus – improve the legislative framework for how local bus services are planned and delivered. Invest in the development of integrated regional and local bus networks to increase modal share of bus travel and improve access by bus to a wider range of trip destinations;
 - Metro – Develop the Southeast Metro, South West Metro and North Wales Metro and create new integrated transport systems that provide faster, more frequent and joined up services using trains, buses, and light rail; and
 - Ultra-low Emission Vehicles – Support the roll-out of suitable fuelling infrastructure to facilitate the adoption of ultra-low emission vehicles, particularly in rural areas.

Wales Transport Strategy (Connecting the Nation)

- 3.15 The wider agenda of this document is to ensure that transport features strongly in the Welsh Assembly Government's policy spectrum:
- 'Getting the most out of our existing transport system;
 - Making greater use of more sustainable modes of travel; and
 - Reducing demands on the transport system'.
- 3.16 This is a sustainable, permeable, well-connected site and hence it is compliant with the Wales Transport Strategy.



Active Travel Wales Act 2013

- 3.17 The Welsh Government seeks to enable more people to walk, cycle and generally travel by more active methods, so that:
- More people can experience the health benefits of active travel;
 - We reduce our greenhouse gas emissions;
 - We help address poverty and disadvantage; and
 - We help our economy to grow by unlocking sustainable economic growth.

All Wales Common Standards for Residential Estate Roads

The All Wales Common Standards for Residential Estate Roads are a set of guidelines aimed at ensuring consistent and high-quality design and construction of roads within residential developments in Wales. These standards cover various aspects of road design, including road layout, junctions, signs, markings, drainage, and landscaping. By following these standards, developers can help create safe, accessible, and well-designed residential estate roads that enhance the overall quality of life for residents.

Local Planning Policy

Vale of Glamorgan Local Development Plan 2011-2026 (February 2012)

- 3.18 The Deposit LDP contains the Vision and Objectives for the Plan, Strategy, Strategic Policies, Development Management Policies and Policies for Managing Growth for the Vale of Glamorgan, covering the period up to 2026. It outlines the requirements for the delivery and implementation of the sites allocated for development.
- 3.19 SP7 places goals around the airport and its transport links including improved rail, and cycle connections such as a new direct rail link to the airport and:

“The LDP will encourage the development of sustainable transport choices and improve accessibility. The National Cycle Network (NCN) route in the Vale of Glamorgan will form part of a longer Route 88 linking with Route 4 to the east at Newport and to the west at Margam Park via Bridgend and Porthcawl.”

Vale of Glamorgan Local Transport Plan 2015-2030

- 1.1 The Local Transport Plan (LTP) seeks to identify 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 the period 2015 to 2020 as well as looking forward to 2030.
- 1.2 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. The LTP also seeks to tackle traffic congestion by securing improvements to the strategic highway corridors for commuters who may need to travel by car as well as providing better infrastructure for freight. It also addresses the key road safety priorities for the Vale.



1.3 There are a number of specific short, medium and long-term goals / schemes identified as well as setting out several active travel, park and ride, highway improvement and bus infrastructure schemes to meet its overall goal.

3.20 Similar to the LDP, the VoGC LTP identifies NCN route 88 as a location for improvement including an eastward expansion through Barry and towards Penarth.

3.21 Other schemes include providing:

- “cycle infrastructure to enable a cycling network as identified by Sustrans and other Plans, including School Travel Plans (STPs). This route also links Cardiff Airport to Barry and the rural villages, with possible links to St Athan and the Enterprise Zone. Segments of the corridor”; and
- “Improvements to the A4226 between Waycock Cross, Barry and Sycamore Cross, A48 (Five Mile Lane) To provide off line improvements to this very busy corridor to assist with access to the strategic highway network and to the airport Enterprise Zone.”

Travel Plan SPG (July 2018)

1.4 The Travel Planning SPG has been prepared to provide guidance to applicants on the production and implementation of travel plans associated with new development proposals.

Vale of Glamorgan Parking Standards SPG (January 2019)

3.22 VoGC is separated into separate parking zones identified in plan 1 of the SPG, Cardiff Airport and the surrounding area are identified as Zone E.

3.23 Car parking standards are provided within **Table 3.1**.

Table 3.1 – Maximum Car parking standards

Car (Maximum Standards)		
Type of development	Residents	Visitors
Houses/Apartments	1 space per bedroom (Up to max requirement of 3)	1 space per 5 units
Cycle (Minimum Standards)		
Type of Development	Long stay	Short Stay
Residential Apartments	1 stand per 5 bedrooms	No Requirement



Summary

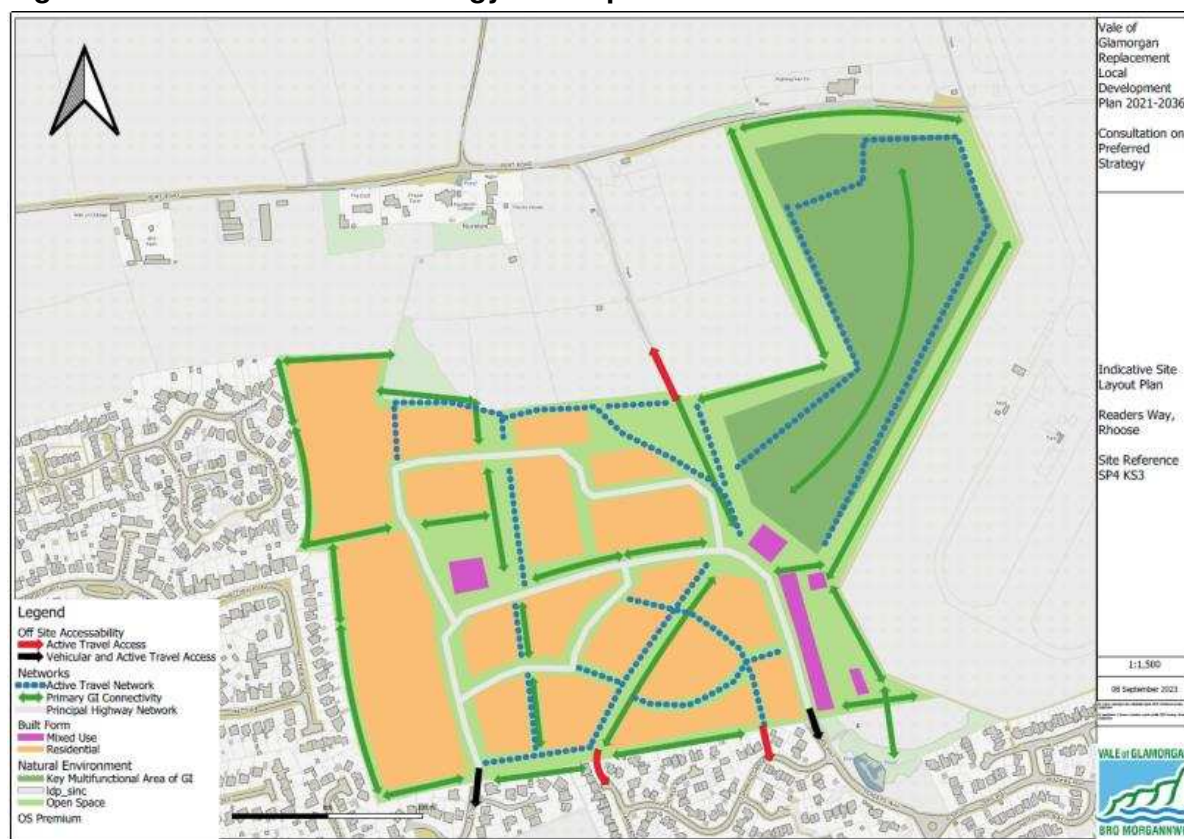
- 3.24 The site is shown to comply with the relevant national and local policies including aiding in reducing carbon emissions whilst delivering much needed growth in order to meet the UK's climate aspirations. It is a fairly well-located site for cycling and public transport accessibility with a variety of opportunities to integrate itself with the existing surrounding area, forming a part of the strategic employment and transport site in which it is located.



4.0 Development Proposals

- 4.1 The proposed development would comprise around 450 residential dwellings as well as community facilities, a country park and sports facilities.
- 4.2 This section of the report details the current proposals for the Site, although at present these details will be limited to broad principles due to the proposals currently being in the early stages of development.
- 4.3 An extract of the Vale of Glamorgan's (VoG) Preferred Strategy Masterplan taken from the Replacement Local Development Plan (2021-2036) is provided in **Figure 4.1**.

Figure 4.1 – VoG Preferred Strategy Masterplan



Access

Vehicle Access

- 4.4 Access to the development will be provided through the natural extension of the Celtic Way and Readers Way carriageways, two existing roads in Rhoose.
- 4.5 Drawings detailing the design of these accesses are provided in **Appendix E**.



Active Travel

- 4.6 The development, by taking advantage of the existing connectivity in the surrounding area will further encourage future residents of the site to travel by active travel modes, to car share, to utilise public transport in order to maximise social inclusion and minimise the number of single occupancy private car trips.
- 4.7 In line with changing travel behaviours and habits, new residents at the proposed development will be encouraged to undertake shorter journeys by foot or bicycle where appropriate. The site is well suited to promote this.
- 4.8 Furthermore, the Covid-19 pandemic has seen people travelling shorter distances for essential journeys, often within their local communities rather than further afield. There has also been a significant take-up of active modes of travel for both short purpose driven trips, as well as leisure trips.
- 4.9 Active travel will be prioritised for users of the site, and to connect with the current and proposed off-site infrastructure, such as the existing footways on Celtic Way, Readers Way and other residential roads close to the site.
- 4.10 The aim is to provide an environment in which pedestrians and cyclists will feel as though they are of highest priority.
- 4.11 The development will provide the necessary pedestrian and cycle infrastructure within the site to encourage walking and cycling and the appropriate road cross sections and speed limits to support this.
- 4.12 The thrust of land use and transport policy is to promote and encourage the choice of walking and cycling above all else where travel needs to occur. Therefore, it is both reasonable to assume that walking is a viable and growing means of travel, and that new development, such as this one, should be designed to promote and encourage it.
- 4.13 A Travel Plan will be provided as part of the development containing measures to encourage sustainable travel to and from the site. Measures to be investigated as part of the Travel Plan could include providing a Demand Responsive Transport (DRT) service, car club space onsite, offering bike / scooter share / e-bike / e-scooter hire, that would result in quicker connections to Rhoose Railway Station and other local facilities. Operators could also be interested in offering the scheme at the railway station.
- 4.14 Designing the site to a pedestrian scale allows for the maximum opportunity to provide social inclusion. Pedestrian and cycle routes are designed to ensure full permeability through the site including connections through cul-de-sacs, and all internal routes will benefit from ample natural surveillance ensuring they are not only convenient links, but secure and attractive also.
- 4.15 Permeability of the site with surrounding neighbourhoods will be a crucial feature of the design process. The site will be designed to feature a network of active travel links running throughout, allowing for permeability with the surrounding existing network including the pedestrian infrastructure.



20 Minute Neighbourhood

- 4.16 The main objective of the placemaking components is to generate a vibrant community and enable local living.
- 4.17 Sustrans supports such a concept declaring that “research shows that people are generally happy to walk for 20 minutes to get to and from the places they need to go. 80% of journeys under a mile are made on foot, which usually equates to around a 20-minute walk. In such a neighbourhood, the 20-minute walking trip could be cycled in around 7 minutes.”. The Town and Country Planning Association is a further supporter, having issued a comprehensive guidance document. The Department for Transport also includes provision for this approach in its active travel local authority toolkit 2022.
- 4.18 Local living already happens in established towns, where residents travel locally to school, to the shops, go for a walk, as well as for work. There is a good range of facilities including schools, shops, leisure services and healthcare within walking and cycling distance of the site.

Pedestrian and Cycle Access

- 4.19 Permeability of the site with surrounding neighbourhoods will be a crucial feature of the design process. The site will be designed to feature a network of active travel links running throughout, allowing for permeability with the surrounding existing network including the pedestrian infrastructure.
- 4.20 There is potential to provide pedestrian and cycle access to the existing residential area, to the west of the site, as well as onto Port Road, to the north, subject to land ownership.

Bike Sharing

- 4.21 Bike sharing schemes can make cycling as a travel mode more accessible and salient. It can be a more cost-effective way for users to travel by bike rather than owning a bike, as well as providing the user more flexibility, especially when using it as a part of a multi-modal journey.

Scooters

- 4.22 The UK Government is currently taking part in ‘Future Transport Zone’ trials for e-scooter hire, with a view of making them legal to use on a road. Similarly in Wales, the Welsh Government are exploring their use across Wales.
- 4.23 GOiA are leading the charge on the electric micro-mobility future with the launch of e-scooter rental opportunities. They are currently in talks with Local Authorities across Wales and the rest of the UK to offer e-scooters in towns and cities (subject to government agreement).

Public Transport

- 4.24 Pedestrian links to existing public transport stops will be retained as part of the development proposals.
- 4.25 It is considered that a contribution towards school transport / bus stop improvements could be secured via a suitably worded planning condition.



Community Transport

- 4.26 Community transport can be key in unlocking development to people of all ages, providing support to those who are unable to drive with a level of flexibility around pick-up and drop-off locations to minimise walking distance.
- 4.27 The site is located within an area already served by a range of community transport services; these comprise the Greenlinks Community Transport service.
- 4.28 The Greenlinks Community Transport service also provides minimis hire opportunities.



Personalised Bus Services

- 4.29 Zeelo is a great example of a 'mobility platform that manages transportation requests from multiple passengers headed in different directions with a free-floating fleet of vans and minibuses'.
- 4.30 Journeys are performed based on both pre-booking and on-demand booking. Passengers can book and manage their rides through client branded mobile apps and designated websites, and are able to track current, future and past rides. Zeelo's solution flexes according to public needs, responding to changing demand and various trip type requirements.

Travel Planning

- 4.31 Personalised Travel Planning (PTP) can have a significant impact on travel behaviour and travel patterns, helping to achieve more sustainable travel practices and healthier lifestyles, which in turn contribute to a more socially inclusive community and help protect the environment. PTP can be effective both amongst existing residents and communities and in new developments.
- 4.32 PTP provides tailored information directly to the individual on sustainable mobility options through a one-to-one discussion with a PTP Adviser. The personal approach and specifically tailored information can lead to a greater propensity for behavioural change than a one-size-fits-all approach.
- 4.33 PTP will be considered as part of future development at the site to enable residents to make the most of the wide range of travel choices that will be available, and to contribute to instilling sustainable travel behaviour from the outset.

Vehicles

- 4.34 Whilst the overarching aim of the mobility strategy is to reduce trips undertaken by car, it is acknowledged that on occasion there is not a suitable alternative. Therefore, opportunities to reduce the potential impact of vehicle trips must also form part of any mobility strategy at the site.



Car Clubs

- 4.35 A car club allows multiple people to access and drive one vehicle, for example, several people in the same community would drive the car on different days of the week. As such, car clubs offer the convenience of owning a private vehicle without the costs associated with fuel, servicing and repairs.
- 4.36 Car clubs are becoming increasingly popular with a total of 767,899 UK car club members in 2023, an increase of 38% since 2020. To accommodate this growth, the number of total car club vehicles has also increased. There are 5,167 car club vehicles operating across the UK.
- 4.37 Studies have demonstrated that each shared car replaces between eight and eleven private cars. Car clubs are becoming more prominent in towns and cities across the UK, and car club spaces can be located strategically at key destinations, major employment sites, transport hubs, and town and city centres. The membership of car clubs is increasing, reflecting people's changing attitudes towards mobility.
- 4.38 The provision of car clubs will encourage people to adopt more sustainable travel habits with the knowledge that should an emergency arise, the need to travel home quickly, or the need to run an errand, collect a parcel, or vary their journey in another way, there is a flexible option which can be used as required on-demand.

Electric Vehicle Charging

- 4.39 The recently announced ban on all new diesel and petrol cars and vans by 2030 highlights that EVs will be the primary form of private vehicles in the near future. As such, the development will commit to providing passive EV charging infrastructure in every dwelling, as well as ensuring the site-wide electricity infrastructure can accommodate this, so that future residents can choose EVs in the future knowing that there is both the reliable infrastructure and capacity to charge their EVs at home.
- 4.40 In addition, charging facilities for visitors to the site will be provided in accordance with VoG standards. It is expected that some level of EV charging facility would also be provided at any mobility or community hub provided at the site.

Summary

- 4.41 Ultimately, the aim of the Transport Strategy is to seek to minimise the quantum of trips that occur external to the site, and to ensure that these trips are made by sustainable modes.

Parking

Car Parking

- 4.42 Car parking will be provided in line with VoG standards. Of the car parking provided the percentage of blue badge and EV charging will also be provided in line with the VoG parking standards.



Cycle Parking

- 4.43 Cycle parking will be provided in line with the VoG guidance.
- 4.44 In houses will be provided in the curtilage of the property and in apartments will be provided in safe and secure stores.

Travel Plan

- 4.45 The proposed development will be supported by an Interim Travel Plan which will accompany this Transport Assessment and will be submitted as part of the planning application submission. Further details of the content of the Travel Plan are provided as part of the Transport Implementation Strategy at Section 8.



5.0 Trip Generation

Overview

- 5.1 This section provides the trip generation associated with the proposed development to understand the potential expected trips that the development could generate on a daily basis and during peak travel hours.
- 5.2 TRICS multi-modal trip rates have been used to inform the assessment.

Trip Generation

- 5.3 The trip rates and forecast trip generation associated with the site will be based on the TRICS database with parameters selecting sites for:
- Land Use – 03 Residential;
 - Sub Land Use Category – A Houses Privately Owned;
 - Location – England and Wales (excluding London);
 - Location type – Edge of Town / Suburban locations;
 - Weekday surveys only;
 - Dwelling numbers – 0 to 1,500; and
 - Car ownership less than 1 removed.
- 5.4 This TRICS assessment differs from the one provided in the Scoping Note (**Appendix B**), and now considers the site using multi-modal trip generation using the same parameters for selecting sites.
- 5.5 Multi-modal trip generation allows the application of mode splits to total person trip rates based on data from the sites location. This allows the proposed trip generation to better reflect the existing character of the local area.
- 5.6 To determine an appropriate mode split Nomis has been used. Nomis is an online census database that can provide method of travel to work data the Middle Layer Super Output Area (MSOA) in which the site is located. The MSOA “The Vale of Glamorgan 014” provides a mode split which is presented in **Table 5.1**.



Table 5.1 – Method of Travel to Work Modal Split

Mode	Mode Share (%)
Underground, metro, light rail, tram	0%
Train	4%
Bus, minibus or coach	3%
Taxi	0%
Motorcycle, scooter or moped	1%
Driving a car or van	70%
Passenger in a car or van	5%
Bicycle	3%
On foot	13%
Other method of travel to work	1%

- 5.7 The mode split demonstrated above in **Table 5.1** is adjusted from the standard Nomis data set. The adjustment is applied by discounting work from home, and not in employment and then proportionally increasing the remaining modes.
- 5.8 The above mode split has been applied to the total person trip generation determined by TRICS. A full copy of the TRCIS report is provided in **Appendix F**.
- 5.9 **Table 5.2** provides the total person trip rates and generation, and **Table 5** applies the mode split to the total person trips.

Table 5.2 – Total Person Trip Rates and Trip Generation

Time	Trip Rate			Trip Generation		
	Arrival	Departure	Two-Way	Arrival	Departure	Two-Way
08:00-09:00	0.155	0.39	0.545	70	176	245
17:00-18:00	0.361	0.164	0.525	162	74	236

- 5.10 **Table 5.2** demonstrates that the total two-way person trips generated by the site will be 245 in the AM Peak and 236 in the PM Peak.
- 5.11 **Table 5.3** provides the total person trip generation for the site split into the expected mode split detailed within **Table 5.1** above.



Table 5.3 – Trip Generation by Mode

Mode	Mode Split	AM			PM		
		Arrival	Departure	Two-Way	Arrival	Departure	Two-Way
Underground, metro, light rail, tram	0%	0	0	0	0	0	0
Train	4%	3	7	10	6	3	9
Bus, minibus or coach	3%	2	4	6	4	2	6
Taxi	0%	0	0	0	0	0	0
Motorcycle, scooter or moped	1%	1	1	2	1	1	2
Driving a car or van	70%	49	123	172	114	52	166
Passenger in a car or van	5%	3	9	12	8	4	12
Bicycle	3%	2	5	7	5	2	7
On foot	13%	9	23	32	21	10	31
Other method of travel to work	1%	1	2	3	2	1	3
Total	100%	70	176	245	162	74	236

- 5.12 During the morning peak hour (08:00-09:00), the proposed development is forecast to generate up to a maximum of 172 two-way vehicle movements and 166 two-way vehicle movements in the PM peak. This equates to approximately 3 new trips every minute in the AM and PM peak which is not considered to have a detrimental effect on the local highway network.

Summary

- 5.13 In summary TRICS has been used to derive a person trip generation rate for the proposed residential development. This person trip rate indicates that the site will produce 176 new person trips in the AM peak and 236 person trips in the PM peak.
- 5.14 In order to understand the number of new vehicles this will add to the local highway network, Nomis has been used to understand the local method of travel to work figures for the site. The Nomis data set suggests that 70% of person trips will drive in a car or van.
- 5.15 The total vehicle trips forecast for the site will be 172 two-way vehicle movements in the AM peak and 166 two-way vehicle movements in the PM peak. Overall, these the trips represent 3 new cars every minute during either peak hour. This is not considered to have a significant impact on the surrounding local highway network.



6.0 Trip Distribution and Assignment

- 6.1 This section sets out the approach to distribution and assignment of vehicle trips across the local highway network.

Vehicle Distribution

- 6.2 To establish the distribution of vehicle trips to work, the Nomis Census data from the MSOA 2011 Super Output Area Middle Layer was used. Within this, the 'location of usual residence' was specified as Vale of Glamorgan (MSOA 014) and 'place of work' as all destinations. This method is used to forecast where future residents of the site may work and the route choices they would likely take. Route choices have been determined by making reference to Google Maps, considering the most appropriate route on the local highway network. All route choices are based on a neutral weekday at 08:00.
- 6.3 A summary of routes is detailed in **Table 6.1**.

Table 6.1 – Distribution of Traffic (Residents)

Route	Total	Percentage
Readers Way / Rhoose Road (W)	333	12%
Readers Way / Porthkerry (W) / A4226 (E) / Waycock (S)	107	4%
Readers Way / Porthkerry (W) / A4226 (E) / Waycock (E)	656	23%
Readers Way / Porthkerry (W) / A4226 (E) / Waycock (N)	175	6%
Fonmon / B4265 / A4226 (E) / Waycock (S)	107	4%
Fonmon / B4265 / A4226 (E) / Waycock (E)	487	17%
Fonmon / B4265 / A4226 (E) / Waycock (N)	175	6%
Fonmon / Fontygary / B4265 (W)	816	29%
Total	2855	100%

*Any errors are due to rounding

- 6.4 As detailed in **Table 6.1** approximately 45% of traffic will route through the Rhoose Road Roundabout, with approximately 6% travelling within Rhoose. The remaining 39% will proceed through Pentir-y-De roundabout and proceed north towards Port Road Roundabout.
- 6.5 Alternatively, 55% will proceed west out of the development via the Fontygary signalised crossroads. The of the 55%, 29% will proceed west. The remaining 26% will route through Dragonfly Drive Roundabout, where it will link up with the 39% proceeding from Rhoose to Port Road.
- 6.6 This 65% of traffic will then arrive at Waycock Roundabout where it will proceed north or east towards Cardiff, or south and east towards Barry.



7.0 Highway Network Assessment

Overview

- 7.1 To consider the effect of the forecast development traffic on the local highway network, a scoping note was submitted, and subsequent discussions have taken place with VoGC officers to determine a scope of assessment.
- 7.2 Further to these discussions, the following junctions have been assessed:
- B4265/Fontygary Road;
 - Fontygary Road/Fonmon Road/Fontygary Leisure Park;
 - Rhoose Road/Readers Way/Porthkerry Road Roundabout;
 - Pentir Y De/Porthkerry Road;
 - B4265 / Tredogan Road / Dragonfly Drive Roundabout;
 - A4226/ Port Road Roundabout; and
 - Waycock Roundabout.
- 7.3 MCC survey data has been used in order to determine the existing flows at these junctions to provide the baseline traffic flows.
- 7.4 The vehicle trips associated with the proposed development has been distributed through these junctions.
- 7.5 The industry standard software package 'Junctions 10', produced by TRL has been used to inform the modelling of unsignalised junctions. Within Junctions 10, the design threshold for ratio of flow to capacity (RFC) is at 0.85. Beyond this point, the junction begins to experience reduced capacity and becomes less efficient. An RFC above 0.85 is typically where mitigation might be considered to improve junction performance. With regards to a queue, this is expressed in vehicles and shows the number of vehicles that may be queuing, with a '1.0' queue representing one full vehicle.
- 7.6 'LinSig 3' an Industry standard software package produced by JCT has also been used to inform the modelling of signalised junctions. Within in LinSig 3, the design threshold for practical reserve capacity (PRC) at values greater than 0%. At negative results, the junction begins to become oversaturated and less efficient with higher ques and delays. A negative PRC is where mitigation might be considered to improve junction performance. With regards to a queue, this is expressed in vehicles and shows the number of vehicles that may be queuing, with a '1.0' queue representing one full vehicle.
- 7.7 The full junction modelling output reports are provided in **Appendix G**.
- 7.8 The assessment has been undertaken for the following peak hours:
- AM weekday peak hour (08:00 – 09:00).
 - PM weekday peak hour (17:00 – 18:00).



Assessment Scenarios

7.9 The following assessment scenarios have been considered.

- Opening Year (2025).
- Opening Year (2025) + Development.
- Future Year (2034).
- Future Year (2034) + Development.

TEMPro Growth Factors

7.10 The development scenarios include a future year scenario set at the scoping stage of the report. This outlines the development should account for the baseline traffic, development flows and 10 years of traffic growth.

7.11 To create a representative future year scenario TEMPro growth factors have been produced to apply traffic growth. The Trip End Model Programme determines growth through NTEM data sets the apply traffic from new developments in the surrounding area.

7.12 TEMPro growth factors have been applied to bring the baseline to opening year of 2025, and from 2025 to 2034.

7.13 The factors are shown in **Table 7.1**.

Table 7.1 – TEMPro Growth Factors

Time	Period	Level	Area	Local Growth Figure
AM	2023-2025	W02000250	The Vale of Glamorgan 014	1.007
PM	2023-2025	W02000250	The Vale of Glamorgan 014	1.007
AM	2024-2025	W02000250	The Vale of Glamorgan 014	1.004
PM	2024-2025	W02000250	The Vale of Glamorgan 014	1.003
AM	2025-2034	W02000250	The Vale of Glamorgan 014	1.089
PM	2025-2034	W02000250	The Vale of Glamorgan 014	1.087

7.14 The future year of 2034 is considered appropriate and in line with the Department for Transport's (DfT) Circular 02/2022 which states that an opening year assessment together with development traffic, any forecast growth and committed development should be utilised in order to determine what mitigation is required to alleviate any transport impacts.

Percentage Impact Assessment

7.15 In the first instance, junctions which are considered to be subject to a 5% or higher impact as a result of development traffic would be subject to a further junction capacity modelling assessment.

7.16 Using the 2023/2024 baseline surveys, a percentage impact assessment for each junction has been undertaken. The results for the surveys compared with the forecast development flows for the development is shown in **Table 7.1** and **Table 7.2**.



Table 7.2 – Percentage Impact (AM)

Junction	Base Flows	Development	Base + Development	Impact
Fonmon Rd / Fontygary Rd	358	49	407	14%
Rhoose Road Rb	579	77	656	13%
Pentir-y-De Rb	580	56	636	10%
Port Rd Rb	1,361	103	1,464	8%
Waycock Rb	2,829	103	2,932	4%
Dragonfly Dr Rb	766	46	812	6%
B4265 / Fontygary Rd Rb	913	49	962	5%

Table 7.3 – Percentage Impact (PM)

Junction	Base Flows	Development	Base Development +	Impact
Fonmon Rd / Fontygary Rd	439	47	486	11%
Rhoose Road Rb	663	74	737	11%
Pentir-y-De Rb	795	55	850	7%
Port Rd Rb	1503	99	1602	7%
Waycock Rb	2,671	99	2,770	4%
Dragonfly Dr Rb	879	45	924	5%
B4265 / Fontygary Rd Rb	1,138	47	1,185	4%

7.17 The following junctions are identified as having a percentage impact over 5%:

- Fonmon Road / Fontygary Road;
- Rhoose Road Roundabout;
- Pentir-y-De Roundabout;
- Port Road Roundabout;
- Dragonfly Drive Roundabout; and
- B4265 / Fontygary Road Roundabout.

Junction Capacity Assessment

Junction 1 – Fonmon Road & Fontygary Road Signalised Crossroads - LinSig

7.18 The junction modelling results for the Fonmon Road and Fontygary Road are provided in **Table 7.4**.



Table 7.4 – Fonmon Road & Fontygary Road Signalised Crossroads

Arm	AM				PM			
	DoS (%)	MMQ (PCU)	Delay (S/PCU)	PRC (%)	DoS (%)	MMQ (PCU)	Delay (S/PCU)	PRC (%)
	2024 Base							
Fontygary Road (East)	20.3%	1.8	27.4	194.2%	23.9%	2.3	23.2	166.2%
Fonmon Road (North)	29.1%	2.5	36.6		31.8%	2.1	44.7	
Fontygary Road (East)	30.6%	3.1	28.9		33.8%	3.6	25.4	
Fontygary Leisure Park (South)	7.0%	0.3	50.1		26.8%	1.1	54.3	
	2025 Opening							
Fontygary Road (East)	27.1%	1.7	28.9	139.3 %	31.8%	2.2	25.7	120.8%
Fonmon Road (North)	35.9%	2.3	37.0		38.8%	1.9	44.8	
Fontygary Road (East)	37.6%	2.9	30.0		40.8%	3.5	27.4	
Fontygary Leisure Park	5.9%	0.2	41.2		22.6%	0.9	44.0	
	2025 Opening + Development							
Fontygary Road (East)	45.8%	2.5	37.1	81.0%	51.6%	30.9	3.8	74.3%
Fonmon Road (North)	48.1%	3.7	35.7		47.8%	45.3	2.6	
Fontygary Road (East)	49.7%	3.2	37.1		50.1%	31.7	3.7	
Fontygary Leisure Park	5.9%	0.2	41.2		22.6%	44.0	0.9	
	2034 Future							
Fontygary Road (East)	29.4%	1.9	29.2	118.0%	37.4%	2.5	27.0	96.7%
Fonmon Road (North)	39.2%	2.6	37.7		42.6%	2.1	45.9	
Fontygary Road (East)	41.3%	3.2	30.7		45.8%	3.9	28.7	
Fontygary Leisure Park	6.5%	0.3	41.3		24.8%	1.0	44.4	



Arm	AM				PM			
	DoS (%)	MMQ (PCU)	Delay (S/PCU)	PRC (%)	DoS (%)	MMQ (PCU)	Delay (S/PCU)	PRC (%)
2034 Future + Development								
Fontygary Road (East)	45.4%	2.6	35.4	65.3%	58.5%	4.2	32.6	54.7%
Fonmon Road (North)	54.4%	4.2	38.7		56.4%	3.0	51.1	
Fontygary Road (East)	50.5%	3.6	36.0		55.8%	4.1	32.8	
Fontygary Park Leisure	6.5%	0.3	41.3		24.8%	1.0	44.4	

- 7.19 **Table 7.4** shows that the junction is forecast to operate within its theoretical capacity in all scenarios, during both peak periods. The highest DoS of the junction is 58.5% on the eastern arm of the junction, during the future year 2034 plus development scenario, within the PM peak. This results in a queue of 4 PCUs and a delay of just over 32.6 seconds. Overall PRC remains at 54.7%, suggesting the addition of development traffic remains well within the operational capacity of the junction.

Junction 2 – Rhoose Road Roundabout – ARCADY

- 7.20 The junction modelling results for the Rhoose Road roundabout are provided in **Table 7.4**.

Table 7.5 – Rhoose Road Roundabout

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2025 Opening						
1 - Porth Kerry Road	0.2	3.29	0.19	0.3	3.38	0.25
2 - Rhoose Road (W)	0.3	3.66	0.20	0.3	3.88	0.23
3 - Readers Way	0.1	5.20	0.12	0.1	4.85	0.07
4 - Rhoose Road (NE)	0.1	4.24	0.05	0.1	3.92	0.05
2025 Opening + Development						
1 - Porth Kerry Road	0.3	3.35	0.21	0.4	3.53	0.28
2 - Rhoose Road (W)	0.3	3.68	0.20	0.3	3.94	0.25
3 - Readers Way	0.2	5.67	0.20	0.1	5.02	0.10
4 - Rhoose Road (NE)	0.1	4.39	0.05	0.1	3.98	0.05
2034 Future						
1 - Porth Kerry Road	0.3	3.37	0.21	0.4	3.49	0.27
2 - Rhoose Road (W)	0.3	3.76	0.22	0.3	4.01	0.26
3 - Readers Way	0.2	5.35	0.13	0.1	4.96	0.07
4 - Rhoose Road (NE)	0.1	4.34	0.05	0.1	3.99	0.06
2034 Future + Development						
1 - Porth Kerry Road	0.3	3.44	0.22	0.4	3.65	0.30
2 - Rhoose Road (W)	0.3	3.77	0.22	0.4	4.08	0.27
3 - Readers Way	0.3	5.84	0.21	0.1	5.14	0.10
4 - Rhoose Road (NE)	0.1	4.49	0.06	0.1	4.05	0.06



- 7.21 **Table 7.5** shows that the junction is forecast to operate within its theoretical capacity in all scenarios. The highest RFC of the junction is 0.3 on the Rhoose Road (NE), during the future year 2034 plus development scenario, within the PM peak. This results in a queue of 0.4 PCUs and a delay of just over 3.65 seconds. This remains well within the operational capacity of the junction.

Junction 3 – Pentir-Y-De Roundabout – ARCADY

- 7.22 The junction modelling results for the Pentir-Y-De Roundabout are provided in **Table 7.6**.

Table 7.6 – Pentir-Y-De Roundabout

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2025 Opening						
1 - Porth Kerry Road (E)	0.1	2.53	0.11	0.5	3.24	0.32
2 - Pentir Y De	0.1	2.78	0.11	0.1	2.89	0.05
3 - Porth Kerry Road (W)	0.3	3.08	0.21	0.2	2.86	0.19
2025 Opening + Development						
1 - Porth Kerry Road (E)	0.1	2.51	0.11	0.5	3.24	0.32
2 - Pentir Y De	0.1	2.82	0.12	0.1	2.99	0.09
3 - Porth Kerry Road (W)	0.3	3.22	0.24	0.3	2.96	0.20
2034 Future						
1 - Porth Kerry Road (E)	0.1	2.48	0.12	0.5	3.39	0.35
2 - Pentir Y De	0.1	2.76	0.12	0.1	2.96	0.06
3 - Porth Kerry Road (W)	0.3	3.14	0.23	0.3	2.93	0.20
2034 Future + Development						
1 - Porth Kerry Road (E)	0.2	2.65	0.15	0.5	3.39	0.35
2 - Pentir Y De	0.2	3.02	0.14	0.1	3.06	0.09
3 - Porth Kerry Road (W)	0.1	2.63	0.12	0.3	3.03	0.22

- 7.23 **Table 7.6** shows that the junction is forecast to operate within its theoretical capacity in all scenarios. The highest RFC of the junction is 0.35 on the Porth Kerry Road arm of the junction, during the future year 2034 plus development scenario, within the PM peak. This results in a queue of 0.5 PCUs and a delay of just over 3.39 seconds. This remains well within the operational capacity of the junction.



Junction 4 – Port Road Roundabout – ARACDY

7.24 The junction modelling results for the Pentir-Y-De Roundabout are provided in **Table 7.7**.

Table 7.7 – Port Road Roundabout

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2025 Opening						
1 - A4226 (E)	0.7	4.10	0.41	2.0	7.06	0.67
2 - Port Road	0.2	1.60	0.17	0.1	1.51	0.09
3 - A4226 (W)	0.4	2.99	0.26	0.3	2.46	0.22
2025 Opening + Development						
1 - A4226 (E)	0.8	4.22	0.43	2.5	8.15	0.72
2 - Port Road	0.2	1.63	0.19	0.1	1.51	0.10
3 - A4226 (W)	0.4	3.11	0.29	0.3	2.44	0.23
2034 Future						
1 - A4226 (E)	0.8	4.38	0.44	2.7	8.56	0.73
2 - Port Road	0.2	1.65	0.19	0.1	1.54	0.10
3 - A4226 (W)	0.4	3.15	0.29	0.3	2.54	0.24
2034 Future + Development						
1 - A4226 (E)	0.9	4.52	0.47	3.4	10.24	0.77
2 - Port Road	0.3	1.68	0.21	0.1	1.54	0.11
3 - A4226 (W)	0.5	3.29	0.32	0.3	2.52	0.25

7.25 **Table 7.7** shows that the junction is forecast to operate within its theoretical capacity in all scenarios. The highest RFC of the junction is 0.77 on the A4226 (East) arm of the junction, during the future year 2034 plus development scenario, within the PM peak. This results in a queue of 3.4 PCUs and a delay of just over 10.24 seconds. This remains well within the operational capacity of the junction.

Junction 5 – Dragonfly Drive Roundabout – ARCADY

7.26 The junction modelling results for the Dragonfly Drive Roundabout are provided in **Table 7.8**.



Table 7.8 – Dragonfly Drive Roundabout

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2025 Opening Year						
1 - A226 (E)	0.3	2.47	0.23	0.3	2.46	0.23
2 - Tredogan Road (S)	0.1	2.45	0.05	0.0	2.42	0.05
3 - Dragonfly Drive (SW)	0.4	3.42	0.27	0.4	3.34	0.27
4 - B4265 (W)	0.0	2.20	0.03	0.0	2.18	0.03
5 - Tredogan Road (N)	0.0	0.00	0.00	0.0	0.00	0.00
2025 + Development						
1 - A226 (E)	0.2	2.33	0.18	0.3	2.51	0.25
2 - Tredogan Road (S)	0.1	2.38	0.05	0.1	2.45	0.05
3 - Dragonfly Drive (SW)	0.3	3.22	0.24	0.4	3.39	0.27
4 - B4265 (W)	0.1	2.27	0.07	0.0	2.20	0.04
5 - Tredogan Road (N)	0.0	1.98	0.00	0.0	0.00	0.00
2034 Future Year						
1 - A226 (E)	0.2	2.36	0.19	0.3	2.52	0.25
2 - Tredogan Road (S)	0.1	2.40	0.05	0.1	2.46	0.05
3 - Dragonfly Drive (SW)	0.4	3.34	0.27	0.4	3.52	0.29
4 - B4265 (W)	0.1	2.26	0.05	0.0	2.21	0.03
5 - Tredogan Road (N)	0.0	1.97	0.00	0.0	0.00	0.00
2034 + Development						
1 - A226 (E)	0.3	2.38	0.20	0.4	2.58	0.27
2 - Tredogan Road (S)	0.1	2.41	0.05	0.1	2.49	0.05
3 - Dragonfly Drive (SW)	0.4	3.35	0.27	0.4	3.58	0.30
4 - B4265 (W)	0.1	2.30	0.07	0.0	2.23	0.04
5 - Tredogan Road (N)	0.0	1.99	0.00	0.0	0.00	0.00

7.27 **Table 7.8** shows that the junction is forecast to operate within its theoretical capacity in all scenarios. The highest RFC of the junction is 0.30 on the Dragonfly Drive (south west) arm of the junction, during the future year 2034 plus development scenario, within the PM peak. This results in a queue of 0.4 PCUs and a delay of just over 3.58 seconds. This remains well within the operational capacity of the junction.



Junction 6 – B4265 & Fontygary Road priority junction – PICADY

- 7.28 The junction modelling results for the B4265 / Fontygary Road priority junction are provided in **Table 7.8**.

Table 7.9 – B4265 & Font-T-Garry Road Priority Junction

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2025 Opening						
Stream B-C	0.3	6.82	0.25	0.3	7.05	0.23
Stream B-A	0.0	13.30	0.03	0.1	11.65	0.05
Stream C-AB	0.4	9.48	0.27	1.8	18.87	0.64
2025 Opening + Development						
Stream B-C	0.5	7.45	0.30	0.4	7.40	0.26
Stream B-A	0.2	12.17	0.11	0.1	12.81	0.10
Stream C-AB	0.5	9.84	0.30	2.6	23.82	0.72
2034 Future						
Stream B-C	0.4	7.14	0.27	0.4	7.43	0.25
Stream B-A	0.1	13.96	0.03	0.1	12.84	0.06
Stream C-AB	0.5	9.94	0.29	2.5	23.11	0.71
2034 Future + Development						
Stream B-C	0.5	7.77	0.33	0.4	7.83	0.28
Stream B-A	0.1	10.12	0.11	0.1	14.28	0.11
Stream C-AB	0.5	9.70	0.32	3.8	30.23	0.79

- 7.29 **Table 7.8** shows that the junction is forecast to operate within its theoretical capacity in all scenarios. The highest RFC of the junction is 0.79 on stream to C-AB of the junction, during the future year 2033 + development scenario, within the PM peak. This results in a queue of 3.8 PCUs and a delay of just over 30 seconds. This remains within the operational capacity of the junction.

Summary

- 7.30 The forecast impact of the proposed development on the local highway network is demonstrated to be minimal in most cases, with slight increases to delay and queuing at existing junctions.
- 7.31 The junction modelling results at the Waycock Cross roundabout demonstrate that the junction would operate over capacity in the 2033 Future Year plus Development scenarios, in the AM peak period. However, as set out above, the junction is already shown to be approaching capacity as a result of the Model Farm development (Ref: 2019/00871/OUT). The proposed development will not result in a detrimental impact to highway safety at the Waycock Cross junction.



- 7.32 It is noted that the Model Farm development, although considered a committed development has not yet received planning consent, but has been included in the junction analysis and thus the assessment can be considered robust. There is potential for the Cardiff and Vale College (CAVC) site (Ref: 2024/00329/FUL) to be delivered before the Model Farm development. It is also worth noting that details regarding additional committed developments to be considered in the assessment is awaited from VoGC.
- 7.33 In summary, the junction capacity assessment results demonstrate that each of the junctions currently operate within the theoretical capacity in their current form and therefore the development can be delivered without any highway interventions.
- 7.34 The conclusion is that the effect of the development, in terms of highway capacity, is not significant and does not give rise to any severe residual cumulative impacts.
- 7.35 Due to the sustainable location of the site and in line with discussions with VoGC officers, there will be a commitment to provide an appropriate level of active travel provision, and to undertake further investigation for active travel links into Rhoose.



8.0 Transport Implementation Strategy

Overview

- 8.1 The Welsh Government's Planning Policy Wales Technical Advice Note 18: Transport States that:

"The transport assessment process should include the production of a 'Transport Implementation Strategy' (TIS) for the development. This should set objectives and targets relating to managing travel demand for the development and set out the infrastructure, demand management measures and financial contributions necessary to achieve them. The TIS should set a framework for monitoring the objectives and targets, including the future modal split of transport to development sites".

- 8.2 This section considers how future residents will travel to and from the site and what measures will be put in place to monitor mode split targets.

Access Arrangements

- 8.3 Pedestrian and cycle access to the site will be provided from Celtic Way & Readers Way. The residential character of the streets will produce low speeds that will increase the safety for cyclists travelling to and from the site. Appropriate parking will be provided for cyclists in-line with VoGC standards.
- 8.4 Either access to the site will be suitable to accommodate refuse vehicles and delivery vans.

Mode Share Target

- 8.5 The existing (based on census method of travel to work) and proposed mode split are shown below in **Table 8.1**. The implementation of the transport strategy including Travel Plan is designed to reduce the mode share for car driver and increase the mode share for public transport and walking.



Table 8.1 Mode Share Target

Target	Indicator
Residents	
Reduce car vehicle trips by 2.5% from the baseline travel survey	Resident modal split monitoring survey
Increase the number of active travel trips by 2.5% from the baseline travel survey	Resident modal split monitoring survey

- 8.6 The actual residential modal share target will be set following the completion of the development and completion of the travel survey within 3 months of occupation.

Travel Plan

- 8.7 An Travel Plan will be prepared and submitted as part of the planning application submission for the proposed development. The Plan will include a summary of the local pedestrian, cycle and public transport facilities as well as outlining the expected travel patterns of future users of the site.
- 8.8 The Travel Plan will include a range of measures to be explored by the Travel Plan Coordinator, once appointed. A summary of the measures which will be included in the Plan is provided below.

Package of Measures

Measures

Hard Measures

- 8.9 The site will deliver some measures as a part of the proposals to be brought forward by the site.
- 8.10 The implementation of these physical measures is the responsibility of with the construction and delivering these measures is the responsibility of the developer and or contractors.
- Design residential areas in accordance with the latest All Wales Common Standards for Residential Estate Roads;
 - Provide car parking in line with VoGC standards;
 - Provide safe, secure convenient and lit cycle parking in line with VoGC standards;
 - Provide high quality pedestrian routes with dropped kerbs and footpaths, providing linkages with existing routes in the area; and
 - Provide lighting on pedestrian / cycle routes.



Design Residential areas in line with All Wales Common Standards for Residential Estate Roads

- 8.11 The streets provided within the development will be delivered in line with the guidance provided in All Wales Common Standards for Residential Estate Roads. The All-Wales Common Standards for Residential Estate Roads guidance provides principles that will provide safe and inclusive public spaces for future residents.

Car and Cycle Parking

- 8.12 Car parking for the development will provide appropriate level of car parking in line with VOGC standards.
- 8.13 In addition, the site will also provide secure and lit cycle parking, also in line with the standards outlined with VoGC.

Provide Suitable Pedestrian and Cyclist Facilities.

- 8.14 As part of the proposed development, the permeability through the site will be improved by creating internal pedestrian and cycle links. These internal routes will allow pedestrians and cyclists to travel through the site and exit onto the wider pedestrian network that will benefit existing residents in the area and any future potential residents.
- 8.15 Pedestrian facilities provided on site will be conducive to and support safe pedestrian travel through the site. Paths will be well lit, and road crossing will provide will be provide dropped kerbs and tactile paving to aid pedestrian movement through the site.

Soft Measures

Travel Plan Management and Promotion

- 8.16 A Travel Plan Coordinator (TPC) will be appointed who will be responsible for overseeing the implementation of the Travel Plan. The TPC will provide personalised travel planning advice to residents should they require this service, as well as providing a Welcome Pack to all new residents.
- 8.17 This Welcome Pack will contain information regarding:
- Walking and cycling routes;
 - Public transport timetables and routes;
 - Public transport interchange locations;
 - Public transport fare and season ticket information;
 - Journey Planner tools;
 - Contact details for the TPC;
 - Brief overview of the Travel Plan.



- 8.18 The TPC will continuously promote the Travel Plan and its initiatives and will be responsible for investigating new ways for residents to become involved. An example could be holding a promotional event where residents can sign up for bicycle training, social bike rides/walks and receive information regarding public transport etc. The TPC will also publicise the on-going progress and successes of the Travel Plan, in order to encourage residents to start to travel or continue to travel sustainably.

Promotion

- 8.19 The TPC will be responsible for promoting the benefits of walking to residents of the Site. As well as providing information regarding local walking routes on the notice boards and in Welcome Packs, the TPC will promote public health campaigns such as Change for Life, which highlight the health benefits associated with active travel.
- 8.20 As described previously, information regarding local cycle routes will be provided within Welcome Packs provided to residents upon occupation.
- 8.21 In addition, the TPC will liaise with local bicycle retailers regarding the potential for providing residents with discounts for cycle equipment.
- 8.22 The TPC will include promotion of meetings and events to encourage residents to participate in sustainable travel events in the welcome packs. An example of the social value and community engagement events includes 'National Car Free Day' and 'Bike Week'.

Summary

- 8.23 This section has set out the Transport Implementation Strategy for the site. It has detailed the access arrangements and the multimodal trip generation for peak periods. The existing and target mode share has been identified and the package of measures to support this has been outlined at this stage.



9.0 Summary and Conclusions

Summary

- 9.1 SLR Consulting Ltd is retained by PMG Limited to provide transport and highways advice in relation to the proposed residential development at Land off Readers located near Rhoose, a village in the Vale of Glamorgan (VoGC).
- 9.2 The site is located to the south of Cardiff Airport within the settlement of Rhoose. The site is located in the northwest of the settlement. The land surrounding the proposed development includes Cardiff Airport to the east, the Fontygary residential area of Rhoose to the south and west, and agricultural land and Port Road to the north.
- 9.3 A review of walking and cycling links indicates that pedestrians and cyclists would be able to commute from the site to Rhoose. Recent walking and cycling improvements have widened pedestrian footways and provided dropped kerbs and tactile paving on Fontygary Road, the main link through Rhoose.
- 9.4 The nearest bus stops to the site are the 'Mayflower' stops on Fontygary Road, with the eastbound stop being approximately 1,000m from the centre of the site and the westbound stop being approximately 1,050m from the centre of the site. These stops are serviced by the 304 which provides a link between Llanwit Major and Cardiff.
- 9.5 From Monday to Saturday there is an hourly rail service westbound to Bridgend and an hourly service eastbound to Cardiff Central, continuing through to Cardiff Queen Street, Pontypridd, and Aberdare.
- 9.6 A review of local PICs indicated there were 5 incidents with only 1 classified as serious. Each incident provided contributory factors which suggested all they were as a result of driver/pedestrian error. On the basis of the above, that there are no inherent safety issues associated with the existing highway network and junction arrangements in the vicinity of the site.
- 9.7 The impact of the proposed development on the local highway network is demonstrated to be minimal in most cases, with slight increases to delay and queuing at existing junctions.
- 9.8 The conclusion is that the effect of the development, in terms of highway capacity, is not significant and does not give rise to any severe residual cumulative impacts.

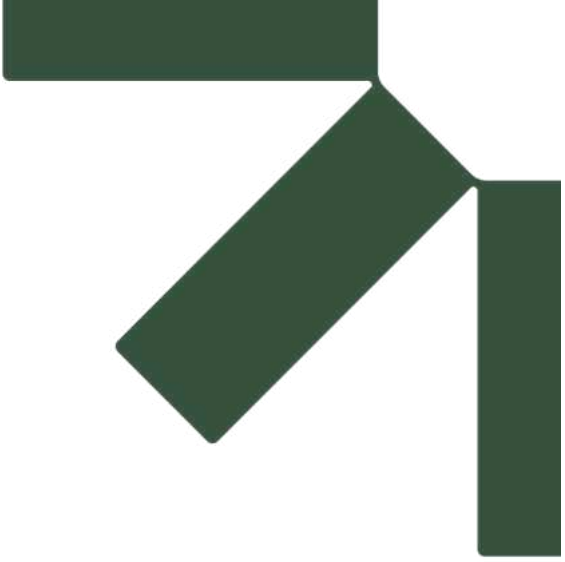
Conclusion

- 9.9 The site is well located and close to a number of existing and community facilities that encourage the use of alternative modes of travel. The ability to walk and cycle is of paramount importance and the development neatly links with a number of existing footways that serve the wider settlement of Rhoose. Cycle routes are available and the VoG are committed to improve cycle connections between Rhoose and Barry.



- 9.10 The findings of the highway network assessment show that the effect of the development is not significant in terms of highway capacity and does not give rise to any severe residual impacts. The proposal to develop the Land at Readers Way site at this location should therefore be supported.





Appendix A VoG Preferred Strategy Masterplan

Land off Readers Way, Rhoose

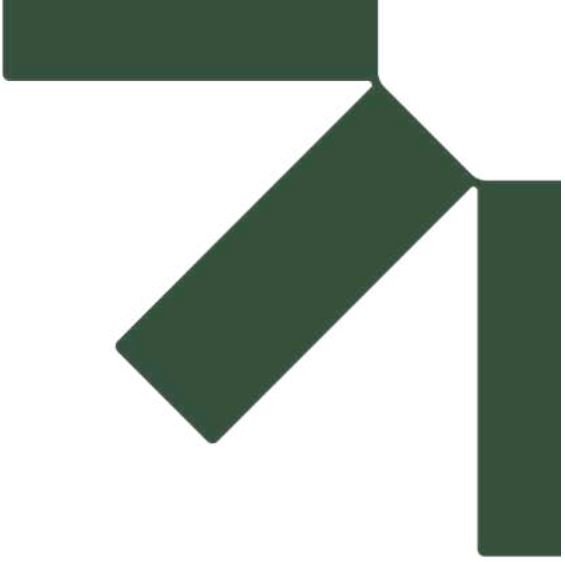
Transport Assessment

PMG Limited

SLR Project No.: 237538

21 May 2024





Appendix B TA Scoping Note

Land off Readers Way, Rhoose

Transport Assessment

PMG Limited

SLR Project No.: 237538

21 May 2024

PMG Limited

Transport Scoping Note

SLR Project No.: 237538

18 January 2024

Revision: V02

RE: LAND OFF READERS WAY, RHOOSE

1.0 Introduction

- 1.1 SLR has been appointed by PMG Limited to provide highways and transportation advice in relation to development proposals on Land Off of Readers Way, Rhoose.
- 1.2 The site forms a natural extension to the existing settlement of Rhoose which has a range of existing community facilities and amenities as well as a number of public transport facilities including Rhoose Cardiff International Airport railway station and a number of local bus stops.
- 1.3 The proposed development would comprise around 450 residential dwellings as well as some community facilities and country park and sports facilities.
- 1.4 The site has been identified in the Draft Vale of Glamorgan Replacement Local Development Plan Preferred Strategy.
- 1.5 This Scoping Note sets out the scope and proposed approach for the Transport Assessment (TA) that will be prepared in support of the proposed allocation and any subsequent planning application.

Transport Strategy Note (TSN)

- 1.6 This Scoping Note follows the submission of a TSN (July 2023), which provides more extensive details of the proposed development and active travel links around the site to local facilities. This supported the subsequent draft allocation within the Preferred Strategy.
- 1.7 The TSN report already provides details on the existing site and the development proposals. This scoping report focuses on the scope of the network assessment. Details covered briefly in this report are also covered in the submitted (TSN) is provided in **Appendix A**, for reference.



Transport Assessment

- 1.8 The continued promotion through various stages of the Replacement LDP and any subsequent planning application will be supported by a Transport Assessment (TA). The TA will follow the headings outlined below.

Introduction

- 1.9 This chapter will set out the purpose of the report and will identify the issues to be covered.

Existing Situation

- 1.10 This section of the report will consider the existing accessibility of the site having regard to a range of transport opportunities, including active travel, public transport, and the local highway network in the surrounding area.
- 1.11 Existing transport conditions pertaining to the site will be established to provide baseline data against which the potential impacts of the development proposals can effectively be assessed. Baseline observations are to be informed by desktop investigations, site visits and traffic survey data.
- 1.12 A high-level review of the existing accessibility of the site is provided below and a more comprehensive review will be contained within the TA. It should be noted that where reference is made to the 'site', this refers to land outlined within the appendices of the TSN attached as **Appendix A**.

Site Location

- 1.13 The site forms a natural extension to the existing settlement of Rhoose which has a range of community facilities and amenities as well as a number of public transport nodes such as Rhoose Cardiff International Airport railway station and local bus stops.
- 1.14 The location of the site is shown in **Figure 1**.



Figure 1 – Local Site Location



Active Travel

Existing Network

- 1.15 The area is served by good quality pedestrian and cycle routes, through attractive and active environments. Existing pedestrian facilities in the vicinity of the site include formal footways, shared footway/cycleways, Public Rights of Way (PRoW), and Route 88 of the National Cycle Network (NCN).

Future Network

Future improvements to the active travel network have been submitted as a part of the Vale of Glamorgan's Integrated Network Map. These will be identified and considered as part of the TA.



Figure 2 – Future Walking and Cycling Routes



1.16 These routes include:

- VALE-SPR-Future-003H – A shared footway/cycleway within Rhoose that will provide footway widening to shared use width /footway upgrades, improving pedestrian and cycle improvements along Porthkerry Road, Rhoose Road and Fontygary Road in Rhoose;
- VALE-RHSE-Future-043C – A Walking route will be provided on Kemeyes Road, just south of readers way and will improve the walking route to Rhoose station to the south;
- VALE-PKRY-Future-042A – Improvements to cycling along Porthkerry Road will provide improvements to shared use path on NCN88 through Porthkerry, including removal of A-frame access barrier; and
- VALE-SPR-Future-003F – extends an existing walking cycling route that ends on Port road and Improving connection to Barry via a new walking/cycling route along Port Road and the A4226.

Local Facilities

- 1.17 The site is well located with regard to local facilities within a convenient walk and cycle time based on existing infrastructure, such that future residents will have the opportunity to access key services via active travel modes.
- 1.18 The majority of Rhoose is accessible within a 2km walking distance or 25-minute journey time. For cyclists, central Barry and its facilities can be accessed within an 8km cycling distance or 30-minute journey time.



1.19 **Table 1** provides a summary of diverse facilities accessible to the site

Table 1 – Local Facilities

Public Transport	Distance (m)	Walk Time(mins)	Cycle Time(mins)
'Mayflower' Bus Stops	1,050-1100	14-15	4
Station Road/Romily Road Bus Stops	1,100-1250	15-17	4
Rhoose Cardiff International Airport railway station	1,300m	17	5
Education	Distance (m)	Walk Time(mins)	Cycle Time(mins)
Rhws Primary School	1,050	14	4
Passport to Play Day Nursery	1,500	19	6
South Point Primary School	1,900	24	7
Retail, Food & Drink, Other	Distance (m)	Walk Time(mins)	Cycle Time(mins)
Rhoose Post Office	900	10	4
Fontygary Inn	820	10	4
Fontygary Fish Bar	870	11	4
Rhoose Community Library	1,000	12	4
Golden Star	1,000	12	4
Premier	1,050	13	5
Raj Kinara	1,070	13	5
Spar Rhoose	1,100	14	5
Tesco Express	1,100	14	5
The Highwayman Inn	1,350	17	7
Rhoose Cafe	1,400	17	7
The Flying Club	1,700	22	8
Healthcare	Distance (m)	Walk Time(mins)	Cycle Time(mins)
Rhoose Medical Centre	900	10	5
Rhoose Pharmacy	900	10	5
Rhoose Surgery	1,000	12	5
Sport & Leisure	Distance (m)	Walk Time(mins)	Cycle Time(mins)
Rhoose Community Centre	1,100	13	6
Ceri Road Playing Fields	1,800	22	7
Celtic Way Community Centre	1,800	22	8
Rhoose Point Nature Reserve	1,900	22	8
Nurston Close Play Area	2,100	25	9



Local Public Transport

Bus

- 1.20 The nearest bus stops to the site are the 'Mayflower' stops on Fontygary Road, with the eastbound stop being approximately 1,000m from the centre of the site and the westbound stop being approximately 1,050m from the centre of the site.
- 1.21 The local service that runs through all the stop in Rhoose is the 304. The service runs between Llantwit Major and Cardiff via Barry and provides an hourly service Monday to Saturday, and every other hour on Sundays.

Rail

- 1.22 Rhoose benefits from having Rhoose Cardiff International Airport Railway station. The station is located approximately 1,300m from the centre of the site.

Summary

- 1.23 The site well located to take advantage of local facilities, and benefits from a good surrounding active travel network. A plethora of footpaths and footways exist, some of which are traffic free that support the Welsh Governments aspirations for more local journeys to be made on foot. There are a good range of public transport options, including local bus services to neighbouring towns and villages as well as Rhoose Cardiff International railway station. This provides a regular and direct connection to Barry and onwards to Cardiff Central. The site is sustainably located and forms a natural extension to the existing settlement of Rhoose.

Policy Review

- 1.24 Policy Covered in the Transport Assessment (TA):
- Planning Policy Wales (Addition 11) (February 2021)
 - Llwybr Newydd – The Wales Transport Strategy (May 2021)
 - Future Wales – The National Plan 2040 (February 2021)
 - Active Travel (Wales) Act 2013 (October 2013)
 - Active Travel Guidance (July 2021)
 - Well-being of Future Generation (Wales) Act (April 2015)
 - South East Wales Strategic Development Plan
 - Vale of Glamorgan Local Development Plan 2011-2026



Proposed Scheme

The Masterplan

- 1.25 The proposed development would comprise around 450 residential dwellings as well as some community facilities and country park and sports facilities.
- 1.26 Manual for Streets (MfS) and Manual for Streets 2 (MfS2) will be used as a framework for the design philosophy, encompassing a comprehensive movement strategy which will inform the shape and layout of the streets serving the development. In particular, the movement strategy will focus on the movement hierarchy within MfS2 with priority given to pedestrians, cyclists, and other vulnerable road users.
- 1.27 The overarching objectives of the masterplan are set out in current transport and planning policy as:
- Design for community. Putting people, and their quality of life now and in the future at the centre of decision making;
 - Minimising the need to travel, providing choice in transport, and where travel occurs, encouraging greater use of more sustainable and healthy forms of travel; and
 - Establishing priorities so that development and day-to-day facilities are accessible in the first instance by walking and cycling, then by public transport, then by motor vehicles.
- 1.28 Hence, the approach to master planning will be based on the following:
- Design;
 - Choice;
 - Behaviour; and
 - Network Management
- 1.29 The concept masterplan is provided within the appendices of the TSN attached as **Appendix A**.

Mobility Strategy

- 1.30 The TA will contain a detailed Mobility Strategy which will demonstrate the approach to exemplary design for mobility, and sustainable travel.
- 1.31 A Mobility Hub, complete with a Work Hub will be proposed on site to act as a central point for travel and community integration with the existing communities to the south. Details of bus services, pedestrian routes, and safe cycling routes will be provided as well as a home delivery collection point.



- 1.32 Demand responsive transport (DRT) will also be considered as part of the development package in combination with traditional public transport services. Other forms of shared mobility will be investigated such as a car club and a carpooling platform.
- 1.33 The site is well-placed to take advantage of a bike or e-bike sharing scheme which may take the form of day-bike hire through lockers situated within the Mobility Hub. This will be investigated as part of the development proposals.

Active Travel and Vehicular Access Arrangements

- 1.34 Access to the site for all modes is proposed to be taken from two points, Celtic Way, and Readers Way, forming an extension to the existing carriageway.
- 1.35 Pedestrian access is proposed to connect seamlessly with the existing provision on Celtic Way and Reader Way, with cyclists accommodated on the carriageway, as per the current situation on these links.
- 1.36 The site will investigate improving active travel infrastructure within and around site. Options to improve could involve improving permeability of the site or improving existing nearby P RoW connections or other existing active travel routes.
- 1.37 Options like this will be further explored in the Transport Assessment.

Parking Details

- 1.38 Car and cycle parking for the site will be provided in accordance with parking standards as contained within the Vale of Glamorgan's Parking Standards SPD.
- 1.39 Parking provision across the site will also support electric vehicle charging and other low emission technology, in line with VoG guidance.

Assessment Methodology

- 1.40 The TA will consider the effect of the development proposals on the local movement networks. This section of the Scoping Note details the parameters of the highway assessment of the development proposals including the scope of junctions to be assessed, traffic growth and trip attraction.

Traffic Growth

- 1.41 The appropriate growth factors will be obtained from NTM (with comparison to TEMPro local factors undertaken) and applied to the baseline year and future year assessment data. These factors will be adjusted to account for Local Plan growth of which the proposed site forms.
- 1.42 Standalone traffic modelling will be undertaken for the 'Opening Year' and 'Future Year' scenarios.



- 1.43 Based on the scale of the development, the base year +5 is considered appropriate. Therefore, growth factors applied are based on a TempPro growth factor from 2025-2030 using the MSOA of “The Vale of Glamorgan 014”.
- 1.44 The growth factors are provided in **Table 2**.

Table 2 – TEMPro Growth Factors

Time	Period	Level	Area	Local Growth Figure
AM	2025-2030	W02000250	The Vale of Glamorgan 014	1.052
PM	2025-2030	W02000250	The Vale of Glamorgan 014	1.051

Trip Generation

- 1.45 The trip rates and forecast trip generation associated with the site will be based on the TRICS database with parameters selecting sites for:
- Land Use – 03 Residential;
 - Sub Land Use Category – A Houses Privately Owned;
 - Location – England and Wales (excluding London);
 - Location type – Edge of Town / Suburban locations;
 - Weekday surveys only;
 - Dwelling numbers – 0 to 1,500; and
 - Car ownership less than 1 removed.
- 1.46 This TRCIS assessment differs from the one provided in the previous TSN (**Appendix A**), and now considers the site using multi-modal trip generation using the same parameters for selecting sites.
- 1.47 Multi-modal trip generation allows the application of mode splits to total person trip rates based on data from the sites location. This allows the proposed trip generation to better reflect the existing character of the local area.
- 1.48 To determine an appropriate mode split Nomis has been used. Nomis is an online census database that can provide method of travel to work data the Middle Layer Super Output Area (MSOA) in which the site is located. The MSOA “The Vale of Glamorgan 014” provides a mode split which is presented in **Table 3**.



Table 3 – Method of Travel to Work Modal Split

Mode	Mode Share (%)
Underground, metro, light rail, tram	0%
Train	4%
Bus, minibus or coach	3%
Taxi	0%
Motorcycle, scooter or moped	1%
Driving a car or van	70%
Passenger in a car or van	5%
Bicycle	3%
On foot	13%
Other method of travel to work	1%

- 1.49 The above mode split has been applied to the total person trip generation determined by TRICS. A full copy of the TRCIS report is provided in **Appendix B**.
- 1.50 **Table 4** provides the total person trip rates and generation, and **Table 5** applies the mode split to the total person trips.

Table 4 – Total Person Trip Rates and Trip Generation

Time	Trip Rate			Trip Generation		
	Arrival	Departure	Two-Way	Arrival	Departure	Two-Way
08:00-09:00	0.155	0.39	0.545	70	176	245
17:00-18:00	0.361	0.164	0.525	162	74	236

Table 5 – Trip Generation by Mode

Mode	Mode Split	AM			PM		
		Arrival	Departure	Two-Way	Arrival	Departure	Two-Way
Total	100%	70	176	245	162	74	236
Underground, metro, light rail, tram	0%	0	0	0	0	0	0
Train	4%	3	7	10	6	3	9
Bus, minibus or coach	3%	2	4	6	4	2	6
Taxi	0%	0	0	0	0	0	0
Motorcycle, scooter or moped	1%	1	1	2	1	1	2
Driving a car or van	70%	49	123	172	114	52	166
Passenger in a car or van	5%	3	9	12	8	4	12
Bicycle	3%	2	5	7	5	2	7
On foot	13%	9	23	32	21	10	31
Other method of travel to work	1%	1	2	3	2	1	3



- 1.51 During the morning peak hour, the proposed development could generate up to a maximum of 172 two-way vehicle movements in the AM peak and 166 two-way vehicle movements in the PM peak.

Trip Distribution

- 1.52 Distribution of trip will be determined by census data using the NOMIS data set WU03EW "Location of usual residence and place of work by method of travel to work (MSOA level)".
- 1.53 The place of residence will be the MSOA which the site is located within and all places of work they commute to in vehicle trips will be distributed using the online Google Maps 'Directions' tool, and professional judgement has been applied to routing closer to the site. On occasions when two or more routes could be taken to a destination, routing has been split equally.

Highways Assessment

- 1.54 In the context of national and local transport policy, the focus should not be on traffic impact rather than accommodating people movement and providing safe and efficient active travel routes to key local amenities.
- 1.55 The scope of the highway assessment will be considered in the context of the sustainable location of the site, the mobility benefits this site could provide and the sustainable transport strategy for the site.
- 1.56 For assessing the site's impact on the local highway network, a series of surveys will capture the baseline traffic for the local highway network. Based on this, development flows can be assigned to the baseline to determine their impact.
- 1.57 In the first instance, a percentage impact assessment will be undertaken at the junctions within the study area. Junctions with a percentage impact of more than 5% will be subject to more detailed junction modelling assessments. The site access will also be assessed.

Traffic Surveys

- 1.58 Manual classified count (MCC) and queue length surveys will be undertaken for a typical weekday (Tuesday, Wednesday, or Thursday) during school term time at the following junctions are extent of the local highway network to be analysed between 07:00-10:00 in the AM peak and 16:00-19:00 in the PM peak.
- MCC 1 – Fontygary Road/Fonmon Road signalised crossroads;
 - MCC 2 – Rhoose Road/Readers Way/Porthkerry Road roundabout;
 - MCC 3 – Porthkerry Road/Pentir Y De Roundabout;
 - MCC 4 – Tredogan Road/A4226/Dragonfly Drive Roundabout;
 - MCC 5 – A4226/Port Road Roundabout; and
 - MCC 6 – Weycock Cross Roundabout.



1.59 **Figure 3** provides a summary of the potential survey locations.

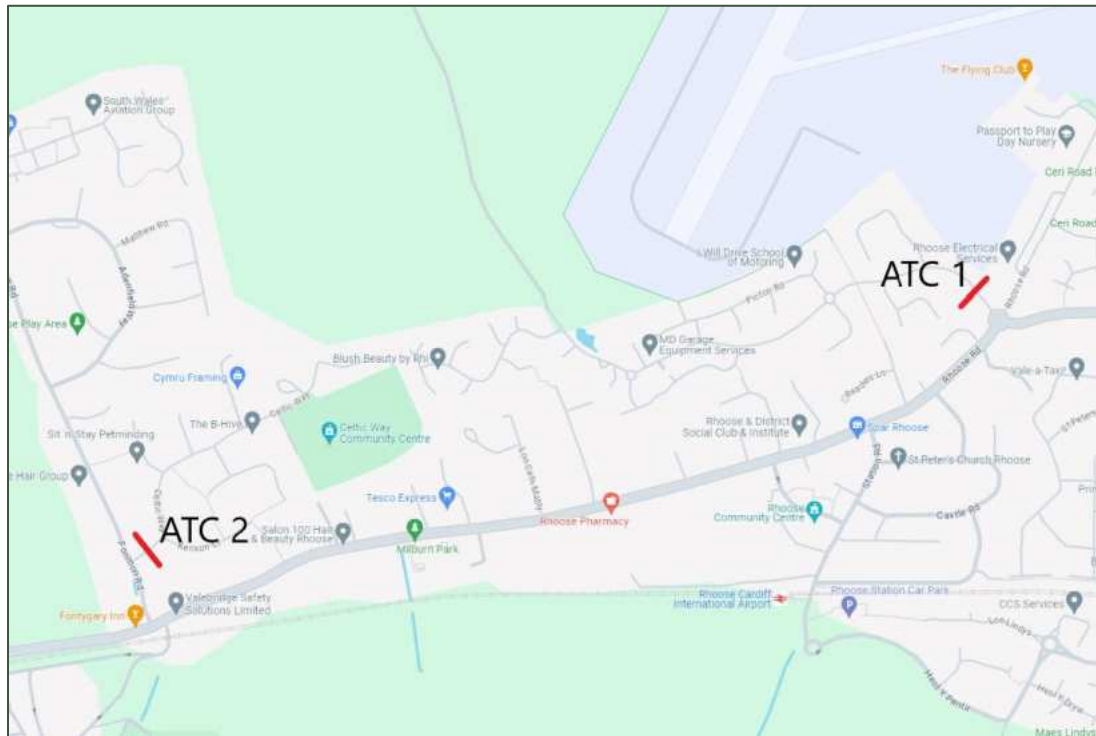
Figure 3 – MCC Surveys



1.60 In addition, two week long automatic traffic count (ATC) surveys were undertaken between Wednesday 12th July and Tuesday 18th July 2023 on Readers Way and Celtic Way, the locations of which are shown in **Figure 4**.



Figure 4 – ATC Locations



- 1.61 The full results of the ATCs are provided within the TSN as **Appendix A**.

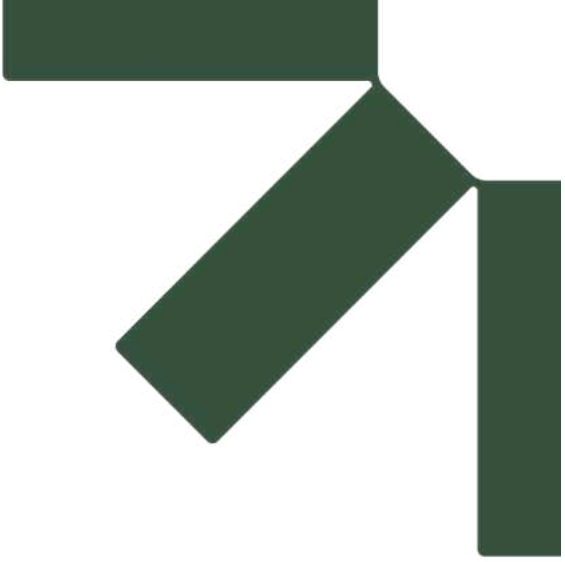
Travel Plans

- 1.62 The TA will be supported by a Travel Plan which will set out the overarching strategy to promote sustainable travel to and from the site and limit the number of single occupancy car trips to and from the proposed development.





Making Sustainability Happen



Appendix C CAVC Traffic Surveys (2023)

Land off Readers Way, Rhoose

Transport Assessment

PMG Limited

SLR Project No.: 237538

21 May 2024



THE SEVERNSIDE GROUP
Transportation Data Collection
Traffic Management
Inductive Loop Cutting
Fabrication

Head Office: 73 Porth-Y-Castell, Barry, Vale of Glam CF62 6QE
Office: Unit 17, Atlantic Business Park, Hayes Lane, Barry, Vale of Glam CF64 5XU
Sevenside Transportation Data Collection is registered Ltd Company
Company Registration Number: 11503589
VAT Number: 306 4112 48

Survey Overview

Job No'/Job Name	SS1254 Vale of Glamorgan
Date	24th October 2023
Time	07:00 - 19:00
Survey Type	Junction turning count
Weather Conditions	Clear

Overview Map



Comments



SS1254 Vale of Glamorgan

24th October 2023

07:00 - 19:00

Site 1

	Arm A - Arm A								Arm A - Arm B								Arm A - Arm C								Arm Total
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	
0700-0715	0	0	0	0	0	0	0	0	6	0	0	3	0	0	0	9	36	0	1	2	0	0	0	39	48
0715-0730	0	0	0	0	0	0	0	0	6	0	0	3	0	0	0	9	40	8	3	0	1	0	0	52	61
0730-0745	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9	43	11	8	1	1	3	0	66	77
0745-0800	0	0	0	0	0	0	0	0	6	0	0	2	0	0	0	8	65	20	4	3	0	0	0	92	100
Hourly Total	0	0	0	0	0	0	0	0	27	0	0	8	0	0	0	35	184	39	16	6	2	3	0	250	285
0800-0815	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	56	11	3	0	1	1	0	72	76
0815-0830	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	52	10	0	0	2	0	0	64	66
0830-0845	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	3	44	10	0	0	0	0	0	54	57
0845-0900	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	3	41	9	4	1	0	0	0	55	58
Hourly Total	0	0	0	0	0	0	0	0	8	0	3	1	0	0	0	12	193	40	7	1	3	1	0	245	257
0900-0915	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	50	11	4	1	0	0	0	66	69
0915-0930	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	3	41	12	2	1	0	0	0	56	59
0930-0945	0	0	0	0	0	0	0	0	1	0	0	4	0	0	0	5	37	14	4	0	0	0	0	55	60
0945-1000	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	4	36	8	2	4	0	0	0	50	54
Hourly Total	0	0	0	0	0	0	0	0	4	3	1	7	0	0	0	15	164	45	12	6	0	0	0	227	242
1000-1015	0	0	0	0	0	0	0	0	3	0	0	2	0	0	0	5	25	6	0	2	0	0	0	33	38
1015-1030	0	0	0	0	0	0	0	0	2	1	0	2	0	0	0	5	38	12	2	0	0	0	0	52	57
1030-1045	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3	44	10	3	5	1	0	0	63	66
1045-1100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	10	1	1	0	0	0	57	57
Hourly Total	0	0	0	0	0	0	0	0	7	2	0	4	0	0	0	13	152	38	6	8	1	0	0	205	218
1100-1115	0	0	0	0	0	0	0	0	1	0	0	3	0	0	0	4	36	8	2	0	0	1	0	47	51
1115-1130	0	0	0	0	0	0	0	0	3	1	1	1	0	0	0	6	47	10	1	1	0	2	0	61	67
1130-1145	0	0	0	0	0	0	0	0	3	0	0	4	0	0	0	7	43	8	0	2	0	1	0	54	61
1145-1200	0	0	0	0	0	0	0	0	3	1	0	1	0	0	0	5	52	13	0	1	0	0	0	66	71
Hourly Total	0	0	0	0	0	0	0	0	10	2	1	9	0	0	0	22	178	39	3	4	0	4	0	228	250
1200-1215	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	51	4	2	0	0	0	0	57	58
1215-1230	0	0	0	0	0	0	0	0	3	1	0	1	0	0	0	5	59	10	1	0	0	0	0	70	75
1230-1245	0	0	0	0	0	0	0	0	2	2	0	1	0	0	0	5	49	6	3	4	0	0	0	62	67
1245-1300	0	0	0	0	0	0	0	0	2	0	0	3	2	0	0	7	52	9	3	1	0	0	0	65	72
Hourly Total	0	0	0	0	0	0	0	0	7	3	0	6	2	0	0	18	211	29	9	5	0	0	0	254	272
1300-1315	0	0	0	0	0	0	0	0	5	1	0	1	0	0	0	7	38	5	1	1	1	1	0	47	54
1315-1330	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	49	13	3	1	0	1	0	67	70
1330-1345	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	65	5	0	1	3	0	1	75	76
1345-1400	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	4	50	11	1	1	1	0	0	64	68
Hourly Total	0	0	0	0	0	0	0	0	10	2	0	3	0	0	0	15	202	34	5	4	5	2	1	253	268
1400-1415	0	0	0	0	0	0	0	0	4	1	0	1	0	0	0	6	62	5	3	2	0	0	1	73	79
1415-1430	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	3	52	9	2	1	1	2	0	67	70
1430-1445	0	0	0	0	0	0	0	0	4	0	0	1	0	0	0	5	61	9	1	0	0	2	0	73	78
1445-1500	0	0	0	0	0	0	0	0	2	1	0	2	0	0	0	5	83	13	1	3	0	1	0	101	106
Hourly Total	0	0	0	0	0	0	0	0	12	2	0	5	0	0	0	19	258	36	7	6	1	6	0	314	333
1500-1515	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	3	72	5	2	0	0	0	0	79	82
1515-1530	0	0	0	0	0	0	0	0	4	1	0	3	0	0	0	8	70	11	2	0	2	1	0	86	94
1530-1545	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	3	71	10	1	0	1	2	0	85	88
1545-1600	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	31	7	2	0	0	0	1	41	42
Hourly Total	0	0	0	0	0	0	0	0	5	3	0	6	1	0	0	15	244	33	7	0	3	3	1	291	306
1600-1615	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	44	6	0	0	2	2	0	54	57
1615-1630	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	70	9	0	7	1	2	1	90	91
1630-1645	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2	39	5	1	0	2	0	0	47	49
1645-1700	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	38	3	0	0	0	1	0	42	44
Hourly Total	0	0	0	0	0	0	0	0	7	0	0	1	0	0	0	8	191	23	1	7	5	5	1	233	241
1700-1715	0	0	0	0	0	0	0	0	4	0	0	1	0	0	0	5	100	7	0	2	1	1	0	111	116
1715-1730	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7	108	11	0	1	0	0	0	120	127
1730-1745	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	3	85	10	0	0	0	0	0	95	98
1745-1800	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	73	6	0	1	1	0	0	81	82
Hourly Total	0	0	0	0	0	0	0	0	14	0	0	2	0	0	0	16	366	34	0	4	2	1	0	407	423
1800-1815	0	0	0	0	0	0	0	0	3	0	0	2	0	0	0	5	69	5	0	0	0	2	0	76	81
1815-1830	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	63	2	0	0	0	0	0	65	70
1830-1845	0	0	0	0	0	0	0	0	5	0	0	2	0	0	0	7	91	2	0	1	0	1	0	95	102
1845-1900	0	0	0	0	0	0	0	0	4	0	0	1	0	0	0	5	86	3	0	1	0	0	0	90	95
Hourly Total	0	0	0	0	0	0	0	0	17	0	0	5	0	0	0	22	309	12	0	2	0	3	0	326	348
Total	0	0	0	0	0	0	0	0	128	17	5	57	3	0	0	210	2652	402	73	53	22	28	3	3233	3443

	Arm B - Arm A							Arm B - Arm B							Arm B - Arm C							Arm Total			
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV		MC	PC	Total
0700-0715	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	18	1	0	1	1	0	0	21	22
0715-0730	2	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	22	2	0	0	0	1	0	25	28
0730-0745	6	0	0	6	0	0	0	12	0	0	0	0	0	0	0	0	21	4	1	0	1	0	0	27	39
0745-0800	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	26	3	1	0	1	0	0	31	33
Hourly Total	10	0	0	8	0	0	0	18	0	0	0	0	0	0	0	0	87	10	2	1	3	1	0	104	122
0800-0815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	3	0	2	2	0	0	50	50
0815-0830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39	5	0	4	4	0	0	48	48
0830-0845	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	24	4	0	0	0	0	0	28	30
0845-0900	0	0	0	5	0	0	0	5	0	0	0	0	0	0	0	0	24	3	1	1	1	0	0	30	35
Hourly Total	1	1	0	5	0	0	0	7	0	0	0	0	0	0	0	0	130	15	1	7	3	0	0	156	163
0900-0915	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0	26	2	1	0	1	0	0	30	32
0915-0930	1	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	19	4	0	0	0	0	0	23	26
0930-0945	4	0	0	1	0	0	0	5	0	0	0	0	0	0	0	0	12	1	0	1	0	0	0	14	19
0945-1000	1	1	0	2	0	0	0	4	0	0	0	0	0	0	0	0	17	4	1	2	1	0	0	25	29
Hourly Total	6	1	1	6	0	0	0	14	0	0	0	0	0	0	0	0	74	11	2	3	2	0	0	92	106
1000-1015	0	2	1	2	0	0	0	5	0	0	0	0	0	0	0	0	15	2	0	3	0	0	0	20	25
1015-1030	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	13	4	0	2	0	0	0	19	23
1030-1045	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	16	4	1	0	1	0	1	23	27
1045-1100	1	1	0	1	0	0	0	3	0	0	0	0	0	0	0	0	28	2	1	0	0	0	0	31	34
Hourly Total	7	5	1	3	0	0	0	16	0	0	0	0	0	0	0	0	72	12	2	5	1	0	1	93	109
1100-1115	0	1	0	1	0	0	0	2	0	0	0	0	0	0	0	0	19	4	0	1	0	0	0	24	26
1115-1130	2	1	0	1	0	0	0	4	0	0	0	0	0	0	0	0	13	3	1	1	0	1	0	19	23
1130-1145	1	1	1	1	0	0	0	4	0	0	0	0	0	0	0	0	17	1	0	1	1	0	0	20	24
1145-1200	5	0	1	3	0	0	0	9	0	0	0	0	0	0	0	0	21	5	0	0	0	0	1	27	36
Hourly Total	8	3	2	6	0	0	0	19	0	0	0	0	0	0	0	0	70	13	1	3	1	1	1	90	109
1200-1215	2	0	1	2	0	0	0	5	0	0	0	0	0	0	0	0	13	3	0	2	0	0	0	18	23
1215-1230	2	1	0	4	0	0	0	7	0	0	0	0	0	0	0	0	15	6	1	2	0	0	2	26	33
1230-1245	1	1	0	2	0	0	0	4	0	0	0	0	0	0	0	0	13	3	0	1	1	0	0	18	23
1245-1300	0	1	0	5	0	0	0	6	0	0	0	0	0	0	0	0	17	4	0	0	0	0	0	21	27
Hourly Total	5	3	1	13	0	0	0	22	0	0	0	0	0	0	0	0	58	16	1	5	1	0	2	83	105
1300-1315	2	2	0	6	0	0	0	10	0	0	0	0	0	0	0	0	22	2	1	2	0	0	0	27	37
1315-1330	3	2	0	2	0	1	0	8	0	0	0	0	0	0	0	0	18	5	0	1	0	0	0	24	32
1330-1345	6	1	1	1	0	0	0	9	0	0	0	0	0	0	0	0	16	5	0	0	3	0	1	25	34
1345-1400	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	24	3	0	0	0	0	0	27	29
Hourly Total	13	5	1	9	0	1	0	29	0	0	0	0	0	0	0	0	80	15	1	3	3	0	1	103	132
1400-1415	3	2	0	1	0	0	2	8	0	0	0	0	0	0	0	0	19	2	1	0	0	0	0	22	30
1415-1430	4	2	0	0	0	0	0	6	0	0	0	0	0	0	0	0	24	2	0	1	0	0	0	27	33
1430-1445	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	17	1	0	0	0	0	3	21	23
1445-1500	8	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0	29	4	0	0	1	1	0	35	44
Hourly Total	15	7	0	1	0	0	2	25	0	0	0	0	0	0	0	0	89	9	1	1	1	1	3	105	130
1500-1515	10	1	0	3	0	0	0	14	0	0	0	0	0	0	0	0	33	5	0	0	0	1	1	40	54
1515-1530	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	27	2	0	0	0	0	0	29	32
1530-1545	4	1	0	1	0	0	0	6	0	0	0	0	0	0	0	0	20	10	0	0	1	1	1	33	39
1545-1600	1	1	0	1	0	0	0	3	0	0	0	0	0	0	0	0	26	5	0	0	1	0	0	32	35

[illegible]

160
63
47
54
25
189
38
35
51
27
151
34
31
29
27
121

0	0	0	0	0	0	0	0
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1597

Arm C - Arm B							
Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
8	0	0	2	0	0	0	10
12	3	0	0	1	0	0	16
16	2	0	2	1	1	0	22
18	1	0	0	0	0	0	19
54	6	0	4	2	1	0	67
21	7	0	4	1	0	0	33
17	7	0	0	0	0	0	24
31	4	1	4	1	0	0	41
23	3	0	1	0	0	0	27
92	21	1	9	2	0	0	125
17	1	2	2	0	0	0	22
9	1	1	0	0	0	0	11
11	1	0	2	1	0	0	15
18	4	1	1	0	0	0	24
55	7	4	5	1	0	0	72
15	1	0	3	0	0	0	19
15	4	0	0	0	0	0	19
9	2	0	0	1	0	0	12
18	2	1	0	0	0	0	21
57	9	1	3	1	0	0	71
13	6	1	2	0	1	0	23
14	4	0	2	1	0	0	21
11	2	0	0	0	0	1	14
22	3	0	1	0	0	0	26
60	15	1	5	1	1	1	84
20	1	1	0	0	0	0	22
28	1	0	2	1	0	0	32
18	3	1	7	0	0	1	30
31	3	0	2	0	0	0	36
97	8	2	11	1	0	1	120
12	4	2	2	0	0	0	20
16	6	2	2	1	0	5	32
21	5	0	3	0	0	1	30
14	1	3	1	0	0	0	19
63	16	7	8	1	0	6	101
16	2	0	0	0	0	0	18
24	3	2	0	1	0	1	31
30	2	0	0	0	0	0	32
18	1	1	0	0	0	0	20
88	8	3	0	1	0	1	101
21	3	0	3	0	0	0	27
30	3	0	3	3	0	0	39
37	3	1	1	1	0	0	43
39	3	1	5	2	0	0	50
127	12	2	12	6	0	0	159
37	4	0	1	0	1	0	43
66	3	0	1	1	2	0	73
57	12	2	1	0	0	0	72
87	6	0	1	1	1	0	96
247	25	2	4	2	4	0	284
84	8	0	1	1	0	0	94
73	9	0	2	0	0	0	85
54	5	1	0	0	1	0	61
54	6	0	0	0	0	0	60
265	28	1	3	2	0	1	300
33	3	0	1	1	1	0	39
46	4	0	1	1	0	0	52
26	1	0	0	0	0	0	27
31	0	0	0	0	0	0	31
136	8	0	2	2	1	0	149

73	Arm Total
108	
130	
121	
432	
128	
125	
132	
108	
493	
99	
68	
79	
93	
339	
92	
73	
88	
339	
95	
109	
67	
94	
365	
81	
83	
96	
356	
83	
118	
89	
375	
91	
123	
112	
96	
422	
92	
117	
144	
152	
505	
140	
146	
139	
153	
578	
173	
163	
113	
117	
566	
89	
92	
83	
72	
336	

1341	163	24	66	22	7	10	1633
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5106

Origin - Arm B							
Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
18	1	0	2	1	0	0	22
24	2	0	1	0	1	0	28
27	4	1	6	1	0	0	39
28	3	1	0	1	0	0	33
97	10	2	9	3	1	0	122
43	3	0	2	2	0	0	50
48	5	0	4	0	0	0	39
25	5	0	0	0	0	0	30
24	3	1	6	1	0	0	35
131	16	1	12	3	0	0	163
26	2	2	1	1	0	0	32
20	4	0	2	0	0	0	26
16	1	0	2	0	0	0	19
18	5	1	4	1	0	0	29
80	12	3	9	2	0	0	106
15	4	1	5	0	0	0	25
16	5	0	2	0	0	0	23
19	5	1	0	1	0	1	27
29	3	1	1	1	0	0	34
79	17	3	8	1	0	1	109
19	5	0	2	0	0	0	26
15	4	1	2	0	1	0	23
18	2	1	2	1	0	0	24
26	5	1	3	0	0	1	36
78	16	3	9	1	1	1	109
15	3	1	4	0	0	0	23
17	7	1	6	0	0	2	33
14	4	0	3	1	0	0	22

Arm Total
143
197
245
254
839
254
239
219
201
913
200
153
158
176
687
155
153
179
179
666
172
199
152
201
724
162
204
172

1245-1300	54	9	3	4	2	0	0	72
Hourly Total	218	32	9	11	2	0	0	272
1300-1315	43	6	1	2	1	1	0	54
1315-1330	52	13	3	1	0	1	0	70
1330-1345	66	5	0	1	3	0	1	76
1345-1400	51	12	1	3	1	0	0	68
Hourly Total	212	36	5	7	5	2	1	268
1400-1415	66	6	3	3	0	1	0	79
1415-1430	54	9	2	2	1	2	0	70
1430-1445	65	9	1	1	0	2	0	78
1445-1500	85	14	1	5	0	1	0	106
Hourly Total	270	38	7	11	1	6	0	333
1500-1515	73	6	2	1	0	0	0	82
1515-1530	74	12	2	3	2	1	0	94
1530-1545	71	11	1	1	2	2	0	88
1545-1600	31	7	2	1	0	0	1	42
Hourly Total	249	36	7	6	4	3	1	306
1600-1615	47	6	0	0	2	2	0	57
1615-1630	71	9	0	7	1	2	1	91
1630-1645	40	5	1	1	2	0	0	49
1645-1700	40	3	0	0	0	1	0	44
Hourly Total	198	23	1	8	5	5	1	241
1700-1715	104	7	0	3	1	1	0	116
1715-1730	115	11	0	1	0	0	0	127
1730-1745	87	10	0	1	0	0	0	98
1745-1800	74	6	0	1	1	0	0	82
Hourly Total	380	34	0	6	2	1	0	423
1800-1815	72	5	0	2	0	2	0	81
1815-1830	68	2	0	0	0	0	0	70
1830-1845	96	2	0	3	0	1	0	102
1845-1900	90	3	0	2	0	0	0	95
Hourly Total	326	12	0	7	0	3	0	348
Total	2780	419	78	110	25	28	3	3443

17	5	0	5	0	0	0	27
63	19	2	18	1	0	2	105
24	4	1	8	0	0	0	37
21	7	0	3	0	1	0	32
22	6	1	1	3	0	1	34
26	3	0	0	0	0	0	29
93	20	2	12	3	1	1	132
22	4	1	1	0	0	2	30
28	4	0	1	0	0	0	33
17	3	0	0	0	0	3	23
37	5	0	0	1	1	0	44
104	16	1	2	1	1	5	130
43	6	0	3	0	1	1	54
30	2	0	0	0	0	0	32
24	11	0	1	1	1	1	39
27	6	0	3	1	0	0	35
124	25	0	5	2	2	2	160
53	6	1	0	0	3	0	63
41	3	1	1	1	0	0	47
45	5	0	1	1	1	1	54
22	2	0	1	0	0	0	25
161	16	2	3	2	4	1	189
33	3	0	1	1	0	0	38
29	3	0	1	2	0	0	35
45	1	2	1	1	0	1	51
27	0	0	0	0	0	0	27
134	7	2	3	4	0	1	151
30	4	0	0	0	0	0	34
26	2	0	1	0	2	0	31
28	1	0	0	0	0	0	29
27	0	0	0	0	0	0	27
111	7	0	1	0	2	0	121

1255	181	21	91	23	12	14	1597
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69	17	4	3	0	3	0	96
284	41	10	15	1	4	1	356
64	13	4	2	0	0	0	83
84	19	5	2	1	2	5	118
67	16	1	3	0	1	1	89
64	12	5	1	0	2	1	85
279	60	15	8	1	5	7	375
73	12	4	1	0	1	0	91
99	16	3	1	2	0	2	123
96	12	2	1	1	0	0	112
78	11	2	2	0	2	1	96
346	51	11	5	3	3	3	422
77	5	2	6	0	2	0	92
90	16	2	3	5	1	0	117
124	12	3	1	2	2	0	144
122	20	1	6	2	0	1	152
413	53	8	16	9	5	1	505
110	22	1	2	2	3	0	140
126	14	1	1	1	3	0	146
116	17	4	1	0	1	0	139
135	13	2	1	1	1	0	153
487	66	8	5	4	8	0	578
145	25	1	1	1	0	0	173
145	15	0	2	0	0	1	163
100	10	1	0	2	0	0	113
105	12	0	0	0	0	0	117
495	62	2	3	3	0	1	566
74	11	1	1	1	1	0	89
84	5	1	1	1	0	0	92
76	5	0	2	0	0	0	83
70	0	2	0	0	0	0	72
304	21	4	4	2	1	0	336

4229	569	101	112	39	41	15	5106
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Destination - Arm A								
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
0700-0715	59	2	1	2	0	0	0	64
0715-0730	89	4	0	1	0	1	0	95
0730-0745	104	7	0	6	1	2	0	120
0745-0800	94	8	0	0	0	2	0	104
Hourly Total	346	21	1	9	1	5	0	383
0800-0815	79	7	2	4	2	1	0	95
0815-0830	88	11	0	0	2	0	0	101
0830-0845	84	4	2	1	2	0	0	93
0845-0900	68	7	3	6	0	2	0	86
Hourly Total	319	29	7	11	6	3	0	375
0900-0915	62	12	4	1	0	0	0	79
0915-0930	50	6	1	2	0	1	0	60
0930-0945	50	11	3	3	1	1	0	69
0945-1000	54	8	5	5	0	1	0	73
Hourly Total	216	37	13	11	1	3	0	281
1000-1015	58	10	6	4	0	0	0	78
1015-1030	52	5	0	1	0	0	0	58
1030-1045	58	16	0	4	0	0	0	78
1045-1100	58	6	3	2	0	1	0	70
Hourly Total	226	37	9	11	0	1	0	284
1100-1115	60	10	2	2	0	0	0	74
1115-1130	69	15	3	4	0	0	1	92
1130-1145	46	7	1	3	0	0	0	57
1145-1200	53	11	4	7	1	1	0	77
Hourly Total	228	43	10	16	1	1	1	300
1200-1215	49	9	3	3	0	0	0	64
1215-1230	57	7	1	5	0	1	0	71
1230-1245	48	5	1	3	0	0	0	57
1245-1300	38	15	4	6	0	3	0	66
Hourly Total	192	36	9	17	0	4	0	258
1300-1315	54	11	2	6	0	0	0	73
1315-1330	71	15	3	2	0	3	0	94
1330-1345	52	12	2	1	0	1	0	68
1345-1400	52	11	2	0	0	2	1	68
Hourly Total	229	49	9	9	0	6	1	303
1400-1415	60	12	4	2	0	1	2	81
1415-1430	79	15	1	1	1	0	1	98
1430-1445	66	12	2	1	1	0	0	82
1445-1500	68	11	1	2	0	2	1	85
Hourly Total	273	50	8	6	2	3	4	346
1500-1515	66	3	2	6	0	2	0	79
1515-1530	63	13	2	0	2	1	0	81
1530-1545	91	10	2	1	1	2	0	107
1545-1600	84	18	0	2	0	0	1	105
Hourly Total	304	44	6	9	3	5	1	372
1600-1615	85	18	1	1	2	3	0	110
1615-1630	68	12	1	0	0	1	0	82
1630-1645	62	6	2	0	0	1	1	72
1645-1700	48	7	2	0	0	0	0	57
Hourly Total	263	43	6	1	2	5	1	321
1700-1715	65	18	1	1	0	0	0	85
1715-1730	74	6	0	1	0	0	0	81
1730-1745	51	5	0	0	1	0	0	57
1745-1800	52	6	0	0	0	0	0	58
Hourly Total	242	35	1	2	1	0	0	281
1800-1815	41	9	1	0	0	0	0	51
1815-1830	40	1	1	1	0	0	0	43
1830-1845	50	5	0	2	0	0	0	57
1845-1900	42	0	2	0	0	0	0	44
Hourly Total	173	15	4	3	0	0	0	195
Total	3011	439	83	105	17	36	8	3699

Destination - Arm B								
Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	
14	0	0	5	0	0	0	19	
18	3	0	3	1	0	0	25	
25	2	0	2	1	1	0	31	
24	1	0	2	0	0	0	27	
81	6	0	12	2	1	0	102	
25	7	0	4	1	0	0	37	
19	7	0	0	0	0	0	26	
32	4	3	4	1	0	0	44	
24	3	1	2	0	0	0	30	
100	21	4	10	2	0	0	137	
20	1	2	2	0	0	0	25	
9	2	2	1	0	0	0	14	
12	1	0	6	1	0	0	20	
18	6	1	3	0	0	0	28	
59	10	5	12	1	0	0	87	
18	1	0	5	0	0	0	24	
17	5	0	2	0	0	0	24	
11	3	0	0	1	0	0	15	
18	2	1	0	0	0	0	21	
64	11	1	7	1	0	0	84	
14	6	1	5	0	1	0	27	
17	5	1	3	1	0	0	27	
14	2	0	4	0	0	1	21	
25	4	0	2	0	0	0	31	
70	17	2	14	1	1	1	106	
20	1	1	1	0	0	0	23	
31	2	0	3	1	0	0	37	
20	5	1	8	0	0	0	15	
33	3	0	5	2	0	0	43	
104	11	2	17	3	0	1	138	
17	5	2	3	0	0	0	27	
19	6	2	2	1	0	5	35	
22	5	0	3	0	0	1	31	
15	2	3	3	0	0	0	23	
73	18	7	11	1	0	6	116	
20	3	0	1	0	0	0	24	
26	3	2	1	1	0	1	34	
34	2	0	1	0	0	0	37	
20	2	1	2	0	0	0	25	
100	10	3	5	1	0	1	120	
22	4	0	4	0	0	0	30	
34	4	0	6	3	0	0	47	
37	4	1	2	2	0	0	46	
39	3	1	6	2	0	0	51	
132	15	2	18	7	0	0	174	
40	4	0	1	0	1	0	46	
67	3	0	1	1	2	0	74	
58	12	2	2	0	0	0	74	
89	6	0	1	1	1	0	98	
254	25	2	5	2	4	0	292	
88	8	0	2	1	0	0	99	
80	9	0	2	0	0	1	92	
56	5	1	1	1	0	0	64	
55	6	0	0	0	0	0	61	
279	28	1	5	2	0	1	316	
36	3	0	3	1	1	0	46	
51	4	0	1	1	0	0	57	
31	1	0	2	0	0	0	34	
35	0	0	1	0	0	0	36	
153	8	0	7	2	1	0	171	



SS1254 Vale of Glamorgan

24th October 2023

07:00 - 19:00

Site 6

	Arm A - Arm A							Total
	Car	LGV	OGV1	OGV2	PSV	MC	PC	
0700-0715	0	0	0	0	0	0	0	0
0715-0730	0	1	0	0	0	0	0	1
0730-0745	0	0	0	0	0	0	0	0
0745-0800	0	0	0	0	0	0	0	0
Hourly Total	0	1	0	0	0	0	0	1
0800-0815	1	0	0	0	0	0	0	1
0815-0830	0	0	0	0	0	0	0	0
0830-0845	0	0	0	0	0	0	0	0
0845-0900	1	0	0	0	0	0	0	1
Hourly Total	2	0	0	0	0	0	0	2
0900-0915	0	0	0	0	0	0	0	0
0915-0930	0	0	0	0	0	0	0	0
0930-0945	1	0	0	0	0	0	0	1
0945-1000	1	0	0	0	0	0	0	1
Hourly Total	2	0	0	0	0	0	0	2
1000-1015	0	0	0	0	0	0	0	0
1015-1030	1	0	0	0	0	0	0	1
1030-1045	0	0	0	0	0	0	0	0
1045-1100	0	0	0	0	0	0	0	0
Hourly Total	1	0	0	0	0	0	0	1
1100-1115	0	0	0	0	0	0	0	0
1115-1130	0	0	0	0	0	0	0	0
1130-1145	0	0	0	0	0	0	0	0
1145-1200	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0
1200-1215	0	0	0	0	0	0	0	0
1215-1230	0	0	0	0	0	0	0	0
1230-1245	0	0	0	0	0	0	0	0
1245-1300	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0
1300-1315	0	0	0	0	0	0	0	0
1315-1330	1	0	0	0	0	0	0	1
1330-1345	0	0	0	0	0	0	0	0
1345-1400	1	0	0	0	0	0	0	1
Hourly Total	2	0	0	0	0	0	0	2
1400-1415	0	0	0	0	0	0	0	0
1415-1430	0	0	0	0	0	0	0	0
1430-1445	0	0	0	0	0	0	0	0
1445-1500	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0
1500-1515	0	0	0	0	0	0	0	0
1515-1530	2	0	0	0	0	0	0	2
1530-1545	0	0	0	0	0	0	0	0
1545-1600	0	0	0	0	0	0	0	0
Hourly Total	2	0	0	0	0	0	0	2
1600-1615	0	0	0	0	0	0	0	0
1615-1630	0	0	0	0	0	0	0	0
1630-1645	1	0	0	0	0	0	0	1
1645-1700	0	0	0	0	0	0	0	0
Hourly Total	1	0	0	0	0	0	0	1
1700-1715	0	0	0	0	0	0	0	0
1715-1730	2	0	0	0	0	0	0	2
1730-1745	0	0	0	0	0	0	0	0
1745-1800	0	0	0	0	0	0	0	0
Hourly Total	2	0	0	0	0	0	0	2
1800-1815	0	0	0	0	0	0	0	0
1815-1830	1	0	0	0	0	0	0	1
1830-1845	1	0	0	0	0	0	0	1
1845-1900	0	0	0	0	0	0	0	0
Hourly Total	2	0	0	0	0	0	0	2

Total	14	1	0	0	0	0	0	15
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	Arm B - Arm B							Total
	Car	LGV	OGV1	OGV2	PSV	MC	PC	
27	2	0	0	0	0	0	0	29
35	7	0	0	2	0	0	0	44
32	8	1	1	2	0	0	0	44
49	8	0	0	1	0	0	0	58
143	25	1	1	5	0	0	0	175
59	9	1	0	0	0	0	0	69
55	9	3	0	2	1	0	0	70
44	11	0	0	0	0	0	0	55
59	9	1	0	2	0	0	0	71
217	38	5	0	4	1	0	0	265
49	10	2	0	1	0	0	0	62
44	11	1	0	1	0	0	0	57
40	9	2	0	0	0	0	0	51
42	9	0	0	0	0	0	0	51
175	39	5	0	2	0	0	0	221
52	13	2	0	0	2	0	0	69
52	9	2	0	1	0	0	0	64
57	9	1	1	0	0	0	0	68
69	9	5	1	0	0	0	0	84
230	40	10	2	1	2	0	0	285
64	6	0	0	0	0	0	1	71
62	8	0	1	1	0	0	0	72
60	5	0	0	0	0	1	0	66
69	7	3	0	0	0	2	0	81
255	26	3	1	1	0	4	0	290
72	12	0	0	1	0	0	0	85
62	9	1	0	1	0	0	0	73
78	5	1	0	0	0	1	0	85
83	7	1	1	0	1	1	0	94
295	33	3	1	2	1	2	0	337
62	7	2	0	0	0	0	0	71
78	7	1	0	1	0	0	0	87
81	12	0	1	0	0	1	0	95
79	12	0	0	0	0	0	0	91
300	38	3	1	1	0	1	0	344
72	11	3	0	0	0	0	0	86
72	7	0	1	1	0	1	0	82
87	6	0	0	0	0	0	0	93
107	4	1	0	0	0	1	0	113
338	28	4	1	1	0	2	0	374
99	5	1	0	0	2	0	0	107
114	11	2	1	3	1	0	0	132
87	14	1	0	1	0	0	0	103
16	0	0	0	0	0	0	0	16
316	30	4	1	4	3	0	0	358
11	0	0	0	0	0	0	0	11
33	1	0	0	0	1	0	0	35
18	0	1	0	0	0	0	0	19
36	2	0	0	1	0	0	0	39
98	3	1	0	1	1	0	0	104
132	13	0	0	2	0	0	0	147
133	5	2	0	1	0	0	0	141
102	3	1	0	1	2	0	0	109
86	6	1	0	0	0	0	0	93
453	27	4	0	4	2	0	0	490
84	3	0	0	0	0	0	0	87
93	3	1	0	0	1	0	0	98
110	5	0	0	0	0	0	0	115
111	5	0	0	0	0	0	0	116
398	16	1	0	0	1	0	0	416

3218	343	44	8	26	11	9	3659
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	Arm B - Arm C							Total
	Car	LGV	OGV1	OGV2	PSV	MC	PC	
46	10	3	5	0	1	0	0	65
55	15	5	2	1	1	0	0	79
73	19	7	2	3	1	0	0	105
71	18	3	6	0	1	0	0	99
245	62	18	15	4	4	0	0	348
59	11	4	0	1	1	0	0	76
48	9	1	1	2	0	0	0	61
48	13	6	1	0	0	0	0	68
54	12	5	2	1	0	0	0	74
209	45	16	4	4	1	0	0	279
58	9	4	3	0	0	0	0	74
43	14	2	4	0	0	0	0	63
40	13	3	8	1	0	0	0	65
47	8	1	6	0	0	0	0	62
188	44	10	21	1	0	0	0	264
38	2	1	4	0	1	0	0	46
49	13	3	7	0	0	0	0	72
48	8	1	5	1	0	0	0	63
53	8	3	4	0	0	0	0	68
188	31	8	20	1	1	0	0	249
40	10	2	4	0	2	0	0	58
47	11	1	1	0	1	0	0	61
48	7	0	6	0	1	0	0	62
57	6	3	2	0	0	0	0	68
192	34	6	13	0	4	0	0	249
68	10	1	2	0	0	0	0	81
56	12	1	4	0	0	0	0	73
53	7	3	6	0	0	0	0	69
61	13	3	4	2	0	0	0	83
238	42	8	16	2	0	0	0	306
48	8	1	4	0	1	0	0	62
70	10	3	2	0	1	0	0	86
64	9	1	4	2	1	0	0	81
73	7	0	4	1	0	0	0	85
255	34	5	14	3	3	0	0	314
65	5	3	3	1	1	0	0	78
60	12	2	2	0	1	0	0	77
72	8	0	5	1	1	0	0	87
77	13	1	2	0	0	0	0	93
274	38	6	12	2	3	0	0	335
70	12	2	5	0	0	0	0	89
83	15	1	4	2	1	0	0	106
79	9	1	3	2	0	1	0	95
15	8	0	0	0	0	0	0	23
247	44	4	12	4	1	1	0	313
73	6	0	0	1	2	0	0	82
102	18	1	2	4	1	0	0	128
60	7	0	1	0	0	0	0	68
20	2	0	1	0	0	0	0	23
255	33	1	4	5	3	0	0	301
108	12	0	1	0	1	0	0	122
104	7	0	2	0	1	0	0	114
97	9	0	0	0	0	0	0	106
87	6	0	1	0	0	0	0	94
396	34	0	4	0	2	0	0	436
82	4	0	2	1	2	0	0	91
82	2	1	1	0	1	0	0	87
80	4	0	3	1	1	0	0	89
66	2	0	1	1	0	0	0	70
310	12	1	7	3	4	0	0	337

2997	453	83	142	29	26	1	3731
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Arm Total	94	124	149	157	524	146	131	123</
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1245-1300	144	20	4	5	2	1	1	177
Hourly Total	533	75	11	17	4	1	2	643
1300-1315	110	15	3	4	0	1	0	133
1315-1330	149	17	4	2	1	1	0	174
1330-1345	145	21	1	5	2	1	1	176
1345-1400	153	19	0	4	1	0	0	177
Hourly Total	557	72	8	15	4	3	1	660
1400-1415	137	16	6	3	1	1	0	164
1415-1430	132	19	2	3	1	1	1	159
1430-1445	159	14	0	5	1	1	0	180
1445-1500	184	17	2	2	0	0	1	206
Hourly Total	612	66	10	13	3	3	2	709
1500-1515	169	17	3	5	0	2	0	196
1515-1530	199	26	3	5	5	2	0	240
1530-1545	166	23	2	3	3	0	1	198
1545-1600	31	8	0	0	0	0	0	39
Hourly Total	565	74	8	13	8	4	1	673
1600-1615	84	6	0	0	1	2	0	93
1615-1630	135	19	1	2	4	2	0	163
1630-1645	79	7	1	1	0	0	0	88
1645-1700	56	4	0	1	1	0	0	62
Hourly Total	354	36	2	4	6	4	0	406
1700-1715	240	25	0	1	2	1	0	269
1715-1730	239	12	2	2	1	1	0	257
1730-1745	199	12	1	0	1	2	0	215
1745-1800	173	12	1	1	0	0	0	187
Hourly Total	851	61	4	4	4	4	0	928
1800-1815	166	7	0	2	1	2	0	178
1815-1830	176	5	2	1	0	2	0	186
1830-1845	191	9	0	3	1	1	0	205
1845-1900	177	7	0	1	1	0	0	186
Hourly Total	710	28	2	7	3	5	0	755

Total	6229	797	127	150	55	37	10	7405
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69	11	0	0	2	0	1	83
262	26	5	1	3	1	1	299
62	6	3	0	0	1	0	72
62	8	1	0	0	0	0	71
69	10	2	1	1	0	0	83
86	5	0	1	1	0	1	94
279	29	6	2	2	1	1	320
81	12	2	0	0	0	1	96
76	8	3	0	0	1	0	88
66	6	2	0	1	1	0	76
75	11	1	0	0	0	0	87
298	37	8	0	1	2	1	347
84	6	2	1	0	0	0	93
56	5	2	0	0	0	0	63
81	11	2	0	3	2	0	99
67	7	3	0	3	0	0	80
288	29	9	1	6	2	0	335
47	10	0	0	1	2	1	61
68	8	0	0	1	1	0	78
60	9	1	0	0	0	0	70
44	3	1	0	1	0	0	49
219	30	2	0	3	3	1	258
49	3	0	0	0	0	0	52
43	3	1	0	1	0	0	48
42	1	0	0	1	0	0	44
58	6	0	0	1	1	0	66
192	13	1	0	3	1	0	210
53	3	2	0	0	0	0	58
51	1	1	0	1	0	0	54
44	5	0	0	1	1	0	51
62	2	0	0	0	0	0	64
210	11	3	0	2	1	0	227

3400	380	55	10	34	15	7	3901
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43	12	7	8	0	0	0	70
246	34	13	23	1	1	0	318
66	18	3	9	0	2	0	98
72	12	3	5	0	2	0	94
87	11	1	4	0	1	0	104
74	11	4	0	0	2	0	91
299	52	11	18	0	7	0	387
84	12	4	4	0	1	0	105
109	17	0	5	2	1	0	134
101	12	2	3	1	0	1	120
100	11	4	2	0	1	0	118
394	52	10	14	3	3	1	477
116	11	5	6	0	0	1	139
89	20	1	2	0	3	0	115
95	10	2	3	1	2	0	113
97	19	0	2	0	0	0	118
397	60	8	13	1	5	1	485
35	14	1	2	0	2	0	54
92	17	2	3	0	2	0	116
69	6	1	0	0	2	0	78
80	9	2	1	0	0	1	93
276	46	6	6	0	6	1	341
78	14	3	1	0	0	0	96
96	12	0	2	2	0	0	112
78	7	0	0	0	0	0	85
64	8	1	0	0	0	0	73
316	41	4	3	2	0	0	366
61	6	1	0	0	0	0	68
57	3	1	2	0	0	1	64
115	5	0	2	0	0	0	122
54	2	0	1	1	0	0	58
287	16	2	5	1	0	1	312

3696	521	99	159	17	26	4	4522
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378
308
1294

	Destination - Arm A							
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
0700-0715	153	26	0	4	0	0	0	183
0715-0730	189	28	1	2	1	0	0	221
0730-0745	232	24	0	7	1	0	0	264
0745-0800	223	25	1	0	3	0	1	253
Hourly Total	797	103	2	13	5	0	1	921
0800-0815	201	26	6	5	2	2	0	242
0815-0830	140	21	1	2	0	1	0	165
0830-0845	144	17	1	7	3	0	0	172
0845-0900	176	19	5	7	3	0	0	210
Hourly Total	661	83	13	21	8	3	0	789
0900-0915	161	26	2	2	1	0	0	192
0915-0930	119	17	2	3	2	2	0	145
0930-0945	132	12	4	5	1	0	1	155
0945-1000	123	15	5	2	0	0	0	145
Hourly Total	535	70	13	12	4	2	1	637
1000-1015	125	12	9	5	1	0	0	152
1015-1030	136	12	1	4	0	1	1	155
1030-1045	144	22	2	4	0	0	0	172
1045-1100	130	18	3	4	1	0	0	156
Hourly Total	593	64	15	17	2	1	1	635
1100-1115	147	21	2	2	0	0	0	172
1115-1130	141	20	5	2	0	0	0	168
1130-1145	117	25	3	6	0	0	0	151
1145-1200	125	18	4	9	2	1	0	159
Hourly Total	530	84	14	19	2	1	0	650
1200-1215	140	10	5	5	0	0	0	160
1215-1230	114	11	1	9	1	2	0	138
1230-1245	130	13	2	2	1	0	0	148
1245-1300	109	22	6	8	2	0	1	148
Hourly Total	493	56	14	24	4	2	1	594
1300-1315	127	24	6	9	0	3	0	169
1315-1330	133	18	4	5	0	2	0	162
1330-1345	153	19	3	5	1	1	0	182
1345-1400	156	16	4	0	1	2	1	180
Hourly Total	569	77	17	19	2	8	1	693
1400-1415	161	23	6	4	0	0	1	195
1415-1430	179	23	3	5	2	1	0	213
1430-1445	163	16	4	3	2	1	1	190
1445-1500	168	21	4	2	0	1	0	196
Hourly Total	671	83	17	14	4	3	2	794
1500-1515	194	15	7	7	0	0	1	224
1515-1530	143	25	1	2	0	3	0	174
1530-1545	171	21	3	2	3	3	0	203
1545-1600	150	20	1	2	3	0	0	176
Hourly Total	658	81	12	13	6	6	1	777
1600-1615	56	15	0	0	0	3	1	75
1615-1630	133	16	2	1	1	2	0	155
1630-1645	104	12	0	0	0	1	0	117
1645-1700	104	10	0	1	1	0	1	117
Hourly Total	397	53	2	2	2	6	2	464
1700-1715	116	15	1	1	0	0	0	133
1715-1730	133	14	1	2	2	0	0	152
1730-1745	117	6	0	0	1	0	0	124
1745-1800	121	13	1	0	1	1	0	137
Hourly Total	487	48	3	3	4	1	0	546
1800-1815	109	8	3	0	0	0	0	120
1815-1830	104	4	2	2	1	0	1	114
1830-1845	154	8	0	2	1	1	0	166
1845-1900	112	4	0	1	1	0	0	118
Hourly Total	479	24	5	5	3	1	1	518
Total	6812	826	127	162	46	34	11	8018

	Destination - Arm B							
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
27	2	0	0	0	0	0	0	29
35	7	0	0	2	0	0	0	44
32	8	1	1	2	0	0	0	44
50	8	0	0	2	0	0	0	60
144	25	1	1	6	0	0	0	177
61	10	1	0	0	0	0	0	72
56	9	3	0	2	1	0	0	71
45	11	0	0	0	0	0	0	56
61	9	1	0	3	0	0	0	74
223	39	5	0	5	1	1	0	273
50	10	3	0	1	0	0	0	64
46	12	1	0	1	0	0	0	60
43	12	2	0	0	0	0	0	57
44	10	1	0	0	0	0	0	55
183	44	7	0	2	0	0	0	236
54	13	2	0	0	0	2	0	71
55	10	3	0	1	0	0	0	69
61	9	1	1	0	0	0	0	72
71	9	5	1	0	0	0	0	86



SS1254 Vale of Glamorgan
24th October 2023
07:00 - 19:00
Site 7

Arm A - Arm A									
Car	LEV	OGV1	OGV2	PSV	MC	PC	Total		
0700-0715	0	0	0	0	0	0	0		
0715-0730	0	0	0	0	0	0	0		
0730-0745	0	0	0	0	0	0	0		
0745-0800	0	0	0	0	0	0	0		
Hourly Total	0	0	0	0	0	0	0		
0800-0815	0	0	0	0	0	0	0		
0815-0830	0	0	0	0	0	0	0		
0830-0845	0	0	0	0	0	0	0		
0845-0900	0	0	0	0	0	0	0		
Hourly Total	0	0	0	0	0	0	0		
0900-0915	0	0	0	0	0	0	0		
0915-0930	0	0	0	0	0	0	0		
0930-0945	0	0	0	0	0	0	0		
0945-1000	0	0	0	0	0	0	0		
Hourly Total	0	0	0	0	0	0	0		
1000-1015	0	0	0	0	0	0	0		
1015-1030	0	0	0	0	0	0	0		
1030-1045	0	0	0	0	0	0	0		
1045-1100	0	0	0	0	0	0	0		
Hourly Total	0	0	0	0	0	0	0		
1100-1115	1	0	0	0	0	0	1		
1115-1130	0	0	0	0	0	0	0		
1130-1145	0	0	0	0	0	0	0		
1145-1200	0	0	0	0	0	0	0		
Hourly Total	1	0	0	0	0	0	1		
1200-1215	0	0	0	0	0	0	0		
1215-1230	0	0	0	0	0	0	0		
1230-1245	0	0	0	0	0	0	0		
1245-1300	0	0	0	0	0	0	0		
Hourly Total	0	0	0	0	0	0	0		
1300-1315	0	0	0	0	0	0	0		
1315-1330	0	0	0	0	0	0	0		
1330-1345	0	0	0	0	0	0	0		
1345-1400	0	0	0	0	0	0	0		
Hourly Total	0	0	0	0	0	0	0		
1400-1415	0	0	0	0	0	0	0		
1415-1430	0	0	0	0	0	0	0		
1430-1445	0	0	0	0	0	0	0		
1445-1500	0	0	0	0	0	0	0		
Hourly Total	0	0	0	0	0	0	0		
1500-1515	0	0	0	0	0	0	0		
1515-1530	0	0	0	0	0	0	0		
1530-1545	0	0	0	0	0	0	0		
1545-1600	0	0	0	0	0	0	0		
Hourly Total	0	0	0	0	0	0	0		
1600-1615	30	4	1	0	0	1	36		
1615-1630	32	2	0	0	0	0	34		
1630-1645	12	3	0	2	0	0	17		
1645-1700	0	0	0	0	0	0	0		
Hourly Total	74	9	1	2	0	1	87		
1700-1715	0	0	0	0	0	0	0		
1715-1730	0	0	0	0	0	0	0		
1730-1745	0	0	0	0	0	0	0		
1745-1800	0	0	0	0	0	0	0		
Hourly Total	0	0	0	0	0	0	0		
1800-1815	0	0	0	0	0	0	0		
1815-1830	0	0	0	0	0	0	0		
1830-1845	0	0	0	0	0	0	0		
1845-1900	0	0	0	0	0	0	0		
Hourly Total	0	0	0	0	0	0	0		

Total 75 9 9 1 2 0 0 1 0 88

Arm B - Arm B									
Car	LEV	OGV1	OGV2	PSV	MC	PC	Total		
0700-0715	11	1	0	0	0	0	12		
0715-0730	13	1	0	0	0	0	14		
0730-0745	25	5	0	0	0	1	31		
0745-0800	30	6	0	1	0	0	37		
Hourly Total	79	14	0	1	0	1	95		
0800-0815	51	6	0	0	2	0	59		
0815-0830	17	5	1	0	0	0	23		
0830-0845	18	5	2	0	0	0	25		
0845-0900	33	3	0	0	0	0	36		
Hourly Total	119	19	3	0	2	0	143		
0900-0915	22	3	0	0	0	0	25		
0915-0930	15	7	2	0	0	0	24		
0930-0945	13	6	1	0	0	0	20		
0945-1000	13	6	2	0	0	0	21		
Hourly Total	63	22	5	0	0	0	90		
1000-1015	7	2	1	0	0	0	10		
1015-1030	8	0	0	0	0	0	8		
1030-1045	9	1	0	0	0	0	10		
1045-1100	18	1	0	0	0	0	19		
Hourly Total	42	4	1	0	0	0	47		
1100-1115	10	3	1	0	0	0	14		
1115-1130	17	3	2	0	0	0	22		
1130-1145	13	1	4	0	0	0	18		
1145-1200	20	2	0	0	0	0	22		
Hourly Total	60	9	7	0	0	0	76		
1200-1215	11	3	1	0	0	0	15		
1215-1230	16	2	0	0	0	0	18		
1230-1245	21	1	1	1	0	0	24		
1245-1300	9	3	0	0	0	0	12		
Hourly Total	57	9	2	1	0	0	69		
1300-1315	15	1	0	1	0	0	17		
1315-1330	10	1	2	1	0	0	14		
1330-1345	18	8	0	0	1	0	27		
1345-1400	22	1	2	0	0	0	25		
Hourly Total	65	11	4	2	1	0	83		
1400-1415	9	5	1	0	1	0	16		
1415-1430	17	8	0	0	0	0	25		
1430-1445	23	4	0	0	2	0	29		
1445-1500	29	1	0	0	1	0	31		
Hourly Total	68	18	1	0	4	0	91		
1500-1515	20	3	0	0	0	0	23		
1515-1530	19	5	0	0	2	1	27		
1530-1545	22	3	2	0	0	0	27		
1545-1600	25	6	0	0	0	0	31		
Hourly Total	87	15	2	1	1	0	106		
1600-1615	40	8	2	0	0	0	50		
1615-1630	35	6	0	1	0	0	42		
1630-1645	45	4	0	1	0	1	51		
1645-1700	48	7	1	0	0	0	56		
Hourly Total	168	25	3	2	0	1	199		
1700-1715	50	7	2	1	0	0	60		
1715-1730	44	5	0	0	0	0	49		
1730-1745	33	1	0	0	0	0	34		
1745-1800	44	4	1	0	0	0	49		
Hourly Total	164	17	3	1	0	0	185		
1800-1815	32	5	0	0	1	0	38		
1815-1830	24	4	0	0	1	0	29		
1830-1845	36	5	0	0	0	0	41		
1845-1900	41	5	0	0	0	0	46		
Hourly Total	127	17	0	0	2	0	146		

1099 180 31 8 9 5 1 1333

Arm A - Arm C							
Car	LEV	OGV1	OGV2	PSV	MC	PC	Total
11	3	0	0	0	0	0	3
12	4	1	2	0	0	0	7
23	6	1	0	0	0	0	7
26	11	0	0	0	0	0	11
74	24	2	3	0	0	0	103
43	7	2	1	1	0	0	54
43	8	0	0	0	0	0	51
55	11	0	0	1	1	0	68
37	16	1	0	0	0	0	54
178	42	3	1	2	1	0	227
27	2	1	0	0	0	0	30
29	13	1	0	0	0	0	43
31	3	0	0	0	0	0	34
32	2	0	0	0	0	0	34
119	20	2	0	0	0	0	141
24	5	2	0	0	0	0	31
28	4	2	0	0	0	0	34
23	4	2	3	0	0	0	32
19	10	1	0	0	1	0	31
94	23	7	3	0	0	1	128
22	3	0	1	0	0	0	26
28	4	0	0	0	0	0	32
27	6	2	0	0	2	0	37
28	8	1	0	0	0	0	37
105	21	3	0	1	2	0	132
28	3	1	0	0	0	0	32
27	7	0	1	1	3	0	36
29	7	0	0	0	0	0	36
35	13	1	0	0	0	0	35
119	30	2	1	0	0	0	153
35	4	0	0	0	0	1	38
31	6	2	0	0	0	0	41
27	6	0	0	0	0	0	33
33	5	0	0	0	0	0	38
127	21	2	0	0	0	0	150
38	6	0	0	0	0	2	46
35	6	0	0	0	0	0	49
43	7	1	1	0	0	0	52
35	6	2	0	0	0	0	42
160	23	3	1	0	0	2	159
36	3	0	0	0	0	0	39
43	6	0	0	0	0	0	49
51	8	0	0	0	0	0	59
56	5	1	0	0	0	0	59
185	22	1	1	0	2	0	110
56	15	1	0	0	0	0	72
55	10	0	1	0	0	0	66
44	7	0	0	0	1	0	52
53	12	0	0	0	0	0	65
208	44	1	1	0	1	0	255
112	24	2	1	1	0	0	140
85	8	1	0	1	0	0	95
60	8	0	0	0	1	0	89
208	24	3	0	0	0	0	135
295	42	6	1	2	1	0	347
55	4	0	0	0	0	0	72
62	4	0	0	0	0	0	79
68	4	0	0	0	0	0	68
48	1	0	0	0	0	0	49
233	14	0	0	1	0	0	248

1500-1510	101	13	1	3	0	1	0	119
1511-1530	89	17	0	4	1	3	1	115
1530-1545	122	24	2	3	2	0	0	153
1545-1600	96	11	2	2	2	1	0	114
Hourly Total	408	65	5	12	5	5	1	501
1600-1615	126	27	4	0	0	1	0	158
1615-1630	122	18	0	2	0	0	0	142
1630-1645	101	14	0	3	0	2	0	120
1645-1700	120	19	1	0	0	0	0	140
Hourly Total	469	78	5	5	0	3	0	560
1700-1715	191	33	4	2	1	0	0	231
1715-1730	160	15	2	0	1	0	0	178
1730-1745	121	12	0	0	0	1	0	134
1745-1800	112	8	4	0	0	0	0	124
Hourly Total	584	68	10	2	2	1	0	667
1800-1815	119	10	0	2	1	0	0	132
1815-1830	134	10	0	1	1	0	0	146
1830-1845	143	14	0	3	1	0	0	161
1845-1900	136	7	0	1	0	0	0	144
Hourly Total	532	41	0	7	3	0	0	583

Total	4235	664	91	118	29	17	4	5158
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Destination - Arm A								
	Car	LGV	OGV1	OGV2	PSV	MC	PL	Total
0700-0715	83	21	0	0	0	0	0	104
0715-0730	114	30	2	0	1	1	0	148
0730-0745	120	27	1	6	0	2	0	156
0745-0800	122	21	2	0	2	0	0	147
Hourly Total	439	96	6	6	4	3	0	554
0800-0815	127	24	4	1	0	0	0	156
0815-0830	146	22	3	0	1	0	0	172
0830-0845	122	19	0	5	0	0	0	146
0845-0900	124	12	2	5	2	0	0	145
Hourly Total	519	77	9	11	3	0	0	619
0900-0915	103	9	1	5	1	0	1	120
0915-0930	90	14	1	2	1	1	0	109
0930-0945	85	5	1	2	1	2	0	96
0945-1000	56	7	2	3	0	0	3	71
Hourly Total	334	35	5	12	3	3	4	396
1000-1015	56	9	5	4	0	0	1	75
1015-1030	58	8	1	2	1	1	0	71
1030-1045	65	9	0	0	0	0	0	74
1045-1100	72	14	1	3	0	0	0	90
Hourly Total	251	40	7	9	1	1	1	310
1100-1115	70	7	2	0	0	1	0	80
1115-1130	75	13	4	1	0	2	0	95
1130-1145	55	13	14	5	0	1	0	74
1145-1200	59	8	1	5	0	0	0	73
Hourly Total	259	41	8	10	0	4	0	322
1200-1215	58	4	4	5	0	0	0	71
1215-1230	51	5	1	5	1	3	0	66
1230-1245	60	9	2	5	0	0	0	76
1245-1300	57	12	3	5	1	1	0	79
Hourly Total	226	30	10	20	2	4	0	292
1300-1315	59	9	4	3	0	1	0	76
1315-1330	53	9	1	5	0	2	1	71
1330-1345	58	16	2	4	0	0	0	80
1345-1400	83	18	1	0	0	0	0	102
Hourly Total	253	52	8	12	0	3	1	329
1400-1415	75	10	0	4	1	1	0	91
1415-1430	86	13	2	4	3	1	0	109
1430-1445	80	16	3	1	0	0	0	100
1445-1500	85	10	0	1	0	0	1	97
Hourly Total	326	49	5	10	4	2	1	397
1500-1515	103	15	3	6	0	0	0	127
1515-1530	117	19	2	3	2	0	0	143
1530-1545	99	18	2	1	0	1	0	121
1545-1600	121	21	2	1	0	1	0	146
Hourly Total	440	73	9	11	2	2	0	537
1600-1615	131	15	2	2	1	2	0	153
1615-1630	137	19	1	3	2	0	0	162
1630-1645	60	12	2	2	0	1	0	77
1645-1700	59	12	0	1	0	0	0	72
Hourly Total	387	58	5	8	3	3	0	464
1700-1715	93	10	1	2	0	0	0	105
1715-1730	146	15	3	2	1	0	0	167
1730-1745	88	13	1	0	1	0	0	103
1745-1800	77	5	0	1	1	0	0	84
Hourly Total	404	43	5	4	3	0	0	459
1800-1815	64	6	1	0	0	0	0	71
1815-1830	38	4	0	1	0	0	0	43
1830-1845	53	4	0	2	1	0	0	60
1845-1900	36	2	0	1	0	0	0	39
Hourly Total	191	16	1	4	1	0	0	213

Total	4029	610	78	117	26	25	7	4892
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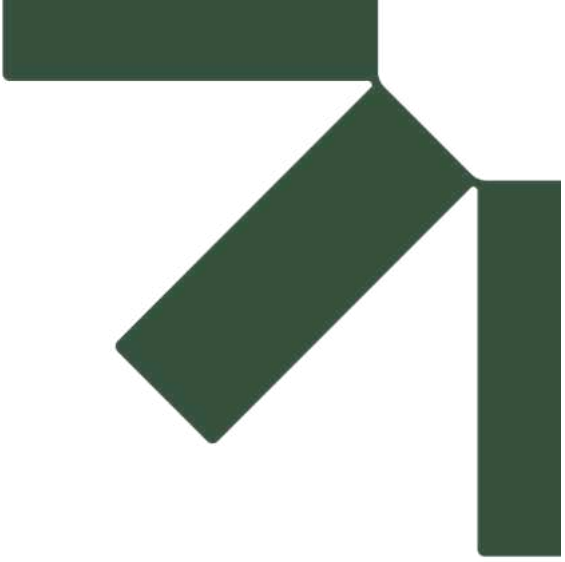
1993	9	4	3	0	2	0	0	211
1993	21	3	0	6	2	0	0	217
1993	23	3	0	1	1	1	0	178
1993	15	2	1	0	1	0	0	114
1993	70	12	4	7	6	1	0	715
1993	12	2	1	1	1	0	0	112
1993	11	0	2	1	0	0	0	107
1993	5	2	0	0	0	0	0	44
1993	4	0	0	0	1	0	0	43
1993	32	4	3	2	2	0	0	306
1993	18	0	2	2	0	0	0	176
1993	12	1	1	1	3	0	0	211
1993	14	1	1	0	2	0	0	167
1993	8	1	1	0	1	0	0	157
1993	52	3	5	3	6	0	0	711
1993	16	4	0	1	1	0	0	182
1993	13	0	1	0	2	0	0	139
1993	9	1	0	1	1	1	0	169
1993	8	0	0	1	2	0	0	155
1993	46	5	1	3	6	1	0	655

6070	845	128	64	38	47	8	7200
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Destination - Arm B								
	Car	LGV	OGV1	OGV2	PSV	MC	PL	Total
0715-0730	87	14	2	2	0	1	0	106
0730-0745	102	23	4	5	1	0	0	149
0745-0800	127	23	1	1	0	0	0	158
0800-0815	488	72	3	6	1	2	1	573
0815-0830	597	18	2	2	3	2	0	624
0830-0845	220	13	3	2	2	1	0	241
0845-0900	100	23	4	5	1	0	0	143
0900-0915	124	12	2	1	1	0	0	139
0915-0930	740	66	11	10	7	3	0	837
0930-0945	137	22	2	1	0	0	0	169
0945-1000	96	16	4	1	2	0	0	119
1000-1015	116	18	3	3	0	0	0	140
1015-1030	106	18	5	0	0	2	1	132
1030-1045	455	74	14	5	2	2	1	553
1045-1100	98	15	2	1	1	0	0	117
1100-1115	92	11	3	2	1	0	0	109
1115-1130	78	8	1	1	0	0	0	88
1130-1145	117	17	2	2	1	1	0	140
1145-1200	385	51	8	6	3	1	0	454
1200-1215	110	20	3	3	0	0	0	136
1215-1230	110	16	5	1	0	0	0	136
1230-1245	114	27	8	0	0	0	0	149
1245-1300	124	20	3	1	2	0	0	150
1300-1315	464	83	19	5	2	0	0	573
1315-1330	130	15	4	0	1	0	0	150
1330-1345	200	17	1	4	1	0	0	223
1345-1400	119	13	5	1	1	0	0	139
1400-1415	86	17	4	2	1	0	0	110
1415-1430	435	62	14	7	4	0	0	522
1430-1445	142	17	1	3	0	2	0	165
1445-1500	143	16	4	3	0	2	0	168
1500-1515	151	27	2	2	1	1	0	184
1515-1530	158	20	4	0	1	1	1	185
1530-1545	594	80	11	8	2	6	1	702
1545-1600	135	21	5	2	1	0	0	164
1600-1615	134	26	2	1	2	1	0	160
1615-1630	162	14	4	1	4	1	1	187
1630-1645	142	15	2	1	1	0	0	161
1645-1700	573	76	13	5	8	2	3	680
1700-1715	120	15	3	5	0	2	0	145
1715-1730	124	14	0	0	0	4	2	144
1730-1745	113	16	3	0	1	1	0	134
1745-1800	97	12	1	0	0	1	0	111
1800-1815	454	57	7	5	1	8	2	534
1815-1830	83	9	2	0	0	2	0	96
1830-1845	54	6	0	1	0	0	0	61
1845-1900	77	10	0	1	0	1	0	89
1900-1915	333	43	5	2	1	5	0	390
1915-1930	116	18	2	3	0	0	0	139
1930-1945	113	11	0	0	1	0	0	125
1945-2000	125	6	0	0	1	0	0	132
2000-2015	138	11	1	0	1	0	0	151
2015-2030	492	46	3	3	3	0	0	567
2030-2045	127	12	0	0	1	0	0	141
2045-2100	113	8	1	0	0	1	0	123
2100-2115	119	11	0	0	0	0	0	130
2115-2130	102	5	0	0	0	0	0	108
2130-2145	462	37	1	0	2	0	0	502

5875	747	109	62	36	29	8	6866
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104	15	1	1	0	1	0	0	122
104	18	0	1	0	1	0	0	177
104	13	3	0	0	1	0	0	164
104	9	2	0	0	2	0	0	104
104	55	6	2	0	5	0	0	557
104	6	0	1	0	1	0	0	55
104	9	1	1	1	0	0	0	4



Appendix D Baseline Survey (2023/2024)

Traffic Data

Land off Readers Way, Rhoose

Transport Assessment

PMG Limited

SLR Project No.: 237538

21 May 2024

Rhose, Thursday 8th February 2024



Junction: 1

Approach: Fonmon Road

TIME	Left to Fontygary Road (East)					Ahead to Fontygary					Right to Fontygary Road (West)				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	9	0	0	9	9.0	0	0	0	0	0.0	1	0	0	1	1.0
07:15 - 07:30	8	0	0	8	8.0	0	0	0	0	0.0	0	0	0	0	0.0
07:30 - 07:45	18	1	0	19	20.3	0	0	0	0	0.0	4	0	0	4	4.0
07:45 - 08:00	26	1	0	27	28.3	0	0	0	0	0.0	2	0	0	2	2.0
Hourly Total	61	2	0	63	65.6	0	0	0	0	0.0	7	0	0	7	7.0
08:00 - 08:15	32	0	0	32	32.0	0	0	0	0	0.0	1	0	0	1	1.0
08:15 - 08:30	29	0	0	29	29.0	0	0	0	0	0.0	1	0	0	1	1.0
08:30 - 08:45	26	0	0	26	26.0	1	0	0	1	1.0	1	0	0	1	1.0
08:45 - 09:00	17	0	0	17	17.0	0	0	0	0	0.0	2	0	0	2	2.0
Hourly Total	104	0	0	104	104.0	1	0	0	1	1.0	5	0	0	5	5.0
09:00 - 09:15	13	0	0	13	13.0	0	0	0	0	0.0	6	0	0	6	6.0
09:15 - 09:30	14	0	0	14	14.0	2	0	0	2	2.0	3	0	0	3	3.0
09:30 - 09:45	13	0	0	13	13.0	4	0	0	4	4.0	2	0	0	2	2.0
09:45 - 10:00	11	0	0	11	11.0	2	0	0	2	2.0	2	1	0	3	4.3
Hourly Total	51	0	0	51	51.0	8	0	0	8	8.0	13	1	0	14	15.3

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TOTAL	216	2	0	218	220.6	9	0	0	9	9.0	25	1	0	26	27.3
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16:00 - 16:15	7	0	1	8	9.0	1	0	0	1	1.0	3	0	0	3	3.0
16:15 - 16:30	10	0	0	10	10.0	1	0	0	1	1.0	2	0	0	2	2.0
16:30 - 16:45	14	0	0	14	14.0	1	0	0	1	1.0	4	0	0	4	4.0
16:45 - 17:00	13	0	0	13	13.0	1	0	0	1	1.0	3	0	0	3	3.0
Hourly Total	44	0	1	45	46.0	4	0	0	4	4.0	12	0	0	12	12.0
17:00 - 17:15	14	0	0	14	14.0	1	0	0	1	1.0	3	0	0	3	3.0
17:15 - 17:30	13	0	0	13	13.0	1	0	0	1	1.0	5	0	0	5	5.0
17:30 - 17:45	14	0	0	14	14.0	2	0	0	2	2.0	8	0	0	8	8.0
17:45 - 18:00	16	0	0	16	16.0	3	0	0	3	3.0	2	0	0	2	2.0
Hourly Total	57	0	0	57	57.0	7	0	0	7	7.0	18	0	0	18	18.0
18:00 - 18:15	19	0	0	19	19.0	4	0	0	4	4.0	0	0	0	0	0.0
18:15 - 18:30	15	0	0	15	15.0	4	0	0	4	4.0	1	0	0	1	1.0
18:30 - 18:45	10	0	0	10	10.0	4	0	0	4	4.0	2	0	0	2	2.0
18:45 - 19:00	9	0	0	9	9.0	0	0	0	0	0.0	4	0	0	4	4.0
Hourly Total	53	0	0	53	53.0	12	0	0	12	12.0	7	0	0	7	7.0

TOTAL	154	0	1	155	156.0	23	0	0	23	23.0	37	0	0	37	37.0
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Rhose, Thursday 8th February 2024



Junction: 1

Approach: Fontygary Road East

TIME	Left to Fontygary					Ahead to Fontygary Road (West)					Right to Fonmon Road				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	0.0	11	1	0	12	13.3	4	0	0	4	4.0
07:15 - 07:30	4	0	0	4	4.0	6	0	0	6	6.0	4	0	0	4	4.0
07:30 - 07:45	1	0	0	1	1.0	22	0	0	22	22.0	9	1	2	12	15.3
07:45 - 08:00	1	0	0	1	1.0	24	0	0	24	24.0	11	0	0	11	11.0
Hourly Total	6	0	0	6	6.0	63	1	0	64	65.3	28	1	2	31	34.3
08:00 - 08:15	1	0	0	1	1.0	28	1	1	30	32.3	14	0	1	15	16.0
08:15 - 08:30	1	1	0	2	3.3	22	0	0	22	22.0	10	0	0	10	10.0
08:30 - 08:45	0	0	0	0	0.0	15	1	1	17	19.3	7	0	0	7	7.0
08:45 - 09:00	2	0	0	2	2.0	25	0	0	25	25.0	17	0	0	17	17.0
Hourly Total	4	1	0	5	6.3	90	2	2	94	98.6	48	0	1	49	50.0
09:00 - 09:15	4	0	0	4	4.0	33	1	0	34	35.3	26	0	0	26	26.0
09:15 - 09:30	2	0	0	2	2.0	21	0	0	21	21.0	12	0	0	12	12.0
09:30 - 09:45	3	1	0	4	5.3	14	0	1	15	16.0	7	0	0	7	7.0
09:45 - 10:00	5	0	0	5	5.0	12	1	0	13	14.3	9	1	0	10	11.3
Hourly Total	14	1	0	15	16.3	80	2	1	83	86.6	54	1	0	55	56.3

TOTAL	24	2	0	26	28.6	233	5	3	241	250.5	130	2	3	135	140.6
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16:00 - 16:15	16	0	0	16	16.0	15	0	0	15	15.0	12	0	0	12	12.0
16:15 - 16:30	12	0	0	12	12.0	11	0	2	13	15.0	13	1	0	14	15.3
16:30 - 16:45	7	0	0	7	7.0	8	0	1	9	10.0	12	0	0	12	12.0
16:45 - 17:00	8	0	0	8	8.0	11	0	0	11	11.0	16	0	0	16	16.0
Hourly Total	43	0	0	43	43.0	45	0	3	48	51.0	53	1	0	54	55.3
17:00 - 17:15	7	0	0	7	7.0	10	0	0	10	10.0	15	0	0	15	15.0
17:15 - 17:30	6	0	0	6	6.0	17	0	0	17	17.0	18	0	0	18	18.0
17:30 - 17:45	12	0	0	12	12.0	23	0	0	23	23.0	27	0	0	27	27.0
17:45 - 18:00	10	0	0	10	10.0	21	0	0	21	21.0	23	0	0	23	23.0
Hourly Total	35	0	0	35	35.0	71	0	0	71	71.0	83	0	0	83	83.0
18:00 - 18:15	27	0	0	27	27.0	20	0	0	20	20.0	22	0	0	22	22.0
18:15 - 18:30	16	0	0	16	16.0	15	0	0	15	15.0	19	0	0	19	19.0
18:30 - 18:45	11	0	0	11	11.0	10	0	1	11	12.0	17	0	0	17	17.0
18:45 - 19:00	7	0	0	7	7.0	9	0	0	9	9.0	14	0	0	14	14.0
Hourly Total	61	0	0	61	61.0	54	0	1	55	56.0	72	0	0	72	72.0

TOTAL	139	0	0	139	139.0	170	0	4	174	178.0	208	1	0	209	210.3
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PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Rhose, Thursday 8th February 2024



Junction: 1

Approach: Fontygary

TIME	Left to Fontygary Road (West)					Ahead to Fonmon Road					Right to Fontygary Road (East)				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
07:15 - 07:30	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
07:30 - 07:45	2	0	0	2	2.0	0	0	0	0	0.0	1	0	0	1	1.0
07:45 - 08:00	1	0	0	1	1.0	0	0	0	0	0.0	0	0	0	0	0.0
Hourly Total	3	0	0	3	3.0	0	0	0	0	0.0	1	0	0	1	1.0
08:00 - 08:15	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
08:15 - 08:30	0	0	0	0	0.0	1	0	0	1	1.0	2	1	0	3	4.3
08:30 - 08:45	0	0	0	0	0.0	1	0	0	1	1.0	2	0	0	2	2.0
08:45 - 09:00	1	0	0	1	1.0	1	0	0	1	1.0	1	0	0	1	1.0
Hourly Total	1	0	0	1	1.0	3	0	0	3	3.0	5	1	0	6	7.3
09:00 - 09:15	3	0	0	3	3.0	0	0	0	0	0.0	0	0	0	0	0.0
09:15 - 09:30	2	0	0	2	2.0	1	0	0	1	1.0	0	0	0	0	0.0
09:30 - 09:45	1	0	0	1	1.0	2	0	0	2	2.0	0	0	0	0	0.0
09:45 - 10:00	1	1	0	2	3.3	2	0	0	2	2.0	0	1	0	1	2.3
Hourly Total	7	1	0	8	9.3	5	0	0	5	5.0	0	1	0	1	2.3

TOTAL	11	1	0	12	13.3	8	0	0	8	8.0	6	2	0	8	10.6
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16:00 - 16:15	6	0	0	6	6.0	1	0	0	1	1.0	10	0	0	10	10.0
16:15 - 16:30	4	0	0	4	4.0	1	0	0	1	1.0	5	0	0	5	5.0
16:30 - 16:45	3	0	0	3	3.0	1	0	0	1	1.0	3	0	0	3	3.0
16:45 - 17:00	4	0	0	4	4.0	0	0	0	0	0.0	5	0	0	5	5.0
Hourly Total	17	0	0	17	17.0	3	0	0	3	3.0	23	0	0	23	23.0
17:00 - 17:15	5	0	0	5	5.0	3	0	0	3	3.0	2	0	0	2	2.0
17:15 - 17:30	2	0	0	2	2.0	2	0	0	2	2.0	8	0	0	8	8.0
17:30 - 17:45	0	0	0	0	0.0	0	0	0	0	0.0	6	0	0	6	6.0
17:45 - 18:00	3	0	0	3	3.0	1	0	0	1	1.0	9	0	0	9	9.0
Hourly Total	10	0	0	10	10.0	6	0	0	6	6.0	25	0	0	25	25.0
18:00 - 18:15	0	0	0	0	0.0	0	0	0	0	0.0	3	0	0	3	3.0
18:15 - 18:30	2	0	0	2	2.0	2	0	0	2	2.0	21	0	0	21	21.0
18:30 - 18:45	3	0	0	3	3.0	3	0	0	3	3.0	18	0	0	18	18.0
18:45 - 19:00	0	0	0	0	0.0	0	0	0	0	0.0	8	0	0	8	8.0
Hourly Total	5	0	0	5	5.0	5	0	0	5	5.0	50	0	0	50	50.0

TOTAL	32	0	0	32	32.0	14	0	0	14	14.0	98	0	0	98	98.0
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PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Rhose, Thursday 8th February 2024



Junction: 1

Approach: Fontygary Road West

TIME	Left to Fonmon Road					Ahead to Fontygary Road (East)					Right to Fontygary				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	0.0	4	0	1	5	6.0	0	0	0	0	0.0
07:15 - 07:30	0	0	1	1	2.0	4	1	0	5	6.3	0	0	0	0	0.0
07:30 - 07:45	0	0	0	0	0.0	3	1	2	6	9.3	0	0	0	0	0.0
07:45 - 08:00	0	0	0	0	0.0	9	0	1	10	11.0	0	0	0	0	0.0
Hourly Total	0	0	1	1	2.0	20	2	4	26	32.6	0	0	0	0	0.0
08:00 - 08:15	0	0	0	0	0.0	16	0	1	17	18.0	0	0	0	0	0.0
08:15 - 08:30	1	0	0	1	1.0	21	0	1	22	23.0	0	0	0	0	0.0
08:30 - 08:45	2	0	0	2	2.0	25	0	1	26	27.0	1	0	0	1	1.0
08:45 - 09:00	1	0	0	1	1.0	19	0	0	19	19.0	1	0	0	1	1.0
Hourly Total	4	0	0	4	4.0	81	0	3	84	87.0	2	0	0	2	2.0
09:00 - 09:15	1	0	0	1	1.0	12	0	0	12	12.0	2	0	0	2	2.0
09:15 - 09:30	2	0	0	2	2.0	13	0	1	14	15.0	1	1	0	2	3.3
09:30 - 09:45	5	0	0	5	5.0	15	0	0	15	15.0	2	0	0	2	2.0
09:45 - 10:00	4	0	0	4	4.0	14	0	0	14	14.0	2	1	0	3	4.3
Hourly Total	12	0	0	12	12.0	54	0	1	55	56.0	7	2	0	9	11.6

TOTAL	16	0	1	17	18.0	155	2	8	165	175.6	9	2	0	11	13.6
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16:00 - 16:15	5	0	0	5	5.0	23	0	0	23	23.0	5	0	0	5	5.0
16:15 - 16:30	6	0	0	6	6.0	22	0	0	22	22.0	4	0	0	4	4.0
16:30 - 16:45	4	0	0	4	4.0	21	0	1	22	23.0	3	0	0	3	3.0
16:45 - 17:00	8	0	0	8	8.0	23	0	0	23	23.0	5	0	0	5	5.0
Hourly Total	23	0	0	23	23.0	89	0	1	90	91.0	17	0	0	17	17.0
17:00 - 17:15	11	0	0	11	11.0	27	0	0	27	27.0	4	0	0	4	4.0
17:15 - 17:30	7	0	0	7	7.0	25	0	0	25	25.0	2	0	0	2	2.0
17:30 - 17:45	4	0	0	4	4.0	23	0	2	25	27.0	1	0	0	1	1.0
17:45 - 18:00	4	0	0	4	4.0	16	0	0	16	16.0	1	0	0	1	1.0
Hourly Total	26	0	0	26	26.0	91	0	2	93	95.0	8	0	0	8	8.0
18:00 - 18:15	3	0	0	3	3.0	10	0	0	10	10.0	1	0	0	1	1.0
18:15 - 18:30	3	0	0	3	3.0	12	0	0	12	12.0	3	0	0	3	3.0
18:30 - 18:45	2	0	0	2	2.0	11	1	1	13	15.3	4	0	0	4	4.0
18:45 - 19:00	2	0	0	2	2.0	10	0	0	10	10.0	2	0	0	2	2.0
Hourly Total	10	0	0	10	10.0	43	1	1	45	47.3	10	0	0	10	10.0

TOTAL	59	0	0	59	59.0	223	1	4	228	233.3	35	0	0	35	35.0
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PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Rhose, Thursday 8th February 2024

Junction: 2

Approach: Readers Way



TIME	Left to Rhose Road (East)					Ahead to Porthkerry Road					Right to Rhose Road (West)				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	0.0	13	0	0	13	13.0	5	0	0	5	5.0
07:15 - 07:30	0	0	0	0	0.0	16	0	0	16	16.0	7	0	0	7	7.0
07:30 - 07:45	1	0	0	1	1.0	15	0	0	15	15.0	6	0	0	6	6.0
07:45 - 08:00	1	0	0	1	1.0	12	0	0	12	12.0	8	0	0	8	8.0
Hourly Total	2	0	0	2	2.0	56	0	0	56	56.0	26	0	0	26	26.0
08:00 - 08:15	0	0	0	0	0.0	9	0	0	9	9.0	9	0	0	9	9.0
08:15 - 08:30	0	0	0	0	0.0	11	1	0	12	13.3	9	1	0	10	11.3
08:30 - 08:45	1	0	0	1	1.0	10	0	0	10	10.0	11	0	0	11	11.0
08:45 - 09:00	0	0	0	0	0.0	9	0	0	9	9.0	14	0	0	14	14.0
Hourly Total	1	0	0	1	1.0	39	1	0	40	41.3	43	1	0	44	45.3
09:00 - 09:15	1	0	0	1	1.0	11	0	0	11	11.0	9	0	0	9	9.0
09:15 - 09:30	0	0	0	0	0.0	10	0	0	10	10.0	5	0	0	5	5.0
09:30 - 09:45	1	0	0	1	1.0	9	1	0	10	11.3	7	0	0	7	7.0
09:45 - 10:00	1	0	0	1	1.0	9	0	0	9	9.0	8	0	0	8	8.0
Hourly Total	3	0	0	3	3.0	39	1	0	40	41.3	29	0	0	29	29.0

TOTAL	6	0	0	6	6.0	134	2	0	136	138.6	98	1	0	99	100.3
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16:00 - 16:15	1	0	0	1	1.0	7	0	0	7	7.0	5	0	0	5	5.0
16:15 - 16:30	0	0	0	0	0.0	5	0	0	5	5.0	5	0	0	5	5.0
16:30 - 16:45	2	0	0	2	2.0	7	0	0	7	7.0	6	0	0	6	6.0
16:45 - 17:00	1	0	0	1	1.0	4	0	0	4	4.0	7	0	0	7	7.0
Hourly Total	4	0	0	4	4.0	23	0	0	23	23.0	23	0	0	23	23.0
17:00 - 17:15	0	0	0	0	0.0	3	0	0	3	3.0	6	0	0	6	6.0
17:15 - 17:30	1	0	0	1	1.0	4	0	0	4	4.0	4	0	0	4	4.0
17:30 - 17:45	2	0	0	2	2.0	7	0	0	7	7.0	5	0	0	5	5.0
17:45 - 18:00	1	0	0	1	1.0	8	0	0	8	8.0	6	0	0	6	6.0
Hourly Total	4	0	0	4	4.0	22	0	0	22	22.0	21	0	0	21	21.0
18:00 - 18:15	0	0	0	0	0.0	9	0	0	9	9.0	5	0	0	5	5.0
18:15 - 18:30	0	0	0	0	0.0	8	0	0	8	8.0	7	0	0	7	7.0
18:30 - 18:45	0	0	0	0	0.0	7	0	0	7	7.0	6	0	0	6	6.0
18:45 - 19:00	0	0	0	0	0.0	5	0	0	5	5.0	4	0	0	4	4.0
Hourly Total	0	0	0	0	0.0	29	0	0	29	29.0	22	0	0	22	22.0

TOTAL	8	0	0	8	8.0	74	0	0	74	74.0	66	0	0	66	66.0
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PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Rhose, Thursday 8th February 2024

Junction: 2

Approach: Rhose Road East



TIME	Left to Porthkerry Road					Ahead to Rhose Road (West)					Right to Readers Way				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	3	0	0	3	3.0	1	0	0	1	1.0	0	0	0	0	0.0
07:15 - 07:30	9	0	0	9	9.0	3	0	0	3	3.0	0	0	0	0	0.0
07:30 - 07:45	13	0	0	13	13.0	2	0	0	2	2.0	0	0	0	0	0.0
07:45 - 08:00	7	0	0	7	7.0	2	0	0	2	2.0	0	0	0	0	0.0
Hourly Total	32	0	0	32	32.0	8	0	0	8	8.0	0	0	0	0	0.0
08:00 - 08:15	2	0	0	2	2.0	9	1	0	10	11.3	0	0	0	0	0.0
08:15 - 08:30	3	0	0	3	3.0	7	0	0	7	7.0	1	0	0	1	1.0
08:30 - 08:45	3	0	0	3	3.0	5	0	0	5	5.0	0	0	0	0	0.0
08:45 - 09:00	2	0	0	2	2.0	4	1	0	5	6.3	1	0	0	1	1.0
Hourly Total	10	0	0	10	10.0	25	2	0	27	29.6	2	0	0	2	2.0
09:00 - 09:15	3	0	0	3	3.0	3	0	0	3	3.0	1	0	0	1	1.0
09:15 - 09:30	3	0	0	3	3.0	1	0	0	1	1.0	0	0	0	0	0.0
09:30 - 09:45	4	0	0	4	4.0	3	0	0	3	3.0	0	0	0	0	0.0
09:45 - 10:00	3	0	0	3	3.0	4	0	0	4	4.0	0	0	0	0	0.0
Hourly Total	13	0	0	13	13.0	11	0	0	11	11.0	1	0	0	1	1.0

TOTAL	55	0	0	55	55.0	44	2	0	46	48.6	3	0	0	3	3.0
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16:00 - 16:15	3	0	0	3	3.0	3	0	0	3	3.0	0	0	0	0	0.0
16:15 - 16:30	4	0	0	4	4.0	3	0	0	3	3.0	0	0	0	0	0.0
16:30 - 16:45	1	0	0	1	1.0	2	0	0	2	2.0	1	0	0	1	1.0
16:45 - 17:00	5	0	0	5	5.0	3	0	0	3	3.0	1	0	0	1	1.0
Hourly Total	13	0	0	13	13.0	11	0	0	11	11.0	2	0	0	2	2.0
17:00 - 17:15	7	0	0	7	7.0	2	0	0	2	2.0	1	0	0	1	1.0
17:15 - 17:30	6	0	0	6	6.0	2	0	0	2	2.0	0	0	0	0	0.0
17:30 - 17:45	8	0	0	8	8.0	4	0	0	4	4.0	1	0	0	1	1.0
17:45 - 18:00	7	0	0	7	7.0	5	0	0	5	5.0	1	0	0	1	1.0
Hourly Total	28	0	0	28	28.0	13	0	0	13	13.0	3	0	0	3	3.0
18:00 - 18:15	8	0	0	8	8.0	7	0	0	7	7.0	1	0	0	1	1.0
18:15 - 18:30	5	0	0	5	5.0	4	0	0	4	4.0	1	0	0	1	1.0
18:30 - 18:45	4	0	0	4	4.0	3	0	0	3	3.0	0	0	0	0	0.0
18:45 - 19:00	2	0	0	2	2.0	3	0	0	3	3.0	0	0	0	0	0.0
Hourly Total	19	0	0	19	19.0	17	0	0	17	17.0	2	0	0	2	2.0

TOTAL	60	0	0	60	60.0	41	0	0	41	41.0	7	0	0	7	7.0
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PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Rhose, Thursday 8th February 2024



Junction: 2

Approach: Porthkerry Road

TIME	Left to Rhose Road (West)					Ahead to Readers Way					Right to Rhose Road (East)				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	14	0	1	15	16.0	0	0	0	0	0.0	2	0	0	2	2.0
07:15 - 07:30	17	1	1	19	21.3	0	0	0	0	0.0	4	0	0	4	4.0
07:30 - 07:45	22	2	1	25	28.6	0	0	0	0	0.0	8	0	0	8	8.0
07:45 - 08:00	36	2	0	38	40.6	2	1	0	3	4.3	7	1	0	8	9.3
Hourly Total	89	5	3	97	106.5	2	1	0	3	4.3	21	1	0	22	23.3
08:00 - 08:15	40	0	2	42	44.0	2	1	0	3	4.3	9	1	0	10	11.3
08:15 - 08:30	45	0	0	45	45.0	3	0	0	3	3.0	6	1	0	7	8.3
08:30 - 08:45	49	0	0	49	49.0	6	0	0	6	6.0	5	0	0	5	5.0
08:45 - 09:00	55	0	1	56	57.0	4	0	0	4	4.0	6	0	0	6	6.0
Hourly Total	189	0	3	192	195.0	15	1	0	16	17.3	26	2	0	28	30.6
09:00 - 09:15	39	1	0	40	41.3	5	0	0	5	5.0	5	0	0	5	5.0
09:15 - 09:30	25	0	0	25	25.0	5	0	0	5	5.0	4	0	0	4	4.0
09:30 - 09:45	29	1	1	31	33.3	7	0	0	7	7.0	3	0	0	3	3.0
09:45 - 10:00	33	1	0	34	35.3	6	0	0	6	6.0	1	0	0	1	1.0
Hourly Total	126	3	1	130	134.9	23	0	0	23	23.0	13	0	0	13	13.0

TOTAL	404	8	7	419	436.4	40	2	0	42	44.6	60	3	0	63	66.9
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16:00 - 16:15	44	0	0	44	44.0	11	0	0	11	11.0	9	0	0	9	9.0
16:15 - 16:30	41	0	2	43	45.0	12	0	0	12	12.0	8	0	0	8	8.0
16:30 - 16:45	44	0	0	44	44.0	14	0	0	14	14.0	9	0	0	9	9.0
16:45 - 17:00	46	1	0	47	48.3	19	0	0	19	19.0	8	0	0	8	8.0
Hourly Total	175	1	2	178	181.3	56	0	0	56	56.0	34	0	0	34	34.0
17:00 - 17:15	50	0	0	50	50.0	23	0	0	23	23.0	7	0	0	7	7.0
17:15 - 17:30	53	0	1	54	55.0	17	0	0	17	17.0	11	0	0	11	11.0
17:30 - 17:45	51	0	0	51	51.0	11	0	0	11	11.0	14	0	0	14	14.0
17:45 - 18:00	56	0	0	56	56.0	10	0	0	10	10.0	12	0	0	12	12.0
Hourly Total	210	0	1	211	212.0	61	0	0	61	61.0	44	0	0	44	44.0
18:00 - 18:15	62	0	0	62	62.0	9	0	0	9	9.0	7	0	0	7	7.0
18:15 - 18:30	54	0	0	54	54.0	12	0	0	12	12.0	6	0	0	6	6.0
18:30 - 18:45	44	0	1	45	46.0	11	0	0	11	11.0	4	0	0	4	4.0
18:45 - 19:00	40	0	0	40	40.0	8	0	0	8	8.0	2	0	0	2	2.0
Hourly Total	200	0	1	201	202.0	40	0	0	40	40.0	19	0	0	19	19.0

TOTAL	585	1	4	590	595.3	157	0	0	157	157.0	97	0	0	97	97.0
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PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Rhose, Thursday 8th February 2024

Junction: 2

Approach: Rhose Road West



TIME	Left to Readers Way					Ahead to Rhose Road (East)					Right to Porthkerry Road				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	4	0	0	4	4.0	4	0	0	4	4.0	29	1	2	32	35.3
07:15 - 07:30	6	0	0	6	6.0	5	0	0	5	5.0	31	0	1	32	33.0
07:30 - 07:45	7	0	0	7	7.0	3	0	0	3	3.0	36	1	1	38	40.3
07:45 - 08:00	5	0	0	5	5.0	5	0	0	5	5.0	39	3	1	43	47.9
Hourly Total	22	0	0	22	22.0	17	0	0	17	17.0	135	5	5	145	156.5
08:00 - 08:15	2	0	0	2	2.0	4	0	0	4	4.0	44	1	1	46	48.3
08:15 - 08:30	3	0	0	3	3.0	3	0	0	3	3.0	45	1	2	48	51.3
08:30 - 08:45	5	0	0	5	5.0	3	0	0	3	3.0	48	0	1	49	50.0
08:45 - 09:00	8	0	0	8	8.0	1	0	0	1	1.0	47	0	0	47	47.0
Hourly Total	18	0	0	18	18.0	11	0	0	11	11.0	184	2	4	190	196.6
09:00 - 09:15	7	0	0	7	7.0	3	0	0	3	3.0	40	0	0	40	40.0
09:15 - 09:30	4	0	0	4	4.0	1	0	0	1	1.0	34	2	1	37	40.6
09:30 - 09:45	5	0	0	5	5.0	4	0	0	4	4.0	36	0	1	37	38.0
09:45 - 10:00	6	0	0	6	6.0	2	0	0	2	2.0	33	0	0	33	33.0
Hourly Total	22	0	0	22	22.0	10	0	0	10	10.0	143	2	2	147	151.6

TOTAL	62	0	0	62	62.0	38	0	0	38	38.0	462	9	11	482	504.7
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16:00 - 16:15	4	0	0	4	4.0	2	0	0	2	2.0	51	0	2	53	55.0
16:15 - 16:30	9	0	0	9	9.0	4	0	0	4	4.0	46	0	1	47	48.0
16:30 - 16:45	15	0	0	15	15.0	4	0	0	4	4.0	44	0	1	45	46.0
16:45 - 17:00	14	0	0	14	14.0	5	0	0	5	5.0	48	0	0	48	48.0
Hourly Total	42	0	0	42	42.0	15	0	0	15	15.0	189	0	4	193	197.0
17:00 - 17:15	15	0	0	15	15.0	6	0	0	6	6.0	45	0	0	45	45.0
17:15 - 17:30	12	0	0	12	12.0	7	0	0	7	7.0	47	0	1	48	49.0
17:30 - 17:45	9	0	0	9	9.0	6	0	0	6	6.0	46	0	1	47	48.0
17:45 - 18:00	8	0	0	8	8.0	8	0	0	8	8.0	45	0	0	45	45.0
Hourly Total	44	0	0	44	44.0	27	0	0	27	27.0	183	0	2	185	187.0
18:00 - 18:15	6	0	0	6	6.0	6	0	0	6	6.0	42	0	0	42	42.0
18:15 - 18:30	7	0	0	7	7.0	5	0	0	5	5.0	38	0	1	39	40.0
18:30 - 18:45	8	0	0	8	8.0	2	0	0	2	2.0	35	1	1	37	39.3
18:45 - 19:00	6	0	0	6	6.0	3	0	0	3	3.0	31	0	0	31	31.0
Hourly Total	27	0	0	27	27.0	16	0	0	16	16.0	146	1	2	149	152.3

TOTAL	113	0	0	113	113.0	58	0	0	58	58.0	518	1	8	527	536.3
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PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Rhose, Thursday 8th February 2024

Junction: 3

Approach: Porthkerry Road East



TIME	Left to Pentir Y De					Ahead to Porthkerry Road (West)				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	4	0	0	4	4.0	14	0	1	15	16.0
07:15 - 07:30	5	0	2	7	9.0	13	2	0	15	17.6
07:30 - 07:45	5	0	0	5	5.0	14	4	1	19	25.2
07:45 - 08:00	6	1	1	8	10.3	26	3	0	29	32.9
Hourly Total	20	1	3	24	28.3	67	9	2	78	91.7
08:00 - 08:15	7	0	0	7	7.0	33	2	1	36	39.6
08:15 - 08:30	5	0	0	5	5.0	31	0	1	32	33.0
08:30 - 08:45	3	0	0	3	3.0	34	0	0	34	34.0
08:45 - 09:00	7	0	1	8	9.0	33	0	0	33	33.0
Hourly Total	22	0	1	23	24.0	131	2	2	135	139.6
09:00 - 09:15	11	0	0	11	11.0	35	1	0	36	37.3
09:15 - 09:30	8	0	0	8	8.0	37	0	1	38	39.0
09:30 - 09:45	7	0	0	7	7.0	36	1	0	37	38.3
09:45 - 10:00	7	0	1	8	9.0	34	0	0	34	34.0
Hourly Total	33	0	1	34	35.0	142	2	1	145	148.6

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TOTAL	75	1	5	81	87.3	340	13	5	358	379.9
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16:00 - 16:15	18	0	1	19	20.0	73	0	1	74	75.0
16:15 - 16:30	15	0	0	15	15.0	51	0	0	51	51.0
16:30 - 16:45	22	0	0	22	22.0	65	0	1	66	67.0
16:45 - 17:00	24	0	1	25	26.0	87	1	0	88	89.3
Hourly Total	79	0	2	81	83.0	276	1	2	279	282.3
17:00 - 17:15	28	0	0	28	28.0	93	0	0	93	93.0
17:15 - 17:30	25	0	0	25	25.0	92	0	0	92	92.0
17:30 - 17:45	20	0	0	20	20.0	98	0	1	99	100.0
17:45 - 18:00	22	0	1	23	24.0	90	0	0	90	90.0
Hourly Total	95	0	1	96	97.0	373	0	1	374	375.0
18:00 - 18:15	25	0	0	25	25.0	85	0	0	85	85.0
18:15 - 18:30	29	0	0	29	29.0	67	0	0	67	67.0
18:30 - 18:45	25	0	0	25	25.0	55	0	1	56	57.0
18:45 - 19:00	18	0	1	19	20.0	49	0	0	49	49.0
Hourly Total	97	0	1	98	99.0	256	0	1	257	258.0

TOTAL	271	0	4	275	279.0	905	1	4	910	915.3
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Rhose, Thursday 8th February 2024

Junction: 3

Approach: Pentir Y De



TIME	Left to Porthkerry Road (West)					Right to Porthkerry Road (East)				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	5	0	0	5	5.0	22	0	0	22	22.0
07:15 - 07:30	6	0	1	7	8.0	32	0	0	32	32.0
07:30 - 07:45	8	0	0	8	8.0	45	0	2	47	49.0
07:45 - 08:00	7	0	0	7	7.0	44	0	0	44	44.0
Hourly Total	26	0	1	27	28.0	143	0	2	145	147.0
08:00 - 08:15	9	0	0	9	9.0	43	0	1	44	45.0
08:15 - 08:30	6	0	0	6	6.0	34	0	0	34	34.0
08:30 - 08:45	3	0	0	3	3.0	20	0	1	21	22.0
08:45 - 09:00	5	0	1	6	7.0	19	0	0	19	19.0
Hourly Total	23	0	1	24	25.0	116	0	2	118	120.0
09:00 - 09:15	8	0	0	8	8.0	18	0	0	18	18.0
09:15 - 09:30	6	0	0	6	6.0	13	0	0	13	13.0
09:30 - 09:45	5	1	0	6	7.3	11	0	0	11	11.0
09:45 - 10:00	4	0	0	4	4.0	10	1	0	11	12.3
Hourly Total	23	1	0	24	25.3	52	1	0	53	54.3

TOTAL	72	1	2	75	78.3	311	1	4	316	321.3
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16:00 - 16:15	5	0	0	5	5.0	11	0	1	12	13.0
16:15 - 16:30	3	0	0	3	3.0	9	0	1	10	11.0
16:30 - 16:45	4	0	0	4	4.0	12	0	0	12	12.0
16:45 - 17:00	6	0	0	6	6.0	14	0	0	14	14.0
Hourly Total	18	0	0	18	18.0	46	0	2	48	50.0
17:00 - 17:15	4	0	0	4	4.0	13	0	0	13	13.0
17:15 - 17:30	3	0	0	3	3.0	10	0	0	10	10.0
17:30 - 17:45	5	0	0	5	5.0	11	0	0	11	11.0
17:45 - 18:00	6	0	0	6	6.0	13	0	0	13	13.0
Hourly Total	18	0	0	18	18.0	47	0	0	47	47.0
18:00 - 18:15	9	0	0	9	9.0	16	0	0	16	16.0
18:15 - 18:30	6	0	0	6	6.0	10	0	0	10	10.0
18:30 - 18:45	4	0	0	4	4.0	8	0	0	8	8.0
18:45 - 19:00	5	0	0	5	5.0	10	0	0	10	10.0
Hourly Total	24	0	0	24	24.0	44	0	0	44	44.0

TOTAL	60	0	0	60	60.0	137	0	2	139	141.0
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PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Rhose, Thursday 8th February 2024

Junction: 3

Approach: Porthkerry Road West



TIME	Ahead to Porthkerry Road (East)					Right to Pentir Y De				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	67	1	3	71	75.3	3	0	0	3	3.0
07:15 - 07:30	71	0	1	72	73.0	5	0	0	5	5.0
07:30 - 07:45	78	1	1	80	82.3	6	0	0	6	6.0
07:45 - 08:00	76	2	0	78	80.6	5	0	1	6	7.0
Hourly Total	292	4	5	301	311.2	19	0	1	20	21.0
08:00 - 08:15	78	1	0	79	80.3	7	0	0	7	7.0
08:15 - 08:30	66	0	2	68	70.0	4	1	0	5	6.3
08:30 - 08:45	53	0	0	53	53.0	2	0	2	4	6.0
08:45 - 09:00	60	0	0	60	60.0	4	0	0	4	4.0
Hourly Total	257	1	2	260	263.3	17	1	2	20	23.3
09:00 - 09:15	68	0	0	68	68.0	6	0	0	6	6.0
09:15 - 09:30	65	1	1	67	69.3	6	1	0	7	8.3
09:30 - 09:45	62	0	1	63	64.0	5	1	0	6	7.3
09:45 - 10:00	59	1	0	60	61.3	4	0	0	4	4.0
Hourly Total	254	2	2	258	262.6	21	2	0	23	25.6

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TOTAL	803	7	9	819	837.1	57	3	3	63	69.9
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16:00 - 16:15	53	0	0	53	53.0	9	0	2	11	13.0
16:15 - 16:30	54	0	0	54	54.0	5	0	0	5	5.0
16:30 - 16:45	56	0	1	57	58.0	8	0	0	8	8.0
16:45 - 17:00	50	0	1	51	52.0	11	0	0	11	11.0
Hourly Total	213	0	2	215	217.0	33	0	2	35	37.0
17:00 - 17:15	43	0	0	43	43.0	14	0	0	14	14.0
17:15 - 17:30	54	0	1	55	56.0	12	0	0	12	12.0
17:30 - 17:45	60	0	1	61	62.0	10	0	0	10	10.0
17:45 - 18:00	56	0	0	56	56.0	9	0	0	9	9.0
Hourly Total	213	0	2	215	217.0	45	0	0	45	45.0
18:00 - 18:15	51	0	0	51	51.0	8	0	0	8	8.0
18:15 - 18:30	48	0	1	49	50.0	9	0	0	9	9.0
18:30 - 18:45	42	1	1	44	46.3	8	0	0	8	8.0
18:45 - 19:00	38	0	0	38	38.0	8	0	0	8	8.0
Hourly Total	179	1	2	182	185.3	33	0	0	33	33.0

TOTAL	605	1	6	612	619.3	111	0	2	113	115.0
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Rhoose, Thursday 8th February 2024

Junction: 4
Approach: Tredogan Road North



TIME	To A4226					To Tredogan Road (South)					To Dragonfly Drive					To B4265				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	2	0	0	2	2.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
07:15 - 07:30	3	0	0	3	3.0	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0
07:30 - 07:45	1	1	0	2	3.3	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0
07:45 - 08:00	1	0	0	1	1.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
Hourly Total	7	1	0	8	9.3	0	0	0	0	0.0	0	0	0	0	0.0	2	0	0	2	2.0
08:00 - 08:15	4	0	0	4	4.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
08:15 - 08:30	4	0	0	4	4.0	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0
08:30 - 08:45	8	0	0	8	8.0	1	0	0	1	1.0	0	0	0	0	0.0	1	0	0	1	1.0
08:45 - 09:00	5	0	0	5	5.0	0	0	0	0	0.0	0	0	0	0	0.0	2	0	0	2	2.0
Hourly Total	21	0	0	21	21.0	1	0	0	1	1.0	0	0	0	0	0.0	4	0	0	4	4.0
09:00 - 09:15	5	0	0	5	5.0	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0
09:15 - 09:30	4	0	0	4	4.0	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0
09:30 - 09:45	4	0	0	4	4.0	0	0	0	0	0.0	0	0	0	0	0.0	3	0	0	3	3.0
09:45 - 10:00	3	0	0	3	3.0	1	0	0	1	1.0	0	0	0	0	0.0	1	0	0	1	1.0
Hourly Total	16	0	0	16	16.0	1	0	0	1	1.0	0	0	0	0	0.0	6	0	0	6	6.0

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TOTAL	44	1	0	45	46.3	2	0	0	2	2.0	0	0	0	0	0.0	12	0	0	12	12.0
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16:00 - 16:15	2	0	0	2	2.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
16:15 - 16:30	3	0	0	3	3.0	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0
16:30 - 16:45	1	1	0	2	3.3	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0
16:45 - 17:00	1	0	0	1	1.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
Hourly Total	7	1	0	8	9.3	0	0	0	0	0.0	0	0	0	0	0.0	2	0	0	2	2.0
17:00 - 17:15	4	0	0	4	4.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
17:15 - 17:30	4	0	0	4	4.0	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0
17:30 - 17:45	8	0	0	8	8.0	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0
17:45 - 18:00	5	0	0	5	5.0	0	0	0	0	0.0	0	0	0	0	0.0	2	0	0	2	2.0
Hourly Total	21	0	0	21	21.0	0	0	0	0	0.0	0	0	0	0	0.0	4	0	0	4	4.0
18:00 - 18:15	5	0	0	5	5.0	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0
18:15 - 18:30	4	0	0	4	4.0	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0
18:30 - 18:45	4	0	0	4	4.0	0	0	0	0	0.0	0	0	0	0	0.0	3	0	0	3	3.0
18:45 - 19:00	3	0	0	3	3.0	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0
Hourly Total	16	0	0	16	16.0	0	0	0	0	0.0	0	0	0	0	0.0	6	0	0	6	6.0

TOTAL	44	1	0	45	46.3	0	0	0	0	0.0	0	0	0	0	0.0	12	0	0	12	12.0
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Rhoose, Thursday 8th February 2024



Junction: 4
Approach: A4226

TIME	To Tredogan Road (South)					To Dragonfly Drive					To B4265					To Tredogan Road (North)				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	4	0	0	4	4.0	7	0	0	7	7.0	38	1	1	40	42.3	1	0	0	1	1.0
07:15 - 07:30	7	0	0	7	7.0	8	0	0	8	8.0	57	1	0	58	59.3	0	1	0	1	2.3
07:30 - 07:45	5	0	0	5	5.0	7	0	0	7	7.0	93	3	0	96	99.9	3	0	0	3	3.0
07:45 - 08:00	11	1	0	12	13.3	4	0	0	4	4.0	66	5	0	71	77.5	3	0	0	3	3.0
Hourly Total	27	1	0	28	29.3	26	0	0	26	26.0	254	10	1	265	279.0	7	1	0	8	9.3
08:00 - 08:15	4	0	0	4	4.0	2	0	0	2	2.0	90	2	0	92	94.6	1	0	0	1	1.0
08:15 - 08:30	10	0	0	10	10.0	1	0	0	1	1.0	52	2	0	54	56.6	2	0	0	2	2.0
08:30 - 08:45	10	0	1	11	12.0	0	0	0	0	0.0	58	4	0	62	67.2	2	0	0	2	2.0
08:45 - 09:00	7	0	0	7	7.0	0	0	0	0	0.0	47	0	0	47	47.0	4	0	0	4	4.0
Hourly Total	31	0	1	32	33.0	3	0	0	3	3.0	247	8	0	255	265.4	9	0	0	9	9.0
09:00 - 09:15	10	2	0	12	14.6	3	0	0	3	3.0	70	4	0	74	79.2	3	0	0	3	3.0
09:15 - 09:30	2	0	0	2	2.0	3	0	0	3	3.0	45	3	0	48	51.9	1	0	0	1	1.0
09:30 - 09:45	5	0	0	5	5.0	1	0	0	1	1.0	39	3	0	42	45.9	3	0	0	3	3.0
09:45 - 10:00	4	0	0	4	4.0	2	0	0	2	2.0	47	0	0	47	47.0	2	0	0	2	2.0
Hourly Total	21	2	0	23	25.6	9	0	0	9	9.0	201	10	0	211	224.0	9	0	0	9	9.0

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TOTAL	79	3	1	83	87.9	38	0	0	38	38.0	702	28	1	731	768.4	25	1	0	26	27.3
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16:00 - 16:15	0	0	0	0	0.0	2	0	0	2	2.0	100	4	0	104	109.2	0	0	0	0	0.0
16:15 - 16:30	1	0	0	1	1.0	1	0	0	1	1.0	104	0	0	104	104.0	1	0	0	1	1.0
16:30 - 16:45	0	0	0	0	0.0	0	0	0	0	0.0	105	0	0	105	105.0	2	0	0	2	2.0
16:45 - 17:00	0	0	0	0	0.0	0	0	0	0	0.0	92	3	0	95	98.9	2	0	0	2	2.0
Hourly Total	1	0	0	1	1.0	3	0	0	3	3.0	401	7	0	408	417.1	5	0	0	5	5.0
17:00 - 17:15	0	0	0	0	0.0	0	0	0	0	0.0	109	3	0	112	115.9	0	0	0	0	0.0
17:15 - 17:30	1	0	0	1	1.0	0	0	0	0	0.0	83	3	0	86	89.9	2	0	0	2	2.0
17:30 - 17:45	4	0	0	4	4.0	3	0	0	3	3.0	94	3	0	97	100.9	7	0	0	7	7.0
17:45 - 18:00	2	0	0	2	2.0	2	0	0	2	2.0	82	1	0	83	84.3	6	0	0	6	6.0
Hourly Total	7	0	0	7	7.0	5	0	0	5	5.0	368	10	0	378	391.0	15	0	0	15	15.0
18:00 - 18:15	1	0	0	1	1.0	4	0	0	4	4.0	74	0	0	74	74.0	5	0	0	5	5.0
18:15 - 18:30	1	0	0	1	1.0	2	0	0	2	2.0	63	2	0	65	67.6	0	0	0	0	0.0
18:30 - 18:45	1	0	0	1	1.0	1	0	0	1	1.0	59	0	0	59	59.0	2	0	0	2	2.0
18:45 - 19:00	1	0	0	1	1.0	0	0	0	0	0.0	64	0	0	64	64.0	3	0	0	3	3.0
Hourly Total	4	0	0	4	4.0	7	0	0	7	7.0	260	2	0	262	264.6	10	0	0	10	10.0

TOTAL	12	0	0	12	12.0	15	0	0	15	15.0	1029	19	0	1048	1072.7	30	0	0	30	30.0
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Rhooose, Thursday 8th February 2024

Junction: 4
Approach: Tredogan Road South



TIME	To Dragonfly Drive					To B4265					To Tredogan Road (North)					To A4226				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	0.0	1	0	0	1	1.0	0	0	0	0	0.0	1	0	0	1	1.0
07:15 - 07:30	0	0	0	0	0.0	2	0	2	4	6.0	0	0	0	0	0.0	3	0	0	3	3.0
07:30 - 07:45	0	0	0	0	0.0	4	0	0	4	4.0	0	0	0	0	0.0	4	0	0	4	4.0
07:45 - 08:00	0	0	0	0	0.0	6	1	0	7	8.3	0	0	0	0	0.0	9	0	0	9	9.0
Hourly Total	0	0	0	0	0.0	13	1	2	16	19.3	0	0	0	0	0.0	17	0	0	17	17.0
08:00 - 08:15	0	0	0	0	0.0	9	0	0	9	9.0	0	0	0	0	0.0	9	0	0	9	9.0
08:15 - 08:30	0	0	0	0	0.0	7	0	1	8	9.0	0	0	0	0	0.0	8	0	0	8	8.0
08:30 - 08:45	0	0	0	0	0.0	18	0	0	18	18.0	1	0	0	1	1.0	5	0	0	5	5.0
08:45 - 09:00	0	0	0	0	0.0	4	0	0	4	4.0	1	0	0	1	1.0	5	0	0	5	5.0
Hourly Total	0	0	0	0	0.0	38	0	1	39	40.0	2	0	0	2	2.0	27	0	0	27	27.0
09:00 - 09:15	0	0	0	0	0.0	3	0	0	3	3.0	0	0	0	0	0.0	4	0	0	4	4.0
09:15 - 09:30	0	0	0	0	0.0	1	0	1	2	3.0	0	0	0	0	0.0	1	1	0	2	3.3
09:30 - 09:45	0	0	0	0	0.0	2	0	0	2	2.0	0	0	0	0	0.0	4	0	0	4	4.0
09:45 - 10:00	0	0	0	0	0.0	4	0	0	4	4.0	0	0	0	0	0.0	4	2	0	6	8.6
Hourly Total	0	0	0	0	0.0	10	0	1	11	12.0	0	0	0	0	0.0	13	3	0	16	19.9

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TOTAL	0	0	0	0	0.0	61	1	4	66	71.3	2	0	0	2	2.0	57	3	0	60	63.9
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16:00 - 16:15	0	0	0	0	0.0	6	0	0	6	6.0	0	0	0	0	0.0	8	0	0	8	8.0
16:15 - 16:30	0	0	0	0	0.0	8	0	0	8	8.0	0	0	0	0	0.0	8	0	0	8	8.0
16:30 - 16:45	0	0	0	0	0.0	6	0	0	6	6.0	0	0	0	0	0.0	6	0	0	6	6.0
16:45 - 17:00	0	0	0	0	0.0	5	0	0	5	5.0	0	0	0	0	0.0	5	0	0	5	5.0
Hourly Total	0	0	0	0	0.0	25	0	0	25	25.0	0	0	0	0	0.0	27	0	0	27	27.0
17:00 - 17:15	0	0	0	0	0.0	4	0	0	4	4.0	0	0	0	0	0.0	4	0	0	4	4.0
17:15 - 17:30	0	0	0	0	0.0	10	0	0	10	10.0	1	0	0	1	1.0	10	0	0	10	10.0
17:30 - 17:45	0	0	0	0	0.0	12	0	0	12	12.0	0	0	0	0	0.0	7	0	0	7	7.0
17:45 - 18:00	0	0	0	0	0.0	8	0	0	8	8.0	0	0	0	0	0.0	11	0	0	11	11.0
Hourly Total	0	0	0	0	0.0	34	0	0	34	34.0	1	0	0	1	1.0	32	0	0	32	32.0
18:00 - 18:15	0	0	0	0	0.0	15	0	0	15	15.0	1	0	0	1	1.0	11	0	1	12	13.0
18:15 - 18:30	0	0	0	0	0.0	5	0	0	5	5.0	0	0	0	0	0.0	1	0	0	1	1.0
18:30 - 18:45	0	0	0	0	0.0	3	0	0	3	3.0	0	0	0	0	0.0	4	0	0	4	4.0
18:45 - 19:00	0	0	0	0	0.0	2	0	0	2	2.0	0	0	0	0	0.0	2	0	0	2	2.0
Hourly Total	0	0	0	0	0.0	25	0	0	25	25.0	1	0	0	1	1.0	18	0	1	19	20.0

TOTAL	0	0	0	0	0.0	84	0	0	84	84.0	2	0	0	2	2.0	77	0	1	78	79.0
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Rhooose, Thursday 8th February 2024

Junction: 4
Approach: Dragonfly Drive



TIME	To B4265					To Tredogan Road (North)					To A4226					To Tredogan Road (South)				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	0.0	0	0	0	0	0.0	2	0	0	2	2.0	0	0	0	0	0.0
07:15 - 07:30	0	0	0	0	0.0	0	0	0	0	0.0	1	1	0	2	3.3	0	0	0	0	0.0
07:30 - 07:45	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0	0	0	0	0	0.0
07:45 - 08:00	0	0	0	0	0.0	0	0	0	0	0.0	0	1	0	1	2.3	0	0	0	0	0.0
Hourly Total	0	0	0	0	0.0	0	0	0	0	0.0	4	2	0	6	8.6	0	0	0	0	0.0
08:00 - 08:15	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0	0	0	0	0	0.0
08:15 - 08:30	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
08:30 - 08:45	2	0	0	2	2.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
08:45 - 09:00	1	0	0	1	1.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
Hourly Total	3	0	0	3	3.0	0	0	0	0	0.0	1	0	0	1	1.0	0	0	0	0	0.0
09:00 - 09:15	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0	0	0	0	0	0.0
09:15 - 09:30	1	0	0	1	1.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
09:30 - 09:45	1	0	0	1	1.0	0	0	0	0	0.0	1	0	0	1	1.0	0	0	0	0	0.0
09:45 - 10:00	1	0	0	1	1.0	0	0	0	0	0.0	3	0	0	3	3.0	0	0	0	0	0.0
Hourly Total	3	0	0	3	3.0	0	0	0	0	0.0	5	0	0	5	5.0	0	0	0	0	0.0
TOTAL	6	0	0	6	6.0	0	0	0	0	0.0	10	2	0	12	14.6	0	0	0	0	0.0
16:00 - 16:15	5	0	0	5	5.0	0	0	0	0	0.0	16	0	0	16	16.0	1	0	0	1	1.0
16:15 - 16:30	3	0	0	3	3.0	0	0	0	0	0.0	8	0	0	8	8.0	0	0	0	0	0.0
16:30 - 16:45	1	0	0	1	1.0	0	0	0	0	0.0	2	0	0	2	2.0	0	0	0	0	0.0
16:45 - 17:00	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0	0	0	0	0	0.0
Hourly Total	9	0	0	9	9.0	0	0	0	0	0.0	27	0	0	27	27.0	1	0	0	1	1.0
17:00 - 17:15	1	0	0	1	1.0	0	0	0	0	0.0	10	0	0	10	10.0	0	0	0	0	0.0
17:15 - 17:30	1	0	0	1	1.0	1	0	0	1	1.0	6	0	0	6	6.0	0	0	0	0	0.0
17:30 - 17:45	1	0	0	1	1.0	0	0	0	0	0.0	18	0	0	18	18.0	0	0	0	0	0.0
17:45 - 18:00	0	0	0	0	0.0	0	0	0	0	0.0	5	0	0	5	5.0	0	0	0	0	0.0
Hourly Total	3	0	0	3	3.0	1	0	0	1	1.0	39	0	0	39	39.0	0	0	0	0	0.0
18:00 - 18:15	1	0	0	1	1.0	0	0	0	0	0.0	5	0	0	5	5.0	0	0	0	0	0.0
18:15 - 18:30	3	0	0	3	3.0	0	0	0	0	0.0	8	0	0	8	8.0	0	0	0	0	0.0
18:30 - 18:45	25	0	0	25	25.0	0	0	0	0	0.0	82	0	0	82	82.0	0	0	0	0	0.0
18:45 - 19:00	2	0	0	2	2.0	0	0	0	0	0.0	3	0	0	3	3.0	0	0	0	0	0.0
Hourly Total	31	0	0	31	31.0	0	0	0	0	0.0	98	0	0	98	98.0	0	0	0	0	0.0
TOTAL	43	0	0	43	43.0	1	0	0	1	1.0	164	0	0	164	164.0	1	0	0	1	1.0

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Rhoose, Thursday 8th February 2024

Junction: 4
Approach: B4265



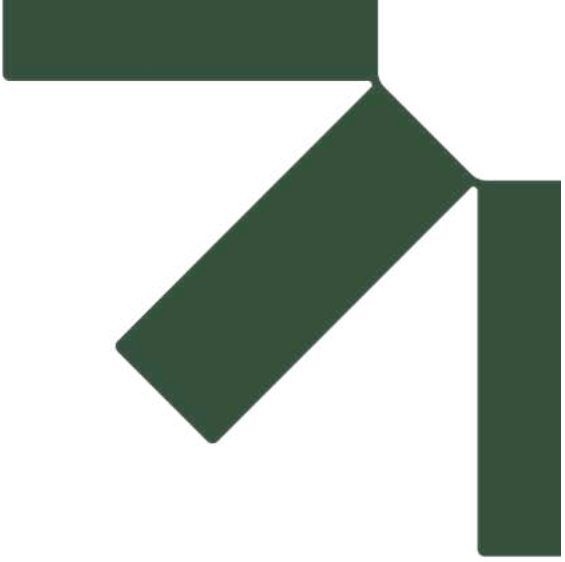
TIME	To Tredogan Road (North)					To A4226					To Tredogan Road (South)					To Dragonfly Drive				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	0.0	63	6	0	69	76.8	3	0	0	3	3.0	6	0	0	6	6.0
07:15 - 07:30	0	0	0	0	0.0	76	3	0	79	82.9	3	0	0	3	3.0	5	0	0	5	5.0
07:30 - 07:45	0	0	0	0	0.0	102	3	0	105	108.9	2	0	1	3	4.0	7	0	0	7	7.0
07:45 - 08:00	1	0	0	1	1.0	98	2	0	100	102.6	8	0	0	8	8.0	4	0	0	4	4.0
Hourly Total	1	0	0	1	1.0	339	14	0	353	371.2	16	0	1	17	18.0	22	0	0	22	22.0
08:00 - 08:15	0	0	0	0	0.0	86	3	2	91	96.9	12	0	0	12	12.0	2	0	0	2	2.0
08:15 - 08:30	3	0	0	3	3.0	79	3	0	82	85.9	8	0	0	8	8.0	1	0	0	1	1.0
08:30 - 08:45	6	0	0	6	6.0	73	1	0	74	75.3	7	0	0	7	7.0	1	0	0	1	1.0
08:45 - 09:00	2	0	0	2	2.0	69	6	0	75	82.8	4	0	1	5	6.0	0	0	0	0	0.0
Hourly Total	11	0	0	11	11.0	307	13	2	322	340.9	31	0	1	32	33.0	4	0	0	4	4.0
09:00 - 09:15	4	0	0	4	4.0	76	5	1	82	89.5	7	0	0	7	7.0	2	0	0	2	2.0
09:15 - 09:30	1	0	0	1	1.0	67	8	0	75	85.4	5	0	0	5	5.0	3	0	0	3	3.0
09:30 - 09:45	1	0	0	1	1.0	62	1	1	64	66.3	1	0	1	2	3.0	1	0	0	1	1.0
09:45 - 10:00	3	0	0	3	3.0	58	6	0	64	71.8	1	0	0	1	1.0	2	0	0	2	2.0
Hourly Total	9	0	0	9	9.0	263	20	2	285	313.0	14	0	1	15	16.0	8	0	0	8	8.0

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TOTAL	21	0	0	21	21.0	909	47	4	960	1025.1	61	0	3	64	67.0	34	0	0	34	34.0
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16:00 - 16:15	1	0	0	1	1.0	104	2	0	106	108.6	4	0	0	4	4.0	1	0	0	1	1.0
16:15 - 16:30	0	0	0	0	0.0	97	6	0	103	110.8	3	0	0	3	3.0	1	0	0	1	1.0
16:30 - 16:45	1	0	0	1	1.0	75	3	0	78	81.9	4	0	0	4	4.0	0	0	0	0	0.0
16:45 - 17:00	0	0	0	0	0.0	86	1	0	87	88.3	1	0	0	1	1.0	0	0	0	0	0.0
Hourly Total	2	0	0	2	2.0	362	12	0	374	389.6	12	0	0	12	12.0	2	0	0	2	2.0
17:00 - 17:15	2	0	0	2	2.0	82	0	0	82	82.0	2	0	0	2	2.0	0	0	0	0	0.0
17:15 - 17:30	2	0	0	2	2.0	86	2	0	88	90.6	4	0	0	4	4.0	0	0	0	0	0.0
17:30 - 17:45	1	0	0	1	1.0	64	2	0	66	68.6	7	0	0	7	7.0	2	0	0	2	2.0
17:45 - 18:00	0	0	0	0	0.0	78	2	0	80	82.6	1	0	0	1	1.0	2	0	0	2	2.0
Hourly Total	5	0	0	5	5.0	310	6	0	316	323.8	14	0	0	14	14.0	4	0	0	4	4.0
18:00 - 18:15	1	0	0	1	1.0	58	2	0	60	62.6	0	0	0	0	0.0	4	0	0	4	4.0
18:15 - 18:30	2	0	0	2	2.0	55	1	0	56	57.3	2	0	0	2	2.0	2	0	0	2	2.0
18:30 - 18:45	1	0	0	1	1.0	41	0	0	41	41.0	0	0	0	0	0.0	0	0	0	0	0.0
18:45 - 19:00	2	0	0	2	2.0	39	1	0	40	41.3	0	0	0	0	0.0	0	0	0	0	0.0
Hourly Total	6	0	0	6	6.0	193	4	0	197	202.2	2	0	0	2	2.0	6	0	0	6	6.0

TOTAL	13	0	0	13	13.0	865	22	0	887	915.6	28	0	0	28	28.0	12	0	0	12	12.0
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Appendix E Drawings

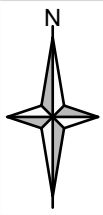
Land off Readers Way, Rhoose

Transport Assessment

PMG Limited

SLR Project No.: 237538

21 May 2024



Notes:

1.

Legend:

Proposed Kerb

Rev	Amendments	Date	By	Chk	Auth
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Drawing Status & Suitability Code

Client

PMG Limited

Project

Land off Readers Way, Rhoose

Drawing Title

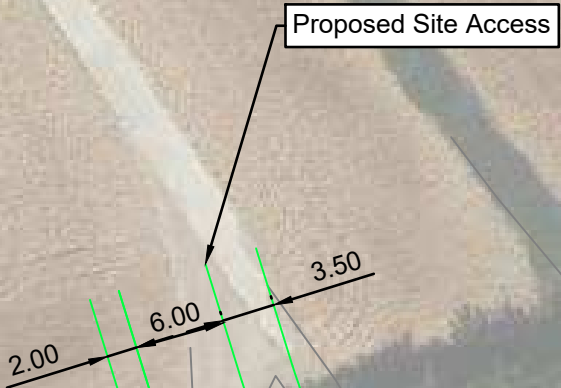
Proposed Site Access
Readers Way

Scale	1:500	@ A3	SLR Project No.	237538
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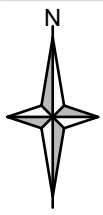
Designed	RJ	Drawn	RJ	Checked	SR	Authorised	
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Date	18.03.24	Date	18.03.24	Date	18.03.24	Date	
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Drawing Number	PD02	Rev.	
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Scale 1:500



Notes:

1.

Legend:

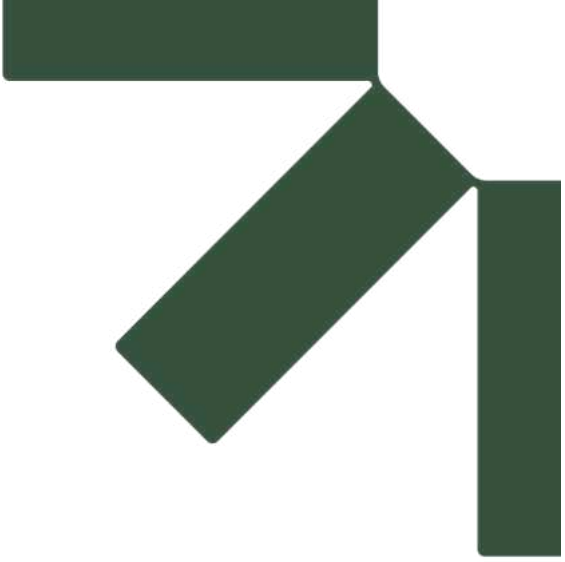
Proposed Kerb

Rev	Amendments	Date	By	Chk	Auth
SLR					
www.slrconsulting.com					
Drawing Status & Suitability Code					
Client PMG Limited					
Project Land off Readers Way, Rhoose					
Drawing Title Proposed Site Access Celtic Way					
Scale 1:500 @ A3		SLR Project No. 237538			
Designed RJ	Drawn RJ	Checked SR	Authorised		
Date 18.03.24	Date 18.03.24	Date 18.03.24	Date		
Drawing Number PD01					Rev.



18/03/2024

Drawing2.dwg



Appendix F TRICS report

Land off Readers Way, Rhoose

Transport Assessment

PMG Limited

SLR Project No.: 237538

21 May 2024

Calculation Reference: AUDIT-529507-240111-0114

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	
	CT CENTRAL BEDFORDSHIRE	1 days
	ES EAST SUSSEX	5 days
	HC HAMPSHIRE	7 days
	HF HERTFORDSHIRE	1 days
	KC KENT	4 days
	MW MEDWAY	1 days
	SC SURREY	2 days
	SP SOUTHAMPTON	1 days
	WB WEST BERKSHIRE	1 days
	WS WEST SUSSEX	5 days
03	SOUTH WEST	
	DC DORSET	2 days
	DV DEVON	2 days
	SD SWINDON	1 days
	SM SOMERSET	1 days
	TB TORBAY	1 days
04	EAST ANGLIA	
	NF NORFOLK	11 days
	PB PETERBOROUGH	1 days
06	WEST MIDLANDS	
	ST STAFFORDSHIRE	1 days
	WK WARWICKSHIRE	1 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days
09	NORTH	
	DH DURHAM	1 days
10	WALES	
	PS POWYS	1 days
	VG VALE OF GLAMORGAN	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: 12 to 1146 (units:)
 Range Selected by User: 0 to 1500 (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: 01/01/15 to 04/07/23

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:

Monday	10 days
Tuesday	10 days
Wednesday	16 days
Thursday	11 days
Friday	6 days

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

Selected survey types:

Manual count	53 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)	10
Edge of Town	43

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	48
Out of Town	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	26 days - Selected
Servicing vehicles Excluded	60 days - Selected

Secondary Filtering selection:

Use Class:

C3	53 days
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This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	4 days
5,001 to 10,000	18 days
10,001 to 15,000	16 days
15,001 to 20,000	8 days
20,001 to 25,000	5 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:

5,001 to 25,000	10 days
25,001 to 50,000	7 days
50,001 to 75,000	9 days
75,001 to 100,000	4 days
100,001 to 125,000	2 days
125,001 to 250,000	18 days
250,001 to 500,000	3 days

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

Car ownership within 5 miles:

1.1 to 1.5	49 days
1.6 to 2.0	4 days

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

Travel Plan:

Yes	37 days
No	16 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	53 days
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This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	AC-03-A-04 LONDON ROAD NORTHWICH LEFTWICH Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 24 Survey date: THURSDAY 06/06/19	TOWN HOUSES	CHESHIRE WEST & CHESTER
2	CT-03-A-01 ARLESEY ROAD STOTFOLD Edge of Town Residential Zone Total No of Dwellings: 46 Survey date: WEDNESDAY 22/06/22	MIXED HOUSES	CENTRAL BEDFORDSHIRE
3	DC-03-A-09 A350 SHAFTESBURY Edge of Town No Sub Category Total No of Dwellings: 50 Survey date: FRIDAY 19/11/21	MIXED HOUSES	DORSET
4	DC-03-A-10 ADDISON CLOSE GILLINGHAM Edge of Town Residential Zone Total No of Dwellings: 26 Survey date: WEDNESDAY 09/11/22	MIXED HOUSES	DORSET
5	DH-03-A-03 PILGRIMS WAY DURHAM Edge of Town Residential Zone Total No of Dwellings: 57 Survey date: FRIDAY 19/10/18	SEMI-DETACHED & TERRACED	DURHAM
6	DV-03-A-02 MILLHEAD ROAD HONITON Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 116 Survey date: FRIDAY 25/09/15	HOUSES & BUNGALOWS	DEVON
7	DV-03-A-03 LOWER BRAND LANE HONITON Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 70 Survey date: MONDAY 28/09/15	TERRACED & SEMI DETACHED	DEVON

LIST OF SITES relevant to selection parameters (Cont.)

8	ES-03-A-03 SHEPHAM LANE POLEGATE	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 212 Survey date: MONDAY 11/07/16		Survey Type: MANUAL
9	ES-03-A-05 RATTLE ROAD NEAR EASTBOURNE STONE CROSS	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 99 Survey date: WEDNESDAY 05/06/19		Survey Type: MANUAL
10	ES-03-A-07 NEW ROAD HAILSHAM HELLINGLY	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 91 Survey date: THURSDAY 07/11/19		Survey Type: MANUAL
11	ES-03-A-08 WRESTWOOD ROAD BEXHILL	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 110 Survey date: WEDNESDAY 12/10/22		Survey Type: MANUAL
12	ES-03-A-09 THE FAIRWAY NEWHAVEN	DETACHED & SEMI-DETACHED	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 47 Survey date: MONDAY 13/03/23		Survey Type: MANUAL
13	HC-03-A-21 PRIESTLEY ROAD BASINGSTOKE HOUNDMILLS	TERRACED & SEMI-DETACHED	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 39 Survey date: TUESDAY 13/11/18		Survey Type: MANUAL
14	HC-03-A-22 BOW LAKE GARDENS NEAR EASTLEIGH BISHOPSTOKE	MIXED HOUSES	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 40 Survey date: WEDNESDAY 31/10/18		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15	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		
16	HC-03-A-24 STONEHAM LANE EASTLEIGH	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 243 Survey date: WEDNESDAY 10/11/21 Survey Type: MANUAL		
17	HC-03-A-27 DAIRY ROAD ANDOVER	MIXED HOUSES	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 73 Survey date: TUESDAY 16/11/21 Survey Type: MANUAL		
18	HC-03-A-28 EAGLE AVENUE WATERLOOVILLE LOVEDEAN	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 125 Survey date: MONDAY 08/11/21 Survey Type: MANUAL		
19	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		
20	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		
21	KC-03-A-03 HYTHE ROAD ASHFORD WILLESBOROUGH	MIXED HOUSES & FLATS	KENT
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 51 Survey date: THURSDAY 14/07/16 Survey Type: MANUAL		

LIST OF SITES relevant to selection parameters (Cont.)

22	KC-03-A-06 MARGATE ROAD HERNE BAY	MIXED HOUSES & FLATS		KENT
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 363 Survey date: WEDNESDAY 27/09/17 Survey Type: MANUAL			
23	KC-03-A-07 RECVLVER 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			
24	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			
25	MW-03-A-02 OTTERHAM QUAY LANE RAINHAM	MIXED HOUSES		MEDWAY
	Edge of Town Residential Zone Total No of Dwellings: 19 Survey date: MONDAY 06/06/22 Survey Type: MANUAL			
26	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			
27	NF-03-A-23 SILFIELD ROAD WYMONDHAM	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Out of Town Total No of Dwellings: 514 Survey date: WEDNESDAY 22/09/21 Survey Type: MANUAL			
28	NF-03-A-28 ATLANTIC AVENUE NORWICH SPROWSTON	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 1146 Survey date: THURSDAY 22/09/22 Survey Type: MANUAL			

LIST OF SITES relevant to selection parameters (Cont.)

29	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
30	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
31	NF-03-A-34 NORWICH ROAD SWAFFHAM	MIXED HOUSES		NORFOLK
	Edge of Town Out of Town Total No of Dwellings:		80	
	Survey date: TUESDAY		27/09/22	Survey Type: MANUAL
32	NF-03-A-35 REPTON AVENUE NORWICH	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:		116	
	Survey date: WEDNESDAY		28/09/22	Survey Type: MANUAL
33	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
34	NF-03-A-37 GREENFIELDS ROAD DEREHAM	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:		44	
	Survey date: TUESDAY		27/09/22	Survey Type: MANUAL
35	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
36	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.)

37	PB-03-A-04 EASTFIELD ROAD PETERBOROUGH	DETACHED HOUSES	PETERBOROUGH
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 28 Survey date: MONDAY 17/10/16		Survey Type: MANUAL
38	PS-03-A-02 GUNROG ROAD WELSHPOOL	DETACHED/ SEMI-DETACHED	POWYS
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 28 Survey date: MONDAY 11/05/15		Survey Type: MANUAL
39	SC-03-A-07 FOLLY HILL FARNHAM	MIXED HOUSES	SURREY
	Edge of Town Residential Zone Total No of Dwellings: 41 Survey date: WEDNESDAY 11/05/22		Survey Type: MANUAL
40	SC-03-A-08 REIGATE ROAD HORLEY	MIXED HOUSES	SURREY
	Edge of Town Residential Zone Total No of Dwellings: 790 Survey date: WEDNESDAY 04/05/22		Survey Type: MANUAL
41	SD-03-A-01 HEADLANDS GROVE SWINDON	SEMI DETACHED	SWINDON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 27 Survey date: THURSDAY 22/09/16		Survey Type: MANUAL
42	SM-03-A-01 WEMBDON ROAD BRIDGWATER NORTHFIELD	DETACHED & SEMI	SOMERSET
	Edge of Town Residential Zone Total No of Dwellings: 33 Survey date: THURSDAY 24/09/15		Survey Type: MANUAL
43	SP-03-A-02 BARNFIELD WAY NEAR SOUTHAMPTON HEDGE END	MIXED HOUSES & FLATS	SOUTHAMPTON
	Edge of Town Out of Town Total No of Dwellings: 250 Survey date: TUESDAY 12/10/21		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

44	ST-03-A-07 BEACONSIDE STAFFORD MARSTON GATE Edge of Town Residential Zone Total No of Dwellings: 248 Survey date: WEDNESDAY 22/11/17	DETACHED & SEMI-DETACHED	STAFFORDSHIRE	Survey Type: MANUAL
45	TB-03-A-01 BRONSHILL ROAD TORQUAY Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 37 Survey date: WEDNESDAY 30/09/15	TERRACED HOUSES	TORBAY	Survey Type: MANUAL
46	VG-03-A-01 ARTHUR STREET BARRY Edge of Town Residential Zone Total No of Dwellings: 12 Survey date: MONDAY 08/05/17	SEMI-DETACHED & TERRACED	VALE OF GLAMORGAN	Survey Type: MANUAL
47	WB-03-A-03 DORKING WAY READING CALCOT Edge of Town Residential Zone Total No of Dwellings: 108 Survey date: FRIDAY 09/09/22	MIXED HOUSES	WEST BERKSHIRE	Survey Type: MANUAL
48	WK-03-A-04 DALEHOUSE LANE KENILWORTH Edge of Town Residential Zone Total No of Dwellings: 49 Survey date: FRIDAY 27/09/19	DETACHED HOUSES	WARWICKSHIRE	Survey Type: MANUAL
49	WS-03-A-08 ROUNDSTONE LANE ANGMERING Edge of Town Residential Zone Total No of Dwellings: 180 Survey date: THURSDAY 19/04/18	MIXED HOUSES	WEST SUSSEX	Survey Type: MANUAL
50	WS-03-A-11 ELLIS ROAD WEST HORSHAM S BROADBRIDGE HEATH Edge of Town Residential Zone Total No of Dwellings: 918 Survey date: TUESDAY 02/04/19	MIXED HOUSES	WEST SUSSEX	Survey Type: MANUAL
51	WS-03-A-14 TODDINGTON LANE LITTLEHAMPTON WICK Edge of Town Residential Zone Total No of Dwellings: 117 Survey date: WEDNESDAY 20/10/21	MIXED HOUSES	WEST SUSSEX	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

52	WS-03-A-17	MIXED HOUSES & FLATS	WEST SUSSEX
	SHOPWHYKE ROAD		
	CHICHESTER		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	86	
	Survey date: WEDNESDAY	01/03/23	Survey Type: MANUAL
53	WS-03-A-19	MIXED HOUSES & FLATS	WEST SUSSEX
	TURNERS HILL ROAD		
	EAST GRINSTEAD		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	92	
	Survey date: MONDAY	15/05/23	Survey Type: MANUAL

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
DH-03-A-01	Car ownership ranges below 1
DY-03-A-01	Car ownership ranges below 1
EX-03-A-03	Car ownership ranges below 1
HC-03-A-26	COVID
HC-03-A-29	Car ownership ranges below 1
HF-03-A-04	Car ownership ranges below 1
KC-03-A-04	Car ownership ranges below 1
KC-03-A-09	COVID
KC-03-A-11	Car ownership ranges below 1
NF-03-A-03	Car ownership ranges below 1
NF-03-A-06	Car ownership ranges below 1
NF-03-A-09	Car ownership ranges below 1
NF-03-A-25	Car ownership ranges below 1
NF-03-A-38	Car ownership ranges below 1
NF-03-A-51	Car ownership ranges below 1
NY-03-A-13	Car ownership ranges below 1
NY-03-A-14	Car ownership ranges below 1
SF-03-A-05	Car ownership ranges below 1
SF-03-A-09	COVID
SF-03-A-10	COVID
WS-03-A-12	Car ownership ranges below 1
WS-03-A-13	COVID
WS-03-A-19	Car ownership ranges below 1
WS-03-A-19	Car ownership ranges below 1
WS-03-A-19	Car ownership ranges below 1

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period
 Total People to Total Vehicles ratio (all time periods and directions): 1.65

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	53	161	0.087	53	161	0.311	53	161	0.398
08:00 - 09:00	53	161	0.155	53	161	0.390	53	161	0.545
09:00 - 10:00	53	161	0.142	53	161	0.159	53	161	0.301
10:00 - 11:00	53	161	0.119	53	161	0.147	53	161	0.266
11:00 - 12:00	53	161	0.134	53	161	0.146	53	161	0.280
12:00 - 13:00	53	161	0.153	53	161	0.150	53	161	0.303
13:00 - 14:00	53	161	0.158	53	161	0.150	53	161	0.308
14:00 - 15:00	53	161	0.159	53	161	0.180	53	161	0.339
15:00 - 16:00	53	161	0.262	53	161	0.167	53	161	0.429
16:00 - 17:00	53	161	0.274	53	161	0.168	53	161	0.442
17:00 - 18:00	53	161	0.361	53	161	0.164	53	161	0.525
18:00 - 19:00	53	161	0.291	53	161	0.162	53	161	0.453
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.295			2.294			4.589

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.

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Parameter summary

Trip rate parameter range selected:	12 - 1146 (units:)
Survey date range:	01/01/15 - 04/07/23
Number of weekdays (Monday-Friday):	53
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	8
Surveys manually removed from selection:	25

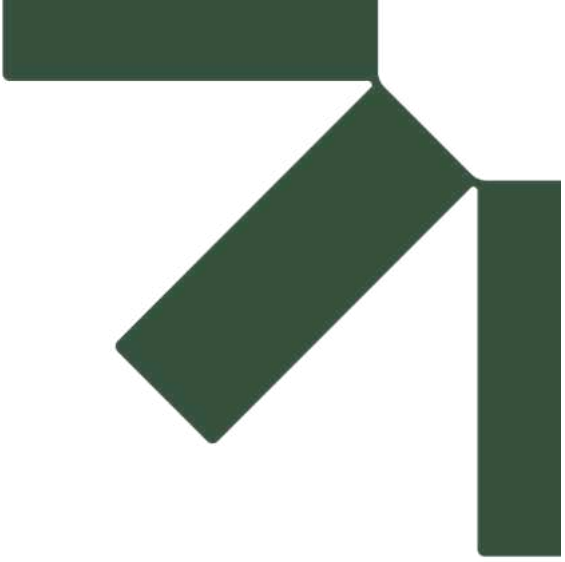
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected 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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period
 Total People to Total Vehicles ratio (all time periods and directions): 1.65

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	53	161	0.121	53	161	0.493	53	161	0.614
08:00 - 09:00	53	161	0.224	53	161	0.779	53	161	1.003
09:00 - 10:00	53	161	0.210	53	161	0.254	53	161	0.464
10:00 - 11:00	53	161	0.180	53	161	0.231	53	161	0.411
11:00 - 12:00	53	161	0.205	53	161	0.229	53	161	0.434
12:00 - 13:00	53	161	0.232	53	161	0.226	53	161	0.458
13:00 - 14:00	53	161	0.240	53	161	0.223	53	161	0.463
14:00 - 15:00	53	161	0.246	53	161	0.270	53	161	0.516
15:00 - 16:00	53	161	0.555	53	161	0.275	53	161	0.830
16:00 - 17:00	53	161	0.499	53	161	0.270	53	161	0.769
17:00 - 18:00	53	161	0.581	53	161	0.280	53	161	0.861
18:00 - 19:00	53	161	0.470	53	161	0.281	53	161	0.751
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.763			3.811			7.574

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 Modelling Outputs

Land off Readers Way, Rhoose

Transport Assessment

PMG Limited

SLR Project No.: 237538

21 May 2024

Junctions 9		
PICADY 9 - Priority Intersection Module		
Version: 9.5.2.1013 © Copyright TRL Limited, 2019		
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: B4265 & Font-Y-Garry Road.j9

Path: H:\Projects\W230000\237538 - Land off Readers Way, Rhoose\Technical\C - Transport Assessment\Modelling\Picady

Report generation date: 18/03/2024 09:01:27

- »2025 Opening, AM
- »2025 Opening , PM
- »2025 Opening + Development, AM
- »2025 Opening + Development, PM
- »2034 Future, AM
- »2034 Future, PM
- »2034 Future + Development, AM
- »2034 Future + Development, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2025 Opening						
Stream B-C	0.3	6.82	0.25	0.3	7.05	0.23
Stream B-A	0.0	13.30	0.03	0.1	11.65	0.05
Stream C-AB	0.4	9.48	0.27	1.8	18.87	0.64
2025 Opening + Development						
Stream B-C	0.5	7.45	0.30	0.4	7.40	0.26
Stream B-A	0.2	12.17	0.11	0.1	12.81	0.10
Stream C-AB	0.5	9.84	0.30	2.6	23.82	0.72
2034 Future						
Stream B-C	0.4	7.14	0.27	0.4	7.43	0.25
Stream B-A	0.1	13.96	0.03	0.1	12.84	0.06
Stream C-AB	0.5	9.94	0.29	2.5	23.11	0.71
2034 Future + Development						
Stream B-C	0.5	7.77	0.33	0.4	7.83	0.28
Stream B-A	0.1	10.12	0.11	0.1	14.28	0.11
Stream C-AB	0.5	9.70	0.32	3.8	30.23	0.79

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	12/03/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	SLR\Tom.Monk
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	2025 Opening	AM	ONE HOUR	07:45	09:15	15
D2	2025 Opening	PM	ONE HOUR	16:45	18:15	15
D3	2025 Opening + Development	AM	ONE HOUR	07:45	09:15	15
D4	2025 Opening + Development	PM	ONE HOUR	16:45	18:15	15
D5	2034 Future	AM	ONE HOUR	07:45	09:15	15
D6	2034 Future	PM	ONE HOUR	16:45	18:15	15
D7	2034 Future + Development	AM	ONE HOUR	07:45	09:15	15
D8	2034 Future + Development	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2025 Opening, 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		2.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B4265 (E)		Major
B	Font-Y-Garry Road		Minor
C	B4265 (W)		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 - B4265 (W)	8.10		✓	3.19	0.0	✓	8.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane Width (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B - Font-Y-Garry Road	Two lanes	5.00	4.90	165	122

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	708	0.117	0.296	0.186	0.423
B-C	841	0.117	0.296	-	-
C-B	636	0.224	0.224	-	-

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	2025 Opening	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - B4265 (E)		✓	274	100.000
B - Font-Y-Garry Road		✓	180	100.000
C - B4265 (W)		✓	528	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - B4265 (E)	B - Font-Y-Garry Road	C - B4265 (W)
From	A - B4265 (E)	0	16	258
	B - Font-Y-Garry Road	12	0	168
	C - B4265 (W)	390	138	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - B4265 (E)	B - Font-Y-Garry Road	C - B4265 (W)
From	A - B4265 (E)	0	33	4
	B - Font-Y-Garry Road	71	0	7
	C - B4265 (W)	5	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.25	6.82	0.3	A
B-A	0.03	13.30	0.0	B
C-AB	0.27	9.48	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	126	779	0.162	126	0.2	5.892	A
B-A	9	551	0.016	9	0.0	11.389	B
C-AB	104	590	0.176	103	0.2	8.092	A
C-A	294			294			
A-B	12			12			
A-C	194			194			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	151	767	0.197	151	0.3	6.256	A
B-A	11	520	0.021	11	0.0	12.128	B
C-AB	124	581	0.214	124	0.3	8.632	A
C-A	351			351			
A-B	14			14			
A-C	232			232			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	185	750	0.247	185	0.3	6.816	A
B-A	13	477	0.028	13	0.0	13.297	B
C-AB	152	568	0.267	152	0.4	9.457	A
C-A	429			429			
A-B	18			18			
A-C	284			284			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	185	750	0.247	185	0.3	6.824	A
B-A	13	477	0.028	13	0.0	13.305	B
C-AB	152	568	0.267	152	0.4	9.476	A
C-A	429			429			
A-B	18			18			
A-C	284			284			

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-C	151	767	0.197	151	0.3	6.269	A
B-A	11	519	0.021	11	0.0	12.139	B
C-AB	124	581	0.214	124	0.3	8.655	A
C-A	351			351			
A-B	14			14			
A-C	232			232			

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-C	126	779	0.162	127	0.2	5.910	A
B-A	9	550	0.016	9	0.0	11.407	B
C-AB	104	590	0.176	104	0.2	8.132	A
C-A	294			294			
A-B	12			12			
A-C	194			194			

2025 Opening , 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		6.02	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)
D2	2025 Opening	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - B4265 (E)		✓	434	100.000
B - Font-Y-Garry Road		✓	160	100.000
C - B4265 (W)		✓	577	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A - B4265 (E)	B - Font-Y-Garry Road	C - B4265 (W)
	A - B4265 (E)	0	18	416
	B - Font-Y-Garry Road	17	0	143
	C - B4265 (W)	270	307	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - B4265 (E)	B - Font-Y-Garry Road	C - B4265 (W)
	A - B4265 (E)	0	13	1
	B - Font-Y-Garry Road	13	0	5
	C - B4265 (W)	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.23	7.05	0.3	A
B-A	0.05	11.65	0.1	B
C-AB	0.64	18.87	1.8	C
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	108	742	0.145	107	0.2	5.959	A
B-A	13	478	0.027	13	0.0	8.763	A
C-AB	231	563	0.411	228	0.7	10.894	B
C-A	203			203			
A-B	14			14			
A-C	313			313			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	722	0.178	128	0.2	6.378	A
B-A	15	432	0.035	15	0.0	9.780	A
C-AB	277	550	0.503	275	1.0	13.324	B
C-A	242			242			
A-B	16			16			
A-C	374			374			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	157	694	0.227	157	0.3	7.046	A
B-A	19	370	0.051	19	0.1	11.607	B
C-AB	344	538	0.639	341	1.7	18.377	C
C-A	292			292			
A-B	20			20			
A-C	458			458			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	157	694	0.227	157	0.3	7.055	A
B-A	19	369	0.051	19	0.1	11.652	B
C-AB	344	538	0.639	344	1.8	18.872	C
C-A	292			292			
A-B	20			20			
A-C	458			458			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	722	0.178	129	0.2	6.390	A
B-A	15	431	0.036	15	0.0	9.828	A
C-AB	277	550	0.503	279	1.1	13.735	B
C-A	242			242			
A-B	16			16			
A-C	374			374			

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-C	108	742	0.145	108	0.2	5.978	A
B-A	13	476	0.027	13	0.0	8.802	A
C-AB	231	563	0.411	233	0.7	11.165	B
C-A	203			203			
A-B	14			14			
A-C	313			313			

2025 Opening + 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		3.30	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	2025 Opening + Development	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - B4265 (E)		✓	287	100.000
B - Font-Y-Garry Road		✓	248	100.000
C - B4265 (W)		✓	542	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A - B4265 (E)	B - Font-Y-Garry Road	C - B4265 (W)
	A - B4265 (E)	0	29	258
	B - Font-Y-Garry Road	45	0	203
	C - B4265 (W)	390	152	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - B4265 (E)	B - Font-Y-Garry Road	C - B4265 (W)
	A - B4265 (E)	0	25	4
	B - Font-Y-Garry Road	42	0	5
	C - B4265 (W)	5	9	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.30	7.45	0.5	A
B-A	0.11	12.17	0.2	B
C-AB	0.30	9.84	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	153	769	0.199	152	0.3	6.142	A
B-A	34	545	0.062	34	0.1	9.964	A
C-AB	114	587	0.195	113	0.3	8.241	A
C-A	294			294			
A-B	22			22			
A-C	194			194			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	182	754	0.242	182	0.3	6.636	A
B-A	40	513	0.079	40	0.1	10.791	B
C-AB	137	578	0.236	136	0.3	8.859	A
C-A	351			351			
A-B	26			26			
A-C	232			232			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	224	733	0.305	223	0.5	7.433	A
B-A	50	469	0.106	49	0.2	12.150	B
C-AB	167	565	0.296	167	0.5	9.819	A
C-A	429			429			
A-B	32			32			
A-C	284			284			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	224	733	0.305	223	0.5	7.449	A
B-A	50	469	0.106	50	0.2	12.166	B
C-AB	167	565	0.296	167	0.5	9.842	A
C-A	429			429			
A-B	32			32			
A-C	284			284			

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-C	182	754	0.242	183	0.3	6.656	A
B-A	40	513	0.079	41	0.1	10.812	B
C-AB	137	578	0.236	137	0.3	8.888	A
C-A	351			351			
A-B	26			26			
A-C	232			232			

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-C	153	769	0.199	153	0.3	6.169	A
B-A	34	544	0.062	34	0.1	9.995	A
C-AB	114	587	0.195	115	0.3	8.289	A
C-A	294			294			
A-B	22			22			
A-C	194			194			

2025 Opening + 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		7.77	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)
D4	2025 Opening + Development	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - B4265 (E)		✓	465	100.000
B - Font-Y-Garry Road		✓	189	100.000
C - B4265 (W)		✓	610	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A - B4265 (E)	B - Font-Y-Garry Road	C - B4265 (W)
	A - B4265 (E)	0	49	416
	B - Font-Y-Garry Road	31	0	158
	C - B4265 (W)	270	340	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - B4265 (E)	B - Font-Y-Garry Road	C - B4265 (W)
	A - B4265 (E)	0	11	1
	B - Font-Y-Garry Road	12	0	4
	C - B4265 (W)	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.26	7.40	0.4	A
B-A	0.10	12.81	0.1	B
C-AB	0.72	23.82	2.6	C
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	119	735	0.162	118	0.2	6.093	A
B-A	23	465	0.050	23	0.1	9.102	A
C-AB	256	558	0.459	253	0.8	11.906	B
C-A	203			203			
A-B	37			37			
A-C	313			313			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	142	713	0.199	142	0.3	6.581	A
B-A	28	416	0.067	28	0.1	10.355	B
C-AB	307	545	0.564	305	1.3	15.214	C
C-A	241			241			
A-B	44			44			
A-C	374			374			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	174	682	0.255	174	0.4	7.394	A
B-A	34	350	0.097	34	0.1	12.715	B
C-AB	390	543	0.718	386	2.5	22.636	C
C-A	281			281			
A-B	54			54			
A-C	458			458			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	174	682	0.255	174	0.4	7.405	A
B-A	34	348	0.098	34	0.1	12.805	B
C-AB	390	543	0.718	390	2.6	23.825	C
C-A	281			281			
A-B	54			54			
A-C	458			458			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	142	713	0.199	142	0.3	6.597	A
B-A	28	413	0.067	28	0.1	10.445	B
C-AB	307	545	0.564	312	1.4	16.066	C
C-A	241			241			
A-B	44			44			
A-C	374			374			

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-C	119	734	0.162	119	0.2	6.113	A
B-A	23	463	0.050	23	0.1	9.163	A
C-AB	256	558	0.459	258	0.9	12.326	B
C-A	203			203			
A-B	37			37			
A-C	313			313			

2034 Future, 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		2.78	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)
D5	2034 Future	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - B4265 (E)		✓	299	100.000
B - Font-Y-Garry Road		✓	196	100.000
C - B4265 (W)		✓	575	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A - B4265 (E)	B - Font-Y-Garry Road	C - B4265 (W)
	A - B4265 (E)	0	18	281
	B - Font-Y-Garry Road	13	0	183
	C - B4265 (W)	425	150	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - B4265 (E)	B - Font-Y-Garry Road	C - B4265 (W)
	A - B4265 (E)	0	33	4
	B - Font-Y-Garry Road	71	0	7
	C - B4265 (W)	5	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.27	7.14	0.4	A
B-A	0.03	13.96	0.1	B
C-AB	0.29	9.94	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	138	773	0.178	137	0.2	6.046	A
B-A	10	537	0.018	10	0.0	11.710	B
C-AB	113	585	0.193	112	0.3	8.314	A
C-A	320			320			
A-B	14			14			
A-C	212			212			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	165	760	0.217	164	0.3	6.467	A
B-A	12	503	0.023	12	0.0	12.565	B
C-AB	135	576	0.234	135	0.3	8.940	A
C-A	382			382			
A-B	16			16			
A-C	253			253			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	201	741	0.272	201	0.4	7.131	A
B-A	14	457	0.031	14	0.1	13.950	B
C-AB	165	562	0.294	165	0.4	9.914	A
C-A	468			468			
A-B	20			20			
A-C	309			309			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	201	741	0.272	201	0.4	7.139	A
B-A	14	456	0.031	14	0.1	13.959	B
C-AB	165	562	0.294	165	0.5	9.937	A
C-A	468			468			
A-B	20			20			
A-C	309			309			

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-C	165	760	0.217	165	0.3	6.484	A
B-A	12	502	0.023	12	0.0	12.579	B
C-AB	135	576	0.234	135	0.3	8.970	A
C-A	382			382			
A-B	16			16			
A-C	253			253			

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-C	138	773	0.178	138	0.2	6.069	A
B-A	10	536	0.018	10	0.0	11.729	B
C-AB	113	585	0.193	113	0.3	8.361	A
C-A	320			320			
A-B	14			14			
A-C	212			212			

2034 Future, 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		7.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2034 Future	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - B4265 (E)		✓	472	100.000
B - Font-Y-Garry Road		✓	174	100.000
C - B4265 (W)		✓	627	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A - B4265 (E)	B - Font-Y-Garry Road	C - B4265 (W)
	A - B4265 (E)	0	20	452
	B - Font-Y-Garry Road	19	0	155
	C - B4265 (W)	293	334	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - B4265 (E)	B - Font-Y-Garry Road	C - B4265 (W)
	A - B4265 (E)	0	13	1
	B - Font-Y-Garry Road	13	0	5
	C - B4265 (W)	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.25	7.43	0.4	A
B-A	0.06	12.84	0.1	B
C-AB	0.71	23.11	2.5	C
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	117	733	0.159	116	0.2	6.131	A
B-A	14	458	0.031	14	0.0	9.187	A
C-AB	252	557	0.452	248	0.8	11.790	B
C-A	220			220			
A-B	15			15			
A-C	340			340			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	139	711	0.196	139	0.3	6.617	A
B-A	17	408	0.042	17	0.0	10.429	B
C-AB	302	543	0.555	300	1.2	14.982	B
C-A	262			262			
A-B	18			18			
A-C	406			406			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	171	680	0.251	170	0.3	7.418	A
B-A	21	340	0.061	21	0.1	12.763	B
C-AB	383	541	0.708	378	2.4	22.045	C
C-A	307			307			
A-B	22			22			
A-C	498			498			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	171	680	0.251	171	0.4	7.429	A
B-A	21	339	0.062	21	0.1	12.843	B
C-AB	383	541	0.708	383	2.5	23.112	C
C-A	307			307			
A-B	22			22			
A-C	498			498			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	139	711	0.196	140	0.3	6.635	A
B-A	17	406	0.042	17	0.1	10.508	B
C-AB	302	543	0.555	306	1.3	15.762	C
C-A	262			262			
A-B	18			18			
A-C	406			406			

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-C	117	733	0.159	117	0.2	6.151	A
B-A	14	456	0.031	14	0.0	9.241	A
C-AB	252	557	0.452	254	0.9	12.187	B
C-A	220			220			
A-B	15			15			
A-C	340			340			

2034 Future + 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		3.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2034 Future + Development	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - B4265 (E)		✓	312	100.000
B - Font-Y-Garry Road		✓	264	100.000
C - B4265 (W)		✓	589	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - B4265 (E)	B - Font-Y-Garry Road	C - B4265 (W)
From	A - B4265 (E)	0	31	281
	B - Font-Y-Garry Road	46	0	218
	C - B4265 (W)	425	164	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - B4265 (E)	B - Font-Y-Garry Road	C - B4265 (W)
From	A - B4265 (E)	0	11	1
	B - Font-Y-Garry Road	12	0	4
	C - B4265 (W)	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.33	7.77	0.5	A
B-A	0.11	10.12	0.1	B
C-AB	0.32	9.70	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	164	763	0.215	163	0.3	6.257	A
B-A	35	531	0.065	34	0.1	8.097	A
C-AB	123	583	0.212	122	0.3	7.948	A
C-A	320			320			
A-B	23			23			
A-C	212			212			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	196	747	0.262	196	0.4	6.817	A
B-A	41	496	0.083	41	0.1	8.844	A
C-AB	147	573	0.257	147	0.3	8.612	A
C-A	382			382			
A-B	28			28			
A-C	253			253			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	240	724	0.331	239	0.5	7.749	A
B-A	51	448	0.113	50	0.1	10.108	B
C-AB	181	559	0.323	180	0.5	9.674	A
C-A	468			468			
A-B	34			34			
A-C	309			309			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	240	724	0.331	240	0.5	7.769	A
B-A	51	448	0.113	51	0.1	10.121	B
C-AB	181	559	0.323	181	0.5	9.700	A
C-A	468			468			
A-B	34			34			
A-C	309			309			

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-C	196	747	0.262	197	0.4	6.841	A
B-A	41	496	0.083	42	0.1	8.861	A
C-AB	147	573	0.257	148	0.4	8.645	A
C-A	382			382			
A-B	28			28			
A-C	253			253			

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-C	164	763	0.215	164	0.3	6.288	A
B-A	35	530	0.065	35	0.1	8.121	A
C-AB	123	583	0.212	124	0.3	7.995	A
C-A	320			320			
A-B	23			23			
A-C	212			212			

2034 Future + 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		9.78	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)
D8	2034 Future + Development	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - B4265 (E)		✓	502	100.000
B - Font-Y-Garry Road		✓	203	100.000
C - B4265 (W)		✓	659	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - B4265 (E)	B - Font-Y-Garry Road	C - B4265 (W)
From	A - B4265 (E)	0	50	452
	B - Font-Y-Garry Road	33	0	170
	C - B4265 (W)	293	366	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - B4265 (E)	B - Font-Y-Garry Road	C - B4265 (W)
From	A - B4265 (E)	0	11	1
	B - Font-Y-Garry Road	12	0	4
	C - B4265 (W)	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.28	7.83	0.4	A
B-A	0.11	14.28	0.1	B
C-AB	0.79	30.23	3.8	D
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	128	726	0.176	127	0.2	6.276	A
B-A	25	445	0.056	25	0.1	9.558	A
C-AB	276	552	0.500	272	1.0	12.931	B
C-A	220			220			
A-B	38			38			
A-C	340			340			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	153	702	0.218	153	0.3	6.845	A
B-A	30	393	0.076	30	0.1	11.082	B
C-AB	333	541	0.615	330	1.6	17.260	C
C-A	260			260			
A-B	45			45			
A-C	406			406			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	187	668	0.280	187	0.4	7.815	A
B-A	36	321	0.113	36	0.1	14.112	B
C-AB	442	562	0.787	434	3.5	27.521	D
C-A	284			284			
A-B	55			55			
A-C	498			498			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	187	667	0.280	187	0.4	7.833	A
B-A	36	318	0.114	36	0.1	14.280	B
C-AB	442	561	0.787	441	3.8	30.234	D
C-A	284			284			
A-B	55			55			
A-C	498			498			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	153	702	0.218	153	0.3	6.865	A
B-A	30	388	0.076	30	0.1	11.235	B
C-AB	333	540	0.616	341	1.7	19.048	C
C-A	260			260			
A-B	45			45			
A-C	406			406			

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-C	128	725	0.176	128	0.2	6.301	A
B-A	25	442	0.056	25	0.1	9.642	A
C-AB	276	552	0.500	279	1.0	13.555	B
C-A	220			220			
A-B	38			38			
A-C	340			340			

Junctions 9						
ARCADY 9 - Roundabout Module						
Version: 9.5.2.1013 © Copyright TRL Limited, 2019						
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Filename: Dragonfly Drive Rb.j9

Path: H:\Projects\W230000\237538 - Land off Readers Way, Rhoose\Technical\C - Transport Assessment\Modelling\Arcady

Report generation date: 18/03/2024 08:18:47

- »2025 Opening Year, AM
- »2025 Opening Year, PM
- »2025 + Development, AM
- »2025 + Development, PM
- »2034 Future Year, AM
- »2034 Future Year, PM
- »2034 + Development, AM
- »2034 + Development , PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2025 Opening Year						
1 - A226 (E)	0.3	2.47	0.23	0.3	2.46	0.23
2 - Tredogan Road (S)	0.1	2.45	0.05	0.0	2.42	0.05
3 - Dragonfly Drive (SW)	0.4	3.42	0.27	0.4	3.34	0.27
4 - B4265 (W)	0.0	2.20	0.03	0.0	2.18	0.03
5 - Tredogan Road (N)	0.0	0.00	0.00	0.0	0.00	0.00
2025 + Development						
1 - A226 (E)	0.2	2.33	0.18	0.3	2.51	0.25
2 - Tredogan Road (S)	0.1	2.38	0.05	0.1	2.45	0.05
3 - Dragonfly Drive (SW)	0.3	3.22	0.24	0.4	3.39	0.27
4 - B4265 (W)	0.1	2.27	0.07	0.0	2.20	0.04
5 - Tredogan Road (N)	0.0	1.98	0.00	0.0	0.00	0.00
2034 Future Year						
1 - A226 (E)	0.2	2.36	0.19	0.3	2.52	0.25
2 - Tredogan Road (S)	0.1	2.40	0.05	0.1	2.46	0.05
3 - Dragonfly Drive (SW)	0.4	3.34	0.27	0.4	3.52	0.29
4 - B4265 (W)	0.1	2.26	0.05	0.0	2.21	0.03
5 - Tredogan Road (N)	0.0	1.97	0.00	0.0	0.00	0.00
2034 + Development						
1 - A226 (E)	0.3	2.38	0.20	0.4	2.58	0.27
2 - Tredogan Road (S)	0.1	2.41	0.05	0.1	2.49	0.05
3 - Dragonfly Drive (SW)	0.4	3.35	0.27	0.4	3.58	0.30
4 - B4265 (W)	0.1	2.30	0.07	0.0	2.23	0.04
5 - Tredogan Road (N)	0.0	1.99	0.00	0.0	0.00	0.00

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	28/02/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	SLR\Tom.Monk
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	2025 Opening Year	AM	ONE HOUR	07:45	09:15	15	✓
D2	2025 Opening Year	PM	ONE HOUR	16:45	18:15	15	✓
D3	2025 + Development	AM	ONE HOUR	07:45	09:15	15	✓
D4	2025 + Development	PM	ONE HOUR	16:45	18:15	15	✓
D5	2034 Future Year	AM	ONE HOUR	07:45	09:15	15	✓
D6	2034 Future Year	PM	ONE HOUR	16:45	18:15	15	✓
D7	2034 + Development	AM	ONE HOUR	07:45	09:15	15	✓
D8	2034 + Development	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2025 Opening Year, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	2.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A226 (E)	
2	Tredogan Road (S)	
3	Dragonfly Drive (SW)	
4	B4265 (W)	
5	Tredogan Road (N)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A226 (E)	4.00	6.50	26.0	30.0	90.0	8.5	
2 - Tredogan Road (S)	3.50	7.50	15.0	17.5	90.0	18.5	
3 - Dragonfly Drive (SW)	3.75	8.75	9.0	17.5	90.0	20.0	
4 - B4265 (W)	3.50	7.00	24.0	35.0	90.0	13.0	
5 - Tredogan Road (N)	2.50	7.50	30.0	100.0	90.0	19.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A226 (E)	0.512	1954
2 - Tredogan Road (S)	0.473	1771
3 - Dragonfly Drive (SW)	0.466	1728
4 - B4265 (W)	0.505	1926
5 - Tredogan Road (N)	0.498	1880

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	2025 Opening Year	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A226 (E)		ONE HOUR	✓	406	100.000
2 - Tredogan Road (S)		ONE HOUR	✓	67	100.000
3 - Dragonfly Drive (SW)		ONE HOUR	✓	360	100.000
4 - B4265 (W)		ONE HOUR	✓	44	100.000
5 - Tredogan Road (N)		ONE HOUR	✓	4	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
		1 - A226 (E)	2 - Tredogan Road (S)	3 - Dragonfly Drive (SW)	4 - B4265 (W)	5 - Tredogan Road (N)
From	1 - A226 (E)	0	7	5	379	15
	2 - Tredogan Road (S)	32	0	0	34	1
	3 - Dragonfly Drive (SW)	39	0	3	1	317
	4 - B4265 (W)	14	4	5	0	21
	5 - Tredogan Road (N)	0	0	4	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A226 (E)	2 - Tredogan Road (S)	3 - Dragonfly Drive (SW)	4 - B4265 (W)	5 - Tredogan Road (N)
From	1 - A226 (E)	0	3	0	3	0
	2 - Tredogan Road (S)	0	0	0	3	0
	3 - Dragonfly Drive (SW)	0	0	0	0	5
	4 - B4265 (W)	3	0	0	0	0
	5 - Tredogan Road (N)	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A226 (E)	0.23	2.47	0.3	A	373	559
2 - Tredogan Road (S)	0.05	2.45	0.1	A	61	92
3 - Dragonfly Drive (SW)	0.27	3.42	0.4	A	330	496
4 - B4265 (W)	0.03	2.20	0.0	A	40	61
5 - Tredogan Road (N)	0.00	0.00	0.0	A	0	0

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A226 (E)	306	76	9	1949	0.157	305	64	0.0	0.2	2.253	A
2 - Tredogan Road (S)	50	13	306	1626	0.031	50	8	0.0	0.0	2.313	A
3 - Dragonfly Drive (SW)	271	68	346	1567	0.173	270	10	0.0	0.2	2.888	A
4 - B4265 (W)	33	8	305	1772	0.019	33	311	0.0	0.0	2.090	A
5 - Tredogan Road (N)	0	0	73	1844	0.000	0	266	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A226 (E)	365	91	11	1949	0.187	365	76	0.2	0.2	2.340	A
2 - Tredogan Road (S)	60	15	366	1598	0.038	60	10	0.0	0.0	2.371	A
3 - Dragonfly Drive (SW)	324	81	414	1535	0.211	323	12	0.2	0.3	3.092	A
4 - B4265 (W)	40	10	366	1741	0.023	40	372	0.0	0.0	2.135	A
5 - Tredogan Road (N)	0	0	87	1837	0.000	0	318	0.0	0.0	0.000	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 - A226 (E)	447	112	13	1947	0.230	447	94	0.2	0.3	2.470	A
2 - Tredogan Road (S)	74	18	448	1559	0.047	74	12	0.0	0.1	2.454	A
3 - Dragonfly Drive (SW)	396	99	507	1492	0.266	396	14	0.3	0.4	3.419	A
4 - B4265 (W)	49	12	448	1700	0.029	49	456	0.0	0.0	2.200	A
5 - Tredogan Road (N)	0	0	107	1827	0.000	0	389	0.0	0.0	0.000	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 - A226 (E)	447	112	13	1947	0.230	447	94	0.3	0.3	2.470	A
2 - Tredogan Road (S)	74	18	448	1559	0.047	74	12	0.1	0.1	2.454	A
3 - Dragonfly Drive (SW)	396	99	508	1492	0.266	396	14	0.4	0.4	3.420	A
4 - B4265 (W)	49	12	448	1700	0.029	49	456	0.0	0.0	2.201	A
5 - Tredogan Road (N)	0	0	107	1827	0.000	0	390	0.0	0.0	0.000	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 - A226 (E)	365	91	11	1949	0.187	365	76	0.3	0.2	2.341	A
2 - Tredogan Road (S)	60	15	366	1598	0.038	60	10	0.1	0.0	2.371	A
3 - Dragonfly Drive (SW)	324	81	415	1535	0.211	324	12	0.4	0.3	3.094	A
4 - B4265 (W)	40	10	366	1741	0.023	40	372	0.0	0.0	2.137	A
5 - Tredogan Road (N)	0	0	87	1837	0.000	0	319	0.0	0.0	0.000	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 - A226 (E)	306	76	9	1949	0.157	306	64	0.2	0.2	2.257	A
2 - Tredogan Road (S)	50	13	307	1626	0.031	50	8	0.0	0.0	2.316	A
3 - Dragonfly Drive (SW)	271	68	347	1566	0.173	271	10	0.3	0.2	2.895	A
4 - B4265 (W)	33	8	307	1771	0.019	33	312	0.0	0.0	2.092	A
5 - Tredogan Road (N)	0	0	73	1844	0.000	0	267	0.0	0.0	0.000	A

2025 Opening Year, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	2.81	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	2025 Opening Year	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A226 (E)		ONE HOUR	✓	406	100.000
2 - Tredogan Road (S)		ONE HOUR	✓	67	100.000
3 - Dragonfly Drive (SW)		ONE HOUR	✓	360	100.000
4 - B4265 (W)		ONE HOUR	✓	44	100.000
5 - Tredogan Road (N)		ONE HOUR	✓	4	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
		1 - A226 (E)	2 - Tredogan Road (S)	3 - Dragonfly Drive (SW)	4 - B4265 (W)	5 - Tredogan Road (N)
From	1 - A226 (E)	0	7	5	379	15
	2 - Tredogan Road (S)	32	0	0	34	1
	3 - Dragonfly Drive (SW)	39	0	3	1	317
	4 - B4265 (W)	14	4	5	0	21
	5 - Tredogan Road (N)	0	0	4	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A226 (E)	2 - Tredogan Road (S)	3 - Dragonfly Drive (SW)	4 - B4265 (W)	5 - Tredogan Road (N)
From	1 - A226 (E)	0	0	0	3	0
	2 - Tredogan Road (S)	0	0	0	0	0
	3 - Dragonfly Drive (SW)	0	0	0	0	2
	4 - B4265 (W)	0	0	0	0	0
	5 - Tredogan Road (N)	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A226 (E)	0.23	2.46	0.3	A	373	559
2 - Tredogan Road (S)	0.05	2.42	0.0	A	62	93
3 - Dragonfly Drive (SW)	0.27	3.34	0.4	A	331	496
4 - B4265 (W)	0.03	2.18	0.0	A	41	61
5 - Tredogan Road (N)	0.00	0.00	0.0	A	0	0

Main Results for each time segment

16:45 - 17:00

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 - A226 (E)	306	76	9	1949	0.157	305	64	0.0	0.2	2.243	A
2 - Tredogan Road (S)	51	13	306	1626	0.031	50	8	0.0	0.0	2.284	A
3 - Dragonfly Drive (SW)	271	68	347	1567	0.173	270	10	0.0	0.2	2.823	A
4 - B4265 (W)	33	8	306	1772	0.019	33	311	0.0	0.0	2.070	A
5 - Tredogan Road (N)	0	0	73	1844	0.000	0	266	0.0	0.0	0.000	A

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 - A226 (E)	365	91	11	1949	0.187	365	77	0.2	0.2	2.330	A
2 - Tredogan Road (S)	60	15	366	1598	0.038	60	10	0.0	0.0	2.341	A
3 - Dragonfly Drive (SW)	324	81	415	1535	0.211	324	12	0.2	0.3	3.022	A
4 - B4265 (W)	40	10	366	1741	0.023	40	372	0.0	0.0	2.115	A
5 - Tredogan Road (N)	0	0	87	1837	0.000	0	318	0.0	0.0	0.000	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 - A226 (E)	447	112	13	1947	0.230	447	94	0.2	0.3	2.460	A
2 - Tredogan Road (S)	74	19	448	1559	0.047	74	12	0.0	0.0	2.424	A
3 - Dragonfly Drive (SW)	397	99	508	1492	0.266	396	14	0.3	0.4	3.342	A
4 - B4265 (W)	49	12	448	1700	0.029	49	456	0.0	0.0	2.180	A
5 - Tredogan Road (N)	0	0	107	1827	0.000	0	390	0.0	0.0	0.000	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 - A226 (E)	447	112	13	1947	0.230	447	94	0.3	0.3	2.460	A
2 - Tredogan Road (S)	74	19	448	1559	0.047	74	12	0.0	0.0	2.424	A
3 - Dragonfly Drive (SW)	397	99	508	1491	0.266	397	14	0.4	0.4	3.343	A
4 - B4265 (W)	49	12	448	1699	0.029	49	456	0.0	0.0	2.180	A
5 - Tredogan Road (N)	0	0	107	1827	0.000	0	390	0.0	0.0	0.000	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 - A226 (E)	365	91	11	1949	0.187	366	77	0.3	0.2	2.331	A
2 - Tredogan Road (S)	60	15	366	1597	0.038	60	10	0.0	0.0	2.341	A
3 - Dragonfly Drive (SW)	324	81	415	1535	0.211	324	12	0.4	0.3	3.027	A
4 - B4265 (W)	40	10	367	1741	0.023	40	373	0.0	0.0	2.115	A
5 - Tredogan Road (N)	0	0	88	1837	0.000	0	319	0.0	0.0	0.000	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 - A226 (E)	306	76	9	1949	0.157	306	64	0.2	0.2	2.245	A
2 - Tredogan Road (S)	51	13	307	1626	0.031	51	8	0.0	0.0	2.285	A
3 - Dragonfly Drive (SW)	271	68	348	1566	0.173	271	10	0.3	0.2	2.827	A
4 - B4265 (W)	33	8	307	1771	0.019	33	312	0.0	0.0	2.071	A
5 - Tredogan Road (N)	0	0	73	1844	0.000	0	267	0.0	0.0	0.000	A

2025 + 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	2.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2025 + Development	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A226 (E)		ONE HOUR	✓	322	100.000
2 - Tredogan Road (S)		ONE HOUR	✓	69	100.000
3 - Dragonfly Drive (SW)		ONE HOUR	✓	342	100.000
4 - B4265 (W)		ONE HOUR	✓	102	100.000
5 - Tredogan Road (N)		ONE HOUR	✓	5	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
		1 - A226 (E)	2 - Tredogan Road (S)	3 - Dragonfly Drive (SW)	4 - B4265 (W)	5 - Tredogan Road (N)
From	1 - A226 (E)	0	33	3	277	9
	2 - Tredogan Road (S)	27	0	0	40	2
	3 - Dragonfly Drive (SW)	1	0	3	0	338
	4 - B4265 (W)	66	4	11	0	21
	5 - Tredogan Road (N)	1	0	4	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A226 (E)	2 - Tredogan Road (S)	3 - Dragonfly Drive (SW)	4 - B4265 (W)	5 - Tredogan Road (N)
From	1 - A226 (E)	0	3	0	3	0
	2 - Tredogan Road (S)	0	0	0	3	0
	3 - Dragonfly Drive (SW)	0	0	0	0	5
	4 - B4265 (W)	2	0	0	0	0
	5 - Tredogan Road (N)	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A226 (E)	0.18	2.33	0.2	A	296	444
2 - Tredogan Road (S)	0.05	2.38	0.1	A	64	95
3 - Dragonfly Drive (SW)	0.24	3.22	0.3	A	314	471
4 - B4265 (W)	0.07	2.27	0.1	A	94	141
5 - Tredogan Road (N)	0.00	1.98	0.0	A	5	7

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A226 (E)	243	61	17	1946	0.125	242	72	0.0	0.1	2.174	A
2 - Tredogan Road (S)	52	13	231	1662	0.031	52	28	0.0	0.0	2.269	A
3 - Dragonfly Drive (SW)	258	64	267	1604	0.161	257	16	0.0	0.2	2.794	A
4 - B4265 (W)	77	19	285	1782	0.043	77	238	0.0	0.0	2.132	A
5 - Tredogan Road (N)	4	0.94	84	1838	0.002	4	278	0.0	0.0	1.962	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A226 (E)	290	72	20	1944	0.149	290	86	0.1	0.2	2.238	A
2 - Tredogan Road (S)	62	16	276	1640	0.038	62	33	0.0	0.0	2.314	A
3 - Dragonfly Drive (SW)	308	77	319	1579	0.195	307	19	0.2	0.3	2.960	A
4 - B4265 (W)	92	23	342	1753	0.052	92	285	0.0	0.1	2.187	A
5 - Tredogan Road (N)	5	1	101	1830	0.002	5	333	0.0	0.0	1.971	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 - A226 (E)	355	89	24	1942	0.183	355	105	0.2	0.2	2.333	A
2 - Tredogan Road (S)	76	19	338	1611	0.047	76	41	0.0	0.1	2.379	A
3 - Dragonfly Drive (SW)	377	94	391	1546	0.244	376	23	0.3	0.3	3.220	A
4 - B4265 (W)	113	28	418	1715	0.066	113	349	0.1	0.1	2.269	A
5 - Tredogan Road (N)	6	1	124	1819	0.003	6	407	0.0	0.0	1.985	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 - A226 (E)	355	89	24	1942	0.183	355	105	0.2	0.2	2.333	A
2 - Tredogan Road (S)	76	19	338	1611	0.047	76	41	0.1	0.1	2.380	A
3 - Dragonfly Drive (SW)	377	94	391	1546	0.244	377	23	0.3	0.3	3.220	A
4 - B4265 (W)	113	28	419	1714	0.066	113	349	0.1	0.1	2.269	A
5 - Tredogan Road (N)	6	1	124	1819	0.003	6	408	0.0	0.0	1.985	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 - A226 (E)	290	72	20	1944	0.149	290	86	0.2	0.2	2.239	A
2 - Tredogan Road (S)	62	16	276	1640	0.038	62	33	0.1	0.0	2.314	A
3 - Dragonfly Drive (SW)	308	77	320	1579	0.195	308	19	0.3	0.3	2.962	A
4 - B4265 (W)	92	23	342	1753	0.052	92	285	0.1	0.1	2.188	A
5 - Tredogan Road (N)	5	1	101	1830	0.002	5	333	0.0	0.0	1.973	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 - A226 (E)	243	61	17	1946	0.125	243	72	0.2	0.1	2.174	A
2 - Tredogan Road (S)	52	13	231	1661	0.031	52	28	0.0	0.0	2.271	A
3 - Dragonfly Drive (SW)	258	64	268	1603	0.161	258	16	0.3	0.2	2.800	A
4 - B4265 (W)	77	19	287	1781	0.043	77	239	0.1	0.0	2.133	A
5 - Tredogan Road (N)	4	0.94	85	1838	0.002	4	279	0.0	0.0	1.962	A

2025 + 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	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
D4	2025 + Development	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A226 (E)		ONE HOUR	✓	437	100.000
2 - Tredogan Road (S)		ONE HOUR	✓	67	100.000
3 - Dragonfly Drive (SW)		ONE HOUR	✓	360	100.000
4 - B4265 (W)		ONE HOUR	✓	58	100.000
5 - Tredogan Road (N)		ONE HOUR	✓	4	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
		1 - A226 (E)	2 - Tredogan Road (S)	3 - Dragonfly Drive (SW)	4 - B4265 (W)	5 - Tredogan Road (N)
From	1 - A226 (E)	0	7	5	410	15
	2 - Tredogan Road (S)	32	0	0	34	1
	3 - Dragonfly Drive (SW)	39	0	3	1	317
	4 - B4265 (W)	28	4	5	0	21
	5 - Tredogan Road (N)	0	0	4	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A226 (E)	2 - Tredogan Road (S)	3 - Dragonfly Drive (SW)	4 - B4265 (W)	5 - Tredogan Road (N)
From	1 - A226 (E)	0	0	0	3	0
	2 - Tredogan Road (S)	0	0	0	0	0
	3 - Dragonfly Drive (SW)	0	0	0	0	2
	4 - B4265 (W)	0	0	0	0	0
	5 - Tredogan Road (N)	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A226 (E)	0.25	2.51	0.3	A	401	602
2 - Tredogan Road (S)	0.05	2.45	0.1	A	62	93
3 - Dragonfly Drive (SW)	0.27	3.39	0.4	A	331	496
4 - B4265 (W)	0.04	2.20	0.0	A	53	80
5 - Tredogan Road (N)	0.00	0.00	0.0	A	0	0

Main Results for each time segment

16:45 - 17:00

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 - A226 (E)	329	82	9	1949	0.169	328	75	0.0	0.2	2.271	A
2 - Tredogan Road (S)	51	13	329	1615	0.031	50	8	0.0	0.0	2.300	A
3 - Dragonfly Drive (SW)	271	68	370	1556	0.174	270	10	0.0	0.2	2.846	A
4 - B4265 (W)	44	11	306	1772	0.025	44	334	0.0	0.0	2.083	A
5 - Tredogan Road (N)	0	0	84	1839	0.000	0	266	0.0	0.0	0.000	A

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 - A226 (E)	393	98	11	1949	0.202	393	89	0.2	0.3	2.368	A
2 - Tredogan Road (S)	60	15	394	1585	0.038	60	10	0.0	0.0	2.361	A
3 - Dragonfly Drive (SW)	324	81	442	1522	0.213	324	12	0.2	0.3	3.054	A
4 - B4265 (W)	52	13	366	1741	0.030	52	400	0.0	0.0	2.131	A
5 - Tredogan Road (N)	0	0	100	1831	0.000	0	318	0.0	0.0	0.000	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 - A226 (E)	481	120	13	1947	0.247	481	109	0.3	0.3	2.512	A
2 - Tredogan Road (S)	74	19	482	1543	0.048	74	12	0.0	0.1	2.450	A
3 - Dragonfly Drive (SW)	397	99	542	1476	0.269	396	14	0.3	0.4	3.391	A
4 - B4265 (W)	64	16	448	1700	0.038	64	490	0.0	0.0	2.200	A
5 - Tredogan Road (N)	0	0	122	1819	0.000	0	390	0.0	0.0	0.000	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 - A226 (E)	481	120	13	1947	0.247	481	109	0.3	0.3	2.512	A
2 - Tredogan Road (S)	74	19	482	1543	0.048	74	12	0.1	0.1	2.450	A
3 - Dragonfly Drive (SW)	397	99	542	1476	0.269	397	14	0.4	0.4	3.392	A
4 - B4265 (W)	64	16	448	1699	0.038	64	490	0.0	0.0	2.200	A
5 - Tredogan Road (N)	0	0	123	1819	0.000	0	390	0.0	0.0	0.000	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 - A226 (E)	393	98	11	1949	0.202	393	89	0.3	0.3	2.370	A
2 - Tredogan Road (S)	60	15	394	1584	0.038	60	10	0.1	0.0	2.363	A
3 - Dragonfly Drive (SW)	324	81	443	1522	0.213	324	12	0.4	0.3	3.059	A
4 - B4265 (W)	52	13	367	1741	0.030	52	400	0.0	0.0	2.131	A
5 - Tredogan Road (N)	0	0	100	1831	0.000	0	319	0.0	0.0	0.000	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 - A226 (E)	329	82	9	1949	0.169	329	75	0.3	0.2	2.275	A
2 - Tredogan Road (S)	51	13	330	1615	0.031	51	8	0.0	0.0	2.303	A
3 - Dragonfly Drive (SW)	271	68	371	1555	0.174	271	10	0.3	0.2	2.851	A
4 - B4265 (W)	44	11	307	1771	0.025	44	335	0.0	0.0	2.085	A
5 - Tredogan Road (N)	0	0	84	1839	0.000	0	267	0.0	0.0	0.000	A

2034 Future Year, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	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
D5	2034 Future Year	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A226 (E)		ONE HOUR	✓	336	100.000
2 - Tredogan Road (S)		ONE HOUR	✓	76	100.000
3 - Dragonfly Drive (SW)		ONE HOUR	✓	372	100.000
4 - B4265 (W)		ONE HOUR	✓	75	100.000
5 - Tredogan Road (N)		ONE HOUR	✓	5	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
		1 - A226 (E)	2 - Tredogan Road (S)	3 - Dragonfly Drive (SW)	4 - B4265 (W)	5 - Tredogan Road (N)
From	1 - A226 (E)	0	36	3	287	10
	2 - Tredogan Road (S)	30	0	0	44	2
	3 - Dragonfly Drive (SW)	1	0	3	0	368
	4 - B4265 (W)	36	4	12	0	23
	5 - Tredogan Road (N)	1	0	4	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A226 (E)	2 - Tredogan Road (S)	3 - Dragonfly Drive (SW)	4 - B4265 (W)	5 - Tredogan Road (N)
From	1 - A226 (E)	0	3	0	3	0
	2 - Tredogan Road (S)	0	0	0	3	0
	3 - Dragonfly Drive (SW)	0	0	0	0	5
	4 - B4265 (W)	3	0	0	0	0
	5 - Tredogan Road (N)	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A226 (E)	0.19	2.36	0.2	A	308	462
2 - Tredogan Road (S)	0.05	2.40	0.1	A	70	105
3 - Dragonfly Drive (SW)	0.27	3.34	0.4	A	342	512
4 - B4265 (W)	0.05	2.26	0.1	A	69	103
5 - Tredogan Road (N)	0.00	1.97	0.0	A	5	7

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A226 (E)	253	63	17	1945	0.130	252	51	0.0	0.2	2.190	A
2 - Tredogan Road (S)	57	14	239	1658	0.035	57	30	0.0	0.0	2.282	A
3 - Dragonfly Drive (SW)	280	70	280	1598	0.175	279	17	0.0	0.2	2.855	A
4 - B4265 (W)	56	14	311	1769	0.032	56	249	0.0	0.0	2.132	A
5 - Tredogan Road (N)	4	0.99	65	1848	0.002	4	302	0.0	0.0	1.951	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A226 (E)	302	75	21	1943	0.155	302	61	0.2	0.2	2.258	A
2 - Tredogan Road (S)	68	17	286	1635	0.042	68	36	0.0	0.0	2.330	A
3 - Dragonfly Drive (SW)	335	84	335	1572	0.213	334	20	0.2	0.3	3.042	A
4 - B4265 (W)	67	17	372	1738	0.039	67	297	0.0	0.0	2.185	A
5 - Tredogan Road (N)	5	1	77	1842	0.003	5	362	0.0	0.0	1.959	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 - A226 (E)	370	92	26	1941	0.190	369	75	0.2	0.2	2.359	A
2 - Tredogan Road (S)	84	21	351	1605	0.052	84	44	0.0	0.1	2.400	A
3 - Dragonfly Drive (SW)	410	102	410	1537	0.267	409	24	0.3	0.4	3.339	A
4 - B4265 (W)	82	21	455	1696	0.049	82	364	0.0	0.1	2.263	A
5 - Tredogan Road (N)	6	1	95	1833	0.003	6	443	0.0	0.0	1.969	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 - A226 (E)	370	92	26	1941	0.190	370	75	0.2	0.2	2.359	A
2 - Tredogan Road (S)	84	21	351	1605	0.052	84	44	0.1	0.1	2.401	A
3 - Dragonfly Drive (SW)	410	102	410	1537	0.267	410	24	0.4	0.4	3.340	A
4 - B4265 (W)	82	21	456	1696	0.049	82	364	0.1	0.1	2.263	A
5 - Tredogan Road (N)	6	1	95	1833	0.003	6	443	0.0	0.0	1.969	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 - A226 (E)	302	75	21	1943	0.155	302	61	0.2	0.2	2.260	A
2 - Tredogan Road (S)	68	17	287	1635	0.042	68	36	0.1	0.0	2.332	A
3 - Dragonfly Drive (SW)	335	84	335	1572	0.213	335	20	0.4	0.3	3.046	A
4 - B4265 (W)	67	17	372	1738	0.039	67	298	0.1	0.0	2.186	A
5 - Tredogan Road (N)	5	1	77	1842	0.003	5	362	0.0	0.0	1.959	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 - A226 (E)	253	63	17	1945	0.130	253	51	0.2	0.2	2.192	A
2 - Tredogan Road (S)	57	14	240	1657	0.035	57	30	0.0	0.0	2.282	A
3 - Dragonfly Drive (SW)	280	70	281	1597	0.175	280	17	0.3	0.2	2.861	A
4 - B4265 (W)	56	14	312	1769	0.032	56	249	0.0	0.0	2.135	A
5 - Tredogan Road (N)	4	0.99	65	1848	0.002	4	303	0.0	0.0	1.953	A

2034 Future Year, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	2.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2034 Future Year	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A226 (E)		ONE HOUR	✓	441	100.000
2 - Tredogan Road (S)		ONE HOUR	✓	73	100.000
3 - Dragonfly Drive (SW)		ONE HOUR	✓	392	100.000
4 - B4265 (W)		ONE HOUR	✓	47	100.000
5 - Tredogan Road (N)		ONE HOUR	✓	4	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
		1 - A226 (E)	2 - Tredogan Road (S)	3 - Dragonfly Drive (SW)	4 - B4265 (W)	5 - Tredogan Road (N)
From	1 - A226 (E)	0	8	5	412	16
	2 - Tredogan Road (S)	35	0	0	37	1
	3 - Dragonfly Drive (SW)	43	0	3	1	345
	4 - B4265 (W)	15	4	5	0	23
	5 - Tredogan Road (N)	0	0	4	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A226 (E)	2 - Tredogan Road (S)	3 - Dragonfly Drive (SW)	4 - B4265 (W)	5 - Tredogan Road (N)
From	1 - A226 (E)	0	0	0	3	0
	2 - Tredogan Road (S)	0	0	0	0	0
	3 - Dragonfly Drive (SW)	0	0	0	0	2
	4 - B4265 (W)	0	0	0	0	0
	5 - Tredogan Road (N)	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A226 (E)	0.25	2.52	0.3	A	405	607
2 - Tredogan Road (S)	0.05	2.46	0.1	A	67	101
3 - Dragonfly Drive (SW)	0.29	3.52	0.4	A	360	540
4 - B4265 (W)	0.03	2.21	0.0	A	43	65
5 - Tredogan Road (N)	0.00	0.00	0.0	A	0	0

Main Results for each time segment

16:45 - 17:00

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 - A226 (E)	332	83	10	1949	0.170	331	70	0.0	0.2	2.280	A
2 - Tredogan Road (S)	55	14	332	1614	0.034	55	9	0.0	0.0	2.308	A
3 - Dragonfly Drive (SW)	295	74	376	1553	0.190	294	10	0.0	0.2	2.908	A
4 - B4265 (W)	36	9	332	1758	0.020	35	338	0.0	0.0	2.089	A
5 - Tredogan Road (N)	0	0	79	1841	0.000	0	289	0.0	0.0	0.000	A

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 - A226 (E)	397	99	11	1948	0.204	396	83	0.2	0.3	2.378	A
2 - Tredogan Road (S)	66	16	397	1583	0.041	66	11	0.0	0.0	2.372	A
3 - Dragonfly Drive (SW)	353	88	450	1518	0.232	352	12	0.2	0.3	3.139	A
4 - B4265 (W)	42	11	398	1725	0.025	42	404	0.0	0.0	2.139	A
5 - Tredogan Road (N)	0	0	95	1833	0.000	0	346	0.0	0.0	0.000	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 - A226 (E)	486	121	14	1947	0.249	485	102	0.3	0.3	2.525	A
2 - Tredogan Road (S)	80	20	486	1541	0.052	80	13	0.0	0.1	2.464	A
3 - Dragonfly Drive (SW)	432	108	551	1471	0.294	431	15	0.3	0.4	3.518	A
4 - B4265 (W)	52	13	487	1680	0.031	52	495	0.0	0.0	2.211	A
5 - Tredogan Road (N)	0	0	116	1823	0.000	0	423	0.0	0.0	0.000	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 - A226 (E)	486	121	14	1947	0.249	486	102	0.3	0.3	2.525	A
2 - Tredogan Road (S)	80	20	486	1541	0.052	80	13	0.1	0.1	2.464	A
3 - Dragonfly Drive (SW)	432	108	551	1471	0.294	432	15	0.4	0.4	3.521	A
4 - B4265 (W)	52	13	488	1680	0.031	52	496	0.0	0.0	2.211	A
5 - Tredogan Road (N)	0	0	116	1823	0.000	0	424	0.0	0.0	0.000	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 - A226 (E)	397	99	11	1948	0.204	397	83	0.3	0.3	2.381	A
2 - Tredogan Road (S)	66	16	397	1583	0.041	66	11	0.1	0.0	2.372	A
3 - Dragonfly Drive (SW)	353	88	451	1518	0.232	353	12	0.4	0.3	3.145	A
4 - B4265 (W)	42	11	399	1725	0.025	43	405	0.0	0.0	2.141	A
5 - Tredogan Road (N)	0	0	95	1833	0.000	0	346	0.0	0.0	0.000	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 - A226 (E)	332	83	10	1949	0.170	332	70	0.3	0.2	2.284	A
2 - Tredogan Road (S)	55	14	333	1613	0.034	55	9	0.0	0.0	2.311	A
3 - Dragonfly Drive (SW)	295	74	377	1552	0.190	296	10	0.3	0.2	2.915	A
4 - B4265 (W)	36	9	334	1757	0.020	36	339	0.0	0.0	2.092	A
5 - Tredogan Road (N)	0	0	79	1841	0.000	0	290	0.0	0.0	0.000	A

2034 + 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	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
D7	2034 + Development	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A226 (E)		ONE HOUR	✓	350	100.000
2 - Tredogan Road (S)		ONE HOUR	✓	76	100.000
3 - Dragonfly Drive (SW)		ONE HOUR	✓	372	100.000
4 - B4265 (W)		ONE HOUR	✓	108	100.000
5 - Tredogan Road (N)		ONE HOUR	✓	5	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
		1 - A226 (E)	2 - Tredogan Road (S)	3 - Dragonfly Drive (SW)	4 - B4265 (W)	5 - Tredogan Road (N)
From	1 - A226 (E)	0	36	3	301	10
	2 - Tredogan Road (S)	30	0	0	44	2
	3 - Dragonfly Drive (SW)	1	0	3	0	368
	4 - B4265 (W)	69	4	12	0	23
	5 - Tredogan Road (N)	1	0	4	0	0

Vehicle Mix

Heavy Vehicle Percentages

From	To					
		1 - A226 (E)	2 - Tredogan Road (S)	3 - Dragonfly Drive (SW)	4 - B4265 (W)	5 - Tredogan Road (N)
1 - A226 (E)		0	3	0	3	0
2 - Tredogan Road (S)		0	0	0	3	0
3 - Dragonfly Drive (SW)		0	0	0	0	4
4 - B4265 (W)		2	0	0	0	0
5 - Tredogan Road (N)		0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A226 (E)	0.20	2.38	0.3	A	321	481
2 - Tredogan Road (S)	0.05	2.41	0.1	A	70	105
3 - Dragonfly Drive (SW)	0.27	3.35	0.4	A	342	512
4 - B4265 (W)	0.07	2.30	0.1	A	99	148
5 - Tredogan Road (N)	0.00	1.99	0.0	A	5	7

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A226 (E)	263	66	17	1945	0.135	263	76	0.0	0.2	2.200	A
2 - Tredogan Road (S)	57	14	250	1653	0.035	57	30	0.0	0.0	2.288	A
3 - Dragonfly Drive (SW)	280	70	290	1593	0.176	279	17	0.0	0.2	2.860	A
4 - B4265 (W)	81	20	311	1769	0.046	81	259	0.0	0.0	2.153	A
5 - Tredogan Road (N)	4	0.99	89	1836	0.002	4	302	0.0	0.0	1.964	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A226 (E)	314	79	21	1943	0.162	314	91	0.2	0.2	2.271	A
2 - Tredogan Road (S)	68	17	299	1629	0.042	68	36	0.0	0.0	2.338	A
3 - Dragonfly Drive (SW)	335	84	347	1566	0.214	334	20	0.2	0.3	3.050	A
4 - B4265 (W)	97	24	372	1738	0.056	97	310	0.0	0.1	2.214	A
5 - Tredogan Road (N)	5	1	107	1827	0.003	5	362	0.0	0.0	1.975	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 - A226 (E)	385	96	26	1941	0.198	385	111	0.2	0.3	2.378	A
2 - Tredogan Road (S)	84	21	366	1598	0.052	84	44	0.0	0.1	2.411	A
3 - Dragonfly Drive (SW)	410	102	425	1530	0.268	409	24	0.3	0.4	3.354	A
4 - B4265 (W)	119	30	455	1696	0.070	119	380	0.1	0.1	2.304	A
5 - Tredogan Road (N)	6	1	131	1815	0.003	6	443	0.0	0.0	1.989	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 - A226 (E)	385	96	26	1941	0.198	385	111	0.3	0.3	2.378	A
2 - Tredogan Road (S)	84	21	366	1598	0.052	84	44	0.1	0.1	2.411	A
3 - Dragonfly Drive (SW)	410	102	426	1530	0.268	410	24	0.4	0.4	3.354	A
4 - B4265 (W)	119	30	456	1696	0.070	119	380	0.1	0.1	2.304	A
5 - Tredogan Road (N)	6	1	131	1815	0.003	6	443	0.0	0.0	1.989	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 - A226 (E)	314	79	21	1943	0.162	315	91	0.3	0.2	2.272	A
2 - Tredogan Road (S)	68	17	299	1629	0.042	68	36	0.1	0.0	2.339	A
3 - Dragonfly Drive (SW)	335	84	348	1566	0.214	335	20	0.4	0.3	3.055	A
4 - B4265 (W)	97	24	372	1738	0.056	97	310	0.1	0.1	2.215	A
5 - Tredogan Road (N)	5	1	107	1827	0.003	5	362	0.0	0.0	1.975	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 - A226 (E)	263	66	17	1945	0.135	263	76	0.2	0.2	2.200	A
2 - Tredogan Road (S)	57	14	251	1652	0.035	57	30	0.0	0.0	2.289	A
3 - Dragonfly Drive (SW)	280	70	291	1592	0.176	280	17	0.3	0.2	2.866	A
4 - B4265 (W)	81	20	312	1769	0.046	81	260	0.1	0.0	2.156	A
5 - Tredogan Road (N)	4	0.99	90	1836	0.002	4	303	0.0	0.0	1.965	A

2034 + 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	untitled	Standard Roundabout		1, 2, 3, 4, 5	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
D8	2034 + Development	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A226 (E)		ONE HOUR	✓	472	100.000
2 - Tredogan Road (S)		ONE HOUR	✓	73	100.000
3 - Dragonfly Drive (SW)		ONE HOUR	✓	392	100.000
4 - B4265 (W)		ONE HOUR	✓	61	100.000
5 - Tredogan Road (N)		ONE HOUR	✓	4	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
		1 - A226 (E)	2 - Tredogan Road (S)	3 - Dragonfly Drive (SW)	4 - B4265 (W)	5 - Tredogan Road (N)
From	1 - A226 (E)	0	8	5	443	16
	2 - Tredogan Road (S)	35	0	0	37	1
	3 - Dragonfly Drive (SW)	43	0	3	1	345
	4 - B4265 (W)	29	4	5	0	23
	5 - Tredogan Road (N)	0	0	4	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A226 (E)	2 - Tredogan Road (S)	3 - Dragonfly Drive (SW)	4 - B4265 (W)	5 - Tredogan Road (N)
From	1 - A226 (E)	0	0	0	3	0
	2 - Tredogan Road (S)	0	0	0	0	0
	3 - Dragonfly Drive (SW)	0	0	0	0	2
	4 - B4265 (W)	0	0	0	0	0
	5 - Tredogan Road (N)	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A226 (E)	0.27	2.58	0.4	A	433	650
2 - Tredogan Road (S)	0.05	2.49	0.1	A	67	101
3 - Dragonfly Drive (SW)	0.30	3.58	0.4	A	360	540
4 - B4265 (W)	0.04	2.23	0.0	A	56	84
5 - Tredogan Road (N)	0.00	0.00	0.0	A	0	0

Main Results for each time segment

16:45 - 17:00

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 - A226 (E)	355	89	10	1949	0.182	355	80	0.0	0.2	2.309	A
2 - Tredogan Road (S)	55	14	355	1603	0.034	55	9	0.0	0.0	2.325	A
3 - Dragonfly Drive (SW)	295	74	399	1542	0.191	294	10	0.0	0.2	2.933	A
4 - B4265 (W)	46	12	332	1758	0.026	46	361	0.0	0.0	2.102	A
5 - Tredogan Road (N)	0	0	90	1836	0.000	0	289	0.0	0.0	0.000	A

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 - A226 (E)	424	106	11	1948	0.218	424	96	0.2	0.3	2.417	A
2 - Tredogan Road (S)	66	16	425	1570	0.042	66	11	0.0	0.0	2.392	A
3 - Dragonfly Drive (SW)	353	88	478	1505	0.234	352	12	0.2	0.3	3.174	A
4 - B4265 (W)	55	14	398	1725	0.032	55	432	0.0	0.0	2.155	A
5 - Tredogan Road (N)	0	0	107	1827	0.000	0	346	0.0	0.0	0.000	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 - A226 (E)	520	130	14	1947	0.267	519	117	0.3	0.4	2.581	A
2 - Tredogan Road (S)	80	20	520	1525	0.053	80	13	0.0	0.1	2.491	A
3 - Dragonfly Drive (SW)	432	108	585	1455	0.297	431	15	0.3	0.4	3.573	A
4 - B4265 (W)	67	17	487	1680	0.040	67	529	0.0	0.0	2.232	A
5 - Tredogan Road (N)	0	0	131	1815	0.000	0	423	0.0	0.0	0.000	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 - A226 (E)	520	130	14	1947	0.267	520	118	0.4	0.4	2.581	A
2 - Tredogan Road (S)	80	20	520	1525	0.053	80	13	0.1	0.1	2.492	A
3 - Dragonfly Drive (SW)	432	108	586	1455	0.297	432	15	0.4	0.4	3.576	A
4 - B4265 (W)	67	17	488	1680	0.040	67	530	0.0	0.0	2.232	A
5 - Tredogan Road (N)	0	0	131	1815	0.000	0	424	0.0	0.0	0.000	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 - A226 (E)	424	106	11	1948	0.218	425	96	0.4	0.3	2.420	A
2 - Tredogan Road (S)	66	16	425	1570	0.042	66	11	0.1	0.0	2.393	A
3 - Dragonfly Drive (SW)	353	88	479	1505	0.234	353	12	0.4	0.3	3.180	A
4 - B4265 (W)	55	14	399	1725	0.032	55	433	0.0	0.0	2.157	A
5 - Tredogan Road (N)	0	0	107	1827	0.000	0	346	0.0	0.0	0.000	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 - A226 (E)	355	89	10	1949	0.182	356	80	0.3	0.2	2.314	A
2 - Tredogan Road (S)	55	14	356	1602	0.034	55	9	0.0	0.0	2.326	A
3 - Dragonfly Drive (SW)	295	74	401	1541	0.192	296	10	0.3	0.2	2.940	A
4 - B4265 (W)	46	12	334	1757	0.026	46	362	0.0	0.0	2.105	A
5 - Tredogan Road (N)	0	0	90	1836	0.000	0	290	0.0	0.0	0.000	A

Junctions 9						
ARCADY 9 - Roundabout Module						
Version: 9.5.2.1013						
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Filename: Pentir Y De Rb.j9

Path: H:\Projects\W230000\237538 - Land off Readers Way, Rhoose\Technical\C - Transport Assessment\Modelling\Arcady

Report generation date: 18/03/2024 08:49:03

- »2025 Opening, AM
- »2025 Opening, PM
- »2025 Opening + Development, AM
- »2025 Opening + Development, PM
- »2034 Future, AM
- »2034 Future, PM
- »2034 Future + Development, AM
- »2034 Future + Development, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2025 Opening						
1 - Porth Kerry Road (E)	0.1	2.53	0.11	0.5	3.24	0.32
2 - Pentir Y De	0.1	2.78	0.11	0.1	2.89	0.05
3 - Porth Kerry Road (W)	0.3	3.08	0.21	0.2	2.86	0.19
2025 Opening + Development						
1 - Porth Kerry Road (E)	0.1	2.51	0.11	0.5	3.24	0.32
2 - Pentir Y De	0.1	2.82	0.12	0.1	2.99	0.09
3 - Porth Kerry Road (W)	0.3	3.22	0.24	0.3	2.96	0.20
2034 Future						
1 - Porth Kerry Road (E)	0.1	2.48	0.12	0.5	3.39	0.35
2 - Pentir Y De	0.1	2.76	0.12	0.1	2.96	0.06
3 - Porth Kerry Road (W)	0.3	3.14	0.23	0.3	2.93	0.20
2034 Future + Development						
1 - Porth Kerry Road (E)	0.2	2.65	0.15	0.5	3.39	0.35
2 - Pentir Y De	0.2	3.02	0.14	0.1	3.06	0.09
3 - Porth Kerry Road (W)	0.1	2.63	0.12	0.3	3.03	0.22

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	12/03/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	SLR\Tom.Monk
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	2025 Opening	AM	ONE HOUR	07:45	09:15	15
D2	2025 Opening	PM	ONE HOUR	16:45	18:15	15
D3	2025 Opening + Development	AM	ONE HOUR	07:45	09:15	15
D4	2025 Opening + Development	PM	ONE HOUR	16:45	18:15	15
D5	2034 Future	AM	ONE HOUR	07:45	09:15	15
D6	2034 Future	PM	ONE HOUR	16:45	18:15	15
D7	2034 Future + Development	AM	ONE HOUR	07:45	09:15	15
D8	2034 Future + Development	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2025 Opening, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	2.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Porth Kerry Road (E)	
2	Pentir Y De	
3	Porth Kerry Road (W)	

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 - Porth Kerry Road (E)	3.94	6.08	18.0	30.5	36.0	34.7	
2 - Pentir Y De	3.95	6.15	5.8	45.0	36.0	21.0	
3 - Porth Kerry Road (W)	3.58	5.98	25.1	19.0	36.0	38.3	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Porth Kerry Road (E)	0.643	1664
2 - Pentir Y De	0.645	1585
3 - Porth Kerry Road (W)	0.618	1590

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	2025 Opening	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Porth Kerry Road (E)		✓	164	100.000
2 - Pentir Y De		✓	145	100.000
3 - Porth Kerry Road (W)		✓	287	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Porth Kerry Road (E)	2 - Pentir Y De	3 - Porth Kerry Road (W)
From	1 - Porth Kerry Road (E)	0	24	140
	2 - Pentir Y De	120	0	25
	3 - Porth Kerry Road (W)	264	23	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Porth Kerry Road (E)	2 - Pentir Y De	3 - Porth Kerry Road (W)
From	1 - Porth Kerry Road (E)	0	4	3
	2 - Pentir Y De	2	0	4
	3 - Porth Kerry Road (W)	1	15	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Porth Kerry Road (E)	0.11	2.53	0.1	A
2 - Pentir Y De	0.11	2.78	0.1	A
3 - Porth Kerry Road (W)	0.21	3.08	0.3	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Porth Kerry Road (E)	123	17	1653	0.075	123	0.1	2.426	A
2 - Pentir Y De	109	105	1518	0.072	109	0.1	2.615	A
3 - Porth Kerry Road (W)	216	90	1534	0.141	215	0.2	2.782	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Porth Kerry Road (E)	147	21	1651	0.089	147	0.1	2.468	A
2 - Pentir Y De	130	126	1504	0.087	130	0.1	2.680	A
3 - Porth Kerry Road (W)	258	108	1523	0.169	258	0.2	2.901	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 - Porth Kerry Road (E)	181	25	1648	0.110	180	0.1	2.529	A
2 - Pentir Y De	160	154	1486	0.107	160	0.1	2.776	A
3 - Porth Kerry Road (W)	316	132	1508	0.209	316	0.3	3.078	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 - Porth Kerry Road (E)	181	25	1648	0.110	181	0.1	2.529	A
2 - Pentir Y De	160	154	1486	0.107	160	0.1	2.776	A
3 - Porth Kerry Road (W)	316	132	1508	0.209	316	0.3	3.078	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 - Porth Kerry Road (E)	147	21	1651	0.089	148	0.1	2.469	A
2 - Pentir Y De	130	126	1504	0.087	130	0.1	2.683	A
3 - Porth Kerry Road (W)	258	108	1523	0.169	258	0.2	2.904	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 - Porth Kerry Road (E)	123	17	1653	0.075	124	0.1	2.428	A
2 - Pentir Y De	109	105	1517	0.072	109	0.1	2.615	A
3 - Porth Kerry Road (W)	216	90	1534	0.141	216	0.2	2.785	A

2025 Opening, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.09	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	2025 Opening	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Porth Kerry Road (E)		✓	473	100.000
2 - Pentir Y De		✓	65	100.000
3 - Porth Kerry Road (W)		✓	263	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Porth Kerry Road (E)	2 - Pentir Y De	3 - Porth Kerry Road (W)
From	1 - Porth Kerry Road (E)	0	97	376
	2 - Pentir Y De	47	0	18
	3 - Porth Kerry Road (W)	218	45	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Porth Kerry Road (E)	2 - Pentir Y De	3 - Porth Kerry Road (W)
From	1 - Porth Kerry Road (E)	0	1	0
	2 - Pentir Y De	0	0	0
	3 - Porth Kerry Road (W)	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Porth Kerry Road (E)	0.32	3.24	0.5	A
2 - Pentir Y De	0.05	2.89	0.1	A
3 - Porth Kerry Road (W)	0.19	2.86	0.2	A

Main Results for each time segment

16:45 - 17:00

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 - Porth Kerry Road (E)	356	34	1643	0.217	355	0.3	2.798	A
2 - Pentir Y De	49	282	1404	0.035	49	0.0	2.657	A
3 - Porth Kerry Road (W)	198	35	1568	0.126	197	0.1	2.646	A

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 - Porth Kerry Road (E)	425	40	1638	0.260	425	0.3	2.972	A
2 - Pentir Y De	58	338	1368	0.043	58	0.0	2.749	A
3 - Porth Kerry Road (W)	236	42	1564	0.151	236	0.2	2.733	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 - Porth Kerry Road (E)	521	50	1633	0.319	520	0.5	3.241	A
2 - Pentir Y De	72	414	1319	0.054	72	0.1	2.885	A
3 - Porth Kerry Road (W)	290	52	1558	0.186	289	0.2	2.860	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 - Porth Kerry Road (E)	521	50	1633	0.319	521	0.5	3.243	A
2 - Pentir Y De	72	414	1319	0.054	72	0.1	2.886	A
3 - Porth Kerry Road (W)	290	52	1558	0.186	290	0.2	2.860	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 - Porth Kerry Road (E)	425	40	1638	0.260	426	0.4	2.975	A
2 - Pentir Y De	58	338	1367	0.043	58	0.0	2.750	A
3 - Porth Kerry Road (W)	236	42	1564	0.151	237	0.2	2.736	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 - Porth Kerry Road (E)	356	34	1643	0.217	356	0.3	2.806	A
2 - Pentir Y De	49	283	1403	0.035	49	0.0	2.660	A
3 - Porth Kerry Road (W)	198	35	1568	0.126	198	0.1	2.651	A

2025 Opening + 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	untitled	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)
D3	2025 Opening + Development	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Porth Kerry Road (E)		✓	164	100.000
2 - Pentir Y De		✓	162	100.000
3 - Porth Kerry Road (W)		✓	327	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		1 - Porth Kerry Road (E)	2 - Pentir Y De	3 - Porth Kerry Road (W)
	1 - Porth Kerry Road (E)	0	24	140
	2 - Pentir Y De	137	0	25
	3 - Porth Kerry Road (W)	304	23	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Porth Kerry Road (E)	2 - Pentir Y De	3 - Porth Kerry Road (W)
	1 - Porth Kerry Road (E)	0	4	2
	2 - Pentir Y De	2	0	4
	3 - Porth Kerry Road (W)	1	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Porth Kerry Road (E)	0.11	2.51	0.1	A
2 - Pentir Y De	0.12	2.82	0.1	A
3 - Porth Kerry Road (W)	0.24	3.22	0.3	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Porth Kerry Road (E)	123	17	1653	0.075	123	0.1	2.406	A
2 - Pentir Y De	122	105	1518	0.080	122	0.1	2.638	A
3 - Porth Kerry Road (W)	246	103	1526	0.161	245	0.2	2.858	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Porth Kerry Road (E)	147	21	1651	0.089	147	0.1	2.448	A
2 - Pentir Y De	146	126	1504	0.097	146	0.1	2.710	A
3 - Porth Kerry Road (W)	294	123	1514	0.194	294	0.2	3.002	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 - Porth Kerry Road (E)	181	25	1648	0.110	180	0.1	2.508	A
2 - Pentir Y De	178	154	1486	0.120	178	0.1	2.815	A
3 - Porth Kerry Road (W)	360	151	1497	0.241	360	0.3	3.221	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 - Porth Kerry Road (E)	181	25	1648	0.110	181	0.1	2.508	A
2 - Pentir Y De	178	154	1486	0.120	178	0.1	2.815	A
3 - Porth Kerry Road (W)	360	151	1497	0.241	360	0.3	3.221	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 - Porth Kerry Road (E)	147	21	1651	0.089	148	0.1	2.450	A
2 - Pentir Y De	146	126	1504	0.097	146	0.1	2.712	A
3 - Porth Kerry Road (W)	294	123	1514	0.194	294	0.2	3.006	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 - Porth Kerry Road (E)	123	17	1653	0.075	124	0.1	2.408	A
2 - Pentir Y De	122	105	1517	0.080	122	0.1	2.638	A
3 - Porth Kerry Road (W)	246	103	1526	0.161	246	0.2	2.862	A

2025 Opening + 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	untitled	Standard Roundabout		1, 2, 3	3.12	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	2025 Opening + Development	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Porth Kerry Road (E)		✓	473	100.000
2 - Pentir Y De		✓	103	100.000
3 - Porth Kerry Road (W)		✓	280	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Porth Kerry Road (E)	2 - Pentir Y De	3 - Porth Kerry Road (W)
From	1 - Porth Kerry Road (E)	0	97	376
	2 - Pentir Y De	85	0	18
	3 - Porth Kerry Road (W)	235	45	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Porth Kerry Road (E)	2 - Pentir Y De	3 - Porth Kerry Road (W)
From	1 - Porth Kerry Road (E)	0	1	0
	2 - Pentir Y De	0	0	0
	3 - Porth Kerry Road (W)	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Porth Kerry Road (E)	0.32	3.24	0.5	A
2 - Pentir Y De	0.09	2.99	0.1	A
3 - Porth Kerry Road (W)	0.20	2.96	0.3	A

Main Results for each time segment

16:45 - 17:00

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 - Porth Kerry Road (E)	356	34	1643	0.217	355	0.3	2.798	A
2 - Pentir Y De	78	282	1404	0.055	77	0.1	2.714	A
3 - Porth Kerry Road (W)	211	64	1551	0.136	210	0.2	2.706	A

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 - Porth Kerry Road (E)	425	40	1638	0.260	425	0.3	2.972	A
2 - Pentir Y De	93	338	1368	0.068	93	0.1	2.822	A
3 - Porth Kerry Road (W)	252	76	1543	0.163	252	0.2	2.810	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 - Porth Kerry Road (E)	521	50	1633	0.319	520	0.5	3.241	A
2 - Pentir Y De	113	414	1319	0.086	113	0.1	2.985	A
3 - Porth Kerry Road (W)	308	94	1532	0.201	308	0.3	2.965	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 - Porth Kerry Road (E)	521	50	1633	0.319	521	0.5	3.243	A
2 - Pentir Y De	113	414	1319	0.086	113	0.1	2.986	A
3 - Porth Kerry Road (W)	308	94	1532	0.201	308	0.3	2.965	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 - Porth Kerry Road (E)	425	40	1638	0.260	426	0.4	2.975	A
2 - Pentir Y De	93	338	1367	0.068	93	0.1	2.823	A
3 - Porth Kerry Road (W)	252	76	1543	0.163	252	0.2	2.812	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 - Porth Kerry Road (E)	356	34	1643	0.217	356	0.3	2.804	A
2 - Pentir Y De	78	283	1403	0.055	78	0.1	2.718	A
3 - Porth Kerry Road (W)	211	64	1550	0.136	211	0.2	2.711	A

2034 Future, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	2.87	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)
D5	2034 Future	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Porth Kerry Road (E)		✓	178	100.000
2 - Pentir Y De		✓	158	100.000
3 - Porth Kerry Road (W)		✓	312	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Porth Kerry Road (E)	2 - Pentir Y De	3 - Porth Kerry Road (W)
	From			
	1 - Porth Kerry Road (E)	0	26	152
	2 - Pentir Y De	131	0	27
	3 - Porth Kerry Road (W)	287	25	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Porth Kerry Road (E)	2 - Pentir Y De	3 - Porth Kerry Road (W)
	From			
	1 - Porth Kerry Road (E)	0	1	0
	2 - Pentir Y De	0	0	0
	3 - Porth Kerry Road (W)	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Porth Kerry Road (E)	0.12	2.48	0.1	A
2 - Pentir Y De	0.12	2.76	0.1	A
3 - Porth Kerry Road (W)	0.23	3.14	0.3	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Porth Kerry Road (E)	134	19	1652	0.081	134	0.1	2.374	A
2 - Pentir Y De	119	114	1512	0.079	119	0.1	2.584	A
3 - Porth Kerry Road (W)	235	98	1529	0.154	234	0.2	2.804	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Porth Kerry Road (E)	160	22	1650	0.097	160	0.1	2.419	A
2 - Pentir Y De	142	137	1497	0.095	142	0.1	2.655	A
3 - Porth Kerry Road (W)	280	118	1517	0.185	280	0.2	2.936	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 - Porth Kerry Road (E)	196	28	1647	0.119	196	0.1	2.484	A
2 - Pentir Y De	174	167	1478	0.118	174	0.1	2.760	A
3 - Porth Kerry Road (W)	344	144	1501	0.229	343	0.3	3.138	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 - Porth Kerry Road (E)	196	28	1647	0.119	196	0.1	2.484	A
2 - Pentir Y De	174	167	1478	0.118	174	0.1	2.761	A
3 - Porth Kerry Road (W)	344	144	1501	0.229	344	0.3	3.138	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 - Porth Kerry Road (E)	160	22	1650	0.097	160	0.1	2.421	A
2 - Pentir Y De	142	137	1497	0.095	142	0.1	2.658	A
3 - Porth Kerry Road (W)	280	118	1517	0.185	281	0.2	2.940	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 - Porth Kerry Road (E)	134	19	1652	0.081	134	0.1	2.376	A
2 - Pentir Y De	119	114	1512	0.079	119	0.1	2.584	A
3 - Porth Kerry Road (W)	235	99	1529	0.154	235	0.2	2.809	A

2034 Future, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	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)
D6	2034 Future	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Porth Kerry Road (E)		✓	515	100.000
2 - Pentir Y De		✓	71	100.000
3 - Porth Kerry Road (W)		✓	286	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Porth Kerry Road (E)	2 - Pentir Y De	3 - Porth Kerry Road (W)
From	1 - Porth Kerry Road (E)	0	106	409
	2 - Pentir Y De	51	0	20
	3 - Porth Kerry Road (W)	237	49	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Porth Kerry Road (E)	2 - Pentir Y De	3 - Porth Kerry Road (W)
From	1 - Porth Kerry Road (E)	0	1	0
	2 - Pentir Y De	0	0	0
	3 - Porth Kerry Road (W)	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Porth Kerry Road (E)	0.35	3.39	0.5	A
2 - Pentir Y De	0.06	2.96	0.1	A
3 - Porth Kerry Road (W)	0.20	2.93	0.3	A

Main Results for each time segment

16:45 - 17:00

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 - Porth Kerry Road (E)	388	37	1641	0.236	386	0.3	2.873	A
2 - Pentir Y De	53	307	1388	0.039	53	0.0	2.697	A
3 - Porth Kerry Road (W)	215	38	1566	0.137	215	0.2	2.683	A

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 - Porth Kerry Road (E)	463	44	1636	0.283	463	0.4	3.074	A
2 - Pentir Y De	64	367	1349	0.047	64	0.0	2.801	A
3 - Porth Kerry Road (W)	257	46	1562	0.165	257	0.2	2.781	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 - Porth Kerry Road (E)	567	54	1630	0.348	566	0.5	3.390	A
2 - Pentir Y De	78	450	1295	0.060	78	0.1	2.956	A
3 - Porth Kerry Road (W)	315	56	1555	0.202	315	0.3	2.925	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 - Porth Kerry Road (E)	567	54	1630	0.348	567	0.5	3.393	A
2 - Pentir Y De	78	450	1295	0.060	78	0.1	2.957	A
3 - Porth Kerry Road (W)	315	56	1555	0.202	315	0.3	2.925	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 - Porth Kerry Road (E)	463	44	1636	0.283	464	0.4	3.079	A
2 - Pentir Y De	64	368	1348	0.047	64	0.0	2.802	A
3 - Porth Kerry Road (W)	257	46	1562	0.165	257	0.2	2.784	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 - Porth Kerry Road (E)	388	37	1641	0.236	388	0.3	2.880	A
2 - Pentir Y De	53	308	1387	0.039	53	0.0	2.701	A
3 - Porth Kerry Road (W)	215	38	1566	0.137	215	0.2	2.688	A

2034 Future + 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	untitled	Standard Roundabout		1, 2, 3	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)
D7	2034 Future + Development	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Porth Kerry Road (E)		✓	218	100.000
2 - Pentir Y De		✓	178	100.000
3 - Porth Kerry Road (W)		✓	174	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Porth Kerry Road (E)	2 - Pentir Y De	3 - Porth Kerry Road (W)
From	1 - Porth Kerry Road (E)	0	26	192
	2 - Pentir Y De	0	26	152
	3 - Porth Kerry Road (W)	147	0	27

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Porth Kerry Road (E)	2 - Pentir Y De	3 - Porth Kerry Road (W)
From	1 - Porth Kerry Road (E)	0	4	2
	2 - Pentir Y De	2	0	4
	3 - Porth Kerry Road (W)	1	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Porth Kerry Road (E)	0.15	2.65	0.2	A
2 - Pentir Y De	0.14	3.02	0.2	A
3 - Porth Kerry Road (W)	0.12	2.63	0.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Porth Kerry Road (E)	164	40	1639	0.100	164	0.1	2.495	A
2 - Pentir Y De	134	164	1479	0.091	134	0.1	2.766	A
3 - Porth Kerry Road (W)	131	20	1578	0.083	131	0.1	2.508	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Porth Kerry Road (E)	196	48	1634	0.120	196	0.1	2.559	A
2 - Pentir Y De	160	197	1459	0.110	160	0.1	2.865	A
3 - Porth Kerry Road (W)	156	23	1576	0.099	156	0.1	2.557	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 - Porth Kerry Road (E)	240	58	1627	0.148	240	0.2	2.653	A
2 - Pentir Y De	196	241	1430	0.137	196	0.2	3.015	A
3 - Porth Kerry Road (W)	192	29	1572	0.122	191	0.1	2.628	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 - Porth Kerry Road (E)	240	58	1627	0.148	240	0.2	2.653	A
2 - Pentir Y De	196	241	1430	0.137	196	0.2	3.015	A
3 - Porth Kerry Road (W)	192	29	1572	0.122	192	0.1	2.628	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 - Porth Kerry Road (E)	196	48	1634	0.120	196	0.1	2.561	A
2 - Pentir Y De	160	197	1458	0.110	160	0.1	2.866	A
3 - Porth Kerry Road (W)	156	23	1576	0.099	157	0.1	2.557	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 - Porth Kerry Road (E)	164	40	1639	0.100	164	0.1	2.495	A
2 - Pentir Y De	134	165	1479	0.091	134	0.1	2.767	A
3 - Porth Kerry Road (W)	131	20	1578	0.083	131	0.1	2.508	A

2034 Future + 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	untitled	Standard Roundabout		1, 2, 3	3.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2034 Future + Development	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Porth Kerry Road (E)		✓	515	100.000
2 - Pentir Y De		✓	109	100.000
3 - Porth Kerry Road (W)		✓	303	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Porth Kerry Road (E)	2 - Pentir Y De	3 - Porth Kerry Road (W)
From	1 - Porth Kerry Road (E)	0	106	409
	2 - Pentir Y De	89	0	20
	3 - Porth Kerry Road (W)	254	49	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Porth Kerry Road (E)	2 - Pentir Y De	3 - Porth Kerry Road (W)
From	1 - Porth Kerry Road (E)	0	1	0
	2 - Pentir Y De	0	0	0
	3 - Porth Kerry Road (W)	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Porth Kerry Road (E)	0.35	3.39	0.5	A
2 - Pentir Y De	0.09	3.06	0.1	A
3 - Porth Kerry Road (W)	0.22	3.03	0.3	A

Main Results for each time segment

16:45 - 17:00

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 - Porth Kerry Road (E)	388	37	1641	0.236	386	0.3	2.873	A
2 - Pentir Y De	82	307	1388	0.059	82	0.1	2.756	A
3 - Porth Kerry Road (W)	228	67	1549	0.147	227	0.2	2.746	A

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 - Porth Kerry Road (E)	463	44	1636	0.283	463	0.4	3.074	A
2 - Pentir Y De	98	367	1349	0.073	98	0.1	2.878	A
3 - Porth Kerry Road (W)	272	80	1541	0.177	272	0.2	2.861	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 - Porth Kerry Road (E)	567	54	1630	0.348	566	0.5	3.390	A
2 - Pentir Y De	120	450	1295	0.093	120	0.1	3.062	A
3 - Porth Kerry Road (W)	334	98	1530	0.218	333	0.3	3.034	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 - Porth Kerry Road (E)	567	54	1630	0.348	567	0.5	3.393	A
2 - Pentir Y De	120	450	1295	0.093	120	0.1	3.062	A
3 - Porth Kerry Road (W)	334	98	1529	0.218	334	0.3	3.034	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 - Porth Kerry Road (E)	463	44	1636	0.283	464	0.4	3.077	A
2 - Pentir Y De	98	368	1348	0.073	98	0.1	2.879	A
3 - Porth Kerry Road (W)	272	80	1541	0.177	273	0.2	2.865	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 - Porth Kerry Road (E)	388	37	1641	0.236	388	0.3	2.880	A
2 - Pentir Y De	82	308	1387	0.059	82	0.1	2.758	A
3 - Porth Kerry Road (W)	228	67	1549	0.147	228	0.2	2.751	A

Junctions 9		
ARCADY 9 - Roundabout Module		
Version: 9.5.2.1013 © Copyright TRL Limited, 2019		
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Filename: Port Road Rb.j9

Path: H:\Projects\W230000\237538 - Land off Readers Way, Rhoose\Technical\C - Transport Assessment\Modelling\Arcady

Report generation date: 18/03/2024 08:14:38

- »2025 Opening, AM
- »2025 Opening, PM
- »2025 Opening + Development, AM
- »2025 Opening + Development, PM
- »2034 Future, AM
- »2034 Future, PM
- »2034 Future + Development, AM
- »2034 Future + Development, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2025 Opening						
1 - A4226 (E)	0.7	4.10	0.41	2.0	7.06	0.67
2 - Port Road	0.2	1.60	0.17	0.1	1.51	0.09
3 - A4226 (W)	0.4	2.99	0.26	0.3	2.46	0.22
2025 Opening + Development						
1 - A4226 (E)	0.8	4.22	0.43	2.5	8.15	0.72
2 - Port Road	0.2	1.63	0.19	0.1	1.51	0.10
3 - A4226 (W)	0.4	3.11	0.29	0.3	2.44	0.23
2034 Future						
1 - A4226 (E)	0.8	4.38	0.44	2.7	8.56	0.73
2 - Port Road	0.2	1.65	0.19	0.1	1.54	0.10
3 - A4226 (W)	0.4	3.15	0.29	0.3	2.54	0.24
2034 Future + Development						
1 - A4226 (E)	0.9	4.52	0.47	3.4	10.24	0.77
2 - Port Road	0.3	1.68	0.21	0.1	1.54	0.11
3 - A4226 (W)	0.5	3.29	0.32	0.3	2.52	0.25

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	12/03/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	SLR\Tom.Monk
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	2025 Opening	AM	ONE HOUR	07:45	09:15	15
D2	2025 Opening	PM	ONE HOUR	16:45	18:15	15
D3	2025 Opening + Development	AM	ONE HOUR	07:45	09:15	15
D4	2025 Opening + Development	PM	ONE HOUR	16:45	18:15	15
D5	2034 Future	AM	ONE HOUR	07:45	09:15	15
D6	2034 Future	PM	ONE HOUR	16:45	18:15	15
D7	2034 Future + Development	AM	ONE HOUR	07:45	09:15	15
D8	2034 Future + Development	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2025 Opening, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A4226 (E)	
2	Port Road	
3	A4226 (W)	

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 - A4226 (E)	3.50	12.50	7.0	20.0	60.0	33.0	
2 - Port Road	7.00	12.00	22.0	35.0	60.0	30.0	
3 - A4226 (W)	3.50	10.00	21.0	30.0	60.0	33.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A4226 (E)	0.533	1577
2 - Port Road	0.798	3061
3 - A4226 (W)	0.621	2062

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	2025 Opening	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A4226 (E)		✓	583	100.000
2 - Port Road		✓	441	100.000
3 - A4226 (W)		✓	423	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		1 - A4226 (E)	2 - Port Road	3 - A4226 (W)
1 - A4226 (E)		2	276	305
2 - Port Road		421	0	20
3 - A4226 (W)		414	9	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - A4226 (E)	2 - Port Road	3 - A4226 (W)
1 - A4226 (E)		0	3	9
2 - Port Road		2	0	0
3 - A4226 (W)		8	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A4226 (E)	0.41	4.10	0.7	A
2 - Port Road	0.17	1.60	0.2	A
3 - A4226 (W)	0.26	2.99	0.4	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4226 (E)	439	7	1574	0.279	437	0.4	3.355	A
2 - Port Road	332	230	2877	0.115	331	0.1	1.446	A
3 - A4226 (W)	318	318	1864	0.171	318	0.2	2.524	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4226 (E)	524	8	1573	0.333	524	0.5	3.636	A
2 - Port Road	396	276	2841	0.140	396	0.2	1.506	A
3 - A4226 (W)	380	380	1826	0.208	380	0.3	2.702	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 - A4226 (E)	642	10	1572	0.408	641	0.7	4.098	A
2 - Port Road	486	338	2791	0.174	485	0.2	1.596	A
3 - A4226 (W)	466	466	1773	0.263	465	0.4	2.988	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 - A4226 (E)	642	10	1572	0.408	642	0.7	4.104	A
2 - Port Road	486	338	2791	0.174	486	0.2	1.597	A
3 - A4226 (W)	466	466	1773	0.263	466	0.4	2.988	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 - A4226 (E)	524	8	1573	0.333	525	0.5	3.644	A
2 - Port Road	396	276	2840	0.140	397	0.2	1.507	A
3 - A4226 (W)	380	380	1826	0.208	381	0.3	2.704	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 - A4226 (E)	439	7	1574	0.279	439	0.4	3.366	A
2 - Port Road	332	231	2876	0.115	332	0.1	1.447	A
3 - A4226 (W)	318	319	1864	0.171	319	0.2	2.528	A

2025 Opening, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	5.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2025 Opening	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A4226 (E)		✓	946	100.000
2 - Port Road		✓	215	100.000
3 - A4226 (W)		✓	376	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - A4226 (E)	2 - Port Road	3 - A4226 (W)
From	1 - A4226 (E)	2	501	443
	2 - Port Road	211	1	3
	3 - A4226 (W)	346	30	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - A4226 (E)	2 - Port Road	3 - A4226 (W)
From	1 - A4226 (E)	0	2	1
	2 - Port Road	2	0	0
	3 - A4226 (W)	2	11	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A4226 (E)	0.67	7.06	2.0	A
2 - Port Road	0.09	1.51	0.1	A
3 - A4226 (W)	0.22	2.46	0.3	A

Main Results for each time segment

16:45 - 17:00

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 - A4226 (E)	712	23	1565	0.455	709	0.8	4.255	A
2 - Port Road	162	333	2795	0.058	162	0.1	1.393	A
3 - A4226 (W)	283	161	1962	0.144	282	0.2	2.199	A

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 - A4226 (E)	850	28	1562	0.544	849	1.2	5.113	A
2 - Port Road	193	399	2742	0.070	193	0.1	1.439	A
3 - A4226 (W)	338	192	1943	0.174	338	0.2	2.303	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 - A4226 (E)	1042	34	1559	0.668	1038	2.0	6.977	A
2 - Port Road	237	488	2671	0.089	237	0.1	1.507	A
3 - A4226 (W)	414	236	1916	0.216	414	0.3	2.460	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 - A4226 (E)	1042	34	1559	0.668	1041	2.0	7.060	A
2 - Port Road	237	490	2670	0.089	237	0.1	1.507	A
3 - A4226 (W)	414	236	1916	0.216	414	0.3	2.460	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 - A4226 (E)	850	28	1562	0.544	854	1.2	5.181	A
2 - Port Road	193	402	2740	0.071	193	0.1	1.442	A
3 - A4226 (W)	338	192	1942	0.174	338	0.2	2.303	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 - A4226 (E)	712	23	1565	0.455	714	0.9	4.302	A
2 - Port Road	162	336	2793	0.058	162	0.1	1.394	A
3 - A4226 (W)	283	161	1962	0.144	283	0.2	2.203	A

2025 Opening + 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	untitled	Standard Roundabout		1, 2, 3	3.09	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	2025 Opening + Development	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A4226 (E)		✓	612	100.000
2 - Port Road		✓	481	100.000
3 - A4226 (W)		✓	456	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		1 - A4226 (E)	2 - Port Road	3 - A4226 (W)
	1 - A4226 (E)	2	292	318
	2 - Port Road	461	0	20
	3 - A4226 (W)	447	9	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - A4226 (E)	2 - Port Road	3 - A4226 (W)
	1 - A4226 (E)	0	3	8
	2 - Port Road	2	0	0
	3 - A4226 (W)	7	11	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A4226 (E)	0.43	4.22	0.8	A
2 - Port Road	0.19	1.63	0.2	A
3 - A4226 (W)	0.29	3.11	0.4	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4226 (E)	461	7	1574	0.293	459	0.4	3.400	A
2 - Port Road	362	240	2869	0.126	362	0.1	1.465	A
3 - A4226 (W)	343	348	1846	0.186	342	0.2	2.567	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4226 (E)	550	8	1573	0.350	550	0.6	3.705	A
2 - Port Road	432	287	2831	0.153	432	0.2	1.531	A
3 - A4226 (W)	410	416	1804	0.227	410	0.3	2.770	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 - A4226 (E)	674	10	1572	0.429	673	0.8	4.215	A
2 - Port Road	530	352	2780	0.191	529	0.2	1.632	A
3 - A4226 (W)	502	510	1745	0.288	502	0.4	3.105	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 - A4226 (E)	674	10	1572	0.429	674	0.8	4.224	A
2 - Port Road	530	352	2780	0.191	530	0.2	1.632	A
3 - A4226 (W)	502	510	1745	0.288	502	0.4	3.105	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 - A4226 (E)	550	8	1573	0.350	551	0.6	3.715	A
2 - Port Road	432	288	2831	0.153	433	0.2	1.531	A
3 - A4226 (W)	410	416	1803	0.227	410	0.3	2.775	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 - A4226 (E)	461	7	1574	0.293	461	0.4	3.411	A
2 - Port Road	362	241	2868	0.126	362	0.1	1.465	A
3 - A4226 (W)	343	349	1845	0.186	344	0.2	2.571	A

2025 Opening + 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	5.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2025 Opening + Development	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A4226 (E)		✓	1015	100.000
2 - Port Road		✓	232	100.000
3 - A4226 (W)		✓	390	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - A4226 (E)	2 - Port Road	3 - A4226 (W)
From	1 - A4226 (E)	2	539	474
	2 - Port Road	228	1	3
	3 - A4226 (W)	360	30	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - A4226 (E)	2 - Port Road	3 - A4226 (W)
From	1 - A4226 (E)	0	0	0
	2 - Port Road	0	0	0
	3 - A4226 (W)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A4226 (E)	0.72	8.15	2.5	A
2 - Port Road	0.10	1.51	0.1	A
3 - A4226 (W)	0.23	2.44	0.3	A

Main Results for each time segment

16:45 - 17:00

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 - A4226 (E)	764	23	1565	0.488	760	0.9	4.456	A
2 - Port Road	175	357	2776	0.063	174	0.1	1.383	A
3 - A4226 (W)	294	174	1954	0.150	293	0.2	2.165	A

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 - A4226 (E)	912	28	1562	0.584	911	1.4	5.511	A
2 - Port Road	209	427	2720	0.077	208	0.1	1.432	A
3 - A4226 (W)	351	208	1933	0.181	350	0.2	2.274	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 - A4226 (E)	1118	34	1559	0.717	1113	2.5	7.999	A
2 - Port Road	255	522	2644	0.097	255	0.1	1.506	A
3 - A4226 (W)	429	254	1904	0.226	429	0.3	2.440	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 - A4226 (E)	1118	34	1559	0.717	1117	2.5	8.146	A
2 - Port Road	255	524	2643	0.097	255	0.1	1.507	A
3 - A4226 (W)	429	254	1904	0.226	429	0.3	2.440	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 - A4226 (E)	912	28	1562	0.584	917	1.4	5.614	A
2 - Port Road	209	430	2718	0.077	209	0.1	1.434	A
3 - A4226 (W)	351	208	1933	0.181	351	0.2	2.275	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 - A4226 (E)	764	23	1565	0.488	766	1.0	4.519	A
2 - Port Road	175	359	2774	0.063	175	0.1	1.384	A
3 - A4226 (W)	294	174	1954	0.150	294	0.2	2.170	A

2034 Future, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2034 Future	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A4226 (E)		✓	635	100.000
2 - Port Road		✓	481	100.000
3 - A4226 (W)		✓	461	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		1 - A4226 (E)	2 - Port Road	3 - A4226 (W)
	1 - A4226 (E)	2	301	332
	2 - Port Road	459	0	22
	3 - A4226 (W)	451	10	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - A4226 (E)	2 - Port Road	3 - A4226 (W)
	1 - A4226 (E)	0	3	9
	2 - Port Road	2	0	0
	3 - A4226 (W)	8	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A4226 (E)	0.44	4.38	0.8	A
2 - Port Road	0.19	1.65	0.2	A
3 - A4226 (W)	0.29	3.15	0.4	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4226 (E)	478	8	1573	0.304	476	0.5	3.474	A
2 - Port Road	362	250	2861	0.127	362	0.1	1.473	A
3 - A4226 (W)	347	346	1847	0.188	346	0.3	2.602	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4226 (E)	571	9	1572	0.363	570	0.6	3.807	A
2 - Port Road	432	300	2821	0.153	432	0.2	1.541	A
3 - A4226 (W)	414	414	1805	0.230	414	0.3	2.809	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 - A4226 (E)	699	11	1571	0.445	698	0.8	4.368	A
2 - Port Road	530	367	2768	0.191	529	0.2	1.645	A
3 - A4226 (W)	508	507	1747	0.291	507	0.4	3.152	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 - A4226 (E)	699	11	1571	0.445	699	0.8	4.377	A
2 - Port Road	530	368	2767	0.191	530	0.2	1.645	A
3 - A4226 (W)	508	508	1747	0.291	508	0.4	3.152	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 - A4226 (E)	571	9	1572	0.363	572	0.6	3.821	A
2 - Port Road	432	301	2821	0.153	433	0.2	1.544	A
3 - A4226 (W)	414	415	1804	0.230	415	0.3	2.814	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 - A4226 (E)	478	8	1573	0.304	479	0.5	3.489	A
2 - Port Road	362	252	2860	0.127	362	0.1	1.476	A
3 - A4226 (W)	347	347	1846	0.188	347	0.3	2.608	A

2034 Future, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	6.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2034 Future	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A4226 (E)		✓	1028	100.000
2 - Port Road		✓	234	100.000
3 - A4226 (W)		✓	409	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		1 - A4226 (E)	2 - Port Road	3 - A4226 (W)
	1 - A4226 (E)	2	545	481
	2 - Port Road	230	1	3
	3 - A4226 (W)	376	33	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - A4226 (E)	2 - Port Road	3 - A4226 (W)
	1 - A4226 (E)	0	2	1
	2 - Port Road	2	0	0
	3 - A4226 (W)	2	11	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A4226 (E)	0.73	8.56	2.7	A
2 - Port Road	0.10	1.54	0.1	A
3 - A4226 (W)	0.24	2.54	0.3	A

Main Results for each time segment

16:45 - 17:00

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 - A4226 (E)	774	26	1564	0.495	770	1.0	4.574	A
2 - Port Road	176	362	2772	0.064	176	0.1	1.412	A
3 - A4226 (W)	308	175	1953	0.158	307	0.2	2.239	A

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 - A4226 (E)	924	31	1561	0.592	922	1.4	5.693	A
2 - Port Road	210	433	2715	0.077	210	0.1	1.464	A
3 - A4226 (W)	368	209	1932	0.190	367	0.2	2.357	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 - A4226 (E)	1132	37	1557	0.727	1127	2.6	8.388	A
2 - Port Road	258	530	2638	0.098	258	0.1	1.540	A
3 - A4226 (W)	450	256	1903	0.237	450	0.3	2.539	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 - A4226 (E)	1132	37	1557	0.727	1132	2.7	8.561	A
2 - Port Road	258	532	2636	0.098	258	0.1	1.541	A
3 - A4226 (W)	450	257	1903	0.237	450	0.3	2.539	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 - A4226 (E)	924	31	1561	0.592	929	1.5	5.812	A
2 - Port Road	210	436	2713	0.078	210	0.1	1.465	A
3 - A4226 (W)	368	210	1932	0.190	368	0.2	2.358	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 - A4226 (E)	774	26	1563	0.495	776	1.0	4.643	A
2 - Port Road	176	365	2770	0.064	176	0.1	1.416	A
3 - A4226 (W)	308	175	1953	0.158	308	0.2	2.244	A

2034 Future + 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	untitled	Standard Roundabout		1, 2, 3	3.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2034 Future + Development	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A4226 (E)		✓	665	100.000
2 - Port Road		✓	521	100.000
3 - A4226 (W)		✓	494	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		1 - A4226 (E)	2 - Port Road	3 - A4226 (W)
	1 - A4226 (E)	2	317	346
	2 - Port Road	499	0	22
	3 - A4226 (W)	484	10	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - A4226 (E)	2 - Port Road	3 - A4226 (W)
	1 - A4226 (E)	0	3	8
	2 - Port Road	2	0	0
	3 - A4226 (W)	7	11	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A4226 (E)	0.47	4.52	0.9	A
2 - Port Road	0.21	1.68	0.3	A
3 - A4226 (W)	0.32	3.29	0.5	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4226 (E)	501	8	1573	0.318	499	0.5	3.525	A
2 - Port Road	392	261	2853	0.138	392	0.2	1.493	A
3 - A4226 (W)	372	377	1828	0.203	371	0.3	2.650	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4226 (E)	598	9	1572	0.380	597	0.6	3.888	A
2 - Port Road	468	313	2811	0.167	468	0.2	1.567	A
3 - A4226 (W)	444	450	1782	0.249	444	0.4	2.886	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 - A4226 (E)	732	11	1571	0.466	731	0.9	4.510	A
2 - Port Road	574	383	2755	0.208	573	0.3	1.683	A
3 - A4226 (W)	544	551	1719	0.316	543	0.5	3.282	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 - A4226 (E)	732	11	1571	0.466	732	0.9	4.521	A
2 - Port Road	574	383	2755	0.208	574	0.3	1.684	A
3 - A4226 (W)	544	552	1719	0.316	544	0.5	3.285	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 - A4226 (E)	598	9	1572	0.380	599	0.7	3.901	A
2 - Port Road	468	313	2811	0.167	469	0.2	1.571	A
3 - A4226 (W)	444	451	1782	0.249	445	0.4	2.889	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 - A4226 (E)	501	8	1573	0.318	501	0.5	3.543	A
2 - Port Road	392	262	2852	0.138	392	0.2	1.494	A
3 - A4226 (W)	372	377	1828	0.204	372	0.3	2.656	A

2034 Future + 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	7.16	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)
D8	2034 Future + Development	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A4226 (E)		✓	1096	100.000
2 - Port Road		✓	251	100.000
3 - A4226 (W)		✓	423	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - A4226 (E)	2 - Port Road	3 - A4226 (W)
From	1 - A4226 (E)	2	582	512
	2 - Port Road	247	1	3
	3 - A4226 (W)	390	33	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - A4226 (E)	2 - Port Road	3 - A4226 (W)
From	1 - A4226 (E)	0	0	0
	2 - Port Road	0	0	0
	3 - A4226 (W)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A4226 (E)	0.77	10.24	3.4	B
2 - Port Road	0.11	1.54	0.1	A
3 - A4226 (W)	0.25	2.52	0.3	A

Main Results for each time segment

16:45 - 17:00

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 - A4226 (E)	825	26	1564	0.528	821	1.1	4.819	A
2 - Port Road	189	385	2754	0.069	189	0.1	1.403	A
3 - A4226 (W)	318	188	1945	0.164	318	0.2	2.210	A

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 - A4226 (E)	985	31	1561	0.631	983	1.7	6.205	A
2 - Port Road	226	461	2693	0.084	226	0.1	1.458	A
3 - A4226 (W)	380	225	1922	0.198	380	0.2	2.333	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 - A4226 (E)	1207	37	1557	0.775	1200	3.3	9.910	A
2 - Port Road	276	563	2612	0.106	276	0.1	1.540	A
3 - A4226 (W)	466	275	1891	0.246	465	0.3	2.525	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 - A4226 (E)	1207	37	1557	0.775	1206	3.4	10.239	B
2 - Port Road	276	566	2609	0.106	276	0.1	1.542	A
3 - A4226 (W)	466	275	1891	0.246	466	0.3	2.525	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 - A4226 (E)	985	31	1561	0.631	992	1.7	6.395	A
2 - Port Road	226	465	2690	0.084	226	0.1	1.460	A
3 - A4226 (W)	380	225	1922	0.198	381	0.2	2.336	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 - A4226 (E)	825	26	1563	0.528	828	1.1	4.909	A
2 - Port Road	189	388	2751	0.069	189	0.1	1.404	A
3 - A4226 (W)	318	188	1945	0.164	319	0.2	2.213	A

Junctions 9						
ARCADY 9 - Roundabout Module						
Version: 9.5.2.1013						
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Filename: Rhoose Road Roundabout.j9

Path: H:\Projects\W230000\237538 - Land off Readers Way, Rhoose\Technical\C - Transport Assessment\Modelling\Arcady

Report generation date: 18/03/2024 08:55:53

- »2025 Opening , AM
- »2025 Opening, PM
- »2025 Opening + Development, AM
- »2025 Opening + Development, PM
- »2034 Future, AM
- »2034 Future, PM
- »2034 Future + Development , AM
- »2034 Future + Development, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2025 Opening						
1 - Porth Kerry Road	0.2	3.29	0.19	0.3	3.38	0.25
2 - Rhoose Road (W)	0.3	3.66	0.20	0.3	3.88	0.23
3 - Readers Way	0.1	5.20	0.12	0.1	4.85	0.07
4 - Rhoose Road (NE)	0.1	4.24	0.05	0.1	3.92	0.05
2025 Opening + Development						
1 - Porth Kerry Road	0.3	3.35	0.21	0.4	3.53	0.28
2 - Rhoose Road (W)	0.3	3.68	0.20	0.3	3.94	0.25
3 - Readers Way	0.2	5.67	0.20	0.1	5.02	0.10
4 - Rhoose Road (NE)	0.1	4.39	0.05	0.1	3.98	0.05
2034 Future						
1 - Porth Kerry Road	0.3	3.37	0.21	0.4	3.49	0.27
2 - Rhoose Road (W)	0.3	3.76	0.22	0.3	4.01	0.26
3 - Readers Way	0.2	5.35	0.13	0.1	4.96	0.07
4 - Rhoose Road (NE)	0.1	4.34	0.05	0.1	3.99	0.06
2034 Future + Development						
1 - Porth Kerry Road	0.3	3.44	0.22	0.4	3.65	0.30
2 - Rhoose Road (W)	0.3	3.77	0.22	0.4	4.08	0.27
3 - Readers Way	0.3	5.84	0.21	0.1	5.14	0.10
4 - Rhoose Road (NE)	0.1	4.49	0.06	0.1	4.05	0.06

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	12/03/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	SLR\Tom.Monk
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	2025 Opening	AM	ONE HOUR	07:45	09:15	15
D2	2025 Opening	PM	ONE HOUR	16:45	18:15	15
D3	2025 Opening + Development	AM	ONE HOUR	07:45	09:15	15
D4	2025 Opening + Development	PM	ONE HOUR	16:45	18:15	15
D5	2034 Future	AM	ONE HOUR	07:45	09:15	15
D6	2034 Future	PM	ONE HOUR	16:45	18:15	15
D7	2034 Future + Development	AM	ONE HOUR	07:45	09:15	15
D8	2034 Future + Development	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2025 Opening , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Rhoose Road (NE) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.77	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Porth Kerry Road	
2	Rhoose Road (W)	
3	Readers Way	
4	Rhoose Road (NE)	

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 - Porth Kerry Road	4.19	5.02	5.9	41.8	30.0	37.7	
2 - Rhoose Road (W)	2.91	5.05	6.2	26.2	30.0	8.8	
3 - Readers Way	2.97	4.90	1.7	15.7	30.0	53.9	
4 - Rhoose Road (NE)	2.78	3.86	32.7	7.9	30.0	18.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Porth Kerry Road	0.605	1441
2 - Rhoose Road (W)	0.601	1291
3 - Readers Way	0.470	927
4 - Rhoose Road (NE)	0.525	1100

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	2025 Opening	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Porth Kerry Road		✓	243	100.000
2 - Rhoose Road (W)		✓	226	100.000
3 - Readers Way		✓	87	100.000
4 - Rhoose Road (NE)		✓	41	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Porth Kerry Road	2 - Rhoose Road (W)	3 - Readers Way	4 - Rhoose Road (NE)
From	1 - Porth Kerry Road	0	196	17	30
	2 - Rhoose Road (W)	197	0	18	11
	3 - Readers Way	41	45	0	1
	4 - Rhoose Road (NE)	10	29	2	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Porth Kerry Road	2 - Rhoose Road (W)	3 - Readers Way	4 - Rhoose Road (NE)
From	1 - Porth Kerry Road	0	2	6	7
	2 - Rhoose Road (W)	3	0	0	0
	3 - Readers Way	3	2	0	0
	4 - Rhoose Road (NE)	0	7	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Porth Kerry Road	0.19	3.29	0.2	A
2 - Rhoose Road (W)	0.20	3.66	0.3	A
3 - Readers Way	0.12	5.20	0.1	A
4 - Rhoose Road (NE)	0.05	4.24	0.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Porth Kerry Road	183	57	1407	0.130	182	0.2	3.013	A
2 - Rhoose Road (W)	170	37	1269	0.134	170	0.2	3.362	A
3 - Readers Way	65	179	843	0.078	65	0.1	4.732	A
4 - Rhoose Road (NE)	31	212	989	0.031	31	0.0	3.950	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Porth Kerry Road	218	68	1400	0.156	218	0.2	3.123	A
2 - Rhoose Road (W)	203	44	1265	0.161	203	0.2	3.483	A
3 - Readers Way	78	214	827	0.095	78	0.1	4.921	A
4 - Rhoose Road (NE)	37	254	967	0.038	37	0.0	4.069	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 - Porth Kerry Road	268	84	1391	0.192	267	0.2	3.285	A
2 - Rhoose Road (W)	249	54	1259	0.198	249	0.3	3.661	A
3 - Readers Way	96	262	804	0.119	96	0.1	5.199	A
4 - Rhoose Road (NE)	45	311	937	0.048	45	0.1	4.243	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 - Porth Kerry Road	268	84	1391	0.192	268	0.2	3.285	A
2 - Rhoose Road (W)	249	54	1259	0.198	249	0.3	3.661	A
3 - Readers Way	96	262	804	0.119	96	0.1	5.200	A
4 - Rhoose Road (NE)	45	312	937	0.048	45	0.1	4.244	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 - Porth Kerry Road	218	68	1400	0.156	219	0.2	3.124	A
2 - Rhoose Road (W)	203	44	1265	0.161	203	0.2	3.487	A
3 - Readers Way	78	214	827	0.095	78	0.1	4.923	A
4 - Rhoose Road (NE)	37	255	967	0.038	37	0.0	4.070	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 - Porth Kerry Road	183	57	1407	0.130	183	0.2	3.016	A
2 - Rhoose Road (W)	170	37	1269	0.134	170	0.2	3.368	A
3 - Readers Way	65	179	843	0.078	66	0.1	4.741	A
4 - Rhoose Road (NE)	31	213	988	0.031	31	0.0	3.954	A

2025 Opening, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Rhoose Road (NE) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2025 Opening	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Porth Kerry Road		✓	318	100.000
2 - Rhoose Road (W)		✓	259	100.000
3 - Readers Way		✓	47	100.000
4 - Rhoose Road (NE)		✓	44	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Porth Kerry Road	2 - Rhoose Road (W)	3 - Readers Way	4 - Rhoose Road (NE)
From	1 - Porth Kerry Road	0	213	61	44
	2 - Rhoose Road (W)	188	0	44	27
	3 - Readers Way	22	21	0	4
	4 - Rhoose Road (NE)	28	13	3	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - Porth Kerry Road	2 - Rhoose Road (W)	3 - Readers Way	4 - Rhoose Road (NE)
	1 - Porth Kerry Road	0	0	0	0
	2 - Rhoose Road (W)	1	0	0	0
	3 - Readers Way	0	0	0	0
	4 - Rhoose Road (NE)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Porth Kerry Road	0.25	3.38	0.3	A
2 - Rhoose Road (W)	0.23	3.88	0.3	A
3 - Readers Way	0.07	4.85	0.1	A
4 - Rhoose Road (NE)	0.05	3.92	0.1	A

Main Results for each time segment

16:45 - 17:00

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 - Porth Kerry Road	239	28	1424	0.168	239	0.2	3.044	A
2 - Rhoose Road (W)	195	81	1242	0.157	194	0.2	3.460	A
3 - Readers Way	35	194	836	0.042	35	0.0	4.493	A
4 - Rhoose Road (NE)	33	173	1009	0.033	33	0.0	3.686	A

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 - Porth Kerry Road	286	33	1421	0.201	286	0.3	3.180	A
2 - Rhoose Road (W)	233	97	1233	0.189	233	0.2	3.627	A
3 - Readers Way	42	233	818	0.052	42	0.1	4.640	A
4 - Rhoose Road (NE)	40	207	991	0.040	40	0.0	3.781	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 - Porth Kerry Road	350	41	1417	0.247	350	0.3	3.385	A
2 - Rhoose Road (W)	285	119	1220	0.234	285	0.3	3.880	A
3 - Readers Way	52	285	793	0.065	52	0.1	4.852	A
4 - Rhoose Road (NE)	48	254	967	0.050	48	0.1	3.919	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 - Porth Kerry Road	350	41	1417	0.247	350	0.3	3.385	A
2 - Rhoose Road (W)	285	119	1220	0.234	285	0.3	3.882	A
3 - Readers Way	52	285	793	0.065	52	0.1	4.853	A
4 - Rhoose Road (NE)	48	254	967	0.050	48	0.1	3.919	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 - Porth Kerry Road	286	33	1421	0.201	286	0.3	3.184	A
2 - Rhoose Road (W)	233	97	1233	0.189	233	0.2	3.629	A
3 - Readers Way	42	233	818	0.052	42	0.1	4.643	A
4 - Rhoose Road (NE)	40	208	991	0.040	40	0.0	3.782	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 - Porth Kerry Road	239	28	1424	0.168	240	0.2	3.050	A
2 - Rhoose Road (W)	195	81	1242	0.157	195	0.2	3.467	A
3 - Readers Way	35	195	836	0.042	35	0.0	4.498	A
4 - Rhoose Road (NE)	33	174	1009	0.033	33	0.0	3.688	A

2025 Opening + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Rhoose Road (NE) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.02	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)
D3	2025 Opening + Development	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Porth Kerry Road		✓	259	100.000
2 - Rhoose Road (W)		✓	232	100.000
3 - Readers Way		✓	143	100.000
4 - Rhoose Road (NE)		✓	41	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Porth Kerry Road	2 - Rhoose Road (W)	3 - Readers Way	4 - Rhoose Road (NE)
From	1 - Porth Kerry Road	0	212	17	30
	2 - Rhoose Road (W)	197	0	24	11
	3 - Readers Way	82	60	0	1
	4 - Rhoose Road (NE)	10	29	2	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Porth Kerry Road	2 - Rhoose Road (W)	3 - Readers Way	4 - Rhoose Road (NE)
	1 - Porth Kerry Road	0	2	6	3
	2 - Rhoose Road (W)	3	0	0	0
	3 - Readers Way	2	2	0	0
	4 - Rhoose Road (NE)	0	7	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Porth Kerry Road	0.21	3.35	0.3	A
2 - Rhoose Road (W)	0.20	3.68	0.3	A
3 - Readers Way	0.20	5.67	0.2	A
4 - Rhoose Road (NE)	0.05	4.39	0.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Porth Kerry Road	195	68	1400	0.139	194	0.2	3.043	A
2 - Rhoose Road (W)	175	37	1269	0.138	174	0.2	3.371	A
3 - Readers Way	108	179	843	0.128	107	0.1	4.974	A
4 - Rhoose Road (NE)	31	254	967	0.032	31	0.0	4.029	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Porth Kerry Road	233	82	1392	0.167	233	0.2	3.166	A
2 - Rhoose Road (W)	209	44	1265	0.165	208	0.2	3.496	A
3 - Readers Way	129	214	827	0.155	128	0.2	5.247	A
4 - Rhoose Road (NE)	37	304	940	0.039	37	0.0	4.174	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 - Porth Kerry Road	285	100	1381	0.207	285	0.3	3.349	A
2 - Rhoose Road (W)	255	54	1259	0.203	255	0.3	3.680	A
3 - Readers Way	157	262	804	0.196	157	0.2	5.664	A
4 - Rhoose Road (NE)	45	373	905	0.050	45	0.1	4.388	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 - Porth Kerry Road	285	100	1381	0.207	285	0.3	3.349	A
2 - Rhoose Road (W)	255	54	1259	0.203	255	0.3	3.680	A
3 - Readers Way	157	262	804	0.196	157	0.2	5.668	A
4 - Rhoose Road (NE)	45	373	904	0.050	45	0.1	4.389	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 - Porth Kerry Road	233	82	1392	0.167	233	0.2	3.168	A
2 - Rhoose Road (W)	209	44	1265	0.165	209	0.2	3.497	A
3 - Readers Way	129	214	827	0.156	129	0.2	5.256	A
4 - Rhoose Road (NE)	37	305	940	0.039	37	0.0	4.176	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 - Porth Kerry Road	195	69	1400	0.139	195	0.2	3.049	A
2 - Rhoose Road (W)	175	37	1269	0.138	175	0.2	3.377	A
3 - Readers Way	108	179	843	0.128	108	0.2	4.987	A
4 - Rhoose Road (NE)	31	256	966	0.032	31	0.0	4.034	A

2025 Opening + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Rhoose Road (NE) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2025 Opening + Development	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Porth Kerry Road		✓	355	100.000
2 - Rhoose Road (W)		✓	272	100.000
3 - Readers Way		✓	70	100.000
4 - Rhoose Road (NE)		✓	44	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Porth Kerry Road	2 - Rhoose Road (W)	3 - Readers Way	4 - Rhoose Road (NE)
From	1 - Porth Kerry Road	0	250	61	44
	2 - Rhoose Road (W)	188	0	57	27
	3 - Readers Way	39	27	0	4
	4 - Rhoose Road (NE)	28	13	3	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Porth Kerry Road	2 - Rhoose Road (W)	3 - Readers Way	4 - Rhoose Road (NE)
From	1 - Porth Kerry Road	0	0	0	0
	2 - Rhoose Road (W)	1	0	0	0
	3 - Readers Way	0	0	0	0
	4 - Rhoose Road (NE)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Porth Kerry Road	0.28	3.53	0.4	A
2 - Rhoose Road (W)	0.25	3.94	0.3	A
3 - Readers Way	0.10	5.02	0.1	A
4 - Rhoose Road (NE)	0.05	3.98	0.1	A

Main Results for each time segment

16:45 - 17:00

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 - Porth Kerry Road	267	32	1422	0.188	266	0.2	3.122	A
2 - Rhoose Road (W)	205	81	1242	0.165	204	0.2	3.491	A
3 - Readers Way	53	194	836	0.063	52	0.1	4.593	A
4 - Rhoose Road (NE)	33	190	1000	0.033	33	0.0	3.721	A

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 - Porth Kerry Road	319	39	1418	0.225	319	0.3	3.286	A
2 - Rhoose Road (W)	245	97	1233	0.198	244	0.2	3.668	A
3 - Readers Way	63	233	818	0.077	63	0.1	4.767	A
4 - Rhoose Road (NE)	40	228	981	0.040	40	0.0	3.824	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 - Porth Kerry Road	391	47	1413	0.277	390	0.4	3.534	A
2 - Rhoose Road (W)	299	119	1220	0.246	299	0.3	3.938	A
3 - Readers Way	77	285	793	0.097	77	0.1	5.024	A
4 - Rhoose Road (NE)	48	279	954	0.051	48	0.1	3.976	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 - Porth Kerry Road	391	47	1413	0.277	391	0.4	3.534	A
2 - Rhoose Road (W)	299	119	1220	0.246	299	0.3	3.940	A
3 - Readers Way	77	285	793	0.097	77	0.1	5.025	A
4 - Rhoose Road (NE)	48	280	953	0.051	48	0.1	3.977	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 - Porth Kerry Road	319	39	1418	0.225	319	0.3	3.291	A
2 - Rhoose Road (W)	245	97	1233	0.198	245	0.3	3.673	A
3 - Readers Way	63	233	818	0.077	63	0.1	4.769	A
4 - Rhoose Road (NE)	40	229	980	0.040	40	0.0	3.829	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 - Porth Kerry Road	267	32	1422	0.188	268	0.2	3.131	A
2 - Rhoose Road (W)	205	81	1242	0.165	205	0.2	3.496	A
3 - Readers Way	53	195	836	0.063	53	0.1	4.598	A
4 - Rhoose Road (NE)	33	191	1000	0.033	33	0.0	3.726	A

2034 Future, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Rhoose Road (NE) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.87	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)
D5	2034 Future	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Porth Kerry Road		✓	265	100.000
2 - Rhoose Road (W)		✓	246	100.000
3 - Readers Way		✓	95	100.000
4 - Rhoose Road (NE)		✓	45	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Porth Kerry Road	2 - Rhoose Road (W)	3 - Readers Way	4 - Rhoose Road (NE)
From	1 - Porth Kerry Road	0	213	19	33
	2 - Rhoose Road (W)	214	0	20	12
	3 - Readers Way	45	49	0	1
	4 - Rhoose Road (NE)	11	32	2	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Porth Kerry Road	2 - Rhoose Road (W)	3 - Readers Way	4 - Rhoose Road (NE)
From	1 - Porth Kerry Road	0	2	6	7
	2 - Rhoose Road (W)	3	0	0	0
	3 - Readers Way	3	2	0	0
	4 - Rhoose Road (NE)	0	7	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Porth Kerry Road	0.21	3.37	0.3	A
2 - Rhoose Road (W)	0.22	3.76	0.3	A
3 - Readers Way	0.13	5.35	0.2	A
4 - Rhoose Road (NE)	0.05	4.34	0.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Porth Kerry Road	200	62	1404	0.142	199	0.2	3.062	A
2 - Rhoose Road (W)	185	41	1267	0.146	185	0.2	3.416	A
3 - Readers Way	72	194	836	0.086	71	0.1	4.815	A
4 - Rhoose Road (NE)	34	231	979	0.035	34	0.0	4.004	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Porth Kerry Road	238	75	1396	0.171	238	0.2	3.187	A
2 - Rhoose Road (W)	221	49	1262	0.175	221	0.2	3.552	A
3 - Readers Way	85	233	818	0.104	85	0.1	5.029	A
4 - Rhoose Road (NE)	40	277	955	0.042	40	0.0	4.138	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 - Porth Kerry Road	292	91	1386	0.211	292	0.3	3.372	A
2 - Rhoose Road (W)	271	59	1255	0.216	271	0.3	3.755	A
3 - Readers Way	105	285	793	0.132	104	0.2	5.346	A
4 - Rhoose Road (NE)	50	339	922	0.054	49	0.1	4.336	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 - Porth Kerry Road	292	91	1386	0.211	292	0.3	3.373	A
2 - Rhoose Road (W)	271	59	1255	0.216	271	0.3	3.755	A
3 - Readers Way	105	285	793	0.132	105	0.2	5.349	A
4 - Rhoose Road (NE)	50	339	922	0.054	50	0.1	4.337	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 - Porth Kerry Road	238	75	1396	0.171	238	0.2	3.189	A
2 - Rhoose Road (W)	221	49	1262	0.175	221	0.2	3.557	A
3 - Readers Way	85	233	818	0.104	86	0.1	5.032	A
4 - Rhoose Road (NE)	40	277	955	0.042	41	0.0	4.142	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 - Porth Kerry Road	200	63	1403	0.142	200	0.2	3.069	A
2 - Rhoose Road (W)	185	41	1267	0.146	185	0.2	3.422	A
3 - Readers Way	72	195	836	0.086	72	0.1	4.822	A
4 - Rhoose Road (NE)	34	232	978	0.035	34	0.0	4.007	A

2034 Future, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Rhoose Road (NE) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.83	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)
D6	2034 Future	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Porth Kerry Road		✓	346	100.000
2 - Rhoose Road (W)		✓	281	100.000
3 - Readers Way		✓	51	100.000
4 - Rhoose Road (NE)		✓	48	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Porth Kerry Road	2 - Rhoose Road (W)	3 - Readers Way	4 - Rhoose Road (NE)
From	1 - Porth Kerry Road	0	231	67	48
	2 - Rhoose Road (W)	204	0	48	29
	3 - Readers Way	24	23	0	4
	4 - Rhoose Road (NE)	31	14	3	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Porth Kerry Road	2 - Rhoose Road (W)	3 - Readers Way	4 - Rhoose Road (NE)
	1 - Porth Kerry Road	0	0	0	0
	2 - Rhoose Road (W)	1	0	0	0
	3 - Readers Way	0	0	0	0
	4 - Rhoose Road (NE)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Porth Kerry Road	0.27	3.49	0.4	A
2 - Rhoose Road (W)	0.26	4.01	0.3	A
3 - Readers Way	0.07	4.96	0.1	A
4 - Rhoose Road (NE)	0.06	3.99	0.1	A

Main Results for each time segment

16:45 - 17:00

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 - Porth Kerry Road	260	30	1423	0.183	260	0.2	3.103	A
2 - Rhoose Road (W)	212	89	1238	0.171	211	0.2	3.528	A
3 - Readers Way	38	211	828	0.046	38	0.0	4.555	A
4 - Rhoose Road (NE)	36	188	1002	0.036	36	0.0	3.728	A

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 - Porth Kerry Road	311	36	1420	0.219	311	0.3	3.257	A
2 - Rhoose Road (W)	253	106	1227	0.206	252	0.3	3.720	A
3 - Readers Way	46	252	809	0.057	46	0.1	4.718	A
4 - Rhoose Road (NE)	43	225	982	0.044	43	0.0	3.833	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 - Porth Kerry Road	381	44	1415	0.269	381	0.4	3.492	A
2 - Rhoose Road (W)	309	130	1213	0.255	309	0.3	4.012	A
3 - Readers Way	56	309	782	0.072	56	0.1	4.958	A
4 - Rhoose Road (NE)	53	276	955	0.055	53	0.1	3.988	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 - Porth Kerry Road	381	44	1415	0.269	381	0.4	3.492	A
2 - Rhoose Road (W)	309	130	1213	0.255	309	0.3	4.014	A
3 - Readers Way	56	309	782	0.072	56	0.1	4.959	A
4 - Rhoose Road (NE)	53	276	955	0.055	53	0.1	3.989	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 - Porth Kerry Road	311	36	1419	0.219	311	0.3	3.261	A
2 - Rhoose Road (W)	253	106	1227	0.206	253	0.3	3.726	A
3 - Readers Way	46	253	809	0.057	46	0.1	4.720	A
4 - Rhoose Road (NE)	43	226	982	0.044	43	0.0	3.835	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 - Porth Kerry Road	260	30	1423	0.183	261	0.2	3.107	A
2 - Rhoose Road (W)	212	89	1238	0.171	212	0.2	3.539	A
3 - Readers Way	38	212	828	0.046	38	0.0	4.562	A
4 - Rhoose Road (NE)	36	189	1001	0.036	36	0.0	3.730	A

2034 Future + Development , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Rhoose Road (NE) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.11	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)
D7	2034 Future + Development	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Porth Kerry Road		✓	281	100.000
2 - Rhoose Road (W)		✓	251	100.000
3 - Readers Way		✓	150	100.000
4 - Rhoose Road (NE)		✓	45	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Porth Kerry Road	2 - Rhoose Road (W)	3 - Readers Way	4 - Rhoose Road (NE)
From	1 - Porth Kerry Road	0	229	19	33
	2 - Rhoose Road (W)	214	0	25	12
	3 - Readers Way	85	64	0	1
	4 - Rhoose Road (NE)	11	32	2	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Porth Kerry Road	2 - Rhoose Road (W)	3 - Readers Way	4 - Rhoose Road (NE)
From	1 - Porth Kerry Road	0	2	6	3
	2 - Rhoose Road (W)	3	0	0	0
	3 - Readers Way	2	2	0	0
	4 - Rhoose Road (NE)	0	7	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Porth Kerry Road	0.22	3.44	0.3	A
2 - Rhoose Road (W)	0.22	3.77	0.3	A
3 - Readers Way	0.21	5.84	0.3	A
4 - Rhoose Road (NE)	0.06	4.49	0.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Porth Kerry Road	212	73	1397	0.151	211	0.2	3.094	A
2 - Rhoose Road (W)	189	41	1267	0.149	188	0.2	3.423	A
3 - Readers Way	113	194	836	0.135	112	0.2	5.062	A
4 - Rhoose Road (NE)	34	272	957	0.035	34	0.0	4.084	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Porth Kerry Road	253	88	1388	0.182	252	0.2	3.232	A
2 - Rhoose Road (W)	226	49	1262	0.179	225	0.2	3.563	A
3 - Readers Way	135	233	818	0.165	135	0.2	5.365	A
4 - Rhoose Road (NE)	40	326	929	0.044	40	0.0	4.245	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 - Porth Kerry Road	309	108	1376	0.225	309	0.3	3.440	A
2 - Rhoose Road (W)	276	59	1255	0.220	276	0.3	3.771	A
3 - Readers Way	165	285	793	0.208	165	0.3	5.831	A
4 - Rhoose Road (NE)	50	399	891	0.056	49	0.1	4.484	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 - Porth Kerry Road	309	108	1376	0.225	309	0.3	3.441	A
2 - Rhoose Road (W)	276	59	1255	0.220	276	0.3	3.771	A
3 - Readers Way	165	285	793	0.208	165	0.3	5.836	A
4 - Rhoose Road (NE)	50	400	891	0.056	50	0.1	4.486	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 - Porth Kerry Road	253	88	1388	0.182	253	0.2	3.237	A
2 - Rhoose Road (W)	226	49	1262	0.179	226	0.2	3.567	A
3 - Readers Way	135	233	818	0.165	135	0.2	5.372	A
4 - Rhoose Road (NE)	40	327	929	0.044	41	0.0	4.249	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 - Porth Kerry Road	212	74	1397	0.151	212	0.2	3.100	A
2 - Rhoose Road (W)	189	41	1267	0.149	189	0.2	3.427	A
3 - Readers Way	113	195	836	0.135	113	0.2	5.076	A
4 - Rhoose Road (NE)	34	274	957	0.035	34	0.0	4.090	A

2034 Future + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Rhoose Road (NE) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2034 Future + Development	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Porth Kerry Road		✓	384	100.000
2 - Rhoose Road (W)		✓	294	100.000
3 - Readers Way		✓	74	100.000
4 - Rhoose Road (NE)		✓	48	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Porth Kerry Road	2 - Rhoose Road (W)	3 - Readers Way	4 - Rhoose Road (NE)
From	1 - Porth Kerry Road	0	269	67	48
	2 - Rhoose Road (W)	204	0	61	29
	3 - Readers Way	41	29	0	4
	4 - Rhoose Road (NE)	31	14	3	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - Porth Kerry Road	2 - Rhoose Road (W)	3 - Readers Way	4 - Rhoose Road (NE)
	1 - Porth Kerry Road	0	0	0	0
	2 - Rhoose Road (W)	1	0	0	0
	3 - Readers Way	0	0	0	0
	4 - Rhoose Road (NE)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Porth Kerry Road	0.30	3.65	0.4	A
2 - Rhoose Road (W)	0.27	4.08	0.4	A
3 - Readers Way	0.10	5.14	0.1	A
4 - Rhoose Road (NE)	0.06	4.05	0.1	A

Main Results for each time segment

16:45 - 17:00

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 - Porth Kerry Road	289	34	1420	0.204	288	0.3	3.186	A
2 - Rhoose Road (W)	221	89	1238	0.179	220	0.2	3.560	A
3 - Readers Way	56	211	828	0.067	55	0.1	4.657	A
4 - Rhoose Road (NE)	36	205	992	0.036	36	0.0	3.763	A

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 - Porth Kerry Road	345	41	1416	0.244	345	0.3	3.371	A
2 - Rhoose Road (W)	264	106	1227	0.215	264	0.3	3.764	A
3 - Readers Way	67	252	809	0.082	66	0.1	4.849	A
4 - Rhoose Road (NE)	43	246	971	0.044	43	0.0	3.879	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 - Porth Kerry Road	423	51	1411	0.300	422	0.4	3.652	A
2 - Rhoose Road (W)	324	130	1213	0.267	323	0.4	4.073	A
3 - Readers Way	81	309	782	0.104	81	0.1	5.137	A
4 - Rhoose Road (NE)	53	301	942	0.056	53	0.1	4.047	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 - Porth Kerry Road	423	51	1411	0.300	423	0.4	3.655	A
2 - Rhoose Road (W)	324	130	1213	0.267	324	0.4	4.077	A
3 - Readers Way	81	309	782	0.104	81	0.1	5.138	A
4 - Rhoose Road (NE)	53	302	942	0.056	53	0.1	4.048	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 - Porth Kerry Road	345	41	1416	0.244	346	0.3	3.376	A
2 - Rhoose Road (W)	264	106	1227	0.215	265	0.3	3.770	A
3 - Readers Way	67	253	809	0.082	67	0.1	4.854	A
4 - Rhoose Road (NE)	43	247	971	0.044	43	0.0	3.880	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 - Porth Kerry Road	289	35	1420	0.204	289	0.3	3.193	A
2 - Rhoose Road (W)	221	89	1238	0.179	222	0.2	3.571	A
3 - Readers Way	56	212	828	0.067	56	0.1	4.662	A
4 - Rhoose Road (NE)	36	207	992	0.036	36	0.0	3.768	A



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