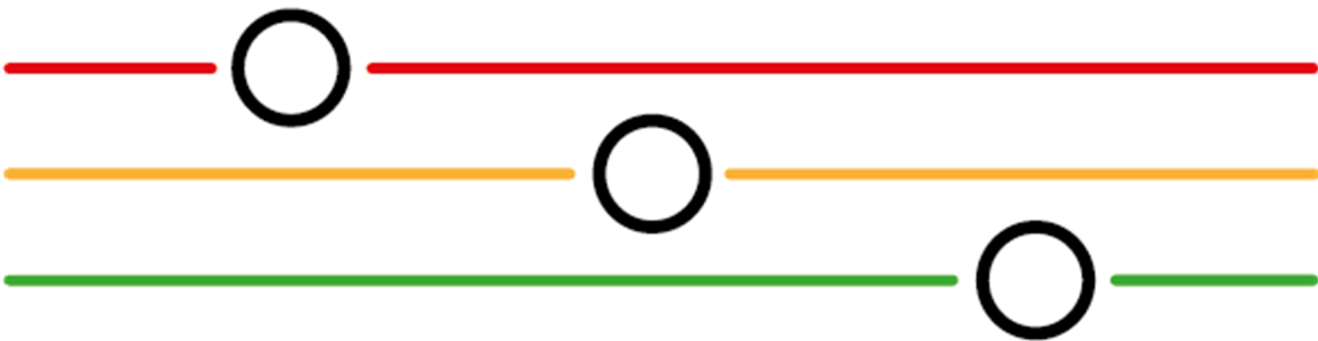




Adil Group Ltd

Proposed Car Wash Development,
A664 Kingsway, Rochdale

Transport Assessment

3717725



FEBRUARY 2026

Report Details

Report Number:	3717725-TA
Report Title:	Transport Assessment, Proposed Car Wash Development, A664 Kingsway, Rochdale
Client:	Adil Group Ltd
Date:	20 February 2026
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1 Introduction

1.1 General

Dynamic Transport Planning Ltd is instructed by Adil Group Ltd to report on the highways and transportation considerations regarding the installation of a new car wash facility on land associated with a used car sales unit, off A664 Kingsway, Rochdale.

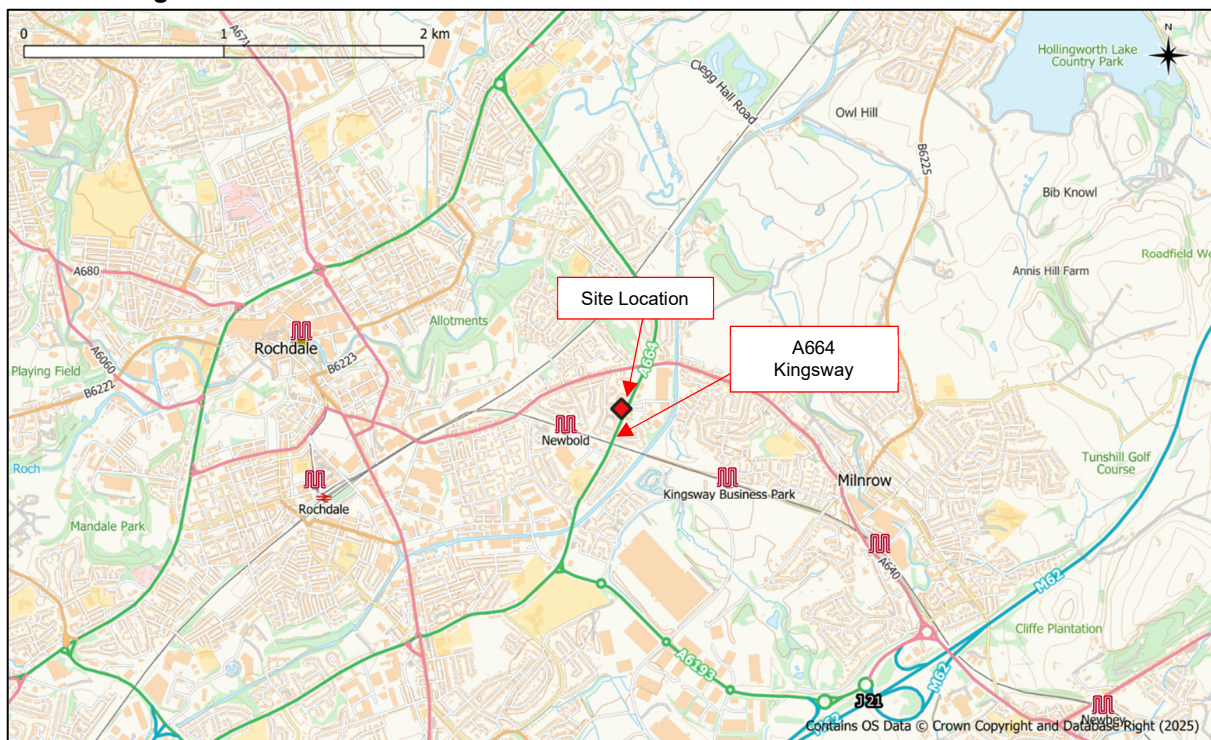
This Transport Assessment (TA) has been produced to advise Rochdale Metropolitan Borough Council (RMBC) as the Local Planning and Highway Authority on the transport planning considerations related to the proposals.

1.2 Site Location

The application site is located just under 2km east of Rochdale Town Centre and approximately 16km to the north-east of Manchester City Centre.

The location of the site is illustrated at **Figure 1.1**:

Figure 1.1: Site Location Plan



1.3 Purpose and Structure of Report

The purpose of this report is to examine the development proposals in the context of the application site, review the layout proposals including swept-path analysis, calculate the trip generating potential of the proposed development and review the accessibility of the site by all modes of transport.

In accordance with best practice this Transport Assessment (TA) has been prepared with reference to the Department for Transport's (DfT's) "*Guidance on Transport Assessment*" document.

This report is structured as follows:

- Section 2 provides a reference to relevant planning policy;
- Section 3 sets out the existing conditions of and around the application site;
- Section 4 provides a description of the proposed development;
- Section 5 details sustainable access opportunities;
- Section 6 assesses the trip generating potential of the development proposals;
- Section 7 details the assessment methodology;
- Section 8 provides the junction capacity assessments; and
- Section 9 presents the summary and conclusions.

2 Policy Context

2.1 General

It is necessary to understand the national and local planning policies which relate to the proposed development. Therefore, the following chapter sets out key policies and demonstrates how the proposals accord with them.

2.2 National Policy

2.2.1 National Planning Policy Framework (NPPF), 2024

In December 2024, the Ministry of Housing, Communities and Local Government published the revised National Planning Policy Framework (NPPF) which is the latest revision of the NPPF since it was first published in 2012. The NPPF sets out the government's planning policies for England and how the policies should be applied to various developments, providing a framework for localised plans to be created.

Paragraph 109 of the latest NPPF discusses the key link between new developments and the transport network. It is stated that transport issues should be considered from the earliest stages of the planning process, *"using a vision-led approach to identify transport solutions that deliver well-designed, sustainable and popular places"*, involving;

- *"Making transport consideration an important part of early engagement with local communities;*
- *Ensuring patterns of movements, streets, parking and other transport considerations are integral to the design of schemes, contributing to making high quality places;*
- *Understanding and addressing the potential impacts of development on transport networks;*
- *Realising opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;*
- *Identifying and pursuing opportunities to promote walking, cycling and public transport use are identified and pursued; and*
- *Identifying and taking into account the environmental impacts of traffic and transport infrastructure – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains."*

Sustainability of developments is discussed in paragraph 110; whereby new developments should be centred around existing infrastructure. The NPPF also acknowledges that opportunities to maximise sustainable transport solutions will vary between urban and rural areas, which should be taken into account during the planning process, ensuring appropriate infrastructure is applied to all projects.

The NPPF discusses spatial planning in paragraph 111, where planning policies should support an appropriate mix of uses across an area to minimise the number and length of journeys needed for employment, shopping, leisure, education and other uses. Providing attractive and well-designed walking and cycling networks supported by associated facilities such as secure cycle parking.

Paragraph 115 of the new NPPF states that when assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

- *“Sustainable transport modes are prioritised taking account of the vision for the site, the type of development and its location;*
- *Safe and suitable access to the site can be achieved for all users;*
- *The design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code 45; and*
- *Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree, through a vision-led approach.”*

Paragraph 116 of the NPPF states *“Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios ”.*

Paragraph 117 of the NPPF states that applications for development should:

- *“Give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*
- *Address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*
- *Create places that are safe, secure, and attractive – which minimise the scope for conflicts between pedestrians and vehicles, avoid unnecessary street clutter and respond to local character and design standards;*
- *Allow for the efficient delivery of goods, and access by service and emergency vehicles; and*

- *Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.”*

Paragraph 118 states that all developments that *“generate significant amounts of movement should be required to provide a Travel Plan, and the application should be supported by a ‘vision-led’ Transport Statement or Transport Assessment”*.

Furthermore, Section 11 of the NPPF discusses making effective use of land, where in paragraph 124 it states, *“Strategic policies should set out a clear strategy for accommodating objectively assessed needs, in a way that makes as much use as possible of previously-developed or ‘brownfield’ land”*.

2.3 Local Policy

2.3.1 Rochdale Local Plan – Adopted Core Strategy 2016

At the time of writing, RMBC are currently preparing a draft Local Plan to cover the area from 2026, though this has not been published to date. Therefore, the existing ‘Rochdale Local Plan – Adopted Core Strategy 2016’ continues to apply to the Rochdale administrative area until it is replaced by the new RMBC Local Plan.

Rochdale’s Local Plan sets the overarching strategic direction for planning in Carlisle from 2016. It establishes key policies to guide sustainable development, including major housing, employment, and retail growth, whilst providing a framework which contributes towards protecting and enhancing the natural, build and historic environment.

Policy T2 Improving Accessibility – States that development should be easily accessible, highlighting the importance of creating safe and convenient access by alternative means of travel. The promoting of sustainable modes of transport such as public transport, cycling and walking are highlighted, prioritising these modes to travel to reduce private motor car use.

The council sets out guidance which aims to facilitate this goal through the use of Travel Plans and Transport Assessments stating that they should identify:

- Measures to secure modal shift and sustainable travel/behavioural change initiatives;
- Developers should ensure access between communities and jobs, shops, schools and colleges;
- The site will safely and conveniently connect to public transport routes, and contribute to creating a multifunctional and integrated green infrastructure network;
- The accessibility needs of more vulnerable people have been taken into account;

- All other sustainable transport concerns will be addressed.

Furthermore, **Policy T1 – Delivering Sustainable Transport** identifies the use of electric charging points to be promoted through new development.

2.3.2 Consideration of the Application Site against Policy Background

In general, the relevant transport policies set out above follow similar themes and promote common aims. These are to provide sustainable development to encourage non-car modes of transport, to ensure the highway impact of new developments is acceptable or mitigated against, and to promote good site design with appropriate parking levels.

The above analysis of relevant national and local transport policies confirms that the proposed development is compliant with relevant transport planning policies and can specifically help contribute to economic growth and access to services whilst positively addressing the traffic impact of the development.

3 Existing Conditions

3.1 General

The application site relates to an area of land to the west of the A664 Kingsway, just under 2km east of Rochdale Town Centre. The site currently comprises of a used car sales unit within a former, historic PFS building.

The site is bounded by the A664 Kingsway to the east, with residential dwellings surrounding the site to the north, south, and west. The wider area surrounding the site largely comprises residential dwellings to the north, south and west, with the Kingsway Retail Park to the east.

Access to the site is taken from the A664 Kingsway via a priority-controlled junction to the southern edge of the site. It is noted that as a historic PFS site, the previous access arrangements involved a separated 'left-in/left-out' arrangement.

3.2 Surrounding Highway Network

3.2.1 A664 Kingsway

The A664 Kingsway is formed of a single carriageway which runs in a north-east/south-west direction along the eastern aspect of the site. This section of the A664 Kingsway forms part of the Transport for Greater Manchester (TfGM) key route network.

To the north of the site is a signalised crossroad junction offering access to Kingsway Retail Park via Wallhead Road, before continuing north to another signalised crossroad junction with the A640 Rochdale Road. To the south of the site, the road routes to a signalised crossroad junction with Sir Isaac Newton Way and Moss Bridge Road.

Within the vicinity of the site, the north-bound carriageway flares to provide a three-lane approach to the signalised junction with Wallhead Road and Merinall Close, supported by a PUFFIN crossing point across the A664.

Within the vicinity of the site, the A664 has an approximate width of 12m, subject to a 30mph speed limit and supported by streetlighting. The road also benefits from the provision of pedestrian footways on both sides of the carriageway.

3.3 Road Safety

Accident statistics have been obtained for the local highway network in the vicinity of the application site for the latest available five full years of data, covering 2020 – 2024 inclusive, from the Department for Transport (DfT).

In 2024 an incident of 'slight' severity was reported at the signalised crossroad junction between A664 / Wallhead Road / Merinall Close, involving two vehicles.

On review of the data and given the nature of the local highway network and associated traffic volumes, it is considered that the existing accident record does not demonstrate any pre-existing patterns or trends of incidents that could be affected by the development proposals.

3.4 Baseline Traffic Data

A classified traffic survey was undertaken of the A664 Kingsway / Wallhead Road / Merinall Close signalised crossroad junction, on Thursday 5th February 2026, between the hours of 07:00 – 09:00 and 16:00 – 18:00 and Saturday 7th February 2026, between the hours of 11:00 – 14:00.

Analysis of the data identified the following peak hour periods and associated traffic flows, in PCUs:

- Weekday AM Peak: 07:30 – 08:30 (1,714 PCUs);
- Weekday PM Peak: 16:00 – 17:00 (2,086 PCUs);
- Saturday Peak: 12:15 – 13:15 (2,390 PCUs).

The full survey data is provided at **Appendix 1**.

4 Proposed Development

4.1 General

The planning application relates to the installation of five jet washing bays, a vacuum bay, and associated parking provision on land currently occupied by an operational used car sales unit.

As part of the proposals, the existing former PFS canopy, and existing used car sales unit on the site will be demolished. The existing access and egress arrangements serving the site will undergo minor alterations to reinstate the previously operational 'left-in/left-out' arrangement.

Access to the site will be provided off the A664 Kingsway, along the eastern boundary of the site.

The proposed site layout plan can be found included at **Appendix 2**.

4.2 Proposed Site Access and Internal Arrangements

It is proposed that vehicular access and egress of the development site will be provided by the existing junctions, off the A664 Kingsway, along the eastern aspect of the site.

It is proposed that the valet/vacuum bay and parking area will be located to the south of the site, with the jet washing bays located to the centre of the site. An internal access road will loop around the western edge of the site, allowing vehicles to bypass the jet washing bays to egress the site.

It is noted that the site will operate a clockwise one-way system, with vehicles accessing the site to the south-east and egressing the site to the north-east. The existing pedestrian facilities along the A664, to the eastern aspect of the site will be retained as existing.

'Left-out only' road markings will be painted at the egress with 'no-entry' signs installed at both the access and egress to regulate the direction of traffic flow at the site. It is noted that these markings and signs will be contained within the site, and not in the public highway.

A swept path analysis has been undertaken of the site access, egress and internal arrangements for a panel van as the largest anticipated vehicle accessing the jet wash facilities, as shown at **Appendix 3**.

4.3 Parking Provision

The development proposals will be supported by five parking bays, with one mobility impaired accessible bay. Each of the jet washing bays will be supported by two waiting bays, therefore, a total of 10 waiting bays will be provided at the site, in addition to the parking and valet bays.

The parking accumulation assessment conducted for the site and displayed in **Chapter 6** of this report shows that the maximum accumulation forecast for the site is seven vehicles. In a 'worst-case' scenario, if all seven of these vehicles arrived at the same time, there would be a large provision of operational spaces remaining to accommodate the two waiting vehicles.

The proposals also incorporate cycle parking provision in the form of 'Sheffield' cycle stands, in order to encourage access to the site by bike.

5 Access by Non-Car Modes

5.1 General

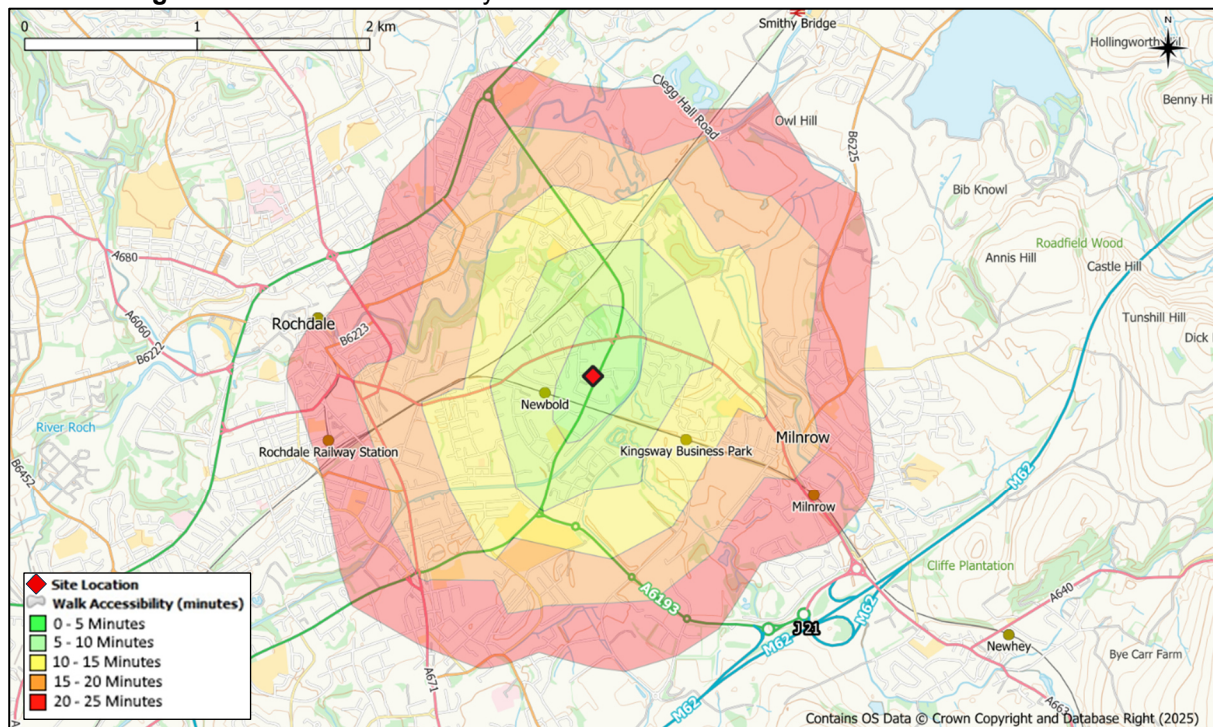
Notwithstanding the primary function of the proposed development, as a car wash facility, the opportunities for accessing the site by sustainable modes are discussed in more detail below. While not likely to be used by customers, employees of the site may benefit from access from non-car modes.

5.2 Pedestrian Access

Relevant guidance provided in Manual for Streets (MfS) states that walking offers the greatest potential to replace short car trips, particularly those under 2km.

A walk accessibility plan is provided at **Figure 5.1**, highlighting the accessible walking area within approximately 2km of the site, equivalent to around a 25-minute walk.

Figure 5.1 – Walk Accessibility Plan



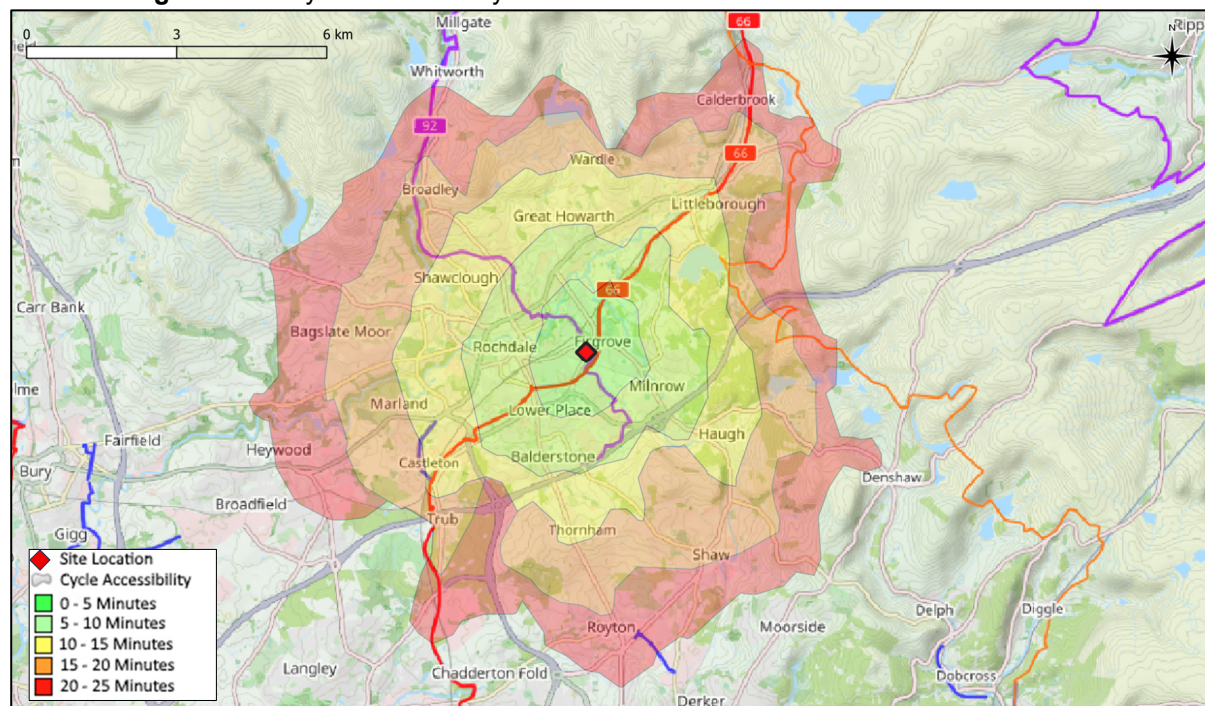
This plan indicates that the residential areas around the site such as Firgrove and Belfield are accessible within a 10-minute walking journey. To the west of the site, areas of Rochdale Town Centre are accessible within a 25-minute walking journey, including Rochdale Railway Station.

Pedestrian access to the site is facilitated by the existing infrastructure within the vicinity of the site, including the existing footways and controlled pedestrian crossings along the A664 and at the adjacent signalised junction.

5.3 Cycle Access

It is widely recognised that cycling has the potential to substitute shorter car journeys for work and leisure purposes. The areas reachable within around a 25-minute cycle journey, are identified at **Figure 5.2**:

Figure 5.2 – Cycle Accessibility Plan



Source: OpenStreetMap (2026)

The above catchment shows that the entirety of Rochdale is accessible within a 15-minute cycling journey of the site, with further surrounding residential areas also reachable within 25-minutes.

National Cycle Network (NCN) Route 66 runs within the cycling catchment of the site. Route 66 is accessible within a 5-minute cycle from the site, and runs from Kingston Upon Hull to Manchester, locally connecting to Littleborough to the north, and Middleton to the south of the site.

5.4 Public Transport Access

5.4.1 Bus

The nearest bus stops are located along the A664 Kingsway, approximately 80m to the south-west of the site, equivalent to around a one-minute walking journey.

The services are summarised in the **Table 5.1**:

Table 5:1 – Bus Service Summary

Service	Route Description	Core Weekday Frequency
434	Rochdale – Middleton	Hourly

Source: Traveline, 2026

It is noted that there are further stops on Milnrow Road, around 240m to the north and accessible via a five-minute walk. These stops give access to the 451, 455, and 435 services at more frequent intervals.

5.4.2 Light Rail/Rail

Newbold Tram Station is the closest tram station to the site, located approximately 400m to the south-west and accessible in a five-minute walk. It sits on the Pink Line and offers services every 12-minutes in both directions between Rochdale and East Didsbury via Oldham.

Rochdale Railway Station is the closest station to the site, located approximately 1.5km to the south-west the station is accessible via a 28-minute walking or a seven-minute cycling journey or via bus.

Rochdale Railway Station sits on the Calder Valley Line, with services operated by Northern. Hourly services depart the station to Chester, Wigan, and Blackburn. Two services depart the station every 30-minutes towards Leeds via Bradford, and Blackburn via Manchester Victoria.

5.5 Accessibility Summary

Overall, it can be summarised that the location of the site offers a genuine choice of transport options other than private car, particularly for staff.

6 Development Trip Generation

6.1 General

This chapter provides an estimation of the likely levels of trip generation resulting from the proposed development on the adjacent highway network.

It is noted that the below assessment makes no allowance for the existing use of the site as a car sales unit.

6.2 Trip Generation

6.2.1 Proposed Jet Wash Development

The TRICS database has been used to derive the anticipated trip generation associated with the current development proposals. The selection criteria for the comparative sites are listed below:

- Land Use – ‘Vehicle Services, sub-category – ‘Car Wash’;
- London and Ireland sites excluded;
- Weekday surveys only;
- Town Centre, Edge of Town Centre and Free-Standing sites removed;
- Hand/jet car wash sites only; and
- Selection by number of filling bays.

It is noted that the TRICS database does not include a sufficient number of comparable hand car wash sites for a Saturday scenario. Given the location of the site and the retail uses within the surrounding area, the busiest weekday hour at the site has been used to assess a Saturday scenario on the local highway network.

A summary of trip rates is shown below in **Table 3.1**, with the full TRICS outputs included at **Appendix 4**.

Table 3.1: Car Wash Trip Rates (per bay)

Time Range	Arrivals	Departures	Total
07:00-08:00	0.167	0.033	0.200
08:00-09:00	0.733	0.500	1.233
09:00-10:00	2.000	1.700	3.700
10:00-11:00	2.667	2.467	5.134
11:00-12:00	2.433	2.533	4.966
12:00-13:00	3.133	2.933	6.066
13:00-14:00	2.467	2.667	5.134
14:00-15:00	3.133	3.400	6.533
15:00-16:00	2.267	2.067	4.334
16:00-17:00	2.467	2.333	4.800
17:00-18:00	1.100	1.600	2.700
18:00-19:00	0.467	0.700	1.167
19:00-20:00	0.111	0.444	0.555
Daily Trip Rates	23.145	23.377	46.522

The above trip rates have been applied to the proposed six jet wash bays (to allow for the five jet washing bays and a robust assessment of the vacuum bay), to provide the anticipated vehicle movements and parking accumulation as shown in **Table 3.2:**

Table 3.2: Car Wash Trip Generation (6 bays)

Time Range	Arrivals	Departures	Total	Accumulation
07:00-08:00	1	0	1	1
08:00-09:00	4	3	7	2
09:00-10:00	12	10	22	4
10:00-11:00	16	15	31	5
11:00-12:00	15	15	30	5
12:00-13:00	19	18	36	6
13:00-14:00	15	16	31	5
14:00-15:00	19	20	39	4
15:00-16:00	14	12	26	6
16:00-17:00	15	14	29	7
17:00-18:00	7	10	16	4
18:00-19:00	3	4	7	3
19:00-20:00	1	3	3	1
Daily Trip Rates	139	140	279	

The table shows that the proposed development has the potential to generate around seven and 16 two-way trips during the traditional highway AM and PM peak hour periods, respectively. It is again noted that the TRICS database does not currently include a sufficient number of comparable number of hand car wash sites for a Saturday scenario, therefore, the busiest peak hour of the site (12:00 -13:00) of the above TRICS assessment for a weekday has been used in absence of any data.

The table shows that the proposals have the potential to generate around 36 two-way trips during the busiest peak hour of the site. This equates to less than one vehicle arrival and one vehicle departure during the busiest peak hour at the site.

The assessment also demonstrates that the proposed car wash would result in a peak parking accumulation of seven vehicles which would easily be accommodated on the site, as a total of 10 waiting bays will be provided alongside five vehicle parking spaces.

6.3 Trip Types & Distribution

Given the nature and the location of the proposed development, it is noted that some of the above trip generation would be drawn from vehicles already routing along the local highway network. Therefore, the actual number of 'new' or 'primary' vehicle trips would be low and there would be a significant number of vehicle trips linked with the adjacent retail park.

6.4 Summary

Overall, the proposed development would result in a peak of 36 two-way vehicles trips during the busies peak hour at the site, equating to less than one arrival and one departure every minute during the busiest peak hour. It is again noted that assessment makes no allowance for the existing lawful use of the site as a car sales unit

Therefore, it is considered that the proposed development would not have a material impact on the operation of the local highway network.

However, given the proximity of the signalised junction, the development proposals have been carried forward as part of an operational assessment regarding the adjacent A664 Kingsway / Wallhead Road / Merinall Close signalised junction, to understand any potential impact of the proposals on the local highway network.

7 Assessment Methodology

7.1 Study Area

The study area has been identified as the proposed site access and egress junctions and the A664 Kingsway / Wallhead Road / Merinall Close signalised junction.

7.2 Assessment Scenarios

Capacity assessments have been undertaken for the following scenarios to ensure that the surrounding local highway network can operate with the proposed development in place in 2026 and in 2031 to consider an opening year and a +5 years post-application scenario:

- 2026 base;
- 2026 base + proposed development;
- 2031 base; and
- 2031 base + proposed development.

All assessment scenarios consider the weekday AM, PM and Saturday peak hour periods.

To account for background traffic growth, the observed traffic flows are typically factored using the DfT's TEMPRO 8.1 computer program using the National Trip End Model (NTEM) dataset 8.1 and the National Travel Model (NTM).

For the interrogation of the TEMPRO database the growth rates for 'car drivers only' were selected with the trip end type being defined as 'origin/destination', for the Middle Layer Super output Area (MSOA) Rochdale 012.

An NTM growth calculation for 'All' roads was weighted to each TEMPRO growth rate using the NTM dataset.

The growth factors are summarised in **Table 7.1**:

Table 7.1 – TEMPRO Growth Factors

	TEMPRO Growth Factors		
	AM	PM	Sat
2026 – 2031	1.0673	1.0669	1.0669

For the purposes of the assessment, the identified junction peak-hour traffic flows have been combined with the TRICS peak-hour trip generation figures to provide each 'with development' assessment scenario.

7.3 Development Distribution

As stated, above developments of this nature are likely to generate relatively low levels of new or primary trips, where majority of trips would be drawn from traffic making use of the existing retail/commercial units within the vicinity of the site or from traffic already routing along the local highway network.

However, to provide a robust assessment, the proposals have been assessed as 100% 'New', with development trip distribution based on the proportions recorded at the A664 Kingsway / Wallhead Road / Merinall Close signalised junction, where trips have been assigned to return to their origin, as illustrated in the traffic figures at **Appendix 5**.

8 Anticipated Highway Impacts

This chapter describes the impact of the trips generated by the proposed development on the operation of the surrounding highway network.

8.1 Assessment Methodology

The LINSIG software package has been used to assess the available capacity at the traffic signal-controlled junctions. Within LINSIG, junction performance is commonly expressed in terms of **Practical Reserve Capacity (PRC)**, which indicates the proportion of additional traffic demand that can be accommodated before an approach reaches practical operating limits.

A PRC value approaching **0%** signifies that an approach is operating close to its practical capacity, with minimal spare green time available to absorb fluctuations in traffic flow. Negative PRC values indicate that the modelled demand exceeds the practical capacity of the approach, suggesting that lanes are likely to perform less reliably and may experience increased queuing. LINSIG also provides **Mean Maximum Queue (MMQ)** estimates, expressed in PCUs, for each signalised approach.

The following section summarises the operational performance results for the assessed scenarios, with detailed model outputs provided in **Appendix 6**.

8.2 Signalised Crossroad and Site Access Junction

A combined LINSIG model has been set up for the A664 Kingsway / Wallhead Road / Merinall Close signalised junction and the site access/egress junctions. The five stage LINSIG model call every stage, every cycle. The LINSIG model has been developed utilising the TfGM Signal Junction Layout and Staging Diagram.

It is noted that although the proposed development includes a left turn only marking at the egress junction, it is not physically restricted and therefore the LINSIG model includes right turn out movements, to provide a robust assessment of the local highway network as part of a 'worst case' scenario.

The results all scenarios are summarised in **Table 8.1**, with the full results, including for all scenarios, included at **Appendix 6**.

Table 8.1 – A664 Kingsway / Wallhead Road / Merinall Close and Site Access Junction

Scenario	PRC (%)
2026 Base AM	110.8
2026 Base PM	55.5
2026 Base Sat	30.6
2026 With Development AM	110.3
2026 With Development PM	55.4
2026 With Development Sat	29.8
2031 Base AM	97.8
2031 Base PM	45.8
2031 Base Sat	22.3
2031 With Development AM	97.4
2031 With Development PM	45.8
2031 With Development Sat	21.6

The results of the modelling shows that the addition of traffic associated with the development would have a negligible impact on the operation of the junction, as demonstrated by the uplift between the base and with development scenarios.

9 Summary and Conclusions

Dynamic Transport Planning is instructed by Adil Group to report on the highways and transportation considerations related with the proposed development of a new car wash facility on land associated with a used car sales unit, off A664 Kingsway, Rochdale.

The proposed development at the site comprises the installation of five jet washing bays, a vacuum bay, and associated parking provision.

A review of the highway accident data for the site access points and adjacent highway has been reviewed and identified no pre-existing patterns or trends of incidents that could be impacted by the development proposals.

A swept-path assessment has been undertaken which demonstrates that the largest anticipated service vehicle can be accommodated within the site.

A review of the site's accessibility has identified that the site offers a genuine choice of transport options other than private car, particularly for staff, which would work to encourage access by sustainable modes for staff.

The TRICS database has been used to assess the trip generating potential of the proposed development, with a peak of 36 two-way trips during the busiest hour of the site. It is noted that the site would draw upon passing vehicle traffic and linked adjacent uses resulting in low numbers of 'new' vehicle trips.

Operational assessments of the site access and local highway network demonstrates that the A664 Kingsway / Wallhead Road / Merinall Close signalised crossroad junction indicates that the impact of development related traffic would be negligible.

Overall, on the basis of the above assessment it is concluded that there are no outstanding reasons why the proposed development should not be granted planning permission on highways grounds.

Appendix 1

Survey Data

Job No.

: GBNth14399

Client

: Dynamic Transport Planning

Suburb

: Rochdale Kingsway Retail Park

Location

: 1. Rochdale Bypass & Merinall CI & Wallhead Rd

Day/Date

: Saturday,7 February, 2026

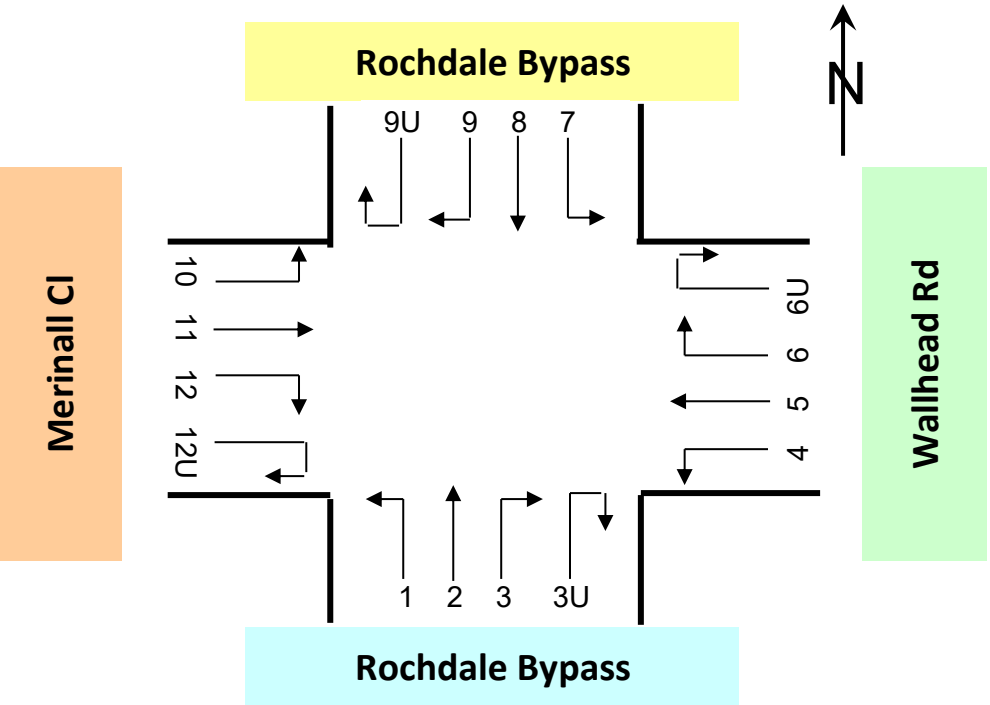
Weather

: Fine

Description

: Classified Intersection Count

: 15 mins Data

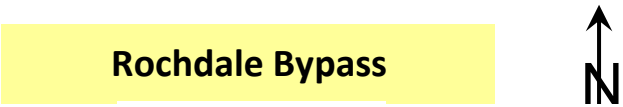


	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7
Classifications	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV

Approach		Rochdale Bypass																									
Direction		Direction 1 (Left Turn)									Direction 2 (Through)									Direction 3 (Right Turn)							
Time Period		Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU
11:00 to 11:15		0	0	0	0	0	0	0	0	0	0	0	127	7	3	0	0	139	137	0	0	43	1	0	0	0	44
11:15 to 11:30		0	0	1	0	0	0	0	1	1	0	0	129	14	0	1	0	145	144	0	0	37	0	0	0	0	37
11:30 to 11:45		0	0	0	0	0	0	0	0	0	0	0	145	14	1	0	0	161	160	0	0	41	3	0	0	0	44
11:45 to 12:00		0	0	0	0	0	0	0	0	0	0	1	135	12	1	0	0	149	149	0	0	44	5	0	0	0	49
Hourly Total		0	0	1	0	0	0	0	1	1	0	1	536	47	5	1	0	594	590	0	0	165	9	0	0	0	174
12:00 to 12:15		0	0	0	0	0	0	0	0	0	0	0	156	14	1	0	1	174	172	0	0	65	1	1	0	0	68
12:15 to 12:30		0	0	1	0	0	0	0	1	1	0	0	169	14	1	0	0	185	184	0	0	46	2	0	0	0	48
12:30 to 12:45		0	0	0	0	0	0	0	0	0	0	0	154	12	2	0	0	169	168	0	0	43	3	0	1	0	48
12:45 to 13:00		0	0	0	0	0	0	0	0	0	0	0	152	8	1	1	0	164	162	0	0	55	1	0	0	0	56
Hourly Total		0	0	1	0	0	0	0	1	1	0	0	631	48	5	1	1	692	686	0	0	209	7	1	1	0	220
13:00 to 13:15		0	0	0	0	0	0	0	0	0	0	0	164	13	0	0	1	179	178	0	0	54	1	0	0	0	55

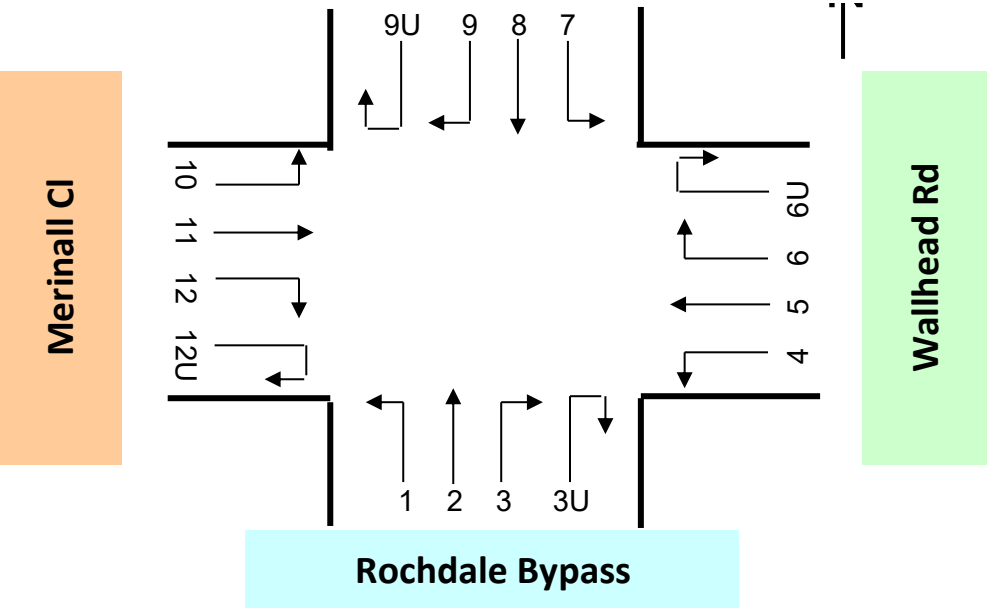
13:15 to 13:30	0	0	1	0	0	0	0	1	1	0	0	148	20	1	0	0	170	169	0	0	42	2	0	0	0	44
13:30 to 13:45	0	0	0	0	0	0	0	0	0	0	0	152	13	2	0	0	168	167	0	0	55	5	0	0	0	60
13:45 to 14:00	0	0	0	0	0	0	0	0	0	0	0	150	10	1	0	0	162	161	0	0	40	4	0	0	0	44
Hourly Total	0	0	1	0	0	0	0	1	1	0	0	614	56	4	0	1	679	675	0	0	191	12	0	0	0	203
Totals	0	0	3	0	0	0	0	3	3	0	1	1,781	151	14	2	2	1,965	1,951	0	0	565	28	1	1	0	597

Approach	Rochdale Bypass																									
Direction	Direction 7 (Left Turn)									Direction 8 (Through)									Direction 9 (Right Turn)							
Time Period	Cyclists	M/C	Cars/Tax	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Tax	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Tax	LGV	OGV1	OGV2	PSV	PCU
11:00 to 11:15	0	0	83	3	0	0	0	86	86	0	0	132	11	1	0	1	147	145	0	0	0	0	0	0	0	0
11:15 to 11:30	0	0	68	1	0	0	0	69	69	0	1	130	13	0	1	0	146	145	0	0	0	0	0	0	0	0
11:30 to 11:45	0	0	76	4	0	0	0	80	80	0	0	148	11	0	0	0	159	159	0	0	0	0	0	0	0	0
11:45 to 12:00	0	0	79	5	0	0	0	84	84	0	0	157	9	1	0	0	168	167	0	0	0	0	0	0	0	0
Hourly Total	0	0	306	13	0	0	0	319	319	0	1	567	44	2	1	1	620	616	0	0	0	0	0	0	0	0
12:00 to 12:15	0	0	86	0	0	0	0	86	86	0	0	117	6	0	0	1	125	124	0	0	0	0	0	0	0	0
12:15 to 12:30	0	0	83	5	1	0	0	90	89	0	0	143	12	0	0	0	155	155	0	0	3	0	0	0	0	3
12:30 to 12:45	0	0	74	3	1	0	0	79	78	0	0	124	9	0	0	0	133	133	0	0	0	0	0	0	0	0
12:45 to 13:00	0	0	87	5	0	0	0	92	92	0	0	136	14	0	0	0	150	150	0	0	1	0	0	0	0	1
Hourly Total	0	0	330	13	2	0	0	347	345	0	0	520	41	0	0	1	563	562	0	0	4	0	0	0	0	4
13:00 to 13:15	0	0	77	3	0	0	0	80	80	0	0	129	11	0	0	1	142	141	0	0	0	0	0	0	0	0
13:15 to 13:30	0	0	92	4	0	0	0	96	96	0	0	128	6	0	0	0	134	134	0	0	0	0	0	0	0	0
13:30 to 13:45	0	0	73	1	0	0	0	74	74	0	1	119	12	0	0	0	131	132	0	0	1	0	0	0	0	1
13:45 to 14:00	0	0	69	1	0	0	0	70	70	0	0	110	7	0	0	0	117	117	0	0	0	1	0	0	0	1
Hourly Total	0	0	311	9	0	0	0	320	320	0	1	486	36	0	0	1	524	524	0	0	1	1	0	0	0	2
Totals	0	0	947	35	2	0	0	986	984	0	2	1,573	121	2	1	3	1,707	1,702	0	0	5	1	0	0	0	6



Job No. : GBNth14399
Client : Dynamic Transport Planning
Suburb : Rochdale Kingsway Retail Park
Location : 1. Rochdale Bypass & Merinall CI & Wallhead Rd

Day/Date : Saturday,7 February, 2026
Weather : Fine
Description : Classified Intersection Count
: Hourly Summary



Approach		Rochdale Bypass																									
Direction		Direction 1 (Left Turn)									Direction 2 (Through)									Direction 3 (Right Turn)							
Time Period		Cyclists	M/C	Cars/Tax	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Tax	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Tax	LGV	OGV1	OGV2	PSV	PCU
11:00 to 12:00		0	0	1	0	0	0	0	1	1	0	1	536	47	5	1	0	594	590	0	0	165	9	0	0	0	174
11:15 to 12:15		0	0	1	0	0	0	0	1	1	0	1	565	54	3	1	1	629	625	0	0	187	9	1	0	0	198
11:30 to 12:30		0	0	1	0	0	0	0	1	1	0	1	605	54	4	0	1	669	665	0	0	196	11	1	0	0	209
11:45 to 12:45		0	0	1	0	0	0	0	1	1	0	1	614	52	5	0	1	677	673	0	0	198	11	1	1	0	213
12:00 to 13:00		0	0	1	0	0	0	0	1	1	0	0	631	48	5	1	1	692	686	0	0	209	7	1	1	0	220
12:15 to 13:15		0	0	1	0	0	0	0	1	1	0	0	639	47	4	1	1	697	692	0	0	198	7	0	1	0	207
12:30 to 13:30		0	0	1	0	0	0	0	1	1	0	0	618	53	4	1	1	682	677	0	0	194	7	0	1	0	203
12:45 to 13:45		0	0	1	0	0	0	0	1	1	0	0	616	54	4	1	1	681	676	0	0	206	9	0	0	0	215
13:00 to 14:00		0	0	1	0	0	0	0	1	1	0	0	614	56	4	0	1	679	675	0	0	191	12	0	0	0	203
Totals		0	0	3	0	0	0	0	3	3	0	1	1,781	151	14	2	2	1,965	1,951	0	0	565	28	1	1	0	597

Approach		Rochdale Bypass																									
Direction		Direction 7 (Left Turn)									Direction 8 (Through)									Direction 9 (Right Turn)							
Time Period		Cyclists	M/C	Cars/Tax	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Tax	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Tax	LGV	OGV1	OGV2	PSV	PCU

11:00 to 12:00	0	0	306	13	0	0	0	319	319	0	1	567	44	2	1	1	620	616	0	0	0	0	0	0	0	0
11:15 to 12:15	0	0	309	10	0	0	0	319	319	0	1	552	39	1	1	1	598	595	0	0	0	0	0	0	0	0
11:30 to 12:30	0	0	324	14	1	0	0	340	339	0	0	565	38	1	0	1	607	605	0	0	3	0	0	0	0	3
11:45 to 12:45	0	0	322	13	2	0	0	339	337	0	0	541	36	1	0	1	581	579	0	0	3	0	0	0	0	3
12:00 to 13:00	0	0	330	13	2	0	0	347	345	0	0	520	41	0	0	1	563	562	0	0	4	0	0	0	0	4
12:15 to 13:15	0	0	321	16	2	0	0	341	339	0	0	532	46	0	0	1	580	579	0	0	4	0	0	0	0	4
12:30 to 13:30	0	0	330	15	1	0	0	347	346	0	0	517	40	0	0	1	559	558	0	0	1	0	0	0	0	1
12:45 to 13:45	0	0	329	13	0	0	0	342	342	0	1	512	43	0	0	1	557	557	0	0	2	0	0	0	0	2
13:00 to 14:00	0	0	311	9	0	0	0	320	320	0	1	486	36	0	0	1	524	524	0	0	1	1	0	0	0	2
Totals	0	0	947	35	2	0	0	986	984	0	2	1,573	121	2	1	3	1,707	1,702	0	0	5	1	0	0	0	6

44	0	0	0	0	0	0	0	0	0	0	0	42	1	0	0	0	43	43	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	57	2	0	0	0	59	59	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	48	0	0	0	0	48	48	0	0	0	0	0	0	0	0	0
203	0	0	0	0	0	0	0	0	0	0	0	200	6	1	0	0	208	207	0	0	0	0	0	0	0	0	0
595	0	0	0	0	0	0	0	0	0	3	0	581	28	2	0	0	614	614	0	0	1	0	0	0	0	1	1

										Merir																	
	Direction 9U (U Turn)									Direction 10 (Left Turn)									Direction 11 (Through)								
Total	Cyclists	M/C	Cars/Tax	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Tax	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Tax	LGV	OGV1	OGV2	PSV	PCU	Total
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
4	0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
6	0	0	1	0	0	0	0	1	1	0	0	5	0	0	0	0	5	5	0	0	1	0	0	0	0	1	1



										Wallhead																	
	Direction 3U (U Turn)									Direction 4 (Left Turn)									Direction 5 (Through)								
Total	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total
174	0	0	0	0	0	0	0	0	0	0	0	185	12	0	0	0	197	197	0	0	0	0	0	0	0	0	0
197	0	0	0	0	0	0	0	0	0	0	0	173	12	0	0	0	185	185	0	0	0	0	0	0	0	0	0
208	0	0	0	0	0	0	0	0	0	0	0	190	14	0	0	0	204	204	0	0	0	0	0	0	0	0	0
211	0	0	0	0	0	0	0	0	0	0	0	199	13	1	0	0	214	213	0	0	1	0	0	0	0	1	1
218	0	0	0	0	0	0	0	0	0	3	0	196	10	1	0	0	209	210	0	0	1	0	0	0	0	1	1
206	0	0	0	0	0	0	0	0	0	3	0	213	9	2	0	0	227	227	0	0	1	0	0	0	0	1	1
202	0	0	0	0	0	0	0	0	0	3	0	191	7	2	0	0	203	203	0	0	1	0	0	0	0	1	1
215	0	0	0	0	0	0	0	0	0	3	0	194	8	1	0	0	205	206	0	0	0	0	0	0	0	0	0
203	0	0	0	0	0	0	0	0	0	0	0	200	6	1	0	0	208	207	0	0	0	0	0	0	0	0	0
595	0	0	0	0	0	0	0	0	0	3	0	581	28	2	0	0	614	614	0	0	1	0	0	0	0	1	1

										Meridale																									
	Direction 9U (U Turn)									Direction 10 (Left Turn)									Direction 11 (Through)																
Total	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total								

0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
3	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
3	0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1
4	0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1
4	0	0	1	0	0	0	0	1	1	0	0	3	0	0	0	0	3	3	0	0	1	0	0	0	0	1
1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0
6	0	0	1	0	0	0	0	1	1	0	0	5	0	0	0	0	5	5	0	0	1	0	0	0	0	1

Head Rd																	
Direction 6 (Right Turn)									Direction 6U (U Turn)								
Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total
0	0	256	7	0	1	0	265	264	0	0	0	0	0	0	0	0	0
0	0	290	10	0	1	0	302	301	0	0	0	0	0	0	0	0	0
0	0	304	13	0	1	0	319	318	0	0	0	0	0	0	0	0	0
0	0	311	19	0	0	0	330	330	0	0	0	0	0	0	0	0	0
0	0	319	23	1	0	0	344	343	0	0	0	0	0	0	0	0	0
0	0	299	23	1	0	0	324	323	0	0	0	0	0	0	0	0	0
0	0	307	25	1	0	0	334	333	0	0	0	0	0	0	0	0	0
0	0	313	24	1	0	0	339	338	0	0	0	0	0	0	0	0	0
0	0	318	18	0	0	0	336	336	0	0	0	0	0	0	0	0	0
0	0	893	48	1	1	0	945	943	0	0	0	0	0	0	0	0	0

Small CI																	
Direction 12 (Right Turn)									Direction 12U (U Turn)								
Cyclists	M/C	Cars/Taxis	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Taxis	LGV	OGV1	OGV2	PSV	PCU	Total

Job No.

: GBNth14399

Client

: Dynamic Transport Planning

Suburb

: Rochdale Kingsway Retail Park

Location

: 1. Rochdale Bypass & Merinall CI & Wallhead Rd

Day/Date

: Thursday, 5 February, 2026

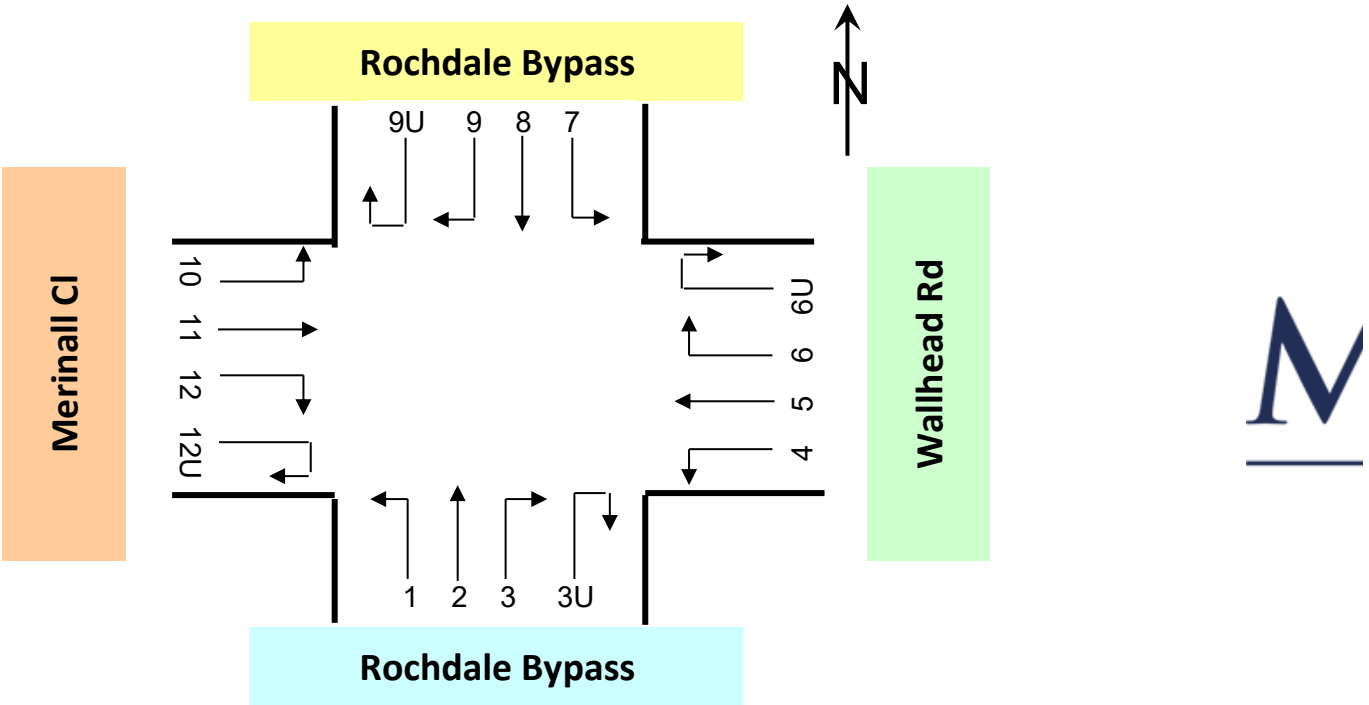
Weather

: Fine

Description

: Classified Intersection Count

: 15 mins Data



	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7
Classifications	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV

Approach			Rochdale Bypass																									
Direction			Direction 1 (Left Turn)							Direction 2 (Through)									Direction 3 (Right Turn)									
Time Period			Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU
07:00 to 07:15			0	0	0	0	0	0	0	0	0	0	1	63	5	2	0	0	71	71	0	0	8	2	0	0	0	10
07:15 to 07:30			0	0	0	0	0	0	0	0	0	0	0	69	14	3	4	0	97	90	0	0	12	1	0	0	0	13
07:30 to 07:45			0	0	0	0	0	0	0	0	0	0	1	89	11	1	3	0	109	105	0	0	11	0	0	0	0	11
07:45 to 08:00			0	0	0	0	0	0	0	0	0	0	0	133	14	10	1	0	164	158	0	0	21	0	0	0	0	21
Hourly Total			0	0	0	0	0	0	0	0	0	0	2	354	44	16	8	0	441	424	0	0	52	3	0	0	0	55
08:00 to 08:15			0	0	0	0	0	0	0	0	0	0	0	140	20	1	0	0	162	161	0	0	15	2	1	0	0	19
08:15 to 08:30			0	0	1	0	0	0	0	1	1	0	0	154	13	1	3	0	175	171	0	0	15	6	0	0	0	21
08:30 to 08:45			0	0	1	0	0	0	0	1	1	0	0	138	22	1	1	0	164	162	0	0	16	1	0	0	0	17
08:45 to 09:00			0	0	0	0	0	0	0	0	0	0	0	123	19	4	5	0	160	151	0	0	24	1	1	0	0	27
Hourly Total			0	0	2	0	0	0	0	2	2	0	0	555	74	7	9	0	661	645	0	0	70	10	2	0	0	84
AM Totals			0	0	2	0	0	0	0	2	2	0	2	909	118	23	17	0	1,102	1,069	0	0	122	13	2	0	0	139

16:00 to 16:15	0	0	0	0	0	0	0	0	0	0	1	167	18	2	0	0	188	188	0	0	36	6	1	0	0	44
16:15 to 16:30	0	0	1	0	0	0	0	1	1	0	1	167	19	3	1	0	193	191	0	0	36	3	1	0	0	41
16:30 to 16:45	0	0	0	0	0	0	0	0	0	0	1	164	27	1	2	0	198	195	0	0	34	2	1	0	0	38
16:45 to 17:00	0	0	1	0	0	0	0	1	1	1	0	189	24	4	0	0	219	218	0	0	30	0	0	0	0	30
Hourly Total	0	0	2	0	0	0	0	2	2	1	3	687	88	10	3	0	798	792	0	0	136	11	3	0	0	153
17:00 to 17:15	0	0	0	0	0	0	0	0	0	0	0	169	16	2	0	0	188	187	0	0	25	4	0	1	0	31
17:15 to 17:30	0	0	0	0	0	0	0	0	0	0	0	167	14	0	0	0	181	181	0	0	43	2	0	0	0	45
17:30 to 17:45	0	0	0	0	0	0	0	0	0	0	0	144	20	1	0	0	166	165	0	0	30	0	0	0	0	30
17:45 to 18:00	0	0	1	0	0	0	0	1	1	0	0	138	12	1	0	0	152	151	0	0	26	1	0	0	0	27
Hourly Total	0	0	1	0	0	0	0	1	1	0	0	618	62	4	0	0	687	684	0	0	124	7	0	1	0	133
PM Totals	0	0	3	0	0	0	0	3	3	1	3	1,305	150	14	3	0	1,485	1,476	0	0	260	18	3	1	0	286

Approach	Rochdale Bypass																									
Direction	Direction 7 (Left Turn)									Direction 8 (Through)									Direction 9 (Right Turn)							
Time Period	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU
07:00 to 07:15	0	0	13	6	1	1	0	23	21	0	0	142	11	3	0	1	160	157	0	0	0	0	0	0	0	0
07:15 to 07:30	0	0	21	5	0	0	0	26	26	0	0	144	13	1	1	0	161	159	0	0	0	0	0	0	0	0
07:30 to 07:45	0	0	26	3	0	0	0	29	29	0	0	182	8	0	1	0	192	191	0	0	0	0	0	0	0	0
07:45 to 08:00	0	0	22	4	1	0	0	28	27	0	0	174	15	4	1	1	199	195	0	0	1	0	0	0	0	1
Hourly Total	0	0	82	18	2	1	0	106	103	0	0	642	47	8	3	2	712	702	0	0	1	0	0	0	0	1
08:00 to 08:15	0	0	26	8	0	1	0	36	35	0	0	180	13	3	2	1	204	199	0	0	1	0	0	0	0	1
08:15 to 08:30	0	0	32	6	0	0	0	38	38	0	0	113	14	3	2	1	138	133	0	0	0	0	0	0	0	0
08:30 to 08:45	0	0	20	1	0	0	0	21	21	0	0	104	16	4	4	0	135	128	0	0	0	0	0	0	0	0
08:45 to 09:00	0	0	31	3	1	0	0	36	35	0	0	118	23	6	1	0	152	148	0	0	0	0	0	0	0	0
Hourly Total	0	0	109	18	1	1	0	131	129	0	0	515	66	16	9	2	629	608	0	0	1	0	0	0	0	1
AM Totals	0	0	191	36	3	2	0	237	232	0	0	1,157	113	24	12	4	1,341	1,310	0	0	2	0	0	0	0	2
16:00 to 16:15	0	0	52	4	0	0	0	56	56	1	0	127	15	2	1	3	154	149	0	0	1	0	0	0	0	1
16:15 to 16:30	0	0	46	3	0	0	0	49	49	0	0	126	12	1	0	0	140	139	0	0	2	0	0	0	0	2

16:30 to 16:45	0	0	34	4	0	0	0	0	38	38	0	0	134	15	1	3	0	157	153	0	0	2	0	0	0	0	2
16:45 to 17:00	0	0	35	6	0	0	0	0	41	41	0	0	122	9	2	0	1	136	134	0	0	1	0	0	0	0	1
Hourly Total	0	0	167	17	0	0	0	0	184	184	1	0	509	51	6	4	4	587	575	0	0	6	0	0	0	0	6
17:00 to 17:15	0	0	46	2	0	0	0	0	48	48	0	0	121	11	0	1	1	136	134	0	0	1	0	0	0	0	1
17:15 to 17:30	0	0	50	0	0	0	0	0	50	50	0	0	105	4	1	2	0	115	112	0	0	2	0	0	0	0	2
17:30 to 17:45	0	0	54	2	0	0	0	0	56	56	0	0	122	5	0	1	1	131	129	0	0	0	0	0	0	0	0
17:45 to 18:00	0	0	66	0	0	0	0	0	66	66	0	0	108	6	1	0	1	118	116	0	0	1	0	0	0	0	1
Hourly Total	0	0	216	4	0	0	0	0	220	220	0	0	456	26	2	4	3	500	491	0	0	4	0	0	0	0	4
PM Totals	0	0	383	21	0	0	0	0	404	404	1	0	965	77	8	8	7	1,087	1,066	0	0	10	0	0	0	0	10

Job No.

: GBNth14399

Client

: Dynamic Transport Planning

Suburb

: Rochdale Kingsway Retail Park

Location

: 1. Rochdale Bypass & Merinall CI & Wallhead Rd

Day/Date

: Thursday, 5 February, 2026

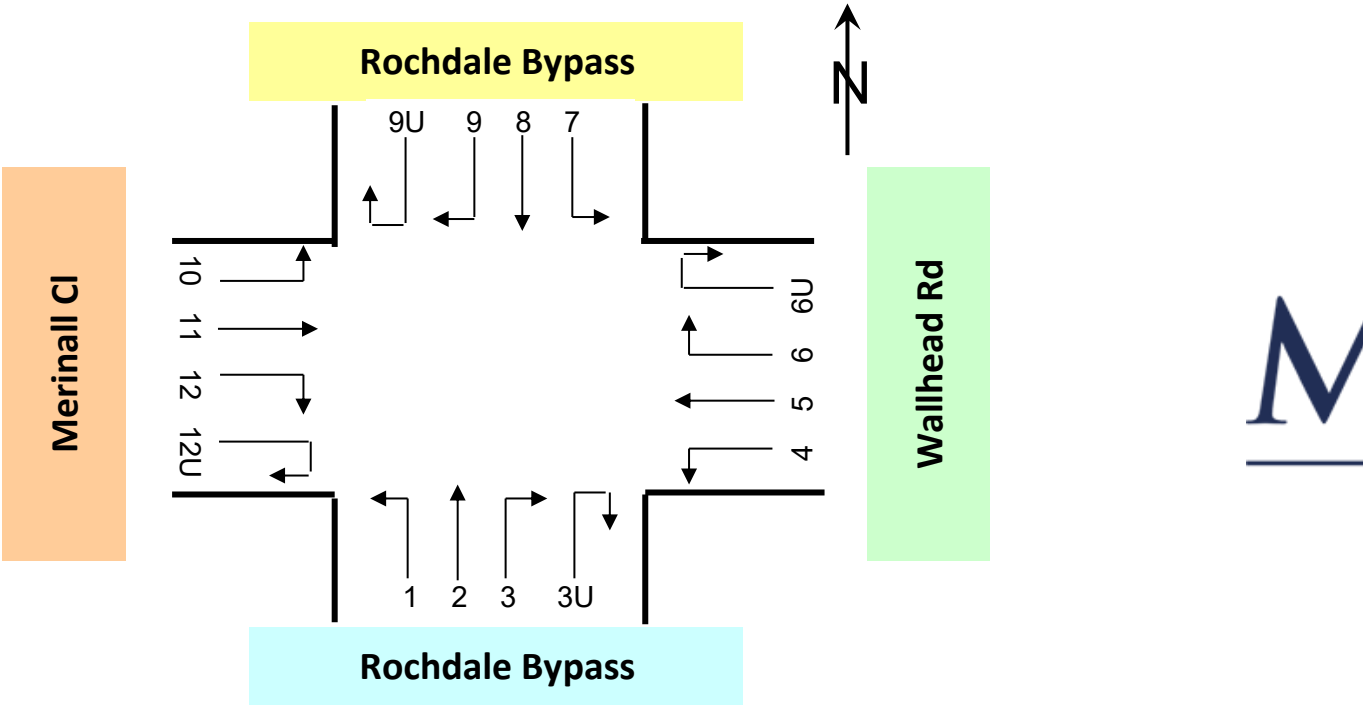
Weather

: Fine

Description

: Classified Intersection Count

: Hourly Summary



Approach			Rochdale Bypass																									
Direction			Direction 1 (Left Turn)								Direction 2 (Through)									Direction 3 (Right Turn)								
Time Period			Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU
07:00	to	08:00	0	0	0	0	0	0	0	0	0	0	2	354	44	16	8	0	441	424	0	0	52	3	0	0	0	55
07:15	to	08:15	0	0	0	0	0	0	0	0	0	0	1	431	59	15	8	0	532	514	0	0	59	3	1	0	0	64
07:30	to	08:30	0	0	1	0	0	0	0	1	1	0	1	516	58	13	7	0	610	595	0	0	62	8	1	0	0	72
07:45	to	08:45	0	0	2	0	0	0	0	2	2	0	0	565	69	13	5	0	665	652	0	0	67	9	1	0	0	78

08:00 to 09:00	0	0	2	0	0	0	0	2	2	0	0	555	74	7	9	0	661	645	0	0	70	10	2	0	0	84
AM Totals	0	0	2	0	0	0	0	2	2	0	2	909	118	23	17	0	1,102	1,069	0	0	122	13	2	0	0	139
16:00 to 17:00	0	0	2	0	0	0	0	2	2	1	3	687	88	10	3	0	798	792	0	0	136	11	3	0	0	153
16:15 to 17:15	0	0	2	0	0	0	0	2	2	1	2	689	86	10	3	0	798	791	0	0	125	9	2	1	0	140
16:30 to 17:30	0	0	1	0	0	0	0	1	1	1	1	689	81	7	2	0	786	781	0	0	132	8	1	1	0	144
16:45 to 17:45	0	0	1	0	0	0	0	1	1	1	0	669	74	7	0	0	754	751	0	0	128	6	0	1	0	136
17:00 to 18:00	0	0	1	0	0	0	0	1	1	0	0	618	62	4	0	0	687	684	0	0	124	7	0	1	0	133
PM Totals	0	0	3	0	0	0	0	3	3	1	3	1,305	150	14	3	0	1,485	1,476	0	0	260	18	3	1	0	286

Approach	Rochdale Bypass																										
Direction	Direction 7 (Left Turn)									Direction 8 (Through)									Direction 9 (Right Turn)								
Time Period	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	
07:00 to 08:00	0	0	82	18	2	1	0	106	103	0	0	642	47	8	3	2	712	702	0	0	1	0	0	0	0	1	
07:15 to 08:15	0	0	95	20	1	1	0	119	117	0	0	680	49	8	5	2	756	744	0	0	2	0	0	0	0	2	
07:30 to 08:30	0	0	106	21	1	1	0	131	129	0	0	649	50	10	6	3	733	718	0	0	2	0	0	0	0	2	
07:45 to 08:45	0	0	100	19	1	1	0	123	121	0	0	571	58	14	9	3	676	655	0	0	2	0	0	0	0	2	
08:00 to 09:00	0	0	109	18	1	1	0	131	129	0	0	515	66	16	9	2	629	608	0	0	1	0	0	0	0	1	
AM Totals	0	0	191	36	3	2	0	237	232	0	0	1,157	113	24	12	4	1,341	1,310	0	0	2	0	0	0	0	2	
16:00 to 17:00	0	0	167	17	0	0	0	184	184	1	0	509	51	6	4	4	587	575	0	0	6	0	0	0	0	6	
16:15 to 17:15	0	0	161	15	0	0	0	176	176	0	0	503	47	4	4	2	569	560	0	0	6	0	0	0	0	6	
16:30 to 17:30	0	0	165	12	0	0	0	177	177	0	0	482	39	4	6	2	544	533	0	0	6	0	0	0	0	6	
16:45 to 17:45	0	0	185	10	0	0	0	195	195	0	0	470	29	3	4	3	518	509	0	0	4	0	0	0	0	4	
17:00 to 18:00	0	0	216	4	0	0	0	220	220	0	0	456	26	2	4	3	500	491	0	0	4	0	0	0	0	4	
PM Totals	0	0	383	21	0	0	0	404	404	1	0	965	77	8	8	7	1,087	1,066	0	0	10	0	0	0	0	10	

43	0	0	0	0	0	0	0	0	0	0	0	29	2	1	0	0	33	32	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	36	1	0	0	0	37	37	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	40	3	0	0	0	43	43	0	0	1	0	0	0	1	1
30	0	0	0	0	0	0	0	0	0	1	0	28	1	0	0	0	29	30	0	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0	0	0	1	0	133	7	1	0	0	142	142	0	0	1	0	0	0	1	1
30	0	0	0	0	0	0	0	0	0	0	0	27	4	1	0	0	33	32	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	26	1	1	0	0	29	28	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	38	1	0	0	0	39	39	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	31	1	0	0	0	32	32	0	0	0	0	0	0	0	0
132	0	0	0	0	0	0	0	0	0	0	0	122	7	2	0	0	133	131	0	0	0	0	0	0	0	0
282	0	0	0	0	0	0	0	0	0	1	0	255	14	3	0	0	275	273	0	0	1	0	0	0	1	1

										Merir																	
	Direction 9U (U Turn)									Direction 10 (Left Turn)									Direction 11 (Through)								
Total	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1

82	0	0	0	0	0	0	0	0	0	1	0	49	10	2	0	0	62	62	0	0	0	0	0	0	0	0
137	0	0	0	0	0	0	0	0	0	1	2	104	16	4	0	0	127	127	0	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0	0	0	1	0	133	7	1	0	0	142	142	0	0	1	0	0	0	1	1
137	0	0	0	0	0	0	0	0	0	1	0	131	9	1	0	0	142	142	0	0	1	0	0	0	1	1
142	0	0	0	0	0	0	0	0	0	1	0	121	9	2	0	0	134	133	0	0	1	0	0	0	1	1
135	0	0	0	0	0	0	0	0	0	1	0	119	7	2	0	0	130	129	0	0	0	0	0	0	0	0
132	0	0	0	0	0	0	0	0	0	0	0	122	7	2	0	0	133	131	0	0	0	0	0	0	0	0
282	0	0	0	0	0	0	0	0	0	1	0	255	14	3	0	0	275	273	0	0	1	0	0	0	1	1

										Merir																	
	Direction 9U (U Turn)									Direction 10 (Left Turn)									Direction 11 (Through)								
Total	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total	Cyclists	M/C	Cars/Taxi	LGV	OGV1	OGV2	PSV	PCU	Total
1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
6	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
6	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
4	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
10	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	2	0	0	0	0	2	2

Appendix 2

Proposed Site Layout

Any discrepancies or proposed alterations to be notified to the designers and further instructions obtained prior to the commencement of work. For all dimensions and levels to be verified on site prior to work commencing.

012345678m

SCALE BAR 1:100

DATE:	REV:	DRAWN:	NOTE:
11/02/26	A	NMB	Ancillary area reconfigured & Dog Wash indicated
16/02/26	B	AAB	Indication of boundary treatment
25/02/26	C	NMB	Amendments to layout of ancillary area + cycle racks

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for a period of 12 months, covering 1 office
Licence/Customer Account Number (AC00000668380)

Ordnance Survey

CLIENT:	Moonbeam Car Wash		
PROJECT:	Jet Wash, Vacuum, Laundrette Dog-Wash & Vending		
SITE LOCATION:	311 Kingsway, Rochdale, Lancashire, OL16 5BX		
DRAWING:	Proposed Site Plan Layout		
DATE:	February 2026	SIZE:	A1
DRAWING NUMBER:	J/725/115/04	REV:	C
DRAWN BY:	NMB	CHECKED BY:	PRB
© COPYRIGHT RESERVED			
SCALE:	1:100		
STATUS:	PLANNING		

THE DESIGN STUDIO

888 SECLINGTOPPE ROAD, LANCASHIRE, L16 7DZ

T: 01625 69 69 69 M: 0795 202 869

W: www.sra-architecture.co.uk

Registered in England 0326004

Any discrepancies or proposed alterations to be notified to the designers and further instructions obtained prior to the commencement of work. For all dimensions and levels to be verified on site prior to work commencing.

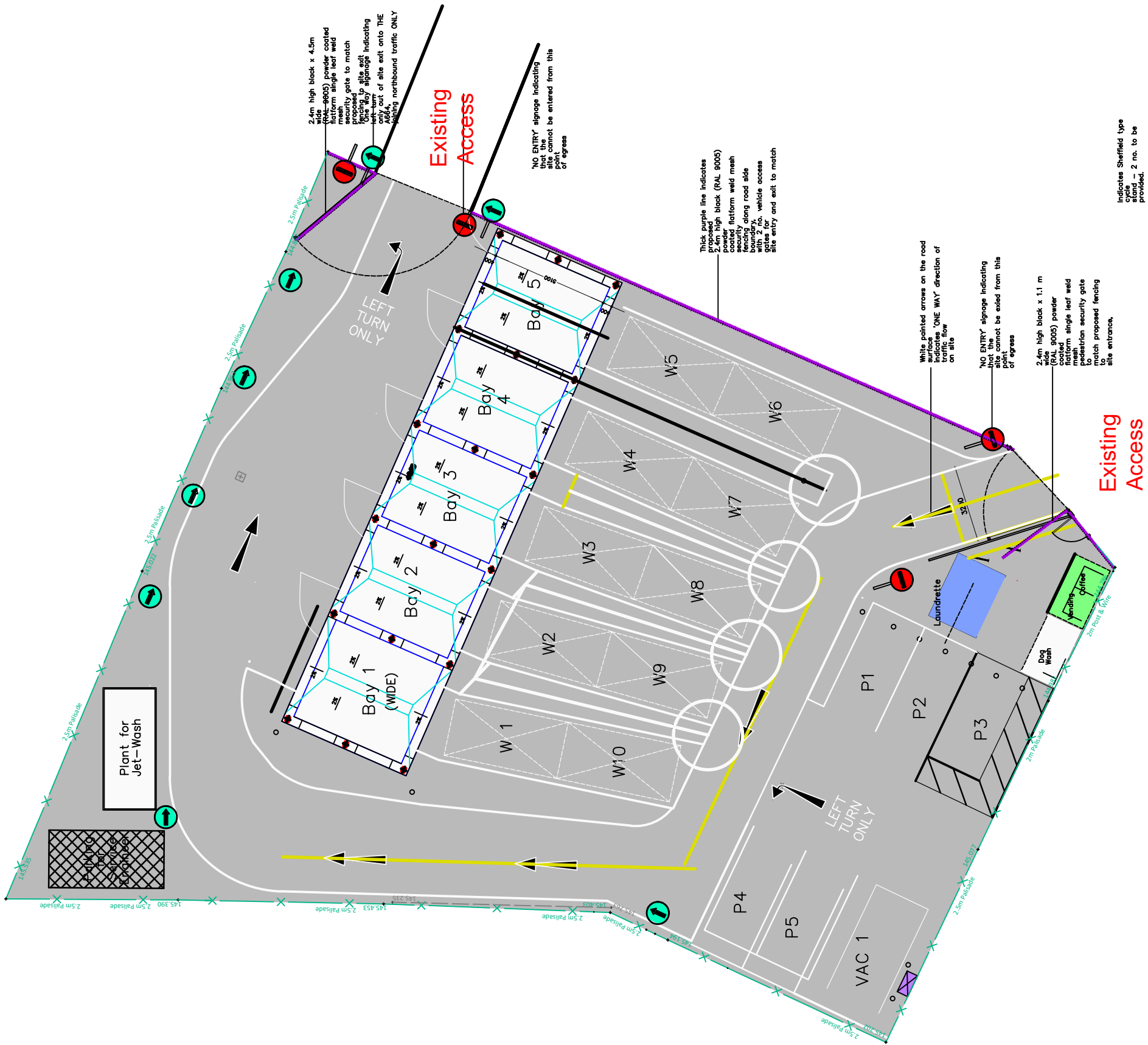
012345678m

SCALE BAR 1:100

DATE:	REV:	DRAWN:	NOTE:
11/02/26	A	NMB	Ancillary area reconfigured & Dog Wash indicated
16/02/26	B	AAB	Indication of boundary treatment
25/02/26	C	NMB	Amendments to layout of ancillary area + cycle racks

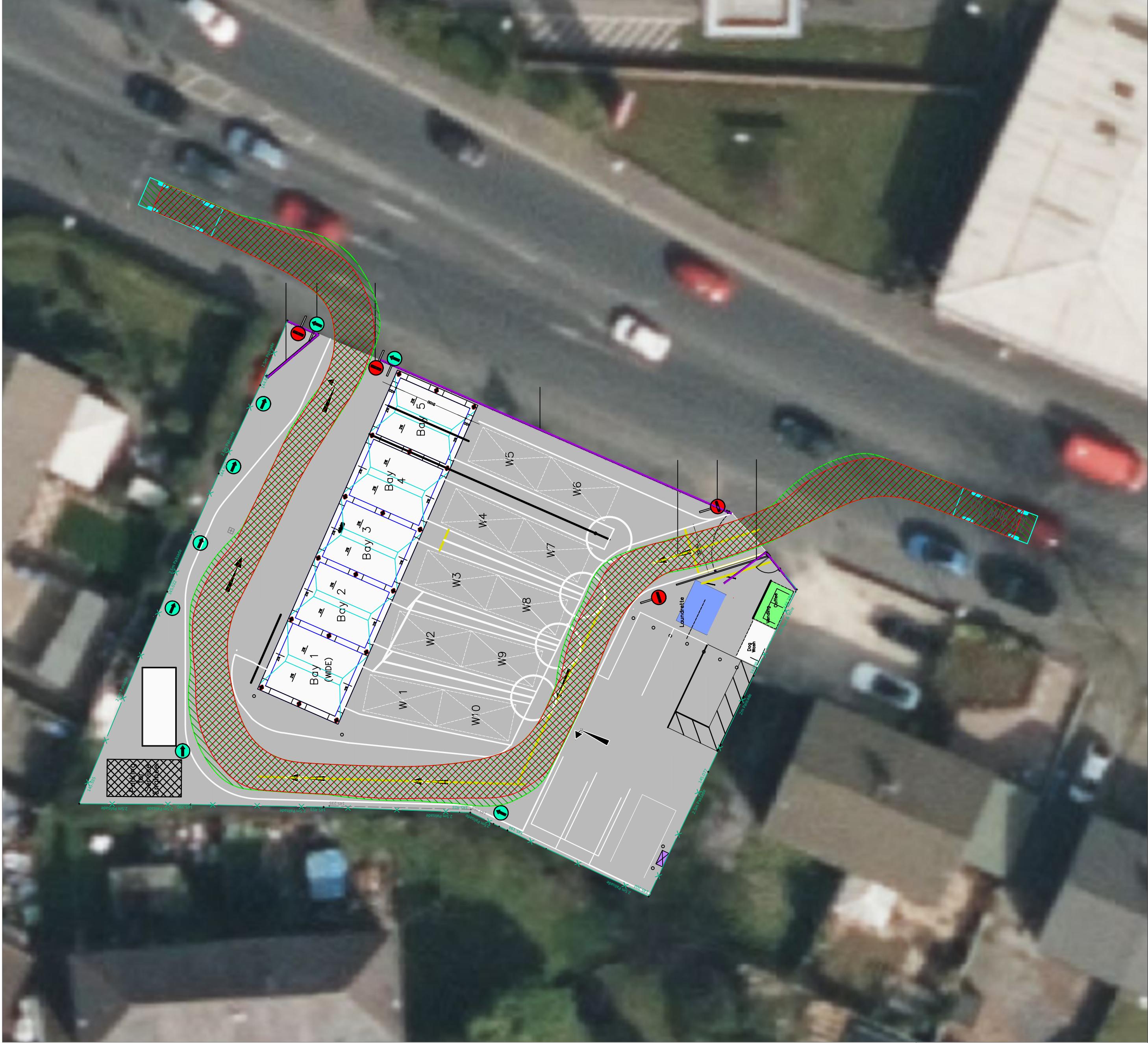
Appendix 3

Swept Path Analysis



Proposed Site Layout - Scale 1/200

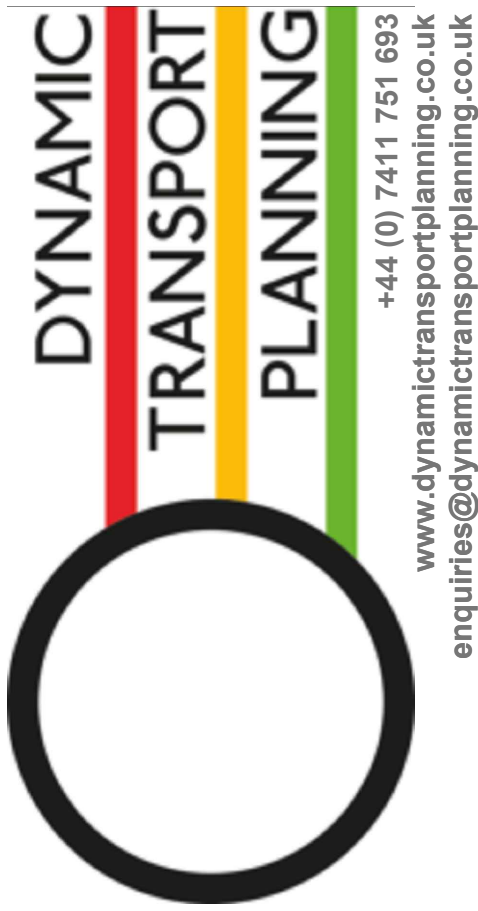
Swept Path Analysis - 3.5t Panel Van - Scale 1/200



Notes

All levels are stated in metres.
This drawing is to be read in colour.
All dimensions are stated in millimetres unless noted otherwise.
Drawing provided for technical approval, NOT to be used for construction purposes.
DTP are not responsible for the accuracy of data provided by clients or third parties.

A	27/02/26	Updated Architect Layout	SA
-	20/02/26	First Issue	SA
Rev.	Date	Revisions	Drawn



Client

Adil Group Ltd

Project

Proposed Car Wash Development,
A664 Kingsway, Rochdale

Drawing Title

Proposed Site Layout
Swept Path Analysis
3.5t Panel Van

Date	February 2026	Scale	As Specified @ A1
Drawn	SA	Approved	GS
Drawing Number	DTP/3717725/ATR001	Rev.	A

Appendix 4

TRICS Output Report

Audit Code: fb7cf6d1-30cb-4d4a-b080-9b6e877e39e1

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 15 - VEHICLE SERVICES

Category: D - CAR WASH

Selected Vehicle Type: Total Vehicles

Selected regions and areas:

05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	1 day
06	WEST MIDLANDS		
	WK	WARWICKSHIRE	1 day
	WM	WEST MIDLANDS	1 day
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 day
08	NORTH WEST		
	GM	GREATER MANCHESTER	1 day
	MS	MERSEYSIDE	1 day
09	NORTH		
	TW	TYNE & WEAR	1 day

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

Audit Code: fb7cf6d1-30cb-4d4a-b080-9b6e877e39e1

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:	BAYS
Actual Range:	2 to 8 (units:BAYS)
Range Selected by User:	1 to 8 (units:BAYS)
Parking Spaces Range:	2 - 21
Public Transport Provision:	
Selection by:	All Surveys Included
Date Range:	31/10/16 to 26/10/24

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

Selected survey days:

Friday	3 days
Thursday	2 days
Tuesday	1 days
Wednesday	1 days

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

Selected survey types:

Manual count	7
Direction ATC Count	0

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

Selected Locations:

Neighbourhood Centre	2 days
Suburban Area	5 days

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

Selected Location Sub Categories:

Industrial Zone	1 days
No Sub Category	2 days
Residential Zone	3 days
Village	1 days

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

Inclusion of Servicing Vehicle Counts:

Servicing vehicles Unknown	7 days
----------------------------	--------

Audit Code: fb7cf6d1-30cb-4d4a-b080-9b6e877e39e1

Secondary Filtering Selection:

Use Class:

N/A

7 surveys

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

Population within 500m Range:

100 - 7705

Population within 1 mile:

10,001 to 15,000	3 surveys
15,001 to 20,000	1 surveys
20,001 to 25,000	1 surveys
25,001 to 50,000	2 surveys

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

Population within 5 miles:

125,001 to 250,000	2 surveys
25,001 to 50,000	1 surveys
250,001 to 500,000	2 surveys
500,001 or More	2 surveys

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

Car ownership within 5 miles:

0.6 to 1.0	3 surveys
1.1 to 1.5	4 surveys

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

Audit Code: fb7cf6d1-30cb-4d4a-b080-9b6e877e39e1

Petrol filling station:

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No 7 surveys

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

PTAL Rating:

No PTAL Present 7 surveys

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

COVID-19 Restrictions:

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

Audit Code: fb7cf6d1-30cb-4d4a-b080-9b6e877e39e1

1	GM-15-D-02	HAND CAR WASH	GREATER MANCHESTER
TEMPLETON ROAD NEAR WIGAN PLATT BRIDGE Neighbourhood Centre Village Site area: 0.15000000596046448 hect Survey date: Friday 22/04/2022			
			Survey Type: Unknown
2	LN-15-D-01	HAND CAR WASH	LINCOLNSHIRE
DIXON WAY LINCOLN Suburban Area Industrial Zone Site area: 0.10000000149011612 hect Survey date: Friday 28/06/2019			
			Survey Type: Unknown
3	MS-15-D-01	HAND CAR WASH	MERSEYSIDE
KENSINGTON LIVERPOOL Suburban Area Residential Zone Site area: 0.029999999329447746 hect Survey date: Wednesday 28/04/2021			
			Survey Type: Unknown
4	NY-15-D-01	HAND CAR WASH	NORTH YORKSHIRE
BAWTRY ROAD SELBY Suburban Area No Sub Category Site area: 0.07000000029802322 hect Survey date: Tuesday 10/05/2022			
			Survey Type: Unknown
5	TW-15-D-02	IMO CAR WASH	TYNE & WEAR
WASHINGTON ROAD SUNDERLAND Suburban Area Residential Zone Site area: 0.10899999737739563 hect Survey date: Thursday 18/10/2018			
			Survey Type: Unknown
6	WK-15-D-01	IMO CAR WASH	WARWICKSHIRE
CROFT ROAD NUNEATON Suburban Area Residential Zone Site area: 0.10000000149011612 hect Survey date: Friday 19/11/2021			
			Survey Type: Unknown
7	WM-15-D-01	HAND CAR WASH	WEST MIDLANDS
GREEN LANE BIRMINGHAM SMALL HEATH Neighbourhood Centre No Sub Category Site area: 0.05000000074505806 hect Survey date: Thursday 18/11/2021			
			Survey Type: Unknown

DESELECTED SURVEYS

Site Ref	Survey Date	Reason for Deselection
DL-15-D-01	24-05-2023	Location not suitable

Audit Code: fb7cf6d1-30cb-4d4a-b080-9b6e877e39e1

Site Ref	Survey Date	Reason for Deselection
EN-15-D-01	20-11-2018	Location not suitable

Audit Code: fb7cf6d1-30cb-4d4a-b080-9b6e877e39e1

TRIP RATE for Land Use 15 - VEHICLE SERVICES/D - CAR WASH

Total Vehicles

Calculation factor: 1 BAYS

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. BAYS	Arrivals	Departures	Totals
00:00-01:00					
01:00-02:00					
02:00-03:00					
03:00-04:00					
04:00-05:00					
05:00-06:00					
06:00-07:00					
07:00-08:00	7	4	0.167	0.033	0.200
08:00-09:00	7	4	0.733	0.500	1.233
09:00-10:00	7	4	2.000	1.700	3.700
10:00-11:00	7	4	2.667	2.467	5.134
11:00-12:00	7	4	2.433	2.533	4.966
12:00-13:00	7	4	3.133	2.933	6.066
13:00-14:00	7	4	2.467	2.667	5.134
14:00-15:00	7	4	3.133	3.400	6.533
15:00-16:00	7	4	2.267	2.067	4.334
16:00-17:00	7	4	2.467	2.333	4.800
17:00-18:00	7	4	1.100	1.600	2.700
18:00-19:00	7	4	0.467	0.700	1.167
19:00-20:00	3	3	0.111	0.444	0.555
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			23.145	23.377	46.522

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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Audit Code: fb7cf6d1-30cb-4d4a-b080-9b6e877e39e1

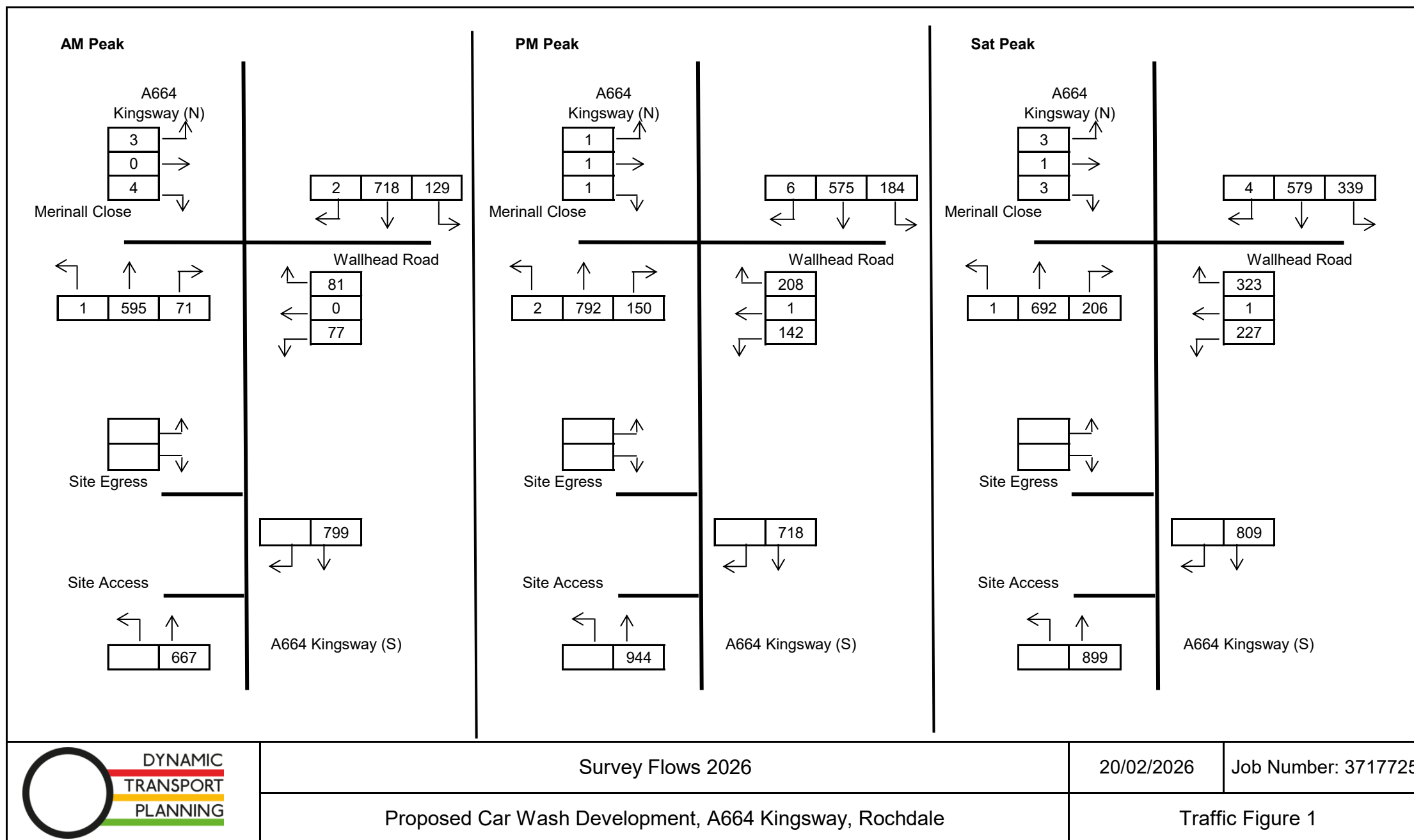
Parameter Summary:

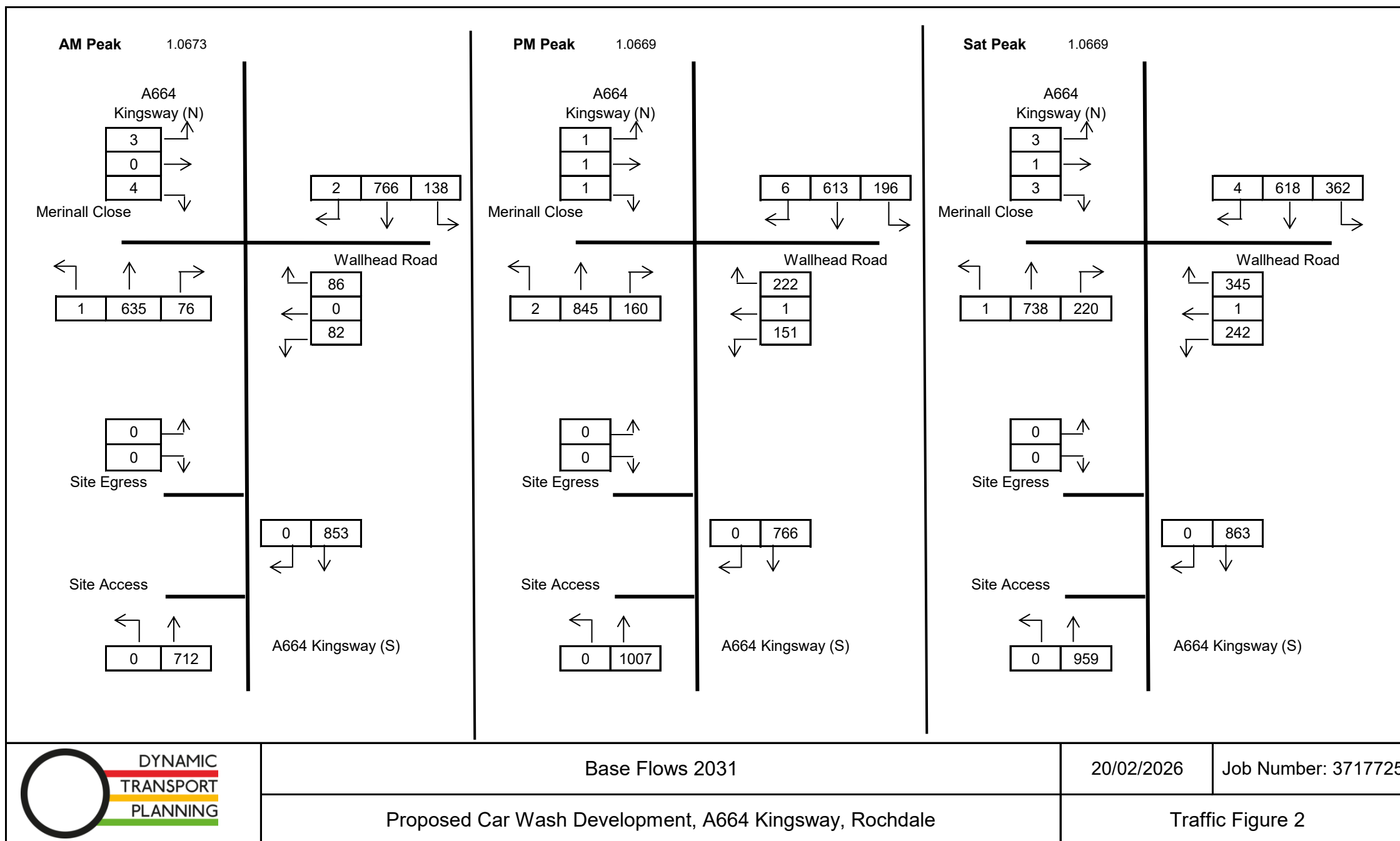
Trip rate parameter range selected:	1 - 8 (units: BAYS)
Survey date date range:	18/10/2018 - 10/05/2022
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
Surveys manually removed from selection:	0

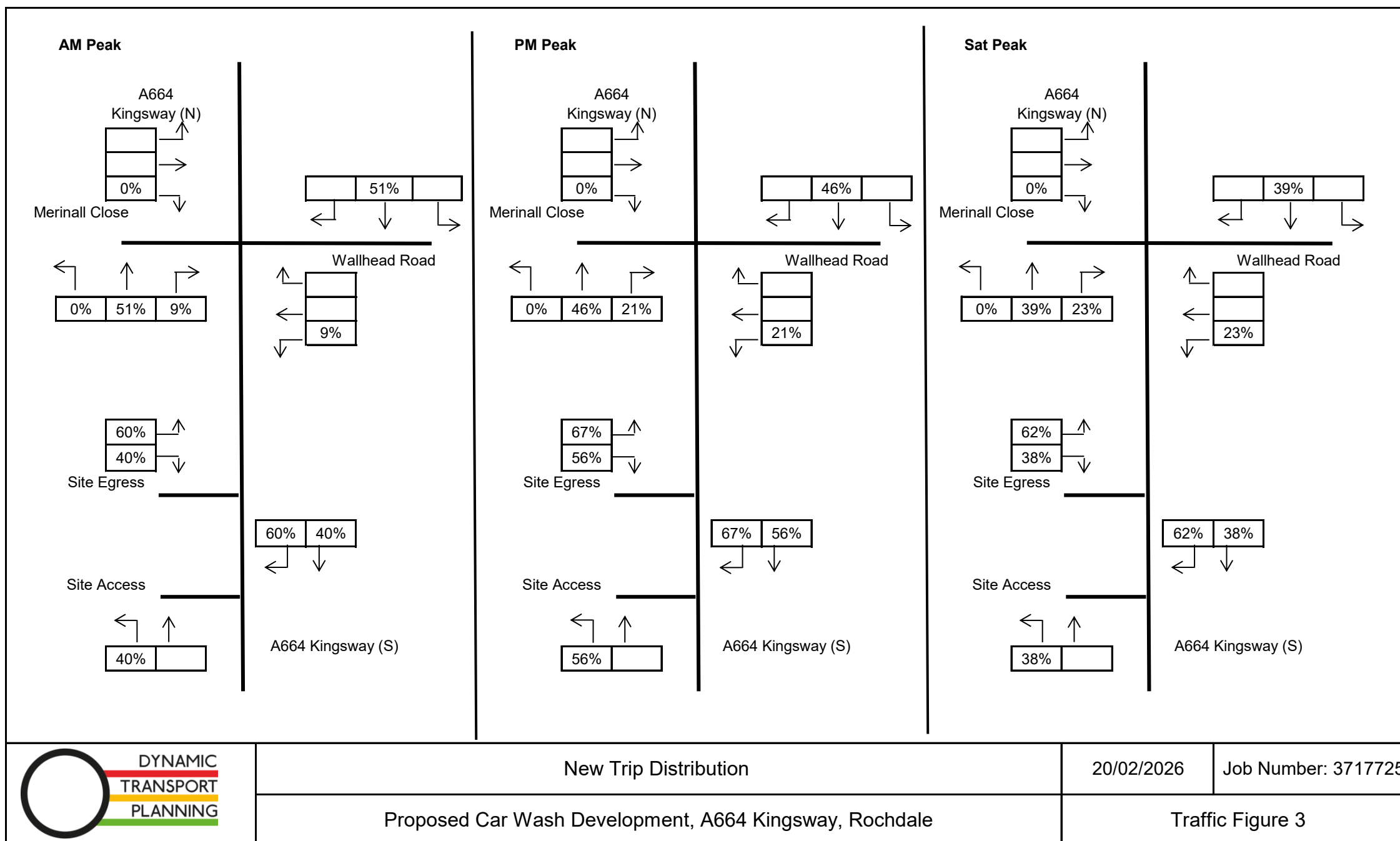
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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

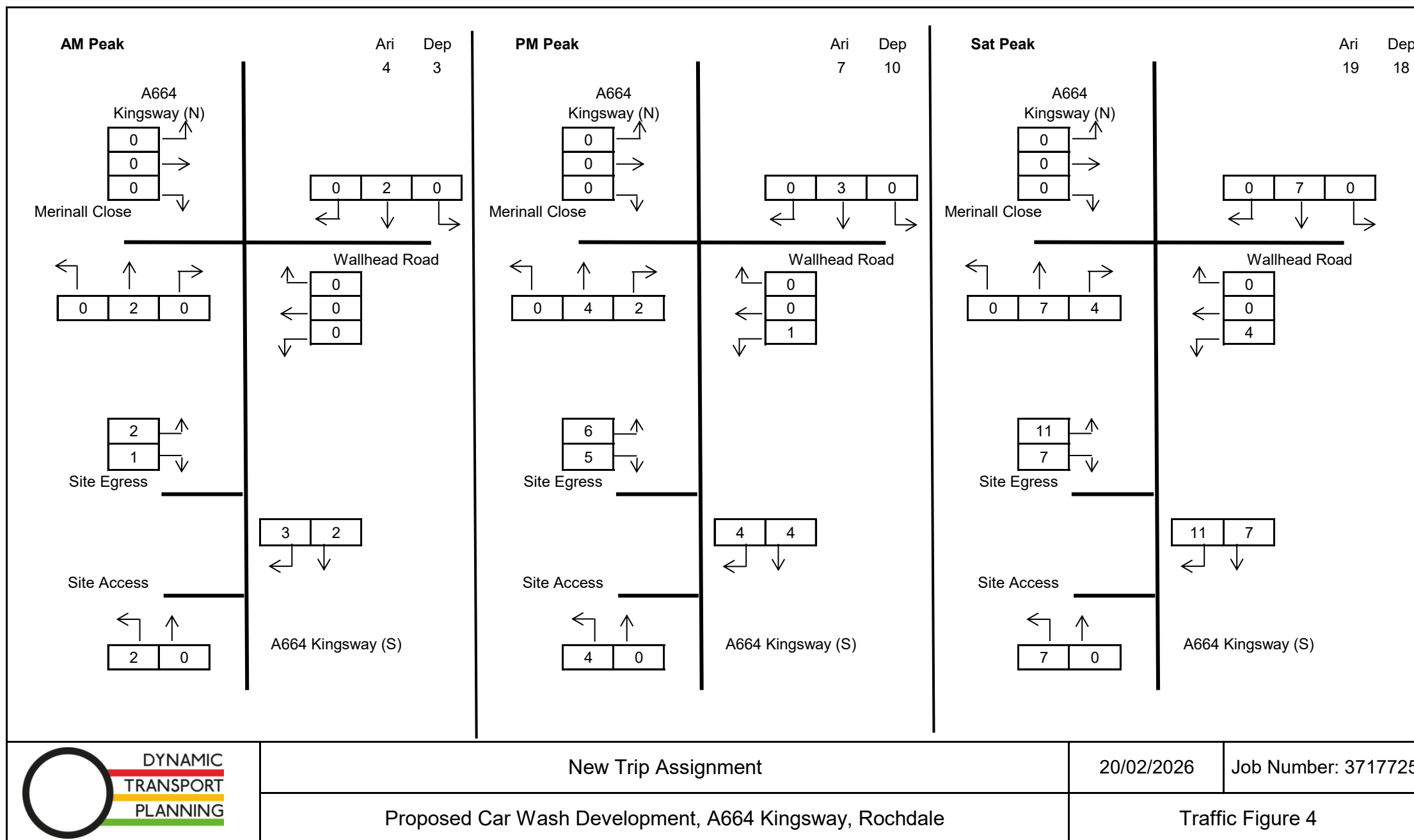
Appendix 5

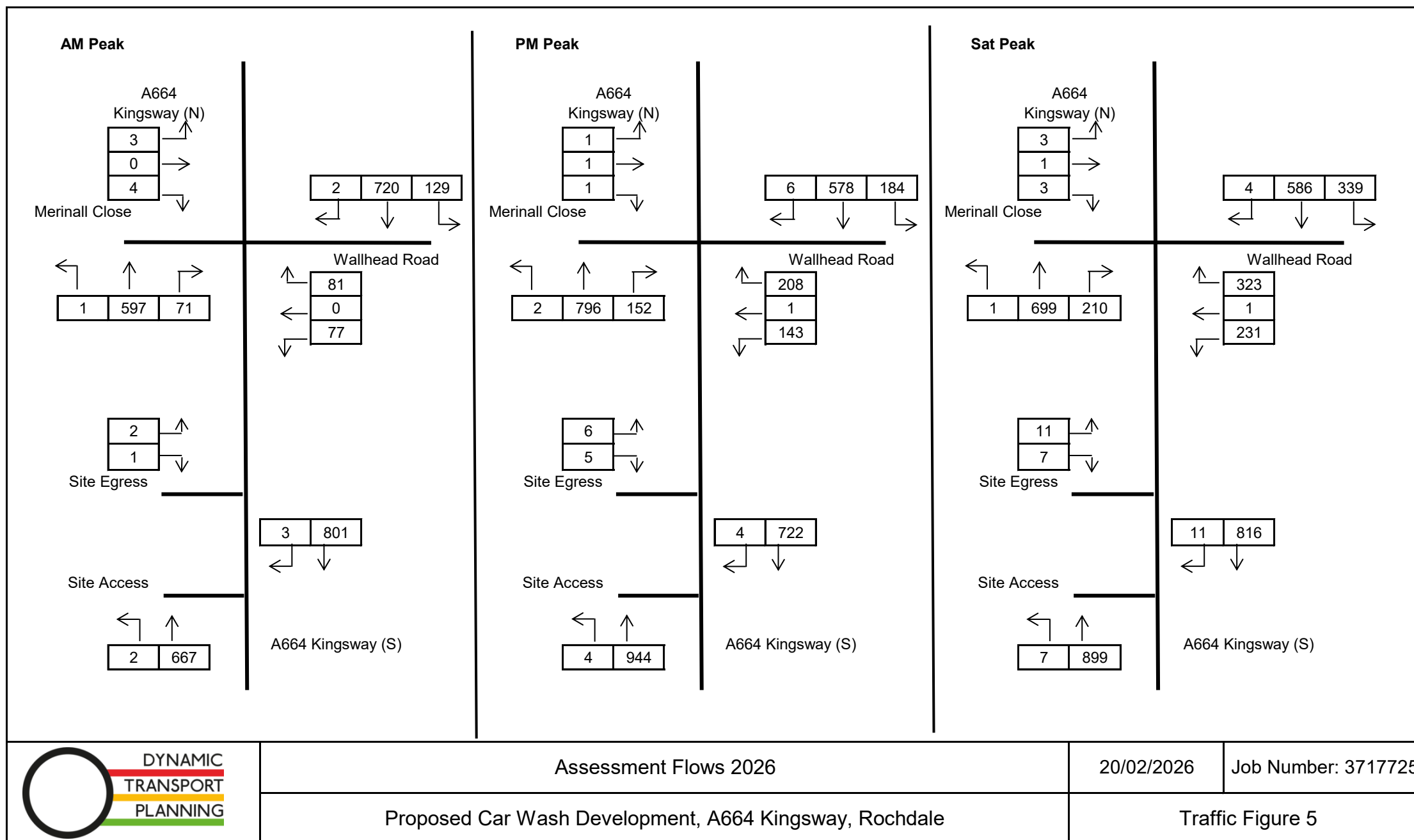
Traffic Figures

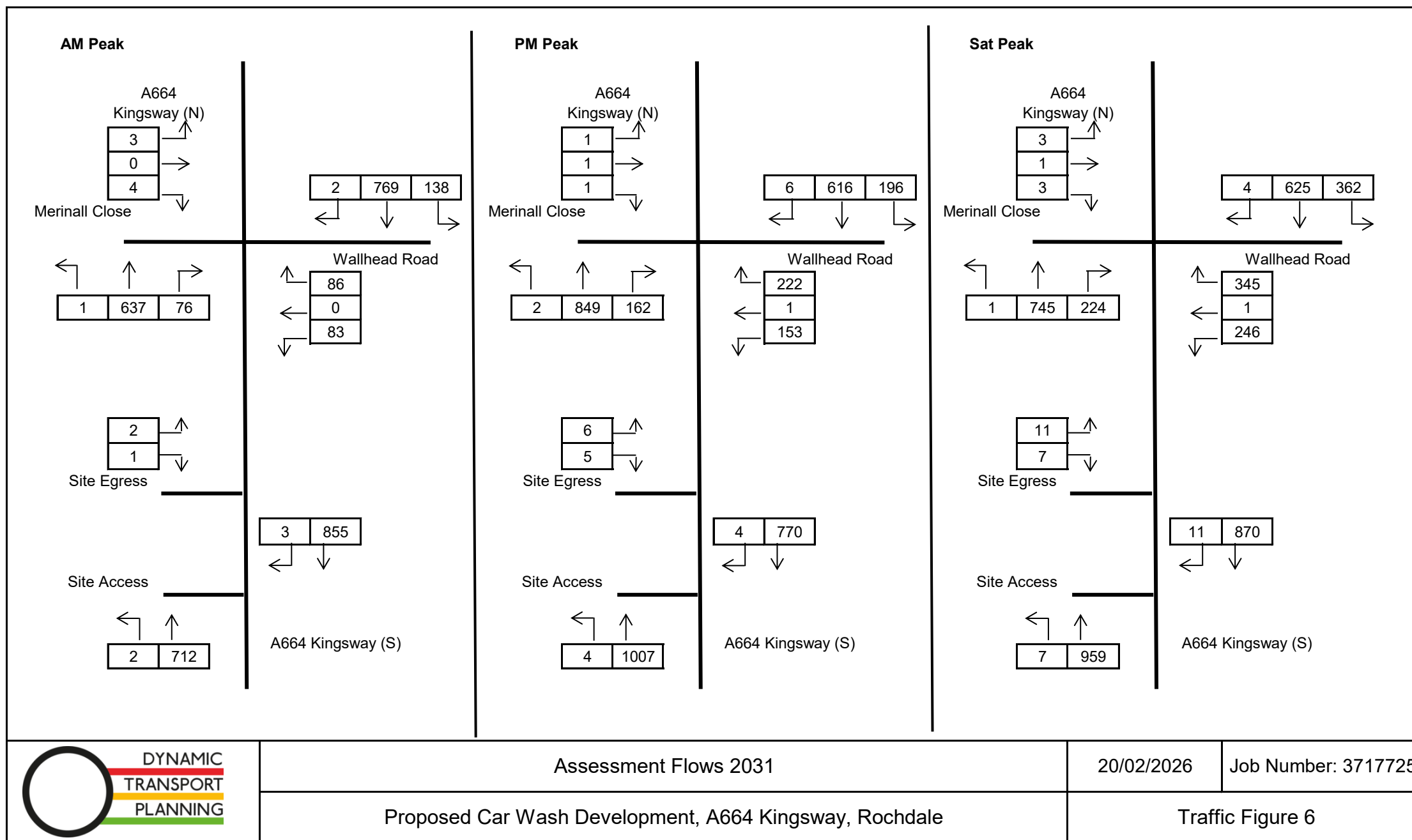












Appendix 6

Model Outputs

Basic Results Summary
Basic Results Summary

User and Project Details

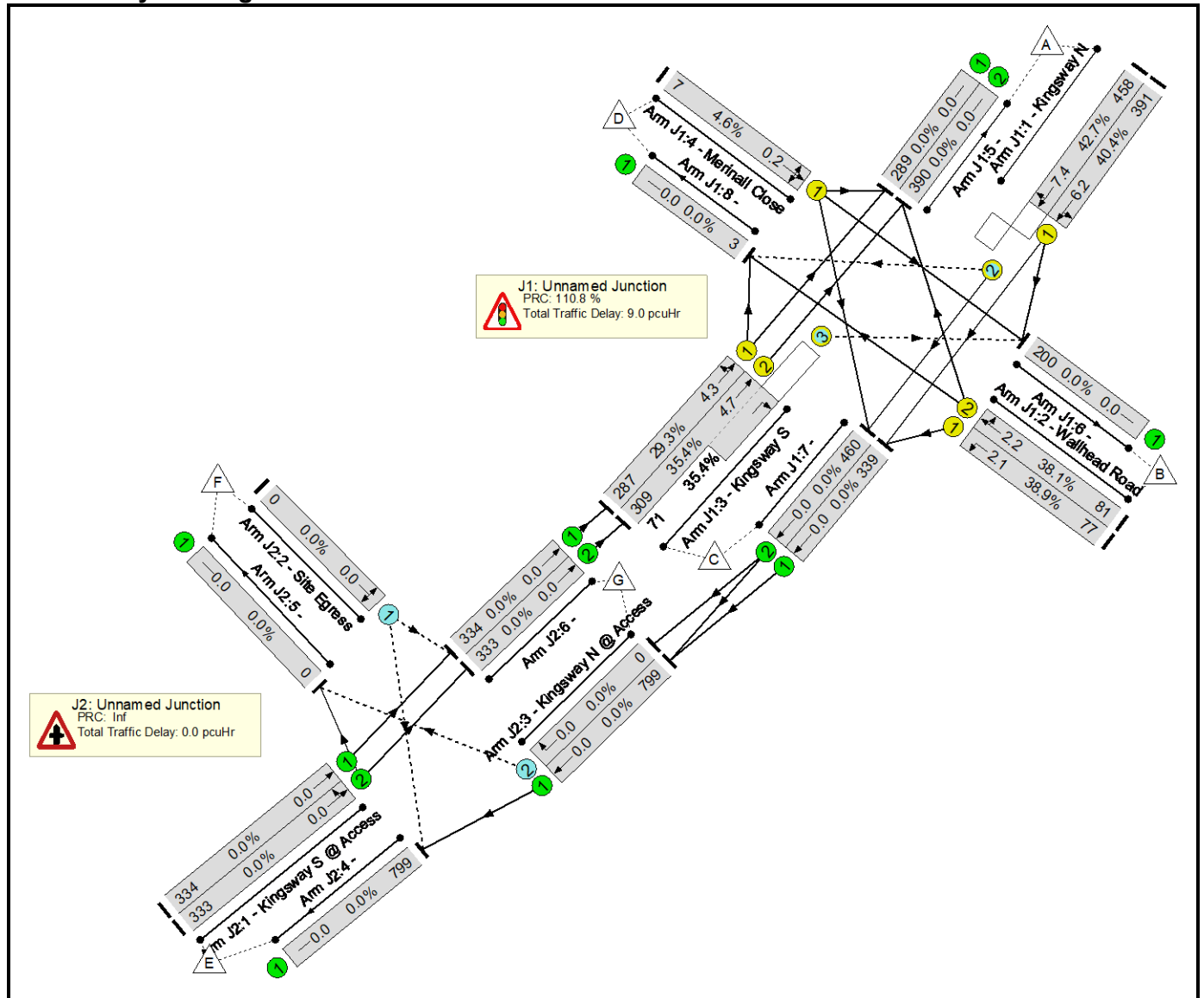
Project:	Moonbeam Rochdale
Title:	
Location:	Kingsway/Wallhead Road/Merinall Close
Additional detail:	
File name:	Kingsway-Wallhead Crossroads.lsg3x
Author:	
Company:	DTP
Address:	
Linsig Version:	3, 3, 1, 0

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	Base 2026 AM	AM Base 2026	Network Control Plan 1	08:00 - 09:00	90	110.8	9.00
2	Base 2026 PM	PM Base 2026	Network Control Plan 1	17:00 - 18:00	90	55.5	14.79
3	Base 2026 Sat	Sat Base 2026	Network Control Plan 1	12:00 - 13:00	90	30.6	21.73
4	With Dev 2026 AM	AM With Dev 2026	Network Control Plan 1	08:00 - 09:00	90	110.3	9.03
5	With Dev 2026 PM	PM With Dev 2026	Network Control Plan 1	17:00 - 18:00	90	55.4	14.90
6	With Dev 2026 Sat	Sat With Dev 2026	Network Control Plan 1	12:00 - 13:00	90	29.8	21.85
7	Base 2031 AM	AM Base 2031	Network Control Plan 1	08:00 - 09:00	90	97.8	9.77
8	Base 2031 PM	PM Base 2031	Network Control Plan 1	17:00 - 18:00	90	45.8	16.25
9	Base 2031 Sat	Sat Base 2031	Network Control Plan 1	12:00 - 13:00	90	22.3	24.47
10	With Dev 2031 AM	AM With Dev 2031	Network Control Plan 1	08:00 - 09:00	90	97.4	9.83
11	With Dev 2031 PM	PM With Dev 2031	Network Control Plan 1	17:00 - 18:00	90	45.8	16.39
12	With Dev 2031 Sat	Sat With Dev 2031	Network Control Plan 1	12:00 - 13:00	90	21.6	24.50

Scenario 1: 'Base 2026 AM' (FG1: 'AM Base 2026', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

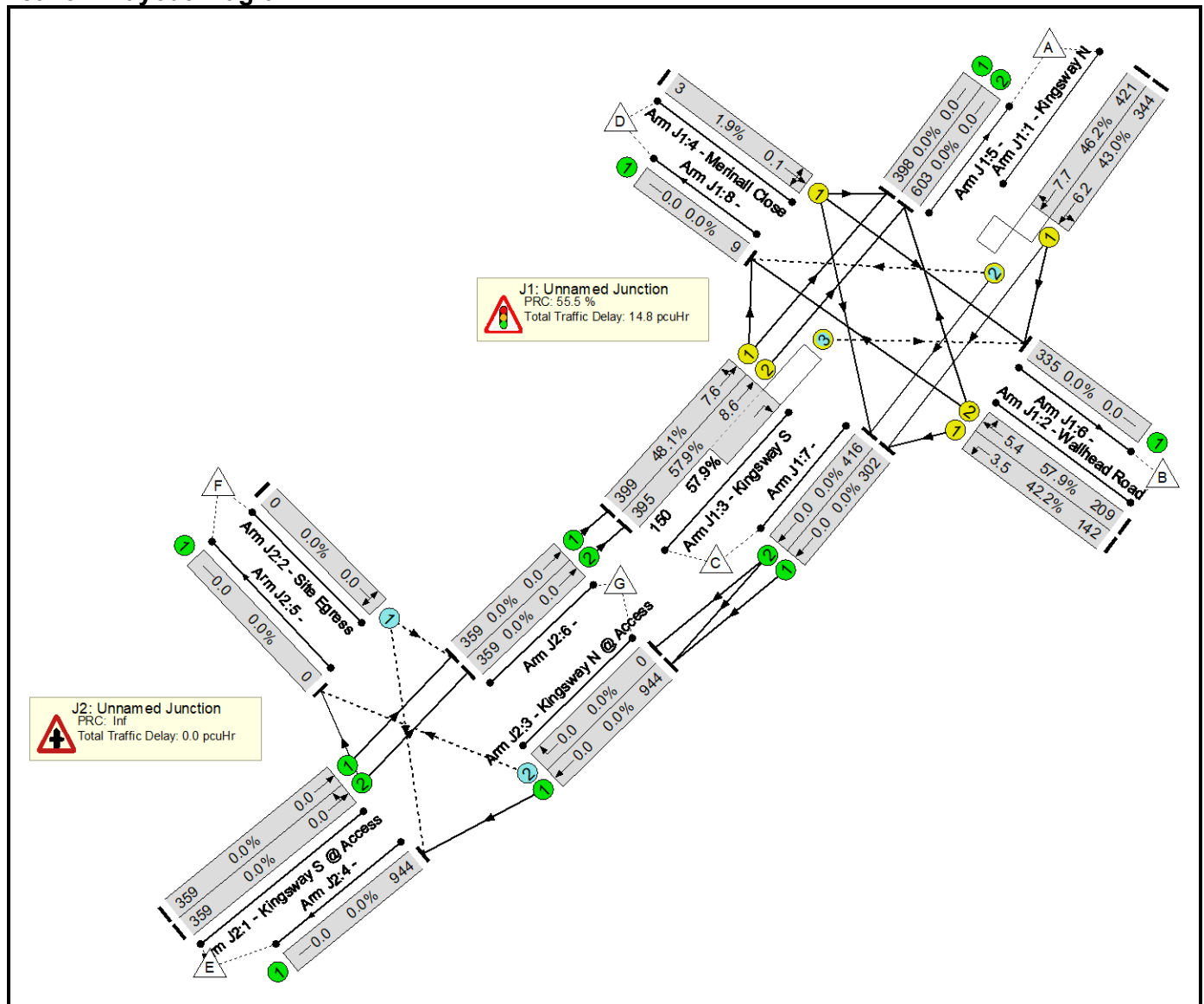


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	42.7%	33	40	0	9.0	-	-
J1: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	42.7%	33	40	0	9.0	-	-
1/1	Kingsway N Left Ahead	U	B		1	46	-	-	391	1853	968	40.4%	-	-	-	1.8	16.1	6.2
1/2	Kingsway N Ahead Right	O	B	E	1	46	6	-	458	2054	1073	42.7%	2	0	0	2.1	16.2	7.4
2/1	Wallhead Road Left	U	C		1	9	-	-	77	1781	198	38.9%	-	-	-	1.1	52.0	2.1
2/2	Wallhead Road Right Ahead	U	C		1	9	-	-	81	1912	212	38.1%	-	-	-	1.1	50.8	2.2
3/1	Kingsway S Ahead Left	U	A		1	45	-	-	287	1914	978	29.3%	-	-	-	1.2	15.3	4.3
3/2+3/3	Kingsway S Ahead Right	U+O	A	F	1	45	4	-	380	2055:1787	873+201	35.4 : 35.4%	32	39	0	1.6	15.4	4.7
4/1	Merinall Close Left Ahead Right	U	D		1	7	-	-	7	1708	152	4.6%	-	-	-	0.1	50.2	0.2
J2: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	0.0%	0	0	0	0.0	-	-
2/1	Site Egress Right Left	O	-		-	-	-	-	0	Inf	450	0.0%	0	0	0	0.0	0.0	0.0
3/2	Kingsway N @ Access Right	O	-		-	-	-	-	0	Inf	617	0.0%	0	0	0	0.0	0.0	0.0
C1					PRC for Signalled Lanes (%):		110.8		Total Delay for Signalled Lanes (pcuHr):				9.00		Cycle Time (s): 90			
					PRC Over All Lanes (%):		110.8		Total Delay Over All Lanes(pcuHr):				9.00					

Network Layout Diagram

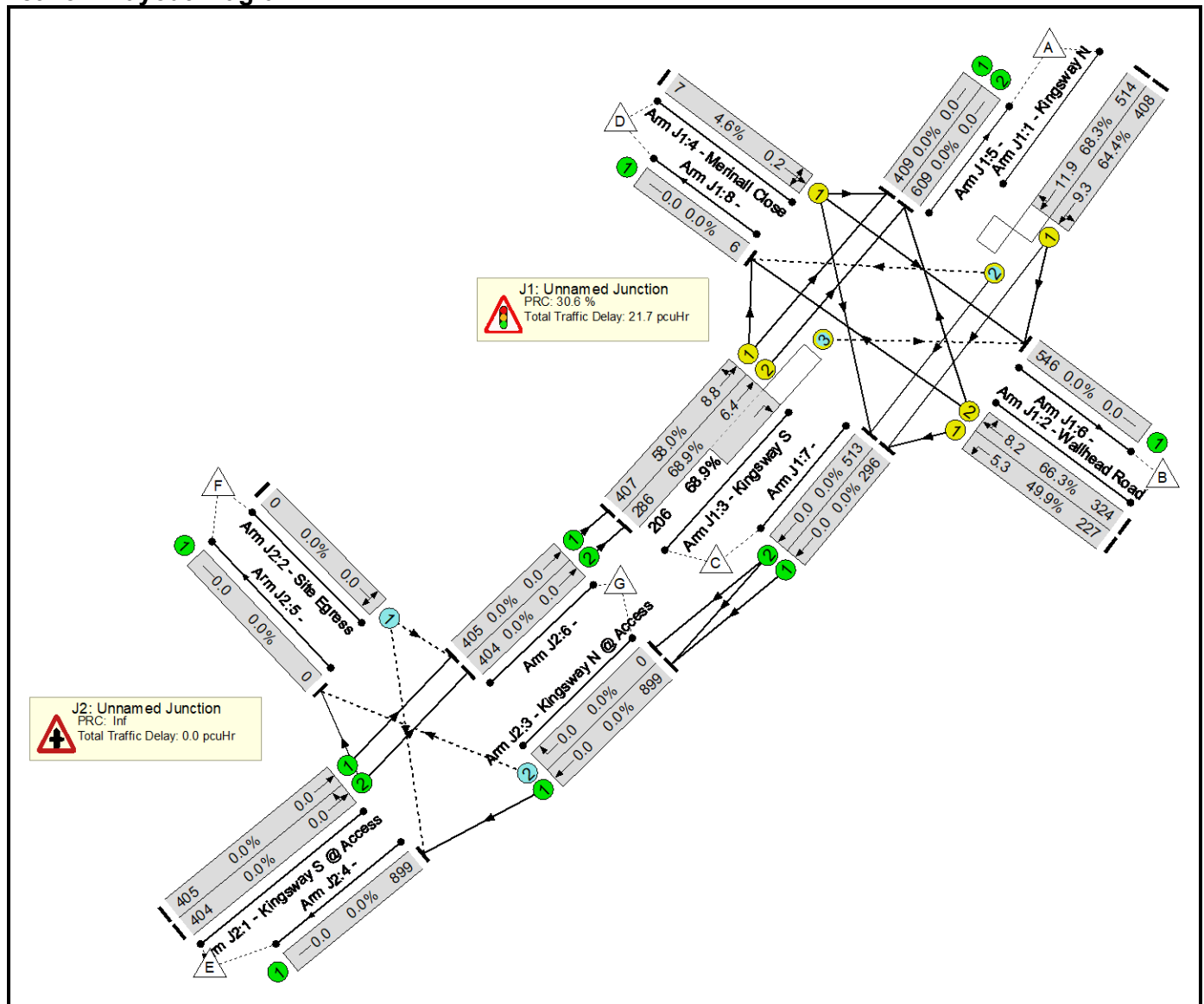


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	57.9%	74	81	0	14.8	-	-
J1: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	57.9%	74	81	0	14.8	-	-
1/1	Kingsway N Left Ahead	U	B		1	39	-	-	344	1801	800	43.0%	-	-	-	2.0	21.1	6.2
1/2	Kingsway N Ahead Right	O	B	E	1	39	6	-	421	2051	912	46.2%	5	1	0	2.5	21.2	7.7
2/1	Wallhead Road Left	U	C		1	16	-	-	142	1781	336	42.2%	-	-	-	1.6	41.4	3.5
2/2	Wallhead Road Right Ahead	U	C		1	16	-	-	209	1912	361	57.9%	-	-	-	2.6	45.0	5.4
3/1	Kingsway S Ahead Left	U	A		1	38	-	-	399	1914	829	48.1%	-	-	-	2.5	22.4	7.6
3/2+3/3	Kingsway S Ahead Right	U+O	A	F	1	38	4	-	545	2055:1787	682+259	57.9 : 57.9%	69	81	0	3.5	23.3	8.6
4/1	Merinall Close Left Ahead Right	U	D		1	7	-	-	3	1768	157	1.9%	-	-	-	0.0	49.5	0.1
J2: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	0.0%	0	0	0	0.0	-	-
2/1	Site Egress Right Left	O	-		-	-	-	-	0	Inf	414	0.0%	0	0	0	0.0	0.0	0.0
3/2	Kingsway N @ Access Right	O	-		-	-	-	-	0	Inf	599	0.0%	0	0	0	0.0	0.0	0.0
C1					PRC for Signalled Lanes (%):			55.5	Total Delay for Signalled Lanes (pcuHr):			14.79	Cycle Time (s): 90					
					PRC Over All Lanes (%):			55.5	Total Delay Over All Lanes(pcuHr):			14.79						

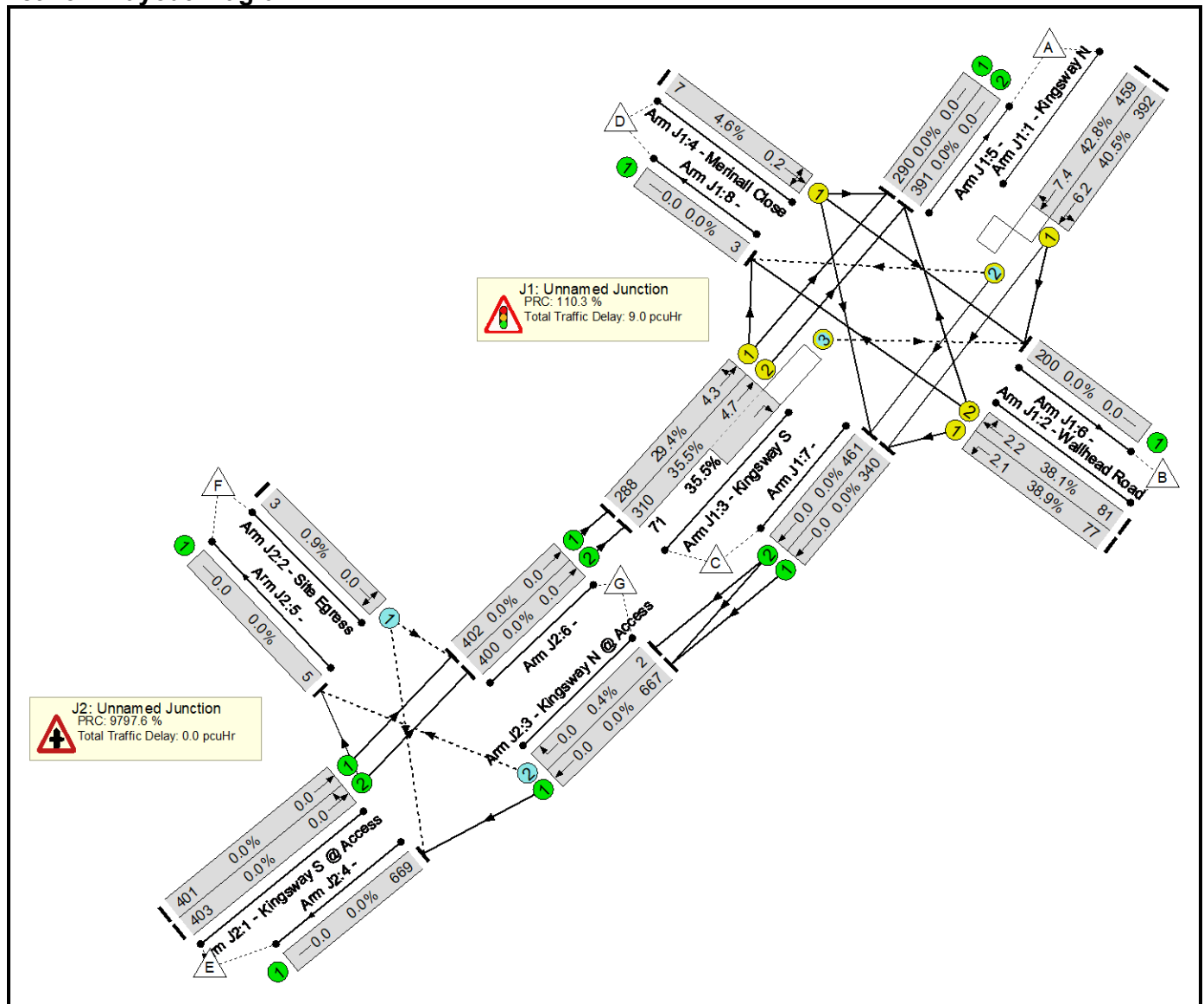
Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	68.9%	52	139	18	21.7	-	-
J1: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	68.9%	52	139	18	21.7	-	-
1/1	Kingsway N Left Ahead	U	B		1	32	-	-	408	1729	634	64.4%	-	-	-	3.6	31.5	9.3
1/2	Kingsway N Ahead Right	O	B	E	1	32	6	-	514	2053	753	68.3%	3	0	0	4.5	31.6	11.9
2/1	Wallhead Road Left	U	C		1	22	-	-	227	1781	455	49.9%	-	-	-	2.3	36.4	5.3
2/2	Wallhead Road Right Ahead	U	C		1	22	-	-	324	1912	489	66.3%	-	-	-	3.7	40.8	8.2
3/1	Kingsway S Ahead Left	U	A		1	32	-	-	407	1914	702	58.0%	-	-	-	3.3	29.0	8.8
3/2+3/3	Kingsway S Ahead Right	U+O	A	F	1	32	5	-	492	2055:1787	415+299	68.9 : 68.9%	49	139	18	4.3	31.5	6.4
4/1	Merinall Close Left Ahead Right	U	D		1	7	-	-	7	1730	154	4.6%	-	-	-	0.1	50.1	0.2
J2: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	0.0%	0	0	0	0.0	-	-
2/1	Site Egress Right Left	O	-		-	-	-	-	0	Inf	398	0.0%	0	0	0	0.0	0.0	0.0
3/2	Kingsway N @ Access Right	O	-		-	-	-	-	0	Inf	567	0.0%	0	0	0	0.0	0.0	0.0
C1					PRC for Signalled Lanes (%):			30.6	Total Delay for Signalled Lanes (pcuHr):				21.73	Cycle Time (s): 90				
					PRC Over All Lanes (%):			30.6	Total Delay Over All Lanes(pcuHr):				21.73					

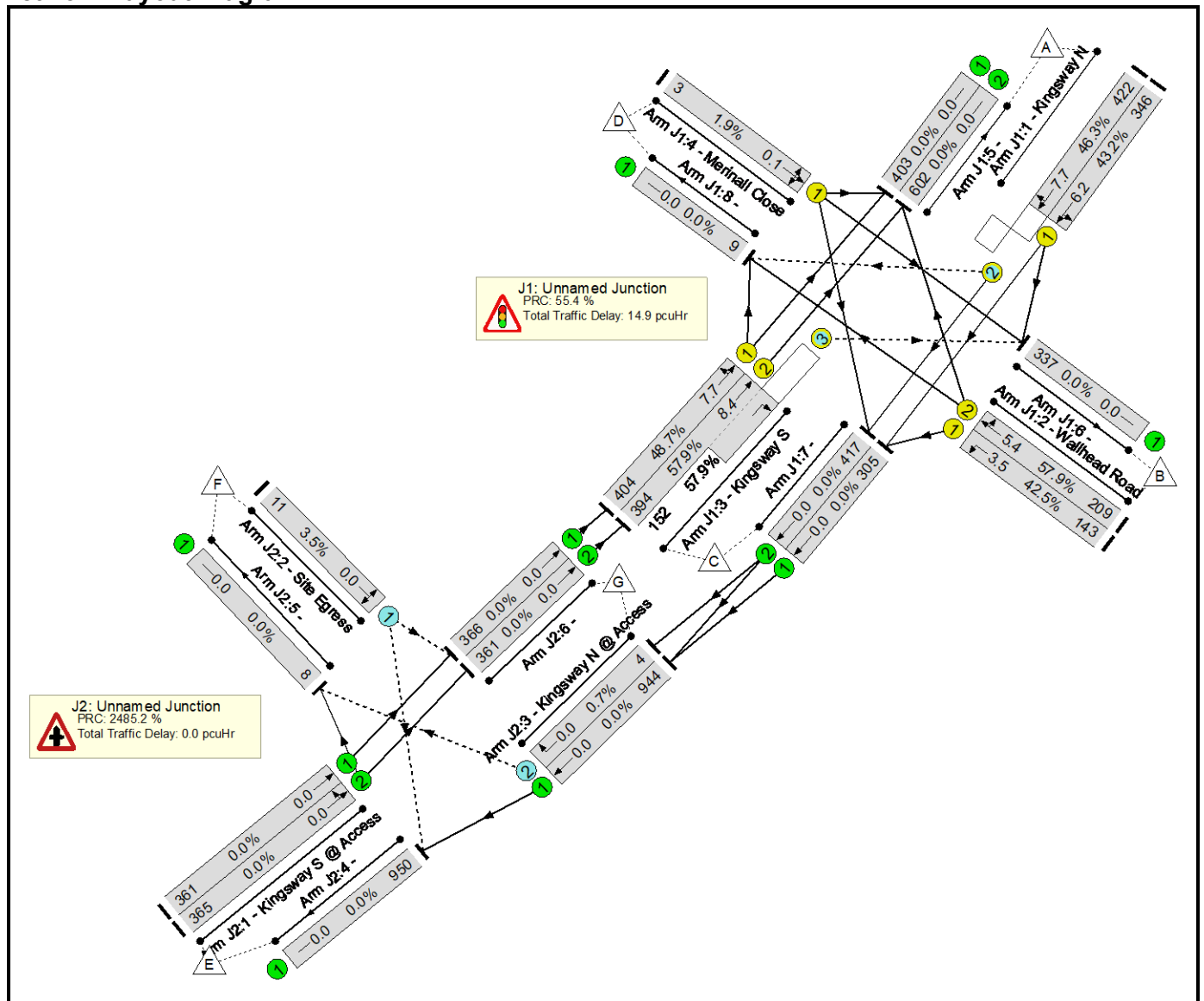
Network Layout Diagram

Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	42.8%	38	40	0	9.0	-	-
J1: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	42.8%	33	40	0	9.0	-	-
1/1	Kingsway N Left Ahead	U	B		1	46	-	-	392	1854	968	40.5%	-	-	-	1.8	16.2	6.2
1/2	Kingsway N Ahead Right	O	B	E	1	46	6	-	459	2054	1073	42.8%	2	0	0	2.1	16.2	7.4
2/1	Wallhead Road Left	U	C		1	9	-	-	77	1781	198	38.9%	-	-	-	1.1	52.0	2.1
2/2	Wallhead Road Right Ahead	U	C		1	9	-	-	81	1912	212	38.1%	-	-	-	1.1	50.8	2.2
3/1	Kingsway S Ahead Left	U	A		1	45	-	-	288	1914	978	29.4%	-	-	-	1.2	15.3	4.3
3/2+3/3	Kingsway S Ahead Right	U+O	A	F	1	45	4	-	381	2055:1787	874+200	35.5 : 35.5%	32	39	0	1.6	15.4	4.7
4/1	Merinall Close Left Ahead Right	U	D		1	7	-	-	7	1708	152	4.6%	-	-	-	0.1	50.2	0.2
J2: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	0.9%	5	0	0	0.0	-	-
2/1	Site Egress Right Left	O	-		-	-	-	-	3	Inf	330	0.9%	3	0	0	0.0	5.5	0.0
3/2	Kingsway N @ Access Right	O	-		-	-	-	-	2	Inf	569	0.4%	2	0	0	0.0	3.2	0.0
C1					PRC for Signalled Lanes (%):			110.3	Total Delay for Signalled Lanes (pcuHr):				9.02	Cycle Time (s): 90				
					PRC Over All Lanes (%):			110.3	Total Delay Over All Lanes(pcuHr):				9.03					

Network Layout Diagram

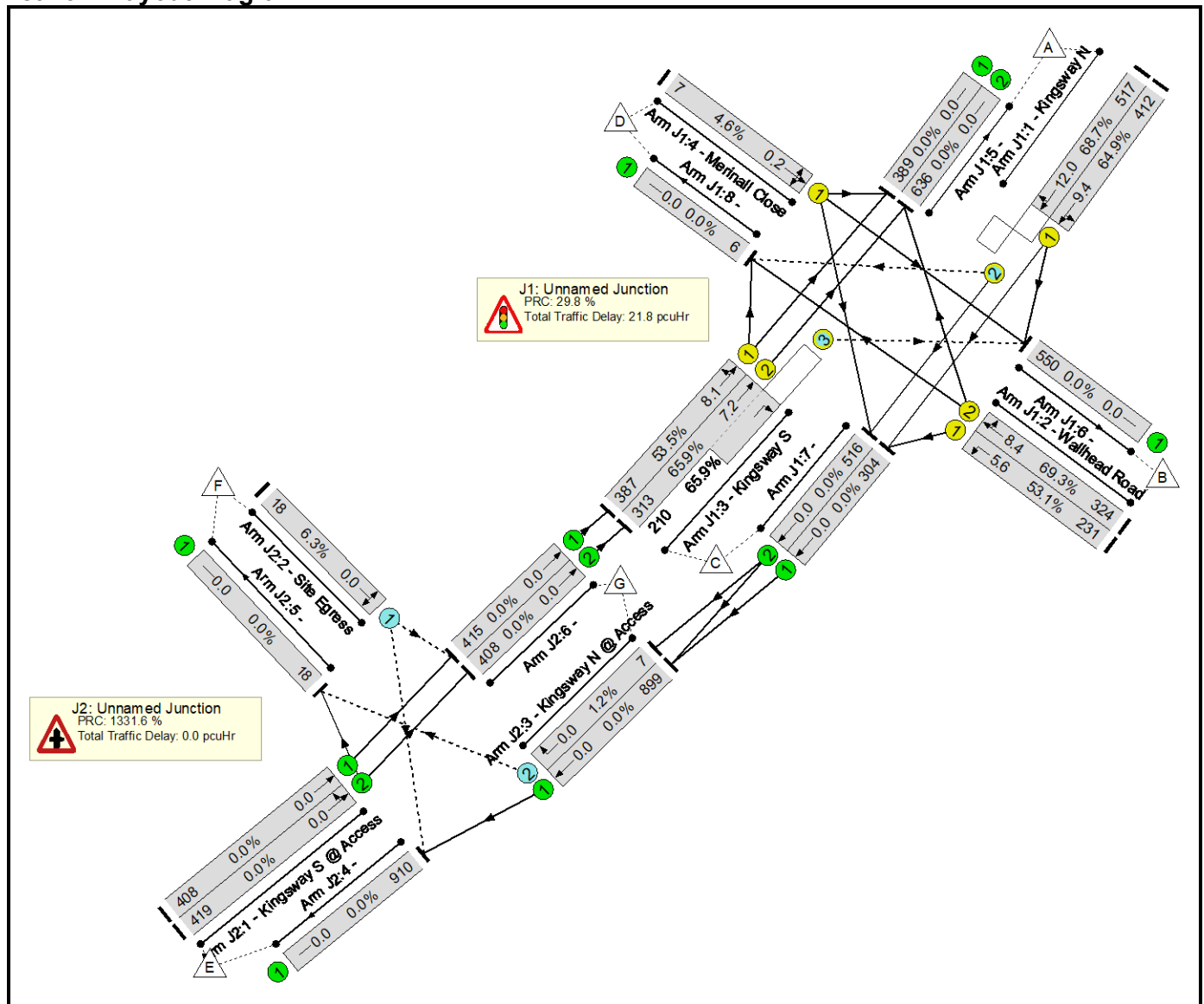


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	57.9%	90	83	0	14.9	-	-
J1: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	57.9%	75	83	0	14.9	-	-
1/1	Kingsway N Left Ahead	U	B		1	39	-	-	346	1801	800	43.2%	-	-	-	2.0	21.1	6.2
1/2	Kingsway N Ahead Right	O	B	E	1	39	6	-	422	2051	912	46.3%	5	1	0	2.5	21.2	7.7
2/1	Wallhead Road Left	U	C		1	16	-	-	143	1781	336	42.5%	-	-	-	1.6	41.5	3.5
2/2	Wallhead Road Right Ahead	U	C		1	16	-	-	209	1912	361	57.9%	-	-	-	2.6	45.0	5.4
3/1	Kingsway S Ahead Left	U	A		1	38	-	-	404	1914	829	48.7%	-	-	-	2.5	22.5	7.7
3/2+3/3	Kingsway S Ahead Right	U+O	A	F	1	38	4	-	546	2055:1787	680+262	57.9 : 57.9%	70	82	0	3.5	23.3	8.4
4/1	Merinall Close Left Ahead Right	U	D		1	7	-	-	3	1768	157	1.9%	-	-	-	0.0	49.5	0.1
J2: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	3.5%	15	0	0	0.0	-	-
2/1	Site Egress Right Left	O	-		-	-	-	-	11	Inf	316	3.5%	11	0	0	0.0	5.9	0.0
3/2	Kingsway N @ Access Right	O	-		-	-	-	-	4	Inf	596	0.7%	4	0	0	0.0	3.0	0.0
C1					PRC for Signalled Lanes (%):			55.4	Total Delay for Signalled Lanes (pcuHr):				14.88	Cycle Time (s): 90				
					PRC Over All Lanes (%):			55.4	Total Delay Over All Lanes(pcuHr):				14.90					

Network Layout Diagram

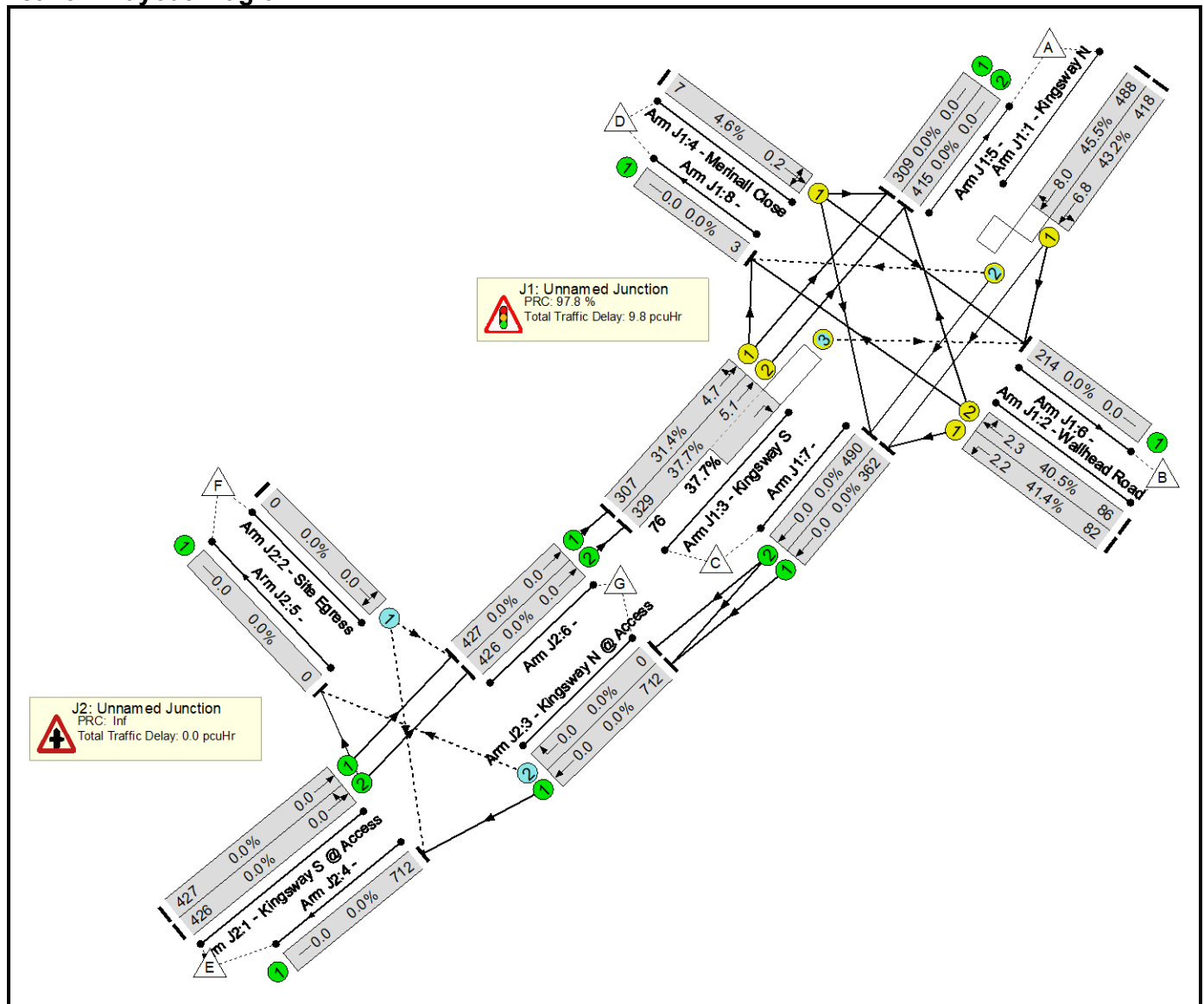


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	69.3%	82	142	14	21.9	-	-
J1: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	69.3%	57	142	14	21.8	-	-
1/1	Kingsway N Left Ahead	U	B		1	32	-	-	412	1731	635	64.9%	-	-	-	3.6	31.7	9.4
1/2	Kingsway N Ahead Right	O	B	E	1	32	6	-	517	2053	753	68.7%	3	0	0	4.6	31.7	12.0
2/1	Wallhead Road Left	U	C		1	21	-	-	231	1781	435	53.1%	-	-	-	2.5	38.3	5.6
2/2	Wallhead Road Right Ahead	U	C		1	21	-	-	324	1912	467	69.3%	-	-	-	3.9	43.3	8.4
3/1	Kingsway S Ahead Left	U	A		1	33	-	-	387	1914	723	53.5%	-	-	-	2.9	27.2	8.1
3/2+3/3	Kingsway S Ahead Right	U+O	A	F	1	33	6	-	523	2055:1787	475+319	65.9 : 65.9%	54	142	14	4.3	29.3	7.2
4/1	Merinall Close Left Ahead Right	U	D		1	7	-	-	7	1730	154	4.6%	-	-	-	0.1	50.1	0.2
J2: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	6.3%	25	0	0	0.0	-	-
2/1	Site Egress Right Left	O	-		-	-	-	-	18	Inf	286	6.3%	18	0	0	0.0	6.7	0.0
3/2	Kingsway N @ Access Right	O	-		-	-	-	-	7	Inf	561	1.2%	7	0	0	0.0	3.3	0.0
C1					PRC for Signalled Lanes (%):			29.8	Total Delay for Signalled Lanes (pcuHr):				21.81	Cycle Time (s): 90				
					PRC Over All Lanes (%):			29.8	Total Delay Over All Lanes(pcuHr):				21.85					

Network Layout Diagram

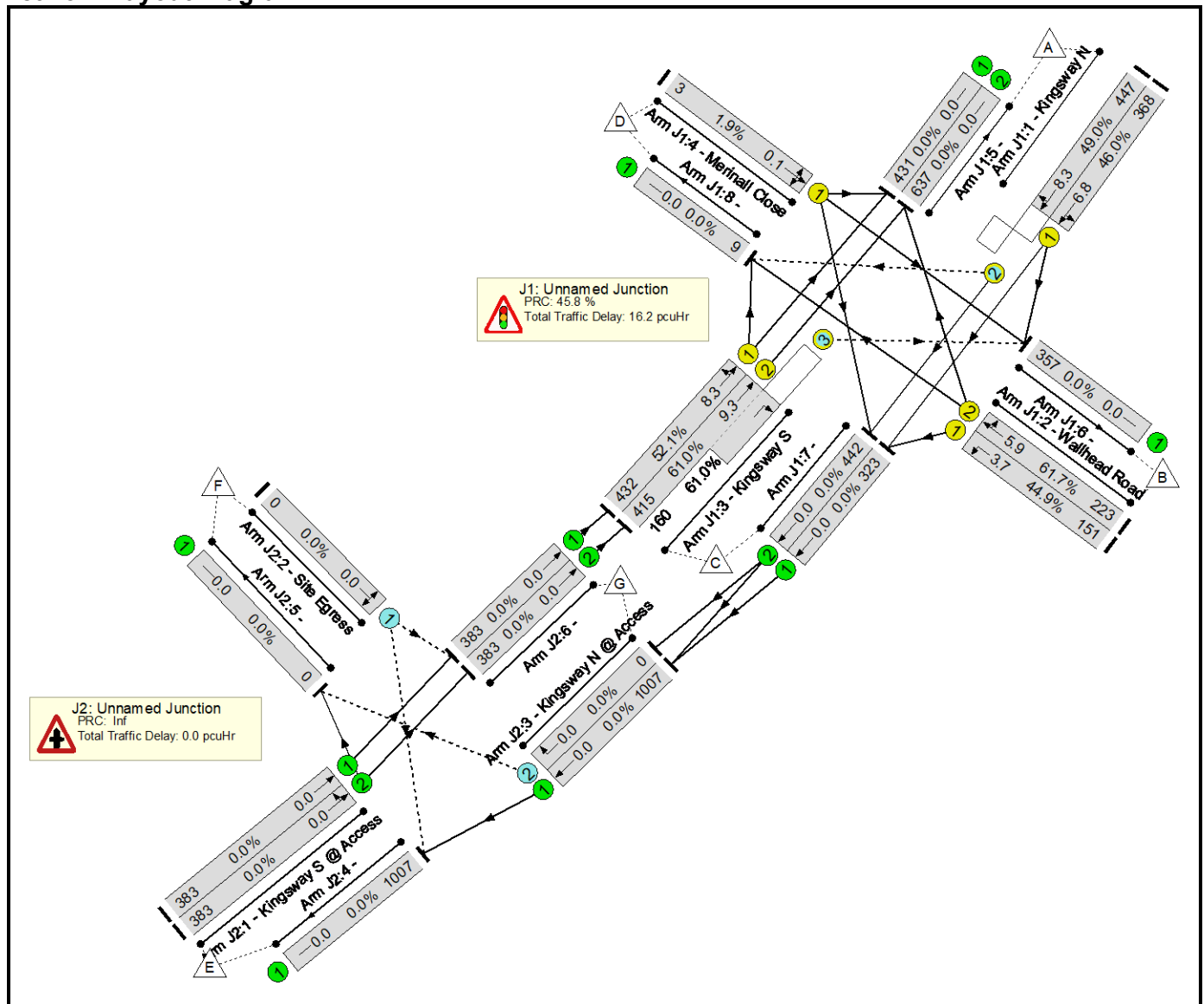


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	45.5%	35	42	0	9.8	-	-
J1: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	45.5%	35	42	0	9.8	-	-
1/1	Kingsway N Left Ahead	U	B		1	46	-	-	418	1853	968	43.2%	-	-	-	1.9	16.5	6.8
1/2	Kingsway N Ahead Right	O	B	E	1	46	6	-	488	2054	1073	45.5%	2	0	0	2.2	16.6	8.0
2/1	Wallhead Road Left	U	C		1	9	-	-	82	1781	198	41.4%	-	-	-	1.2	52.7	2.2
2/2	Wallhead Road Right Ahead	U	C		1	9	-	-	86	1912	212	40.5%	-	-	-	1.2	51.4	2.3
3/1	Kingsway S Ahead Left	U	A		1	45	-	-	307	1914	978	31.4%	-	-	-	1.3	15.5	4.7
3/2+3/3	Kingsway S Ahead Right	U+O	A	F	1	45	4	-	405	2055:1787	873+202	37.7 : 37.7%	34	42	0	1.8	15.7	5.1
4/1	Merinall Close Left Ahead Right	U	D		1	7	-	-	7	1708	152	4.6%	-	-	-	0.1	50.2	0.2
J2: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	0.0%	0	0	0	0.0	-	-
2/1	Site Egress Right Left	O	-		-	-	-	-	0	Inf	416	0.0%	0	0	0	0.0	0.0	0.0
3/2	Kingsway N @ Access Right	O	-		-	-	-	-	0	Inf	551	0.0%	0	0	0	0.0	0.0	0.0
C1					PRC for Signalled Lanes (%):			97.8	Total Delay for Signalled Lanes (pcuHr):				9.77	Cycle Time (s): 90				
					PRC Over All Lanes (%):			97.8	Total Delay Over All Lanes(pcuHr):				9.77					

Network Layout Diagram

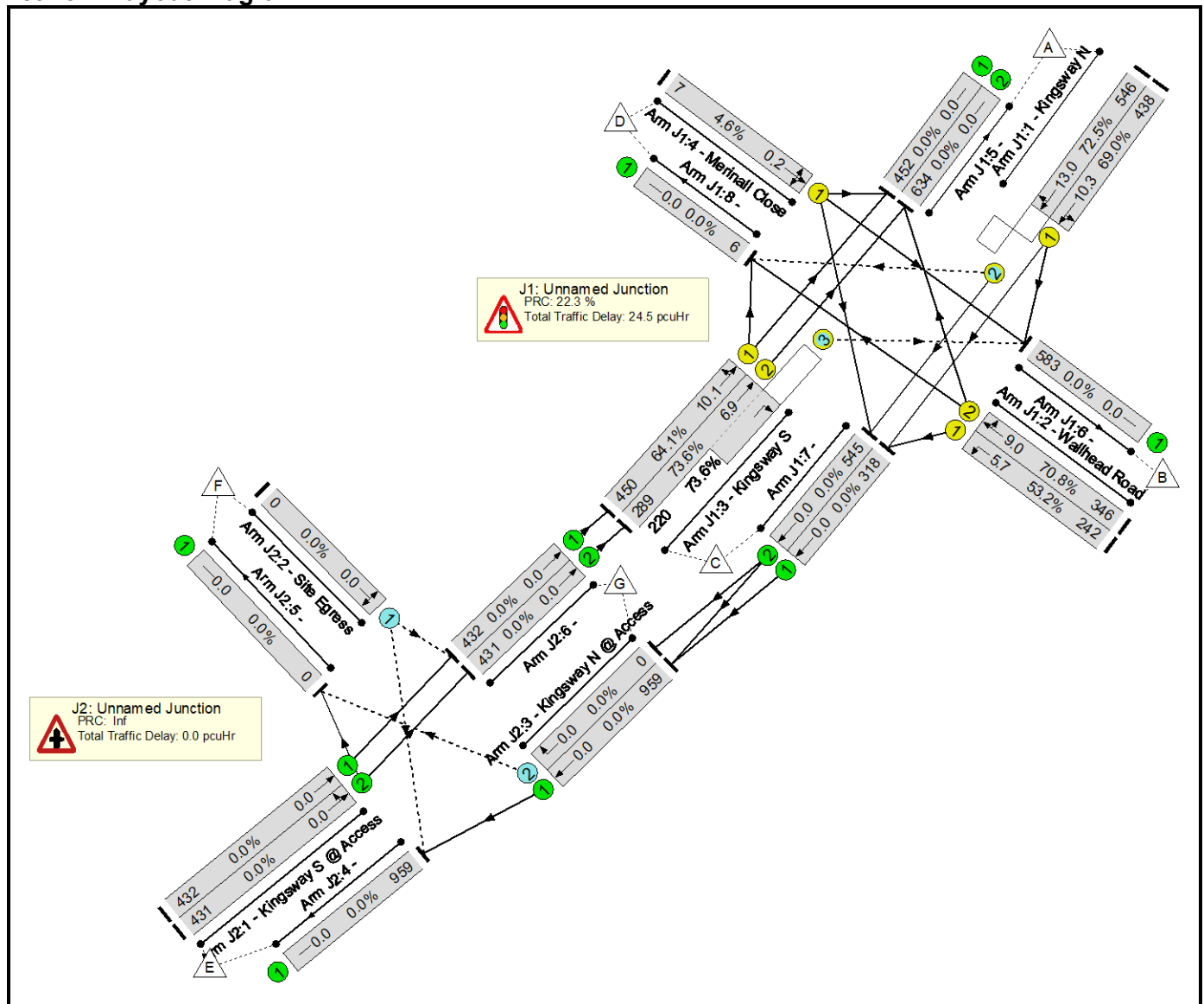


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	61.7%	83	83	0	16.2	-	-
J1: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	61.7%	83	83	0	16.2	-	-
1/1	Kingsway N Left Ahead	U	B		1	39	-	-	368	1801	800	46.0%	-	-	-	2.2	21.6	6.8
1/2	Kingsway N Ahead Right	O	B	E	1	39	6	-	447	2051	912	49.0%	5	1	0	2.7	21.6	8.3
2/1	Wallhead Road Left	U	C		1	16	-	-	151	1781	336	44.9%	-	-	-	1.8	42.0	3.7
2/2	Wallhead Road Right Ahead	U	C		1	16	-	-	223	1912	361	61.7%	-	-	-	2.9	46.4	5.9
3/1	Kingsway S Ahead Left	U	A		1	38	-	-	432	1914	829	52.1%	-	-	-	2.8	23.2	8.3
3/2+3/3	Kingsway S Ahead Right	U+O	A	F	1	38	4	-	575	2055:1787	680+262	61.0 : 61.0%	78	82	0	3.9	24.4	9.3
4/1	Merinall Close Left Ahead Right	U	D		1	7	-	-	3	1768	157	1.9%	-	-	-	0.0	49.5	0.1
J2: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	0.0%	0	0	0	0.0	-	-
2/1	Site Egress Right Left	O	-		-	-	-	-	0	Inf	390	0.0%	0	0	0	0.0	0.0	0.0
3/2	Kingsway N @ Access Right	O	-		-	-	-	-	0	Inf	582	0.0%	0	0	0	0.0	0.0	0.0
C1					PRC for Signalled Lanes (%):		45.8		Total Delay for Signalled Lanes (pcuHr):				16.25		Cycle Time (s): 90			
					PRC Over All Lanes (%):		45.8		Total Delay Over All Lanes(pcuHr):				16.25					

Network Layout Diagram

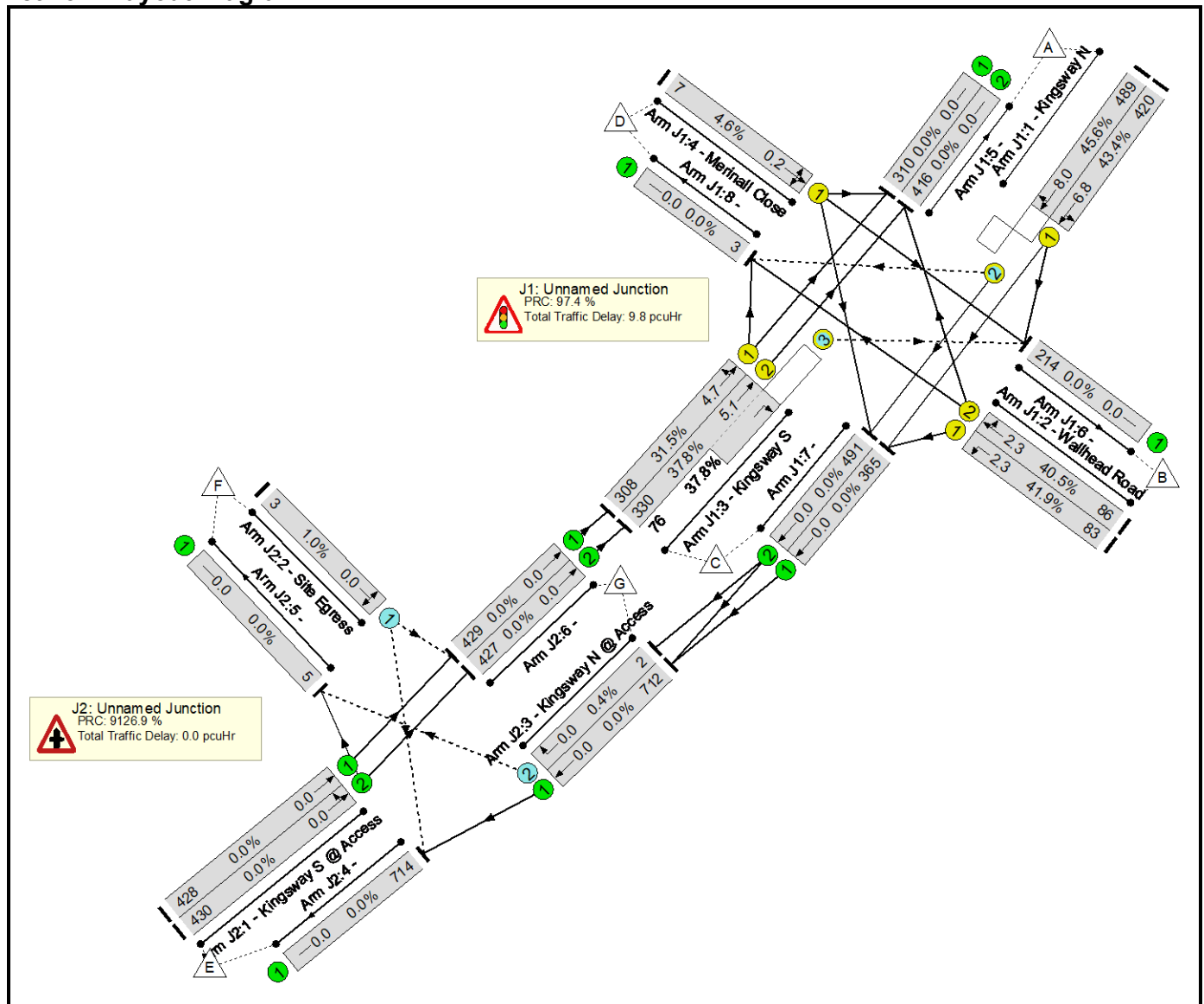


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	73.6%	45	139	40	24.5	-	-
J1: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	73.6%	45	139	40	24.5	-	-
1/1	Kingsway N Left Ahead	U	B		1	32	-	-	438	1730	634	69.0%	-	-	-	4.0	33.2	10.3
1/2	Kingsway N Ahead Right	O	B	E	1	32	6	-	546	2053	753	72.5%	3	0	0	5.0	33.2	13.0
2/1	Wallhead Road Left	U	C		1	22	-	-	242	1781	455	53.2%	-	-	-	2.5	37.3	5.7
2/2	Wallhead Road Right Ahead	U	C		1	22	-	-	346	1912	489	70.8%	-	-	-	4.1	42.9	9.0
3/1	Kingsway S Ahead Left	U	A		1	32	-	-	450	1914	702	64.1%	-	-	-	3.8	30.7	10.1
3/2+3/3	Kingsway S Ahead Right	U+O	A	F	1	32	5	-	509	2055:1787	393+299	73.6 : 73.6%	41	139	40	4.8	34.1	6.9
4/1	Merinall Close Left Ahead Right	U	D		1	7	-	-	7	1730	154	4.6%	-	-	-	0.1	50.1	0.2
J2: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	0.0%	0	0	0	0.0	-	-
2/1	Site Egress Right Left	O	-		-	-	-	-	0	Inf	372	0.0%	0	0	0	0.0	0.0	0.0
3/2	Kingsway N @ Access Right	O	-		-	-	-	-	0	Inf	548	0.0%	0	0	0	0.0	0.0	0.0
C1																		

Network Layout Diagram

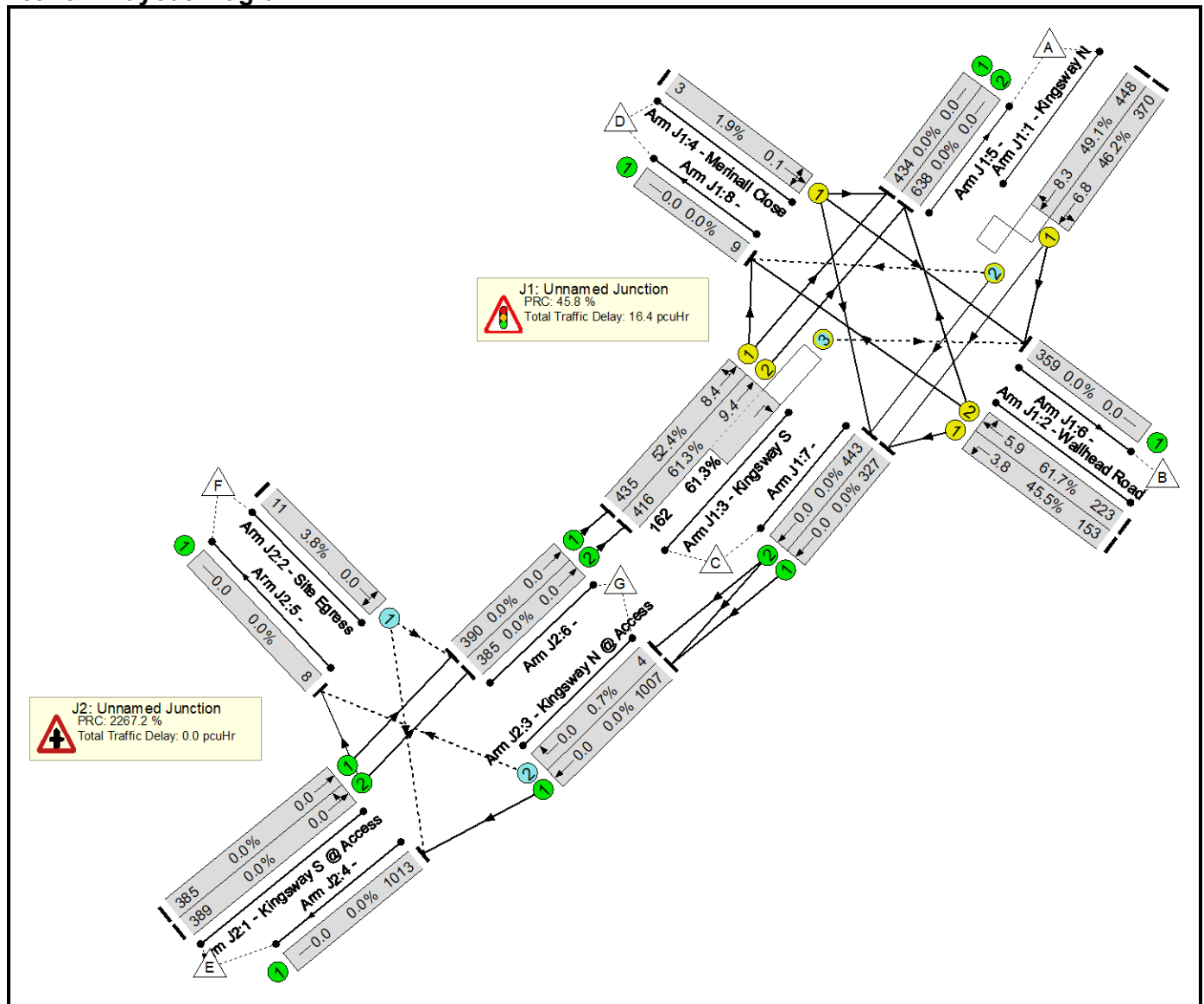


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	45.6%	40	42	0	9.8	-	-
J1: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	45.6%	35	42	0	9.8	-	-
1/1	Kingsway N Left Ahead	U	B		1	46	-	-	420	1854	968	43.4%	-	-	-	1.9	16.6	6.8
1/2	Kingsway N Ahead Right	O	B	E	1	46	6	-	489	2054	1073	45.6%	2	0	0	2.3	16.6	8.0
2/1	Wallhead Road Left	U	C		1	9	-	-	83	1781	198	41.9%	-	-	-	1.2	52.9	2.3
2/2	Wallhead Road Right Ahead	U	C		1	9	-	-	86	1912	212	40.5%	-	-	-	1.2	51.4	2.3
3/1	Kingsway S Ahead Left	U	A		1	45	-	-	308	1914	978	31.5%	-	-	-	1.3	15.5	4.7
3/2+3/3	Kingsway S Ahead Right	U+O	A	F	1	45	4	-	406	2055:1787	873+201	37.8 : 37.8%	34	42	0	1.8	15.7	5.1
4/1	Merinall Close Left Ahead Right	U	D		1	7	-	-	7	1708	152	4.6%	-	-	-	0.1	50.2	0.2
J2: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	1.0%	5	0	0	0.0	-	-
2/1	Site Egress Right Left	O	-		-	-	-	-	3	Inf	308	1.0%	3	0	0	0.0	5.9	0.0
3/2	Kingsway N @ Access Right	O	-		-	-	-	-	2	Inf	550	0.4%	2	0	0	0.0	3.3	0.0
C1					PRC for Signalled Lanes (%):			97.4	Total Delay for Signalled Lanes (pcuHr):				9.82	Cycle Time (s): 90				
					PRC Over All Lanes (%):			97.4	Total Delay Over All Lanes(pcuHr):				9.83					

Network Layout Diagram

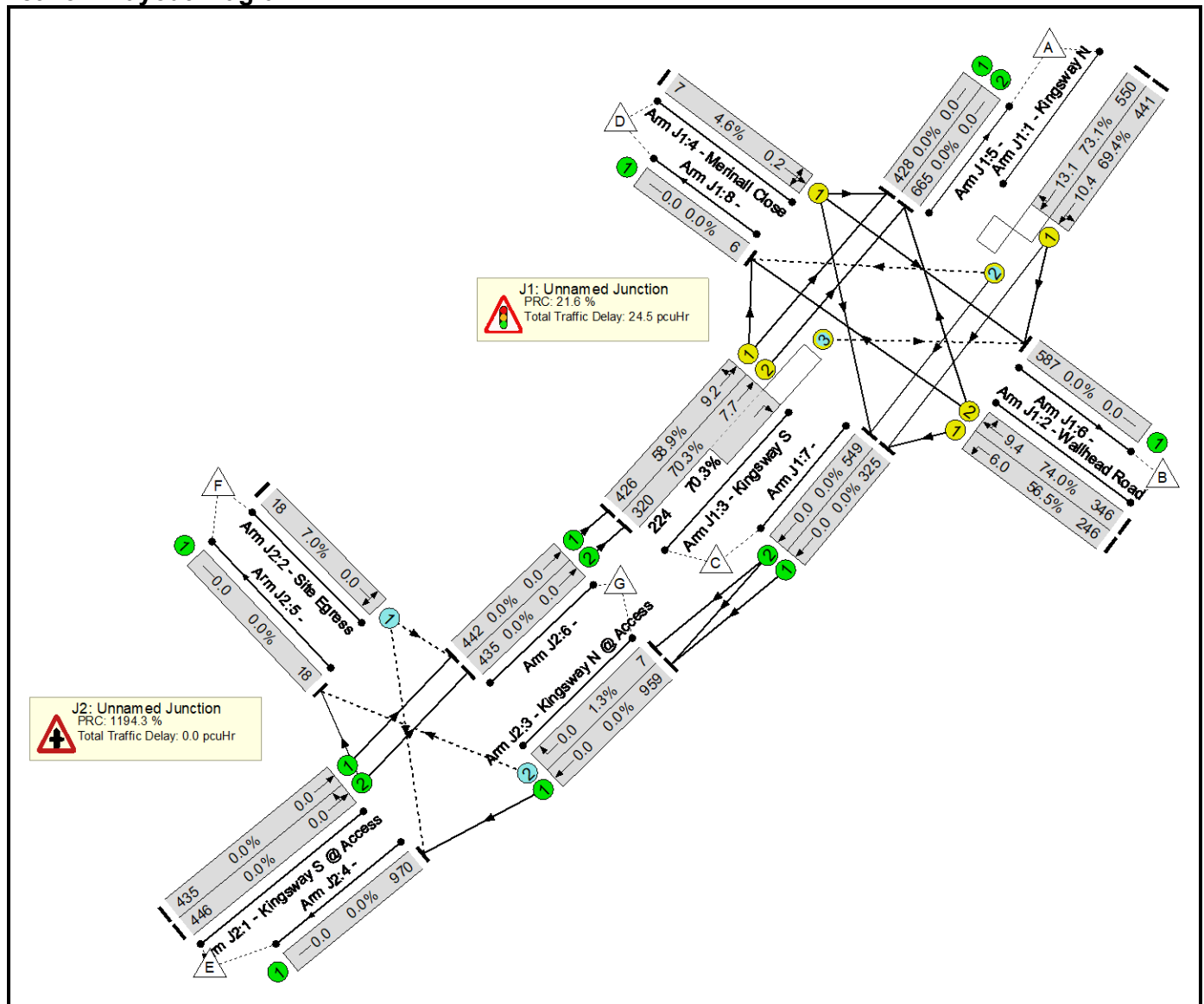


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	61.7%	99	83	0	16.4	-	-
J1: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	61.7%	84	83	0	16.4	-	-
1/1	Kingsway N Left Ahead	U	B		1	39	-	-	370	1802	801	46.2%	-	-	-	2.2	21.6	6.8
1/2	Kingsway N Ahead Right	O	B	E	1	39	6	-	448	2051	912	49.1%	5	1	0	2.7	21.7	8.3
2/1	Wallhead Road Left	U	C		1	16	-	-	153	1781	336	45.5%	-	-	-	1.8	42.2	3.8
2/2	Wallhead Road Right Ahead	U	C		1	16	-	-	223	1912	361	61.7%	-	-	-	2.9	46.4	5.9
3/1	Kingsway S Ahead Left	U	A		1	38	-	-	435	1914	829	52.4%	-	-	-	2.8	23.3	8.4
3/2+3/3	Kingsway S Ahead Right	U+O	A	F	1	38	4	-	578	2055:1787	679+264	61.3 : 61.3%	79	83	0	3.9	24.5	9.4
4/1	Merinall Close Left Ahead Right	U	D		1	7	-	-	3	1768	157	1.9%	-	-	-	0.0	49.5	0.1
J2: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	3.8%	15	0	0	0.0	-	-
2/1	Site Egress Right Left	O	-		-	-	-	-	11	Inf	289	3.8%	11	0	0	0.0	6.5	0.0
3/2	Kingsway N @ Access Right	O	-		-	-	-	-	4	Inf	579	0.7%	4	0	0	0.0	3.1	0.0
C1					PRC for Signalled Lanes (%):		45.8		Total Delay for Signalled Lanes (pcuHr):				16.37		Cycle Time (s): 90			
					PRC Over All Lanes (%):		45.8		Total Delay Over All Lanes(pcuHr):				16.39					

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	74.0%	69	149	36	24.5	-	-
J1: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	74.0%	44	149	36	24.5	-	-
1/1	Kingsway N Left Ahead	U	B		1	32	-	-	441	1732	635	69.4%	-	-	-	4.1	33.4	10.4
1/2	Kingsway N Ahead Right	O	B	E	1	32	6	-	550	2053	753	73.1%	3	1	0	5.1	33.4	13.1
2/1	Wallhead Road Left	U	C		1	21	-	-	246	1781	435	56.5%	-	-	-	2.7	39.3	6.0
2/2	Wallhead Road Right Ahead	U	C		1	21	-	-	346	1912	467	74.0%	-	-	-	4.4	45.9	9.4
3/1	Kingsway S Ahead Left	U	A		1	33	-	-	426	1914	723	58.9%	-	-	-	3.4	28.4	9.2
3/2+3/3	Kingsway S Ahead Right	U+O	A	F	1	33	6	-	544	2055:1787	455+319	70.3 : 70.3%	40	148	36	4.7	31.1	7.7
4/1	Merinall Close Left Ahead Right	U	D		1	7	-	-	7	1730	154	4.6%	-	-	-	0.1	50.1	0.2
J2: Unnamed Junction	-	-	-		-	-	-	-	-	-	-	7.0%	25	0	0	0.0	-	-
2/1	Site Egress Right Left	O	-		-	-	-	-	18	Inf	259	7.0%	18	0	0	0.0	7.5	0.0
3/2	Kingsway N @ Access Right	O	-		-	-	-	-	7	Inf	542	1.3%	7	0	0	0.0	3.4	0.0
C1					PRC for Signalled Lanes (%):		21.6		Total Delay for Signalled Lanes (pcuHr):				24.46		Cycle Time (s): 90			
					PRC Over All Lanes (%):		21.6		Total Delay Over All Lanes(pcuHr):				24.50					