

TRANSPORT ASSESSMENT

Renaker Build Limited

Trinity Islands Manchester

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Transport Assessment

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1 Introduction

- 1.1 Renaker Build Limited has commissioned Vectos to prepare a Transport Assessment (TA) in support of the proposed development of Trinity Islands, Manchester.
- 1.2 The proposals are for a residential-led development with ancillary ground floor commercial uses, underground car parking and public realm.
- 1.3 The site is located within the jurisdiction of Manchester City Council (MCC), who act as both the local planning and highway authority. MCC are supported by Transport for Greater Manchester (TfGM) in their capacity as regional transport authority.

Development Site

- 1.4 The proposed development site comprises approximately 4.4 acres split into two parcels, known as Site C and Site D. The site is currently occupied by surface level car parking across both parcels.
- 1.5 Site C is approximately 2.2 acres in area and is bound by the River Irwell to the north, Trinity Way to the west, Water Street to the south and a railway viaduct to the east. Site D comprises an area of approximately 2.2 acres and is bound by the River Irwell to the north and west, Regent Road to the south and Trinity Way to the east.
- 1.6 The proposed development site has previously operated as a car park providing parking for up to 645 vehicles and has also been used as a construction compound for Network Rail when delivering the Ordsall Chord railway improvement scheme.

- 1.7 An aerial image showing the approximate boundaries of the two development parcels is shown in **Figure 1.1**. Linking the site is road/ footway under Castlefield Bridge (height clearance c.2.8m) over which the developer has rights of access as shown in yellow.



Figure 1.1 Development Site (Source: Google Maps)

- 1.8 The development proposals for the site are for four residential towers across the two parcels with ancillary commercial uses. The full planning description for the proposals is given below:

Construction of four mixed use towers between 39 and 60 storeys comprising of residential dwellings with commercial uses at podium level, public realm, car and cycle parking and other associated works

Planning Background

- 1.9 The development site was previously subject to a planning application for a series of residential towers providing up to 1,390 residential units and other ancillary uses (Planning Reference: 111507/FO/2017).

Scope of Report

- 1.10 This TA has been prepared in accordance with guidance provided by the Department for Transport's (DfT) 'Travel Plans, Transport Assessment and Statements' (2014) document, as well as paying due notice to the DfT's now superseded 'Guidance on Transport Assessments' document.
- 1.11 The scope of the report has also been informed by pre-application discussions with highway officers at MCC and representatives from TfGM.
- 1.12 A meeting was held in May 2021 to discuss the development proposals, the access strategy and the scope of the TA. This was followed by an email dated 1st June 2021 prepared by Vectos outlining the scope of assessment in detail. A response was provided by TfGM on 24th June 2021.
- 1.13 A further meeting was held with MCC and TfGM on 12th August 2021 to further discuss the access strategy for Site D.
- 1.14 The relevant scoping correspondence and meeting minutes have been included as **Appendix A** of this report.
- 1.15 Following this introductory chapter, this report is structured as follows:
- **Section 2: Policy Context** provides a review of pertinent national planning policy guidance;
 - **Section 3: Existing Condition** provides a review of the baseline conditions of the site and local highway network;
 - **Section 4: Development Proposals** provides a description of the development proposals;
 - **Section 5: Access by Sustainable Transport Modes** provides a review of the accessibility of the site by sustainable modes of travel;
 - **Section 6: Highway Impact** presents a traffic impact assessment of the proposed development including a capacity assessment of the Site D access proposals; and
 - **Section 7: Summary and Conclusions** provides a final chapter for the report and brings together the findings of the assessment.

2 Policy Context

National Planning Policy Framework (2021)

- 2.1 The latest National Planning Policy Framework (NPPF) was published in July 2021 by the Ministry of Housing, Communities and Local Government, replacing the previous versions published in 2012, 2018 and 2019. The NPPF sets out the government's planning policies for England and how these are expected to be applied. At the heart of the Framework is a presumption in favour of sustainable development.
- 2.2 As part of promoting sustainable transport, paragraph 110 of the revised NPPF states that in assessing applications for development, it should be ensured that:
- a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location.*
 - b) safe and suitable access to the site can be achieved for all users;*
 - c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and*
 - d) 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.*
- 2.3 Paragraph 111 goes on to state that 'Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe'.
- 2.4 Finally, the NPPF notes that all developments that will generate significant amounts of movement should be required to provide a Travel Plan. Accordingly, a framework Travel Plan has been prepared and submitted alongside this TA in support of this application, which will form the basis of a long-term management strategy for the site, delivering sustainable transport objectives.

Planning Practice Guidance: Travel Plans, Transport Assessments and Statements in Decision-Taking

- 2.5 In March 2014, the MHCLG in conjunction with the Department for Transport (DfT), released advice on when transport assessments and transport statements are required, what they should contain (which is intended to assist stakeholders in determining whether an assessment may be required) and, if so, what the level and scope of that assessment should be.
- 2.6 The advice reflects current Government policy promoting a shift from the 'predict and provide' approach to transport planning to one more focused on sustainability. The document focuses on encouraging environmental sustainability, managing the existing network and mitigating the residual impacts of traffic from the development proposals.

Greater Manchester Transport Strategy 2040

- 2.7 The 2040 Transport Strategy has an established long-term vision for transport in Greater Manchester, of providing world class connections that support long-term, sustainable economic growth and access to opportunity for all. The four key elements of this vision are:
- Supporting sustainable economic growth;
 - Protecting the environment;
 - Improving quality of life for all; and,
 - Developing an innovative city region.
- 2.8 The 2040 Transport Strategy was first published in February 2017. It sets out the practical actions planned to deliver the 2040 Transport Strategy and achieve the ambitions of the GMCA and the Mayor, providing a coordinated approach to transport investment. It is also intended to inform the development of the Greater Manchester Infrastructure Programme (GMIP).
- 2.9 A key ambition is to improve the Greater Manchester transport system so that, by 2040, 50% of all journeys in Greater Manchester are made by public transport or active travel, supporting a reduction in car use to no more than 50% of daily trips. This will mean one million more sustainable journeys every day in Greater Manchester by 2040, enabling us to deliver a healthier, greener and more productive city-region – this is known as the “Right Mix”. Achieving the Right Mix is expected to lead to zero net growth in motor vehicle traffic in Greater Manchester between 2017 and 2040.
- 2.10 Fundamental to delivering the Right Mix will be the adoption of a “Streets for All” framework – to enable more people to walk, cycle and use public transport, and improve reliability for, in particular, buses and freight vehicles on the key route network serving our towns and Regional Centre.

Manchester City Council Local Plan Relevant Policies

- 2.11 Manchester’s Core Strategy was adopted on the 11 July 2012 and is the key document in the Manchester Local Plan. It sets the out the long term strategic policies for Manchester’s future development and forms the framework that planning applications will be assessed against.
- 2.12 The Core Strategy was adopted by Manchester City Council on 11th July 2012. It is the key document in Manchester's Local Development Framework and outlines the Council's vision from 2012 to 2027. Manchester's Local Development Framework is a collection of planning documents and also includes:-
- Development Plan Documents (to be developed following adoption of the Core Strategy), for example on Houses in Multiple Occupation
 - Supplementary Planning Documents (SPDs) which give more detail to policies in the Core Strategy or in any other future Development Plan Documents

- Manchester adopted its 'Guide to Development in Manchester SPD and Planning Guidance' in April 2007 and the 'Providing for Housing Choice SPD and Planning Guidance' September 2008.

- 2.13 The Guide to Development in Manchester (Adopted April 2007) is effectively a hybrid document acting as both a Supplementary Planning Document and planning guidance. The document sets out the City Council's stance on a wide range of issues, demonstrating, where applicable, their links to the Manchester Unitary Development Plan (UDP).
- 2.14 It provides guidance on Urban Design, Accessibility, Environmental Standards, Street Hierarchy and Parking. The development aims to conform to that guidance.

Development Frameworks

- 2.15 The St Johns Strategic Regeneration Framework (SRF) was adopted by MCC in February 2015 and further updated in November 2016. The SRF sets out key goals and principles within the St John's area which encompasses the Proposed Development.
- 2.16 The St Johns SRF recognises the comprehensive public transport network available locally and aims to ensure that the framework area remains permeable for both pedestrians and cyclists.
- 2.17 The site also forms part of the Water Street Strategic Regeneration Framework (SRF). This SRF provides a framework for the mixed-use regeneration of this part of Manchester City Centre.

3 Existing Conditions

Introduction

- 3.1 The Site comprises two distinct plots of land, Site C to the north east and Site D to the south west, divided by the A6042 Trinity Way. The proposed development site is currently configured as a surface level car park providing for 645 cars.
- 3.2 The site is bounded by the River Irwell to the north, Water Street to the east, the A6402 and A57 to the south and the River Irwell to the west.
- 3.3 The site contains and lies adjacent to a number of natural assets, including riverside frontages and vegetation on the edges of the site.

Surrounding Highway Network

- 3.4 As previously described the A6042 Trinity Way divides the site in two and runs in an approximate north-south alignment crossing the River Irwell via a bridge on the northern side of the site.
- 3.5 In the vicinity of the site, Trinity Way is a dual carriageway subject to a 30mph speed restriction. This section of highway forms part of the Manchester and Salford Inner Relief Road which forms an inner ring road around the regional centre.
- 3.6 Trinity Way forms a signalised junction with Water Street which is positioned between the eastern boundary of Site D and the south western boundary of Site C. Further to the south, Trinity Way forms a signalised interchange with the A57 Regent Road. Both junctions were subject to significant improvement works in recent years to enhance capacity and improve provision for cyclists and pedestrians.
- 3.7 Water Street heads north east from its junction with Trinity Way connecting with Liverpool Road, the Factory Cultural Venue and St Johns. It has a speed limit of 20mph and benefits from cycle lanes.

Access and Parking

- 3.8 Site D is currently accessed by vehicles and pedestrians from the Trinity Way and the Site C from Water Street. The existing site access for Site C is shown in **Figure 3.1** and for Site D in **Figure 3.2**.
- 3.9 There is a link between the two sites underneath the Castlefield Bridge which carries Trinity Way over the River Irwell. This route permits cars and pedestrians to cross from one car park to the other. There is a height barrier, the clearance from road level to soffit is around 2.8m.



Figure 3.1: Existing Access to Site C (Source: Google Maps)



Figure 3.2: Existing Access to Site D (Source: Google Maps)

- 3.10 When it was operating as part of the Granada Studios operation the car parks attracted traffic movements. The site was well used by ITV employees, and this is reflected in the aerial view as shown in **Figure 3.3**. Both sites have more recently been used as a site compound for Network Rail's Ordsall Chord works and Site C has since returned to operating as a commuter car park. Site D is still barriered but can open again in the future as a commuter car park.



Figure 3.3: Aerial View of Car Parks While Used by ITV Granada Studios Employees (Source: Bing Maps)

- 3.11 Both sites have an established use as surface level car parks, and these can simply reopen without the for further planning approval or physical works. This is considered in further detail in the highway impact assessment.

- 3.12 Of the off-site public parking spaces available within the area there are more than 4,000 spaces of public parking available within a 10-minute walk of the site and it is noted that there are a further 5,400 spaces within a 15 minute walk as given in **Table 3.1**.

Table 3.1 Car parking Spaces within a 10 minute walk of Trinity Islands

Car Parking Spaces within a 10 Minute Walk	
Spinningfields NCP	680
New Bailey, Salford NCP	605
Great Northern 1&2 NCP	1,200
Bridge Street NCP	73
Deansgate Euro Car Parks	40
Bridgewater Street	70
Manchester Central NCP	700
Stanley Street	637
Total	4,005

Review of Personal Injury Accident Data

- 3.13 Traffic collision data has been obtained from TfGM for the surrounding area. Data has been provided for a period of five years, between March 2015 and February 2020 for the area bounded by Deansgate, Quay Street, New Quay Street, the Inner Relief Road Regent Road and Mancunian Way. While more recent accident data is available the decision was taken to exclude this from the analysis due to the impact of the Covid-19 pandemic on overall traffic volumes in the vicinity of the proposed site.
- 3.14 The full accident data report prepared by TfGM has been included as **Appendix B** of this report. The adopted study area is identical to that adopted in the supporting TA for the previous application at the site.
- 3.15 In total, there have been 56 accidents in the identified area. This consists of 50 which are categorised as slight in severity and six which are categorised as serious. There were no fatal accidents recorded during the selected five-year period.
- 3.16 At the Trinity Way/ Water Street junction, a total of six accidents have been recorded. Of these accidents, five were recorded as slight in severity and one as serious. Of the contributory factors listed in the record, all are attributable to driver error with no highway features identified as contributory.
- 3.17 At the Trinity Way/ Regent Road junction, a total of nine injury accidents were reported. Of these, seven were classified as slight in severity and two as serious. Of the contributory factors listed, none were attributable to the layout of the highway and were instead associated with driver error.

- 3.18 On Water Street itself, three accidents were recorded of which two were slight in severity and one serious. Again, driver error was recorded as contributing to these incidents.
- 3.19 In summary, the review of accident data reveals no evidence of underlying highway safety issues. It is therefore concluded that there are no existing accident blackspots on the highway network in the vicinity of the site.

4 Development Proposals

Proposed Development

- 4.1 The development of Trinity Islands involves the comprehensive redevelopment of the site to provide a residential development with supporting commercial uses.
- 4.2 The Trinity Islands proposals include:
- 1,950 residential apartments across four towers:
 - Site C – 935 apartments
 - Site D – 1,015 apartments
 - Circa 361sqm commercial floorspace
 - A total of 556 car parking spaces
 - A total 1,950 cycle spaces for residents plus 58 cycle spaces for visitors in the public realm.
- 4.3 The general layout of the proposed development with the basement levels, ground floor and first floor levels are shown in **Appendix C**. The highway improvements proposed to enhance access to these sites is shown in **Dwg VN211913-D103**.

Access Site C

- 4.4 Principal access to Site C is proposed to be taken from Water Street via two priority junctions. Each junction will provide two-way access into the basement car parking. The two accesses together will be linked through the site by a one-way servicing/ drop off route. This route will operate with a one-way system in place with access from the western junction and egress via the eastern junction. A parking bay intended for short-term use is to be provided alongside the internal link road on its western side.
- 4.5 The two towers, identified as C1 and C2, are to be provided with dedicated bays permitting refuse collection and other servicing activity.
- 4.6 To help facilitate access for the development, an access is proposed at the northern edge of Site C which allows further service vehicle access.
- 4.7 The landscape arrangement plans for Site C are included in **Appendix C**.

Access Site D

- 4.8 Access for Site D is at the same location as currently provided and will form a fourth arm of the Trinity Way/ Water Street traffic signals. For the previous planning application at the site, it was agreed with MCC and TfGM that this access would operate as a left-in left-out arrangement.
- 4.9 However, for the latest proposed scheme the Site D access arm of the junction will be signalised and incorporated into the existing signal plan of the junction. The principle of this junction design has been discussed and agreed with MCC and TfGM prior to the submission of the planning application.
- 4.10 The forecast operation of this junction once the proposed development becomes operational is discussed in more detail later in this report.
- 4.11 Access to the basement car parking provision is provided to the west of the access and a one-way link for vehicles is provided permitting drop-off/ pick-up activity and access to the service bays adjacent to the D1 and D2 towers.
- 4.12 The landscape arrangement plans for Site C are included in **Appendix C**.

Parking

- 4.13 Residential car parking is being provided at a ratio of approximately 29% to the residential units. To support the site, cycle parking is to be provided at an approximate 1:1 ratio with the proposed apartments. A summary of parking provision is provided below:
- Site C:
 - 261 car parking spaces including 27 disabled bays
 - 935 secure cycle parking spaces
 - Site D:
 - 295 car parking spaces including 30 disabled bays
 - 1,015 secure cycle parking spaces
 - **Total:**
 - **556 car parking spaces including 30 disabled bays**
 - **1,950 secure cycle parking spaces**
- 4.14 The parking provision will be provided in underground facilities below the Site C and Site D towers which are shown in the Basement Plans in **Appendix C** of this report.
- 4.15 Of the proposed parking provision up to 20% will be demand-led Electric Vehicle Charge (EVC) provision (7kw each). Spaces will be future proofed with containment channels that enable cable connections to be installed as and when demand dictates.

Servicing

- 4.16 A separate Waste & Servicing Strategy has been developed and supports this application. This document provides detailed overview of the proposed servicing arrangements for both Sites C and D with a summary of provided below:

Service Access Site C

- 4.17 As previously described, access to Site C is proposed to be taken from Water Street via two priority junctions linked together through the site by a one-way servicing/ drop off route. This route will operate with a one-way system in place with access from the western junction and egress via the eastern junction. A parking bay intended for short-term use is to be provided alongside the internal link road on its western side. This route is expected to be used by smaller vans and couriers.
- 4.18 Site C1 also benefits from a service area to the north east side for larger or longer deliveries including refuse collection. The Tracking for a large 11.5m refuse vehicle accessing this space is shown in **Dwg VN211913-TR109 Rev A**.
- 4.19 Site C2 has its main service access located off the drop-off route. Larger vehicles are expected to reverse into the Service Yard. On exit from this service yard, the larger vehicle can turn right to re-join Water Street. This manoeuvre will block some of the other movement to and from the car park, but it is only for a transitory moment. The manoeuvre of such vehicles is shown in **Dwg VN211913-TR110 Rev A**.
- 4.20 The link connecting the two Sites under Castlefield Bridge is accessed through the C1 service yard but under the Bridge it can only be used by smaller vans and so this route is expected only to be used for servicing of some of the riverside land uses or for maintenance.

Service Access Site D

- 4.21 Service access for Site D will use the proposed Trinity Way/ Water Street traffic signal entrance. Site D includes a drop off route for van and couriers via the front door and this route circulates around the Basement Parking portal. A constraint on this route are some large wind baffles which narrow the road. A large service vehicle can navigate between these structures but needs to undertake an extra 3 point turn in order to do so. However, refuse collection at the site would not be undertaken intensively with only around one vehicle per day undertaking this manoeuvre.
- 4.22 The tracking of a large refuse vehicle accessing Site D1 is shown in **Dwg VN211913-TR112 Rev A** which shows the vehicle bypassing the drop off route to reach the service area on the north eastern side of the building as an alternative routing option.
- 4.23 As shown, the egressing manoeuvre overruns with the opposing lane of the site access arm. To address this, an internal stopline is proposed which would control service vehicle egress onto the Trinity Way/ Water Street junction and prevent conflict with vehicles entering the site through the main site access arm from this junction.

- 4.24 To access Site D2, service vehicles would reverse into Site D2. On exit they can navigate around the Basement Car Park structure and the wind baffles so that they then approach the signals. The tracking of this manoeuvre is shown in **Dwg VN211913-TR111 Rev A**.

External Areas

- 4.25 The external areas are also subject to this application, and a plan of the external layout of the site at ground floor level is included as **Appendix C** of this report. It can be seen that there is a high-quality public realm considering the needs of all users including those that are visually or mobility impaired.
- 4.26 At the ground floor level there are the current pedestrian crossings of the highway at Trinity Way. In addition to this a new riverside walkway linking Site D and Site C under the Castefiled Bridge and offering a quality riverside frontage.
- 4.27 The high-quality public realm within the site itself will be complemented by further works on the highway to improve provision for cyclists and pedestrians. These include an improved footway/cycleway route along Water Street and widening of the footway around Site D where the crossings land. These works are incorporated into the highway improvements previously shown in **Dwg VN211913-D103**.

5 Access by Sustainable Travel Modes

Introduction

- 5.1 The Trinity Islands development is well located for access by all modes. Manchester City Centre offers many amenities and attractions within a short walk. The site is also located within a short distance of major public transport routes.

Accessibility by Walking

- 5.2 Firstly, the development itself will offer the residents on the site convenient facilities so that they do not need to travel. Amenity floors of the proposed towers will provide health and well-being facilities whilst the commercial units will provide convenience retail and leisure uses.
- 5.3 Where residents wish to walk to access local amenities, the Chartered Institution of Highways and Transportation document entitled 'Providing for Journeys on Foot' provides guidance on what are considered to be acceptable walking distances. The document states that the acceptable maximum walking distance for commuting trips is 2km which equates to about a 25-minute walk, while an 800m walking distance is stated as being the preferred maximum distance for shopping trips. A 2km walk covers the entire City Centre and many nearby residential areas of Salford and Trafford such as Ordsall and Castlefield.
- 5.4 Given the location of Trinity Islands, pedestrian accessibility to the surrounding facilities is very good. Existing pedestrian links are present along the A6042 and Water Street, both of which border the sites, and lead to the primary routes towards the centre of Manchester along Liverpool Road. All footways in the surrounding area are lit and there are appropriate crossing facilities across all the main highways.
- 5.5 Many local facilities are situated within a short walk of Trinity Islands. There is the Regent Road Retail Park anchored by Sainsbury's, a Sainsbury's Local and Tesco Express store on Quay Street, banking facilities and a wide range of retail, cafes and restaurants allowing residents to access a wide range of services and amenities without the need to drive elsewhere. **Plan VN211913-G101** shows the amenities that are available within a short 10-minute walk of the site.
- 5.6 The development of St Johns in close proximity to the site will offer a variety of retail, leisure and employment opportunities for local residents on their doorstep. This mix of uses means that most activities can be enjoyed without the need to travel elsewhere.
- 5.7 The area will benefit from quality signage to direct pedestrians on the most appropriate route.

Accessibility by Cycle

- 5.8 Cycling has the potential to replace short car journeys, particularly those under 5km. As part of the development 1,922 cycle parking spaces will be provided in secure cycle stores to support trips by this mode. For cyclists travelling at a leisurely cycle speed of 10 miles per hour, a journey of around 25 minutes would cover the whole of the City Centre and much of the surrounding conurbation. The isochrones showing this extent is provided in **Plan VN211913-G102**.

- 5.9 There are a number of designated cycle routes and facilities in the area which are shown in **Figure 5.1**.

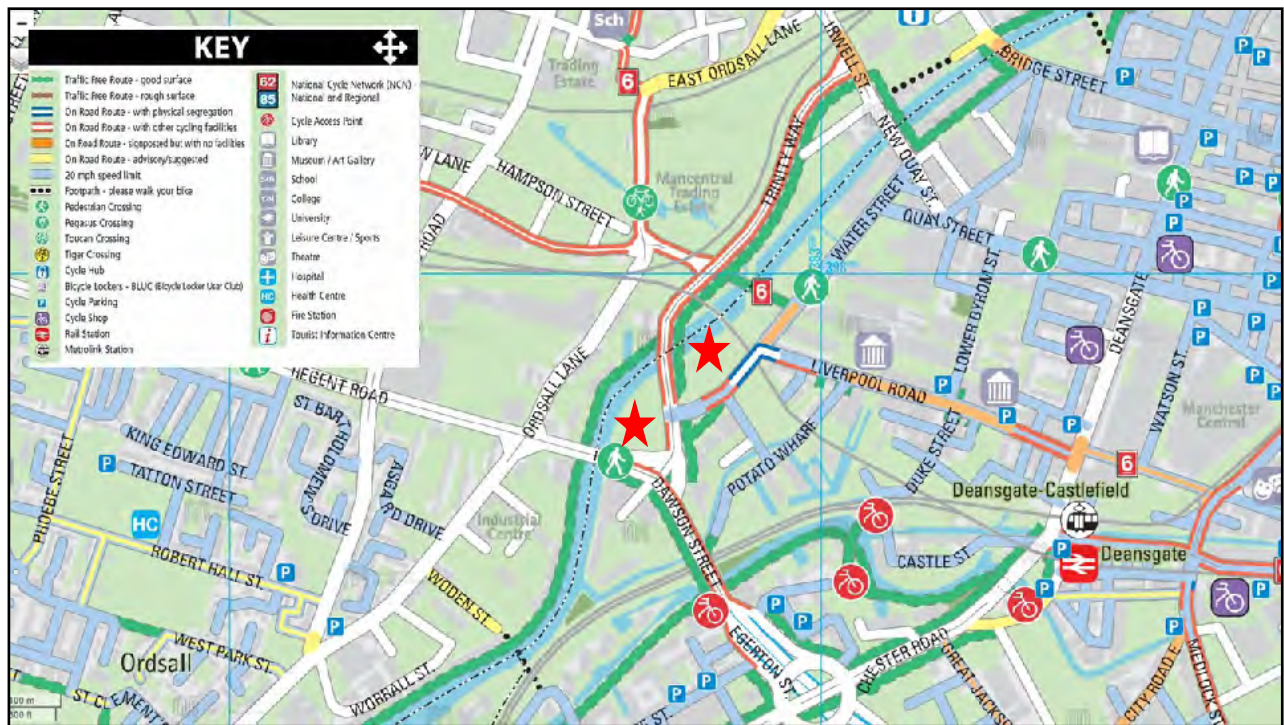


Figure 5.1: Local Cycle Infrastructure

- 5.10 As shown in **Figure 5.1**, National Cycle Route 6 passes close to the site, crossing the River Irwell and then crossing Water Street before heading along Liverpool Road. A cycle bridge runs parallel to Trinity Way and lands next to Site C offering a cycle route alongside the Inner Relief Road.
- 5.11 TfGM is also developing cross city cycleways and the nearest scheme is the Bridgewater Canal scheme that follows the canal and arrives at Deansgate close to the Station just south of Liverpool Road. This is shown in **Figure 5.2** overleaf.

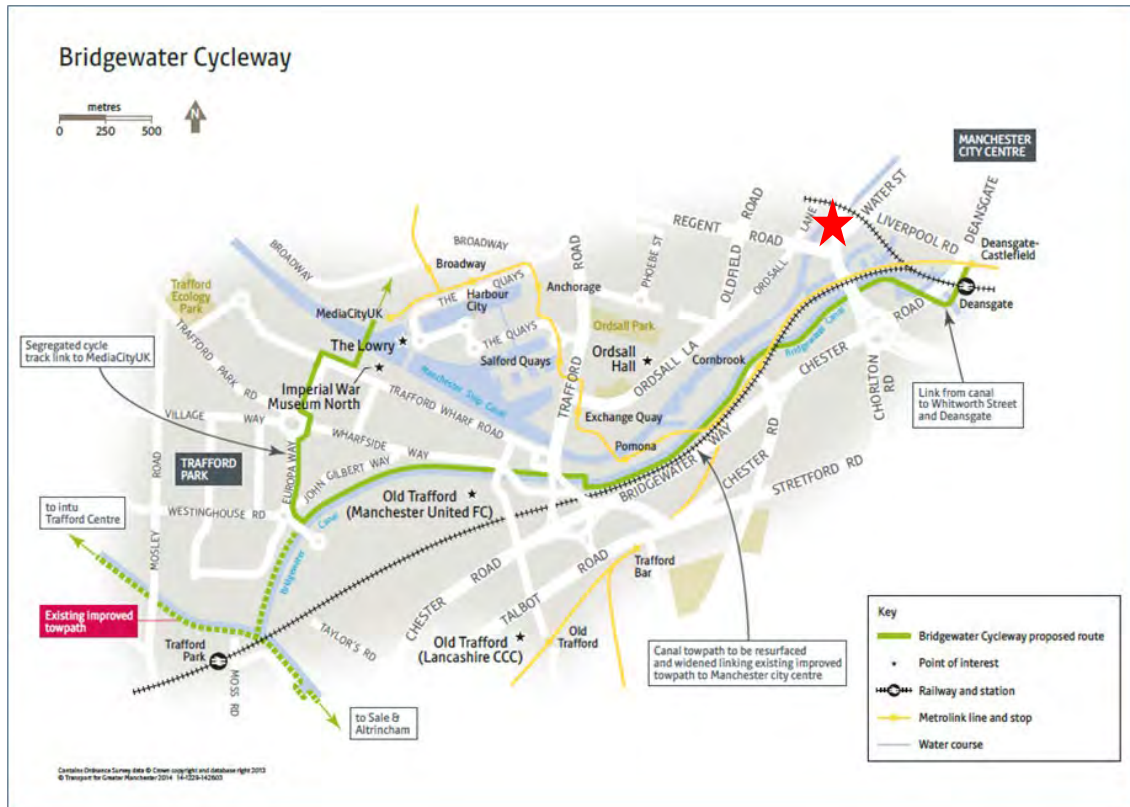


Figure 5.2: Proposed Bridgewater Cycleway

- 5.12 These cycle facilities will offer quality cycle routes from both Salford and Trafford to offer a quality route to Trinity Islands whereupon cyclists will benefit from the excellent cycle facilities.

Accessibility by Bus

- 5.13 There are standard bus services passing immediately past the site. The 33 bus service connects the site with Manchester, Eccles, Brookhouse and Wigan. Other services are available within a short walk of the site.
- 5.14 The site is within a 450-700m walk of the Free Bus Service on Liverpool Road/Lower Byrom Street (depending on the Site/Stop). As illustrated in **Figure 5.3** overleaf, the Free Bus service covers the vast majority of the city centre and provides convenient access to major activity centres in the city. In particular, it completes the City's integrated public transport service and gives the site quick and convenient public transport connections to all mainline railway stations, principal car parks and retail centres.
- 5.15 Free Bus buses are highly branded and are instantly recognisable to workers and visitors. High quality stops are provided along the service routes with clear branded images on bus stop plates to enable instant recognition.

5.16 There are three Free Bus routes, all of which come close to the St John's site, and these are:

- Service 1: Spinningfields circular – this includes route extensions during Monday – Friday peak hours and on Saturdays (Magenta route);
- Service 2: Deansgate circular (Light blue route); and
- Service 3: Deansgate circular – Evening service only (Light green route).

5.17 Free Bus is complimentary to all, runs on a 10-to-20-minute frequency and has been promoted in a unique joint venture by Manchester City Council, National Car Parks (NCP), Greater Manchester Passenger Transport Executive (GMPTE) and Allied London Properties Ltd. During peak hours of the day, Service 1 and Service 2 operate in close proximity to both buildings along either Quay Street or Lower Byrom Street.



Figure 5.3: Free Bus Route Map

Accessibility by Rail

- 5.18 The site is conveniently located for access by a number of railway stations. Salford Central railway station is located immediately to the northwest of the development, and it is a 10-15 minute walk away. This station has been improved to provide a main commuting station for the western part of the conurbation.
- 5.19 Investment in the rail industry includes the Ordsall Chord in recent years and this work has led to a change in the TransPennine Express services. It has led to a greater variety of services using Salford Central including services to Liverpool and Leeds in particular.
- 5.20 Deansgate Railway Station is located to the south, a 10 minute walk away. Both of these nearby stations offer access to frequent services to Lancashire, Merseyside and Bolton.
- 5.21 Manchester Victoria and Piccadilly Stations are accessible by a longer walk but both are readily accessible by Free Bus and provide links both nationally and across the conurbation.

Accessibility by Metrolink

- 5.22 Deansgate-Castlefield is the closest Metrolink stop for residents, and this is about a 10 minutes' walk away. Metrolink services currently cover a broad area of Manchester and its outlying residential districts. A plan showing the destinations and Metrolink stops is shown in **Figure 5.4**.

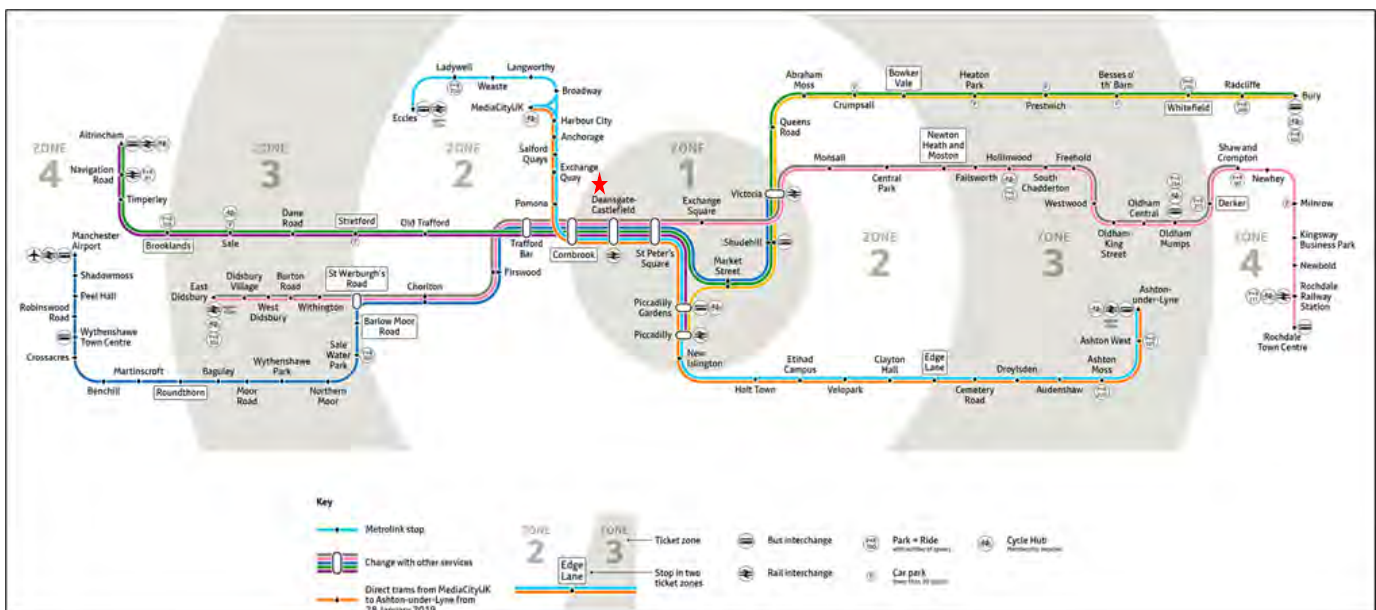


Figure 5.4 Metrolink Coverage and Stops

- 5.23 **Table 5.1** shows the destinations which can be accessed via Metrolink from Deansgate Castlefield and the frequencies at which the services operate during peak times (07:15 – 19:30 Monday to Friday, 09:30 – 18:30 Saturday):

Table 5.1: Metrolink services from Deansgate Castlefield

Destination	Frequency (Peak times)
Altrincham	10 per hour
Ashton-under-Lyne	5 per hour
Bury	5 per hour
East Didsbury	10 per hour
Eccles	5 per hour
Etihad Campus	5 per hour
Manchester Airport	5 per hour
MediaCityUK	5 per hour
Piccadilly	5 per hour
Rochdale Town Centre	5 per hour
Shaw and Crompton	5 per hour
Victoria	5 per hour

Car Club

- 5.24 As part of the wider St John's Transport Strategy, it is expected that several Enterprise Car Club (previously City Car Club) spaces and cars would be provided at convenient locations on the St John's Estate. Enterprise Car Club operates all over Manchester and offers a low-cost alternative to owning a car. Users pay a modest up front annual fee then an hourly charge from as low as £4.60 per hour plus a fuel charge (as low as 5p per mile for electric cars). There are other discounts available subject to age usage and type of vehicle required.

6 Highway Operation

Introduction

- 6.1 This chapter of the report considers the relationship between the development proposals and the local highway network.
- 6.2 The baseline traffic data collected to support the assessment of the highway network is described along with the approach to generating a future year scenario underpinning the 'Without Development' and 'With Development' scenarios.
- 6.3 The methodology adopted to forecast development trips is outlined in detail and the operation of the proposed site access junction with the Trinity Way/ Water Street has been assessed.
- 6.4 As detailed previously in this report, the approach to appraising the impact of the development proposals on the local highway network has been discussed and agreed with both MCC and TfGM.

Surveyed Traffic Flows

- 6.5 Manual classified turning count surveys were undertaken on Tuesday 15th June 2021 for the local highway network between the hours of 07:00-10:00 and 16:00-19:00. It was agreed with TfGM that these surveys would provide a robust baseline for traffic flows on the local highway network. TfGM confirmed that traffic had returned to pre-Covid 19 pandemic conditions.
- 6.6 These surveys were undertaken by an independent third-party data collection company and the full dataset has been included as **Appendix D** of this report.
- 6.7 The following peak hours were identified from the surveyed traffic data and have been adopted for the traffic impact assessment presented in this report:
 - AM Peak Hour 08:00-09:00
 - PM Peak Hour 17:00-18:00
- 6.8 The peak hour surveyed traffic flows have been converted to Passenger Car Units (PCUs) and are illustrated in **Figure 1**.

Baseline 'Without Development'

- 6.9 A future year of 2026 had been adopted for this assessment which represents an assessment year five years post-application registration. It was agreed with MCC that no traffic growth factors were required to derive this future year.
- 6.10 The following committed developments have been adopted in the assessment to establish a representative future baseline:
- Manchester Goods Yard (MCC ref: 121511/FO/2018)
 - Globe and Simpson (MCC ref: 121721/FO/2018)
 - Middlewood Locks Plot N, Salford Central (SCC ref: 14/65793/OUT)
 - St Johns Place (MCC re 109660/FO/2015/C1)
- 6.11 The above committed developments were agreed as they were judged to have a direct impact on the study network and assessment time periods. It was agreed that all other committed schemes in the vicinity of the site would be accounted for in the agreed approach to background traffic growth factors. However, in subsequent discussions with MCC and TfGM it was accepted that no growth factors were required for the assessment.
- 6.12 Traffic flows for these committed developments have been extracted from their supporting Transport Assessments. The total traffic flows from committed developments are shown in **Figure 2**.
- 6.13 The surveyed flows and committed development flows have been combined to generate a 2026 Baseline 'Without Development' traffic flow scenario which is shown in **Figure 3**.

Development Vehicle Trip Forecasts

- 6.14 To predict the number of vehicle movements the proposed development will generate, the industry-standard TRICS database has been interrogated. This database contains a wide range of surveys undertaken at existing residential developments that have comparable accessibility characteristics to the proposed site.
- 6.15 Using the selection criteria provided in TRICS, a series of survey sites have been selected that are considered representative of the development proposals. The full TRICS outputs have been included as **Appendix E** of this report.
- 6.16 As previously described, the proposed total parking provision at the site will equate to around 0.3 space per apartment. This will act as a key limiting factor in the vehicle trip generation potential of the proposals as a large proportion of residents will not have immediate access to a car. This reflects the site's highly sustainable location and proximity to Manchester City Centre.
- 6.17 To account for the proposed ratio of parking spaces to apartments, an exercise has been undertaken to generate a forecast trip rate per space for the AM and PM peak periods. This has been achieved by further interrogating the survey sites selected via the TRICS filtering exercise described above. The recorded arrivals and departures for each survey site have been analysed and compared with

the total parking provision at the site in question. This has enabled a trip rate per parking space to be derived for each survey site.

- 6.18 A summary of this exercise has been provided in **Appendix E** and includes the average trip rate per parking space which has been adopted for this assessment. A summary of the adopted trip rates for the development proposals is provided in **Table 6.1**.

Table 6.1: Proposed Development – Trip Rates per Parking Space

	AM Peak			PM Peak		
	Arr	Dep	Total	Arr	Dep	Total
Trip per Parking Space	0.042	0.100	0.142	0.117	0.061	0.178

- 6.19 The trip rates have then been applied to the proposed car parking provision at Sites C and D to derive a forecast trip generation figure for both the AM and PM peaks. A summary of these predicted vehicle trip movements is provided in **Table 6.2**.

Table 6.2: Trip Generation Forecasts – AM and PM Peaks

	Car Parking	AM Peak			PM Peak		
		Arr	Dep	Total	Arr	Dep	Total
Site C	262	11	26	37	31	16	47
Site D	296	12	30	42	35	18	53
Total	558	23	56	79	65	34	99

- 6.20 As shown in **Table 6.2**, the proposed development is forecast to generate a total of 79 vehicle trips in the AM peak and 99 vehicle trips in the PM peak.
- 6.21 The service vehicle forecasts are assumed to be the similar to those previously agreed for the previous application and are summarised in **Table 6.3** overleaf. While the number of apartments are higher the volume of commercial activity is much lower. The HGV movements are only occasional during the day. The number of LGVs is higher tending to peak on average at around one vehicle every 10 minutes in the middle part of the day.

Service Vehicle Trips	Site C1				Site C2				Site D1				Site D2			
	OGVs		LGVs		OGVs		LGVs		OGVs		LGVs		OGVs		LGVs	
Time Range	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP
06:00-07:00																
07:00-08:00	1	1	1	3	1	2	1	4	0	1	1	3	0	1	1	3
08:00-09:00	0	0	4	3	0	0	5	4	0	0	3	3	0	0	3	3
09:00-10:00	1	1	2	3	1	1	3	3	1	1	2	2	1	1	2	2
10:00-11:00	1	1	5	4	1	2	6	5	1	1	4	4	1	1	4	3
11:00-12:00	0	0	4	5	0	0	5	6	0	0	4	4	0	0	3	4
12:00-13:00	1	1	5	4	1	1	7	5	1	1	5	3	1	1	4	3
13:00-14:00	0	1	4	5	0	1	6	6	0	1	4	4	0	1	4	4
14:00-15:00	1	0	3	3	1	1	3	4	1	0	2	3	1	0	2	3
15:00-16:00	0	0	2	2	1	1	2	2	0	0	1	1	0	0	1	1
16:00-17:00	0	0	3	3	0	1	3	4	0	0	2	3	0	0	2	3
17:00-18:00	0	0	1	1	1	1	2	1	0	0	1	1	0	0	1	1
18:00-19:00	0	0	1	1	0	0	2	2	0	0	1	1	0	0	1	1
19:00-20:00			0	0			0	0			0	0			0	0
20:00-21:00			0	0			0	0			0	0			0	0
21:00-22:00			0	0			0	0			0	0			0	0
22:00-23:00																
23:00-24:00																
Daily Trip Rates:	6	7	35	37	8	9	45	47	5	6	32	34	5	6	29	31

Table 6.3 Trinity Islands Service Delivery Movements

Extant Trip Generation

- 6.22 As previously outlined in this report, the proposed development site has previously operated as a surface level car park. The site is therefore able to lawfully resume these operations at any time and should the proposed development not be granted planning permission then it is conceivable that the site owners would revert the site to this use.
- 6.23 As previously described, the existing car parking across Sites C and D provides capacity for up to 645 vehicles and was well utilised when in operation. Clearly this level of parking provision would have the potential to generate significant vehicle movements in the AM and PM peak periods, particularly as a car park in this location would be expected to attract commuter trips.
- 6.24 At the time of drafting this report, the car park is not in full operation parking activity only taking place on Site C. As a result, it is not possible to undertake a representative survey of vehicle arrivals and departures to establish the likely trip generation potential of the site in its entirety.
- 6.25 Therefore, in order to quantify the likely level of traffic associated with the extant use at the site, reference has been made to historic surveys undertaken at the nearby Owen Street car park in support of a planning application for the Crown Street Phase 1 scheme in Manchester (planning ref: 119806/FO/2018). Owen Street is located around 700m to the south east of the proposed development site and shares similar locational characteristics as the existing surface car parking at Trinity Islands. The surveys of this site are therefore considered suitable to generate a robust

forecast for the likely number of vehicle trips at the proposed site if the car parking facilities were in full operation.

- 6.26 The Owen Street car park has since ceased operations but previously provided 401 parking spaces. The trip rates per parking spaces derived from surveys of the former Owen Street car park are summarised in **Table 6.4**.

Table 6.4: Extant Development – Trip Rates per Parking Space (Former Owen Street Car Park Surveys)

	AM Peak			PM Peak		
	Arr	Dep	Total	Arr	Dep	Total
Trip per Parking Space	0.423	0.025	0.448	0.045	0.360	0.405

- 6.27 Using these trip rates derived from a nearby car parking facility, the trip generation potential of the extant use at the proposed site has been forecast. A summary of the vehicle movements for the 645 space car park across Sites C and D is provided in **Table 6.5**.

Table 6.5: Extant Development – Trip Generation

Existing Car Parking	AM Peak			PM Peak		
	Arr	Dep	Total	Arr	Dep	Total
645	273	16	289	29	232	261

- 6.28 As shown in **Table 6.5**, the existing lawful consent at the site permits vehicle movements well in excess of those forecast for the proposed residential scheme. The traffic impact of the development proposals must therefore be considered in this context. However, to present a robust assessment of the proposed development there has been no vehicle trip discounting exercise to account for the extant use at the site.

Development Trip Distribution and Assignment

- 6.29 A trip distribution profile for the development site has been developed to forecast the likely origin and destination of future development traffic. In order to do this, Journey to Work data from the 2011 Census has been interrogated for the Mid-Layer Super Output Area (MSOA) in which the site is located (Manchester 060: E02006917).
- 6.30 This information has been used to determine the likely travel patterns of future residents at the proposed development in the AM and PM peak hours. In order to establish the routing of these vehicle trips, GIS Routefinder software has been used to establish how development trips will travel through the study network. The resultant distribution is shown in **Figures 4 and 5** for Site C and **Figure 6** for Site D.
- 6.31 Using the forecast trip distribution information, development traffic has then been assigned to the study network. Forecast development trips for both the AM and PM peaks across the study network are shown in **Figures 7 and 8** for Site C and **Figure 9** for Site D. The total development trips are shown in **Figure 10**.

Baseline ‘With Development’

- 6.32 The forecast development vehicle trips have then been combined with the 2026 Baseline ‘Without Development’ flows to generate a 2026 Baseline ‘With Development’ scenario. This is shown in **Figure 11**.

Trinity Way/ Water Street – Capacity Assessment

- 6.33 As detailed previously in this report, Site D is proposed to take access directly from the Trinity Way/ Water Street signalised junction. In order to assess the operation of this junction once the development begins operations, a model of the junction has been created in the industry-standard modelling software package LinSig 3.2.
- 6.34 To assist in the development of the model, signal information and as built drawings of the junction were obtained from TfGM and have been included as **Appendix F** of this report.
- 6.35 A model representing the existing configuration of the junction has been run in the first instance to establish a baseline operation before the addition of the site access arm. A summary of the capacity results generated for the junction using the 2026 Baseline ‘Without Development’ traffic flows is provided in **Table 6.6**. The full LinSig outputs for this exercise are included as **Appendix G** of this report and includes model runs using the 2021 surveyed traffic flows.

- 6.36 Results are presented as Degree of Saturation (DoS), Mean Max Queue (MMQ) and Practical Reserve Capacity (PRC).

Table 6.6: Trinity Way/ Water Street (Existing Layout) – 2026 Baseline ‘Without Development

Junction Arm	AM Peak		PM Peak	
	DoS (%)	MMQ (PCUs)	DoS (%)	MMQ (PCUs)
Trinity Way (North)	72.7	16	71.7	13
Water Street (East)	70.8	7	78.9	15
Trinity Way (South)	60.0	13	79.4	19
PRC (%)	22.4		13.4	
Cycle Time (s)	100		100	

- 6.37 As shown in **Table 6.5**, the junction is forecast to operate within capacity in both the AM and PM peaks under 2026 Baseline ‘Without Development’ traffic conditions.
- 6.38 Having established the baseline operation of the junction, a model which includes the site access arm into Site D has been developed and run using the 2026 Baseline ‘With Development’ traffic flows.
- 6.39 The site access arm has been added to the phasing and staging of the junction. At the request of TfGM and MCC, the site access arm has been run in its own stage to avoid conflict with the Water Street arm opposite. In the PM peak, the site access arm phase has been run every other cycle which is considered representative of the likely demand for this phase during this period as only 18 vehicles are forecast to leave the site.
- 6.40 The results of the exercise are summarised in **Table 6.7** and the full LinSig outputs are included as **Appendix H**.

Table 6.7: Trinity Way/ Water Street (Proposed Layout – with Site D Access) – 2026 Baseline ‘With Development

Junction Arm	AM Peak		PM Peak	
	DoS (%)	MMQ (PCUs)	DoS (%)	MMQ (PCUs)
Trinity Way (North)	87.1	20	85.0	16
Water Street (East)	82.4	8	84.6	17
Trinity Way (South)	84.8	18	79.5	18
Site Access (West)	20.2	1	25.0	1
PRC (%)	3.3		5.9	
Cycle Time (s)	100		200 (double cycled)	

- 6.41 As shown in **Table 6.7** even with the addition of the Site D access arm, the Trinity Way/ Water Street junction is forecast to operate within capacity with minimal queuing and delay.

Summary

- 6.42 The methodology adopted in the traffic impact assessment has been agreed with MCC and TfGM through pre-application discussions.
- 6.43 The site is lawfully permitted to operate as a large car parking facility which would generate a significantly higher level of traffic than the development proposals.
- 6.44 An assessment of the proposed access junction with the Trinity Way/ Water Street junction has demonstrated that the network is capable of accommodating the proposed site access into Site D.

7 Summary and Conclusions

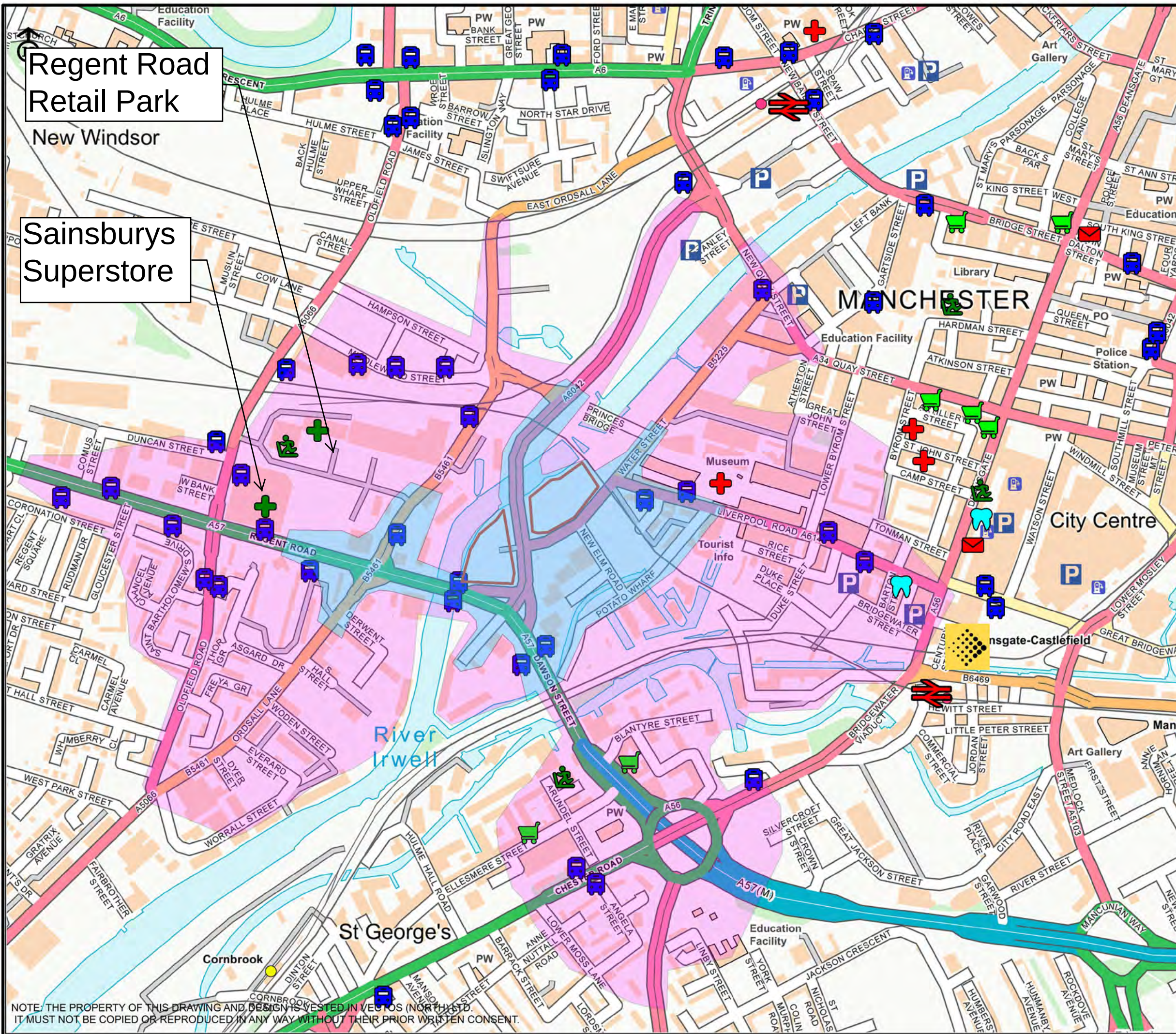
Summary

- 7.1 Vectos has been appointed by Renaker Build Limited to provide highways and transport advice in relation to proposals at Trinity Islands, Sites C and D.
- 7.2 The Transport Assessment has been prepared following pre-application discussions with highways officers at MCC and TfGM and has drawn the following principal conclusions:
- A review of historical collision data has demonstrated that there are no existing accident blackspots in the vicinity of the site. Based upon the findings of the traffic impact assessment it has been concluded that there is no reason to believe highway safety would be worsened as a result of the development proposals.
 - A review of the proposed servicing and car parking arrangements has been undertaken, including an AutoTRACK assessment. This has demonstrated that all required vehicle movements can be safely undertaken.
 - In accordance with the planning policy guidance, which promotes sustainable development, the site has been demonstrated to be highly accessible on foot, by bicycle and by public transport;
 - To supplement the existing sustainable travel facilities provided in the vicinity of the site the development itself has been designed to facilitate ease of access for pedestrians and cyclists;
 - Improvements to pedestrian and cycle facilities are proposed along Water Street and Trinity Way to aid accessibility by these modes; and
 - Junction capacity assessments of the Trinity Way/ Water Street signalised junction have demonstrated that access to Site D via the western arm of the junction can be accommodated.

Conclusions

- 7.3 The National Planning Policy Framework states that *‘development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe’*.
- 7.4 This report has demonstrated that the proposed development would have no material impact on the operation of local highway network. There is also no reason to believe that it will have a detrimental impact upon highway safety. As such the impact of the development cannot be concluded to be severe. Furthermore, the site is lawfully permitted to operate as a large car parking facility which would generate a significantly higher level of traffic than the development proposals.
- 7.5 The site therefore accords with relevant guidance and there are no reasons why the planning application should be refused on highway or transportation grounds.

Plans



Legend

- Site Boundary
- Bus Stop
- Car Parking
- Metrolink
- Train Station

Amenities

- Dentist
- Gym
- Medical Centre
- Pharmacy
- Post Office
- Supermarket

Walking Catchment

- 0 - 5 minutes
- 5 - 10 minutes

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CLIENT:

Renaker Build Limited

PROJECT TITLE:

Trinity Islands, Manchester

DRAWING TITLE:

Pedestrian
Accessibility Plan

SCALE:

N.T.S

DRAWN:

CJ

CHECKED:

OM

DATE:

Oct 2021

vectos.

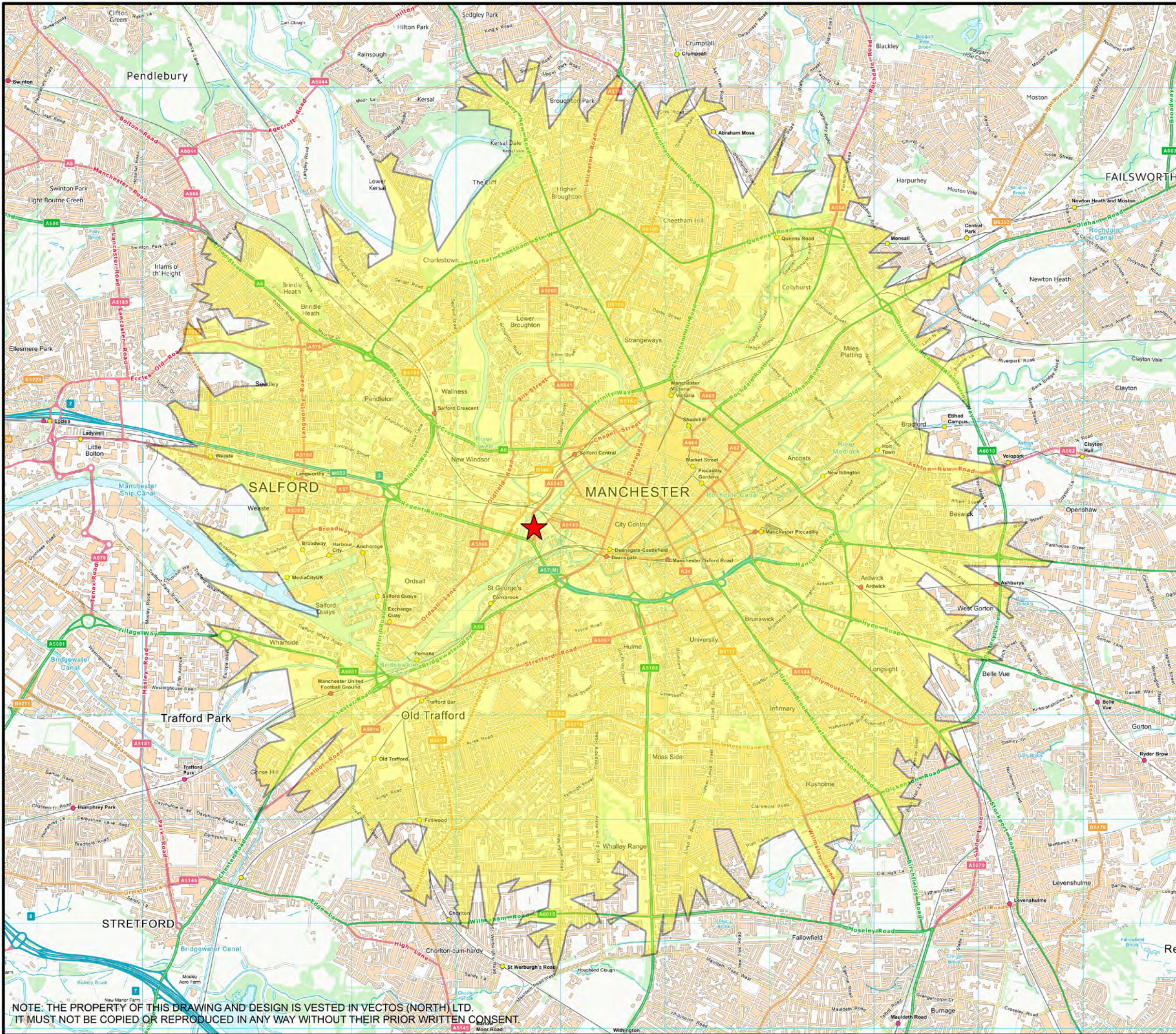
Oxford Place, 61 Oxford Street, Manchester M1 6EQ
t:0161 228 1008 e:manchester@vectos.co.uk

DRAWING NO:

VN211913-G101

REVISION:

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Legend

★ Site Location

Cycling Catchment

0 - 5km

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CLIENT:

Renaker Build Limited

PROJECT TITLE:

Trinity Islands, Manchester

DRAWING TITLE:

Cycling Catchment

SCALE:
N.T.S

DRAWN:	CJ	CHECKED:	OM	DATE:	Oct 2021
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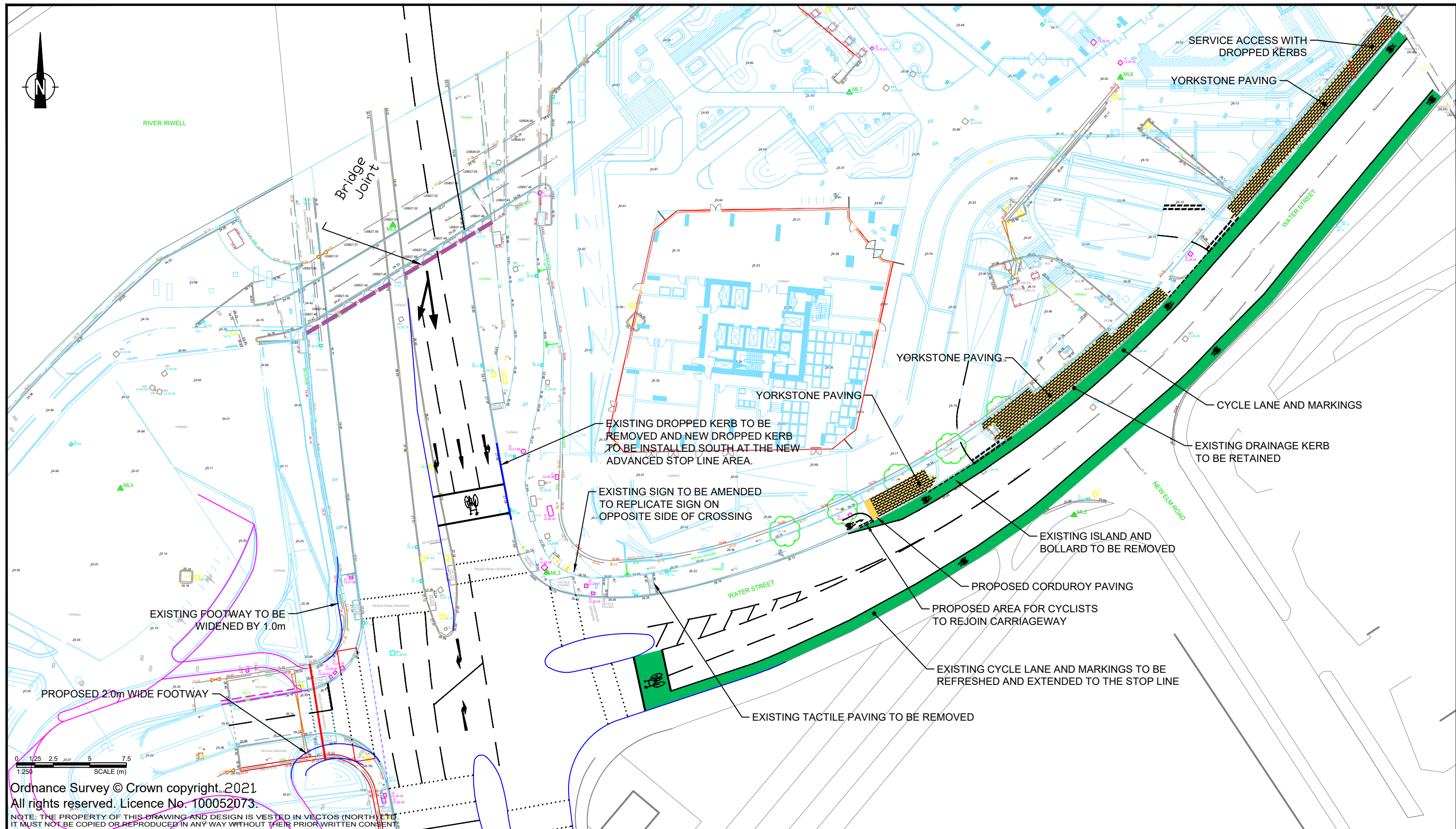
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Drawings



REV.	DETAILS	DRAWN	CHECKED	DATE
A	Additional notes included	DJR	GD	22.09.21
B	Amended Site Layout	DJR	GD	05.10.21

Notes:

1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

Trinity Islands, Manchester

Trinity Way and Water Street
Highway Improvements

DRAWN:
JD

CHECKED:
GD

DATE:
07.09.21

SCALES:
1:500 at A3

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vectos.
4th Floor Oxford Place, 61 Oxford Street, Manchester, M1 6EQ
0161 228 1008 e: manchester@vectos.co.uk

DRAWING NUMBER:
VN211913-D103

REVISION:
B



REV.	DETAILS	DRAWN	CHECKED	DATE
A	Site Layout Amended	WD	GD	15/11/21

Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

Trinity Islands, Manchester

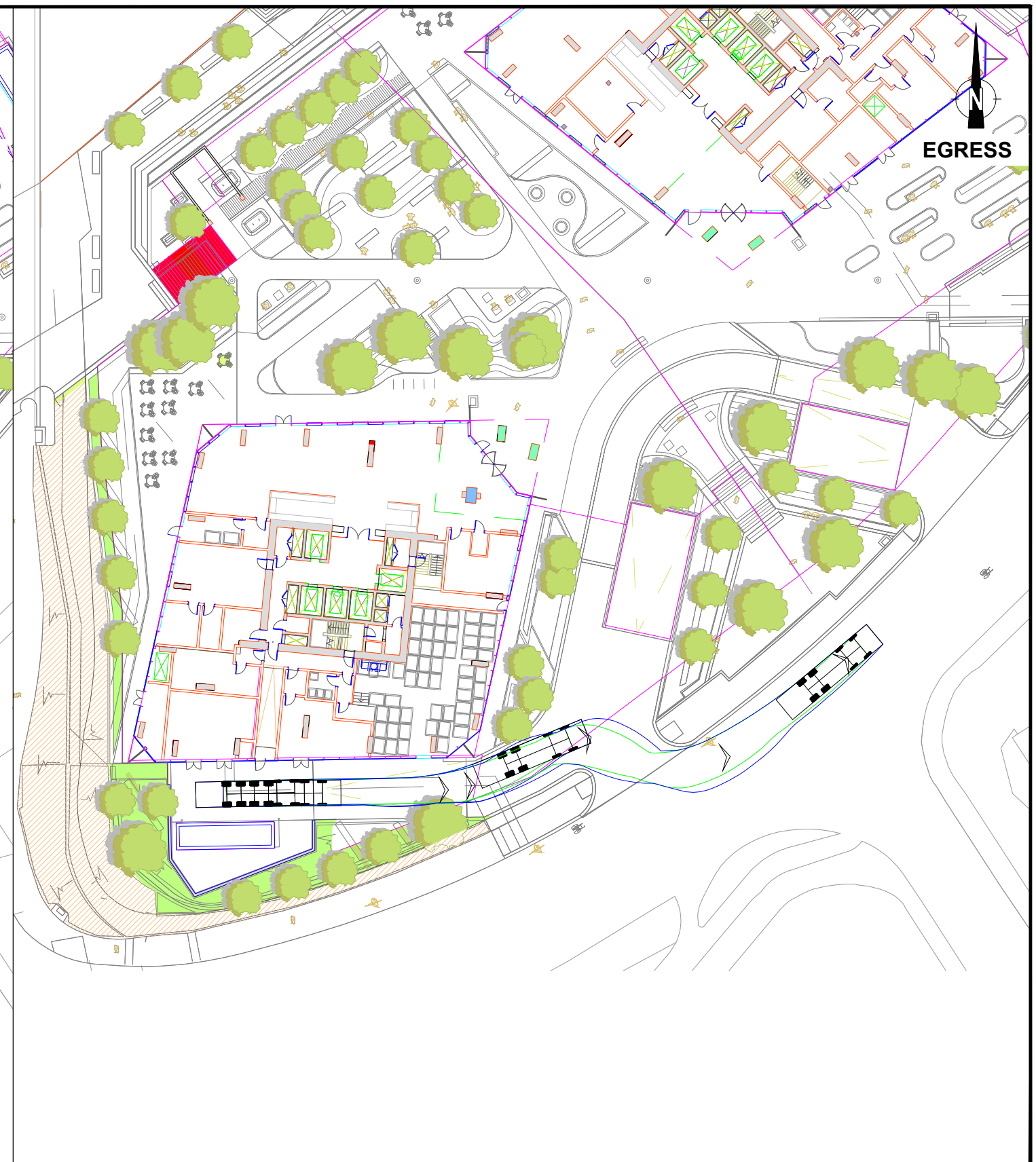
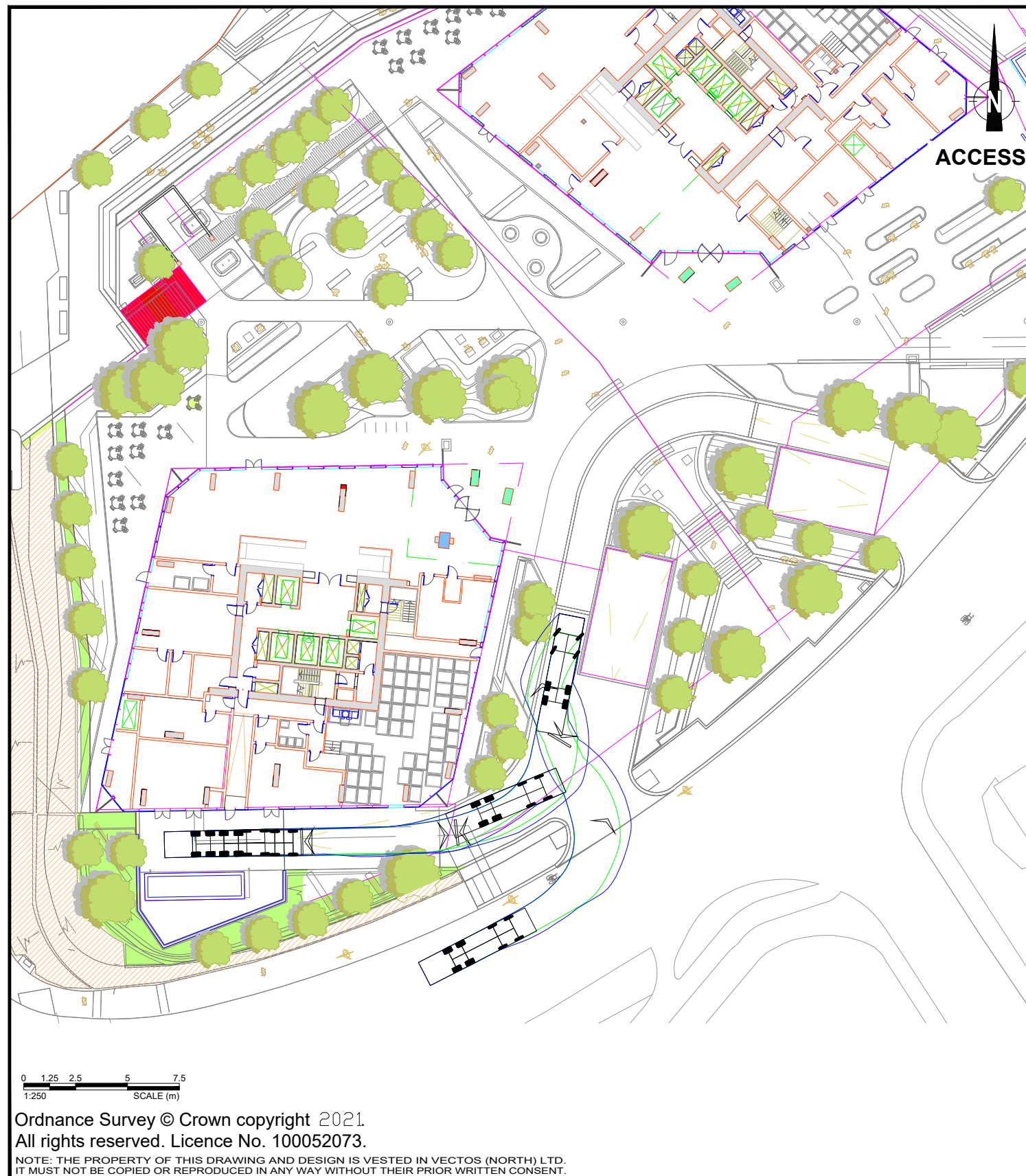
Swept Path Analysis - Site C1

DRAWN: DJR	CHECKED: GD	DATE: 23.09.21	SCALES: 1:500 at A3
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Renaker Build Ltd

vectos.
4th Floor Oxford Place, 61 Oxford Street, Manchester, M1 6EQ
0161 228 1008 e: manchester@vectos.co.uk

DRAWING NUMBER: VN211913-TR109	REVISION: A
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REV.	DETAILS	DRAWN	CHECKED	DATE
A	Site Layout Amended	WD	GD	15/11/21

Notes:

1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

11.5m Large Refuse Vehicle (4 axle)
Overall Length 11.500m
Overall Width 2.500m
Overall Body Height 3.750m
Min. Body Ground Clearance 0.300m
Track Width 2.500m
Lock to lock time 6.000m
Wall to Wall Turning Radius 11.330m

Trinity Islands, Manchester

Swept Path Analysis - Site C2

DRAWN: DJR	CHECKED: GD	DATE: 23.09.21	SCALES: 1:500 at A3
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4th Floor Oxford Place, 61 Oxford Street, Manchester, M1 6EQ
0161 228 1008 e: manchester@vectos.co.uk

DRAWING NUMBER: VN211913-TR110	REVISION: A
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REV.	DETAILS	DRAWN	CHECKED	DATE
A	Site Layout Amended	WD	GD	15/11/21

Notes:

1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

11.5m Large Refuse Vehicle (4 axle)
Overall Length 11.500m
Overall Width 2.500m
Overall Body Height 3.750m
Min. Body Ground Clearance 0.500m
Track Width 2.500m
Lock to lock time 6.000m
Wall to Wall Turning Radius 11.530m

Trinity Islands, Manchester

Site D1
Swept Path Analysis - Refuse Vehicle

Renaker Build Ltd

vectos.
4th Floor Oxford Place, 61 Oxford Street, Manchester, M1 6EQ
0161 228 1008 e: manchester@vectos.co.uk

DRAWN: DJR	CHECKED: GD	DATE: 23.09.21	SCALES: 1:500 at A3
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DRAWING NUMBER: VN211913-TR112	REVISION: A
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REV.	DETAILS	DRAWN	CHECKED	DATE
A	Site Layout Amended	WD	GD	15/11/21

Notes:

1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

11.5m Large Refuse Vehicle (4 axle)
Overall Length 11.500m
Overall Width 2.500m
Overall Body Height 5.750m
Min. Body Ground Clearance 2.500m
Track Width 2.000m
Lock to lock time 6.000m
Wall to Wall Turning Radius 11.330m



Trinity Islands, Manchester

Swept Path Analysis - Site D2

DRAWN: DJR

CHECKED: GD

DATE: 23.09.21

SCALES: 1:500 at A3

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vectos.

4th Floor Oxford Place, 61 Oxford Street, Manchester, M1 6EQ
0161 228 1008 e: manchester@vectos.co.uk

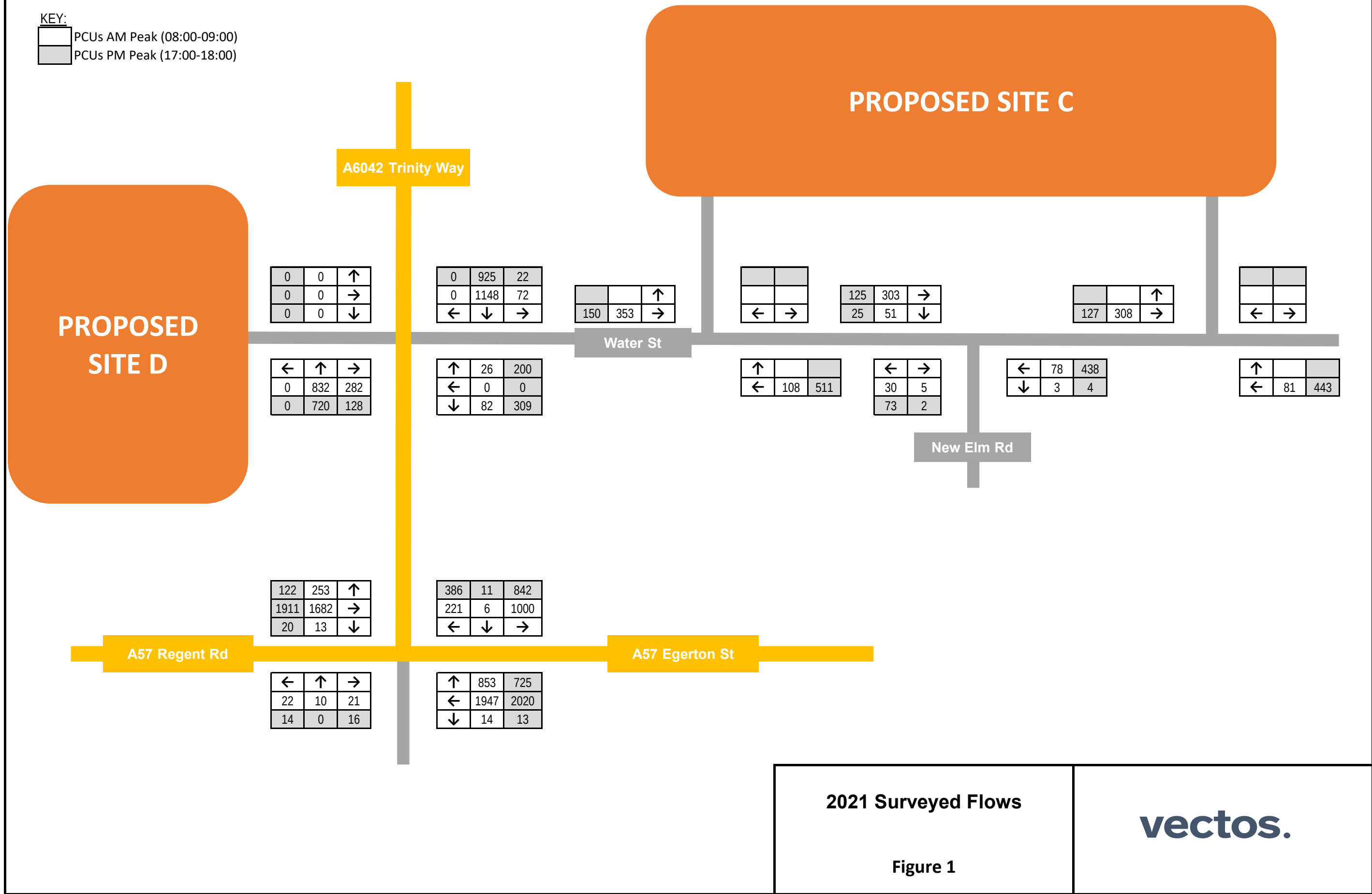
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REVISION: A

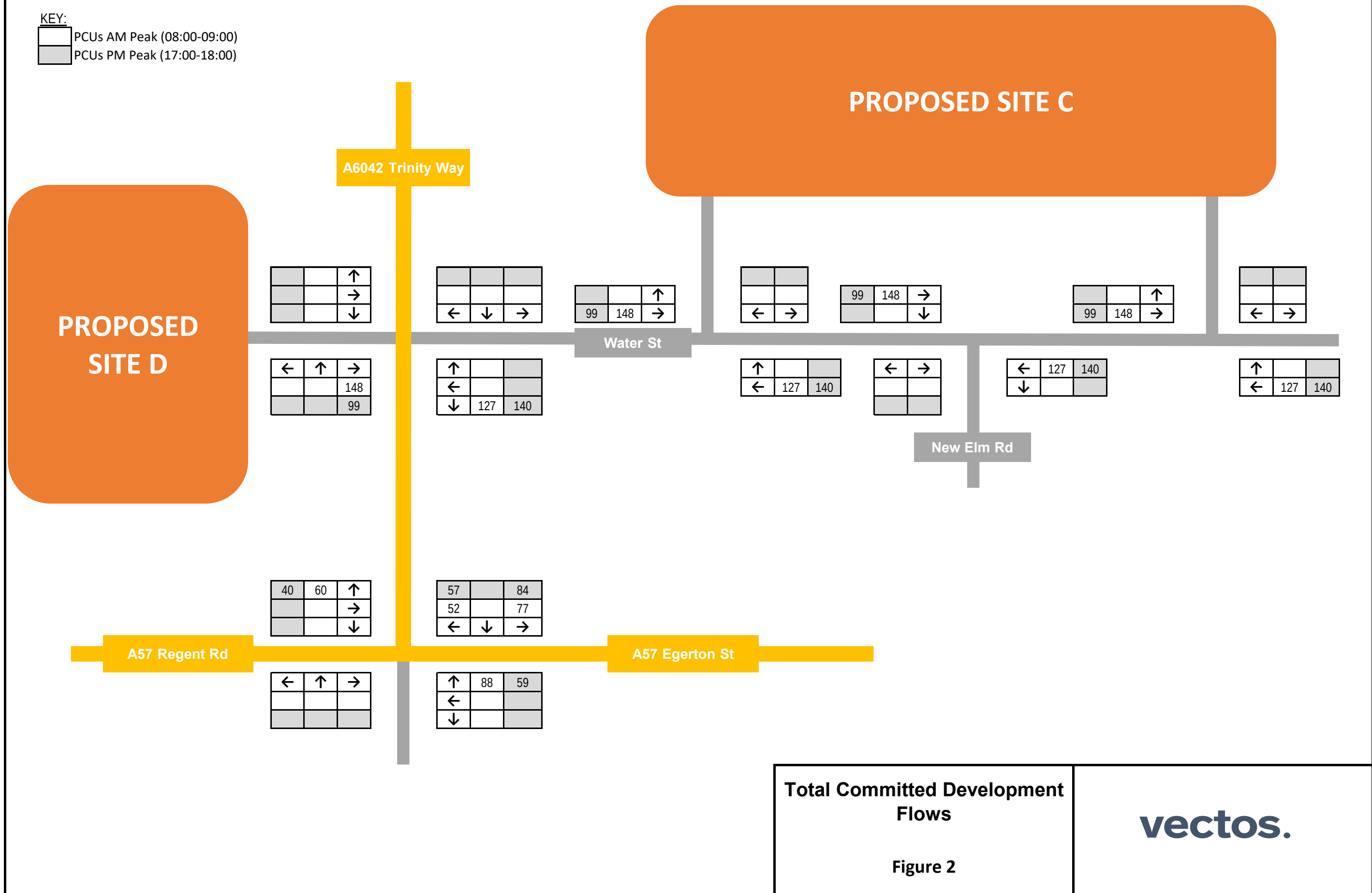
Figures

KEY:

	PCUs AM Peak (08:00-09:00)
	PCUs PM Peak (17:00-18:00)



KEY:
PCUs AM Peak (08:00-09:00)
PCUs PM Peak (17:00-18:00)



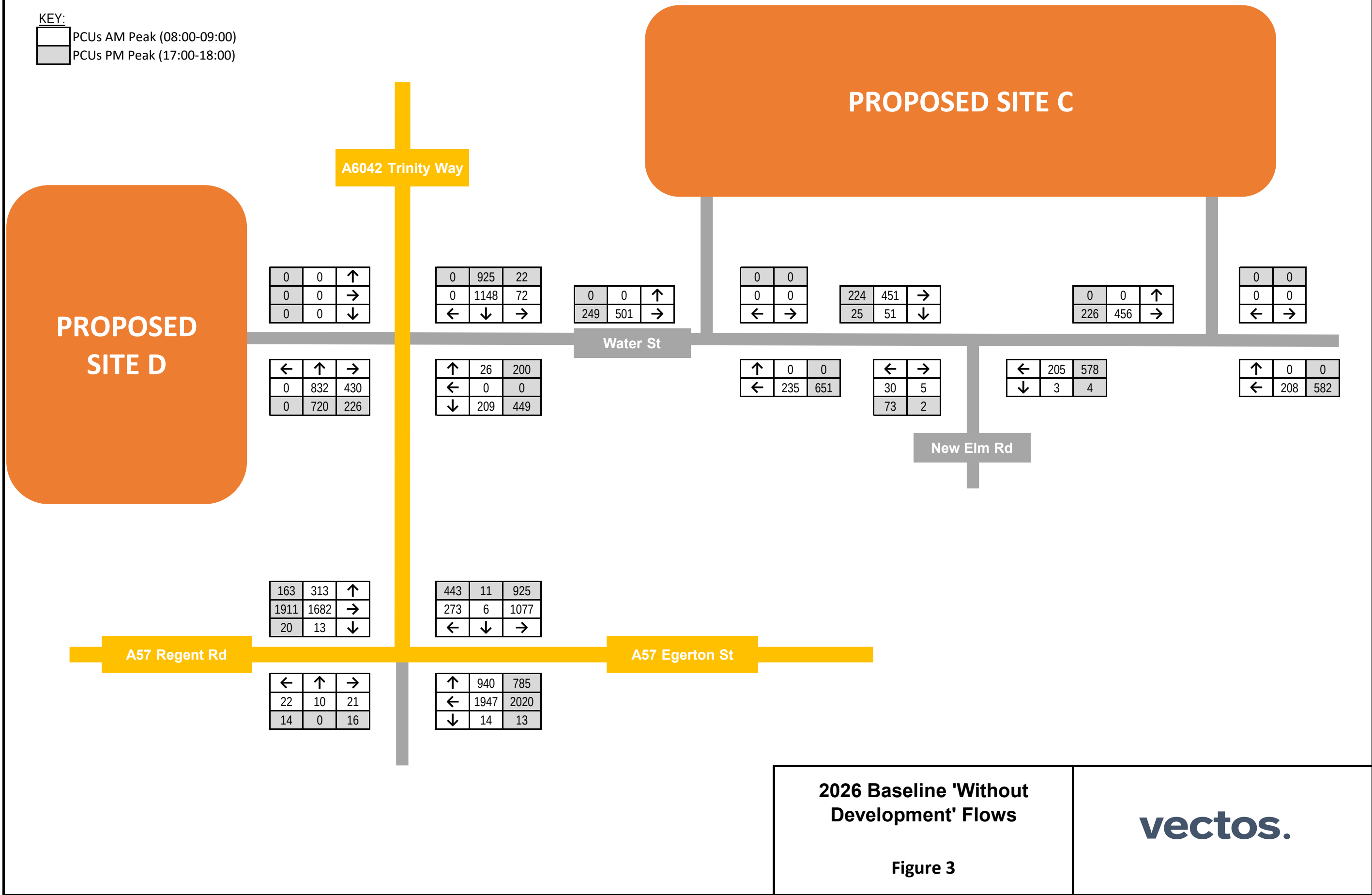
Total Committed Development
Flows

Figure 2

vectos.

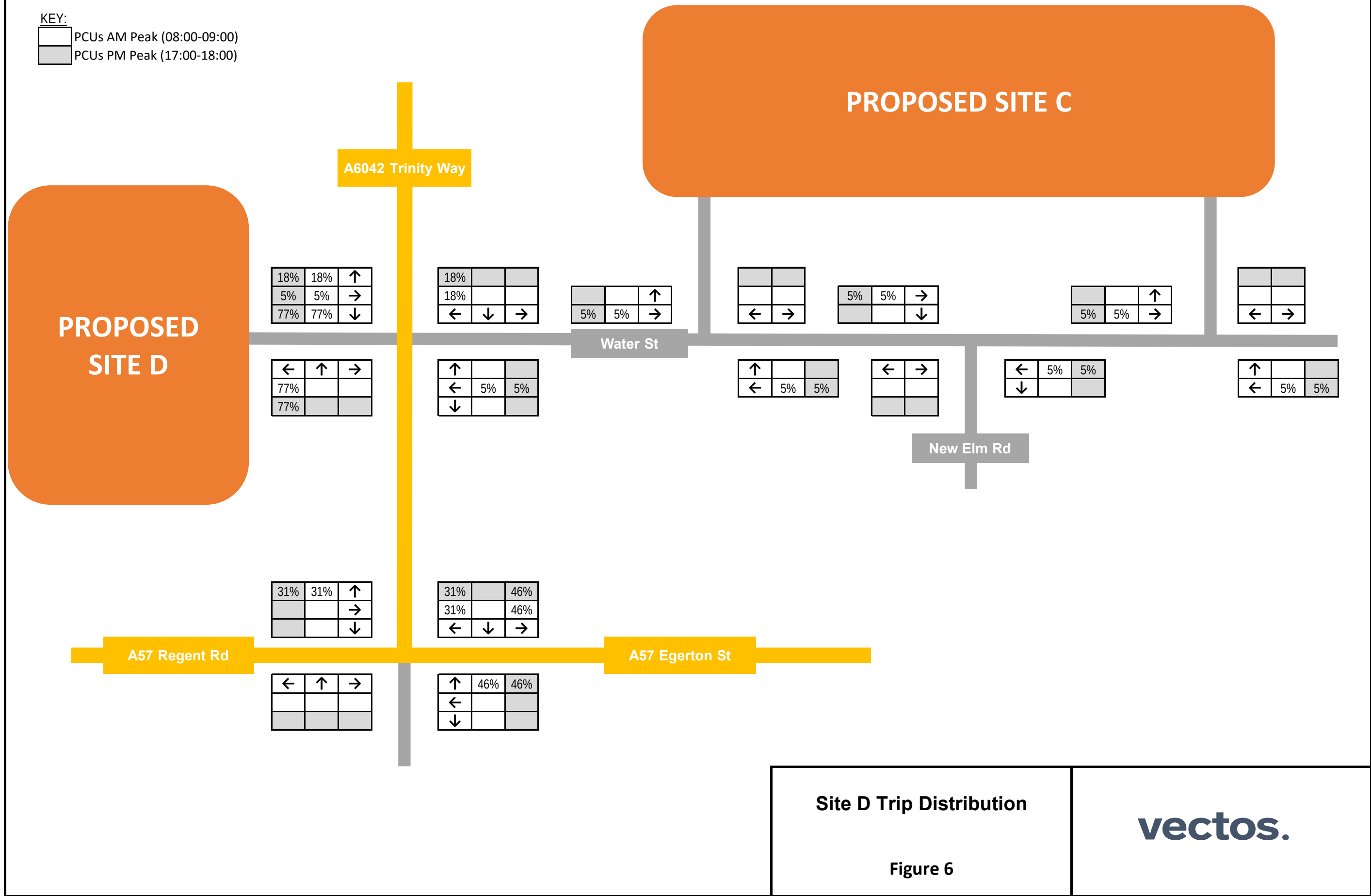
KEY:

	PCUs AM Peak (08:00-09:00)
	PCUs PM Peak (17:00-18:00)



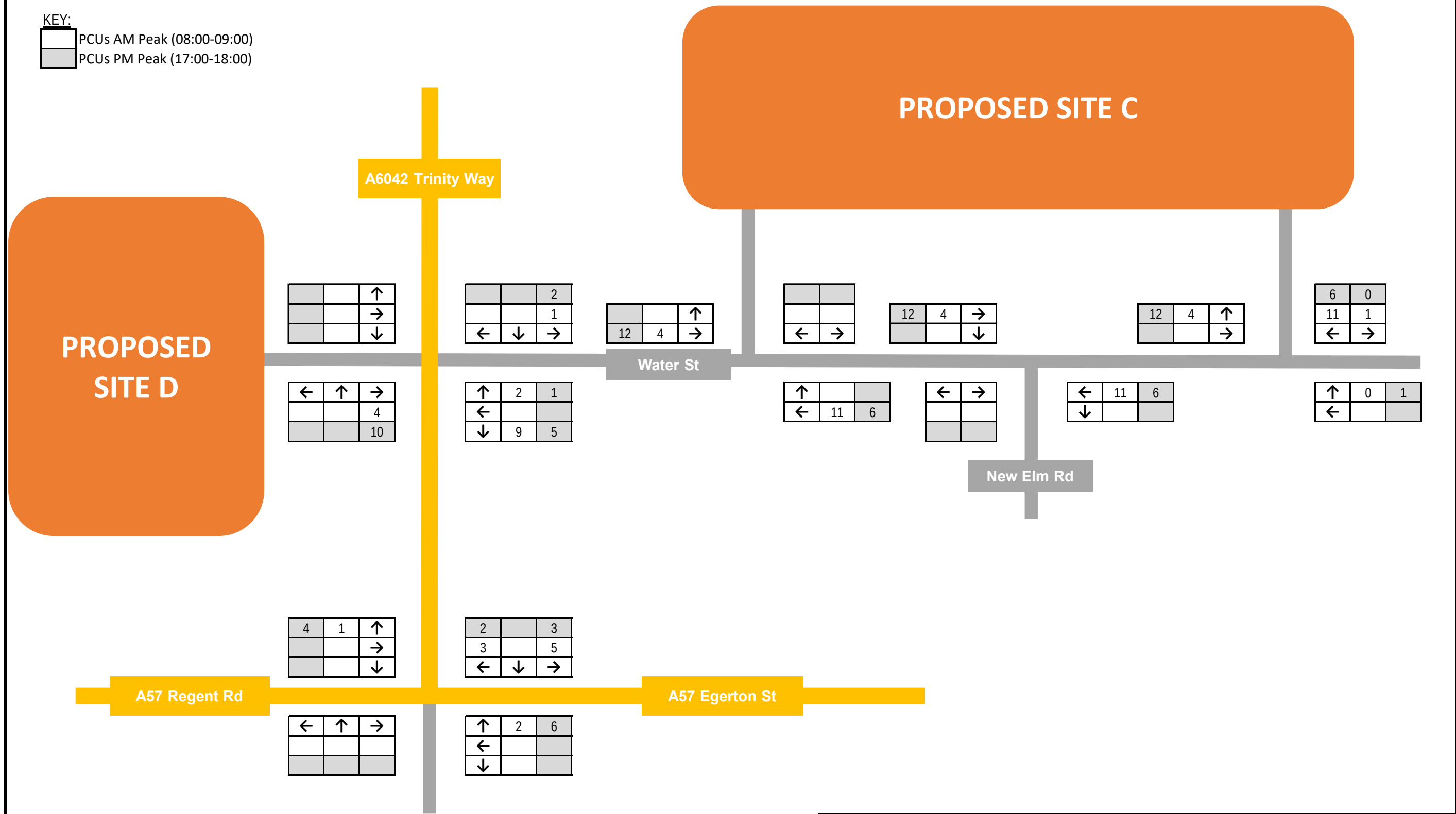
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	PCUs AM Peak (08:00-09:00)
	PCUs PM Peak (17:00-18:00)



KEY:

	PCUs AM Peak (08:00-09:00)
	PCUs PM Peak (17:00-18:00)

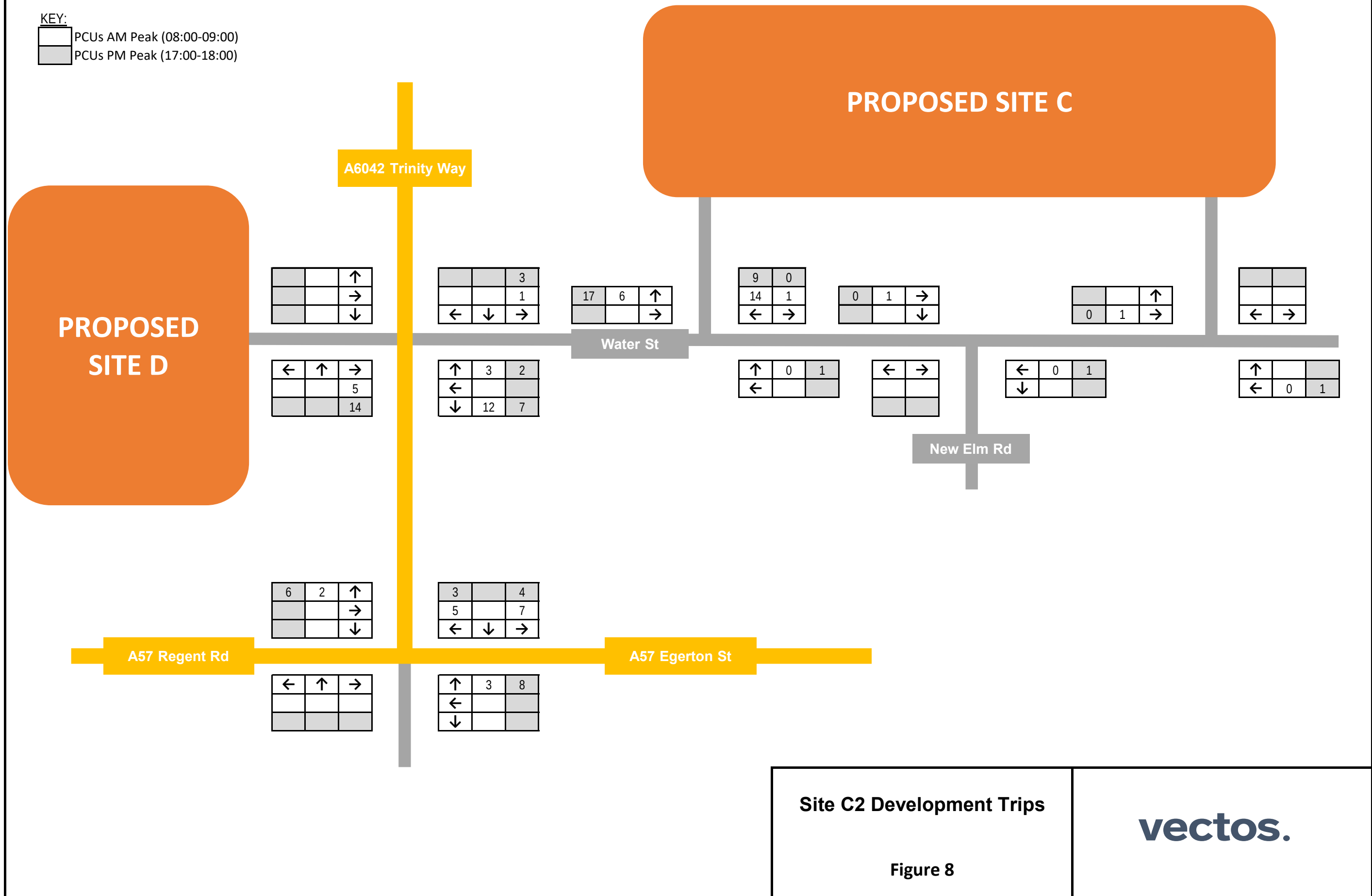


Site C1 Development Trips

Figure 7

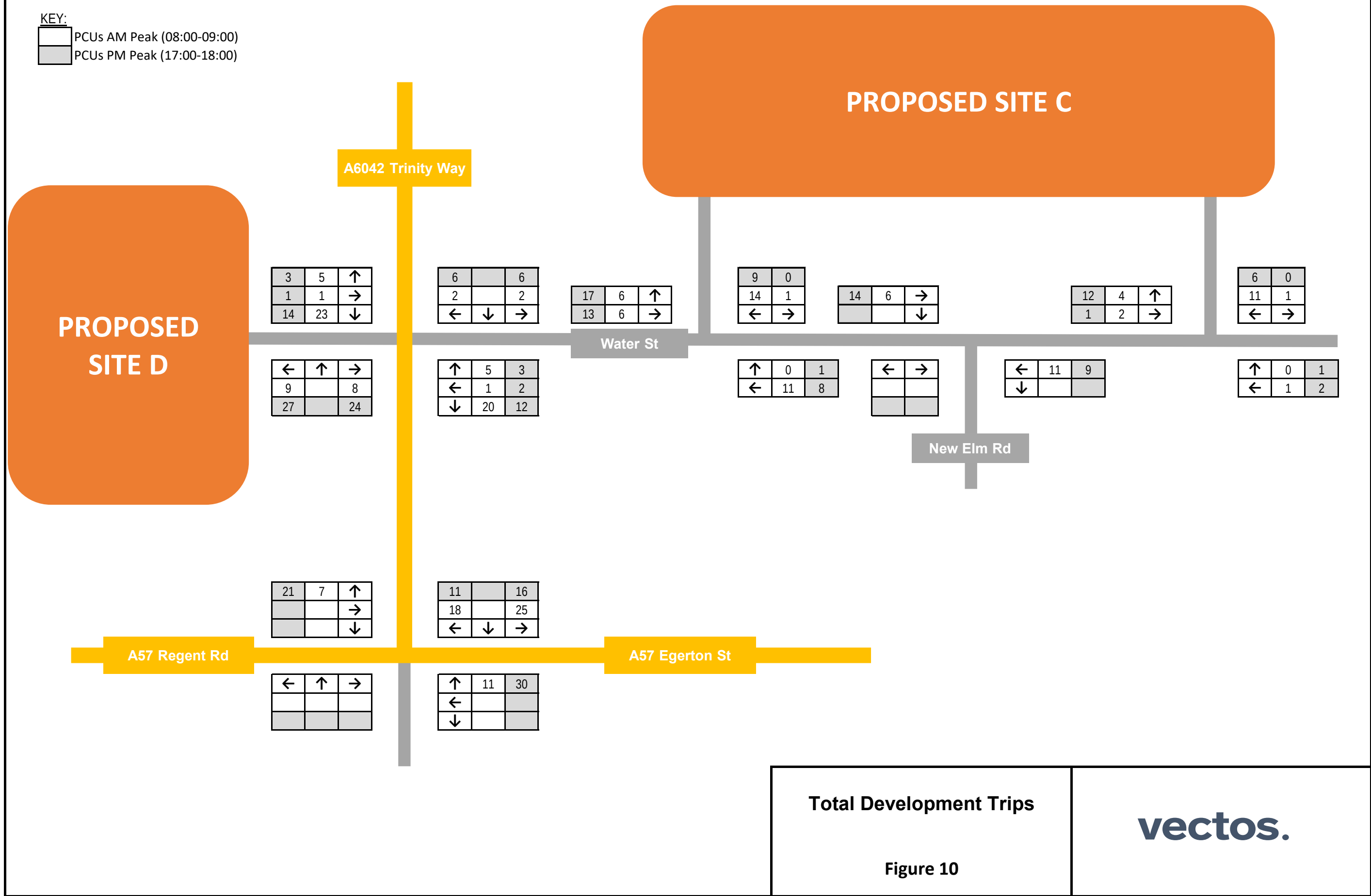
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PCUs AM Peak (08:00-09:00)
PCUs PM Peak (17:00-18:00)



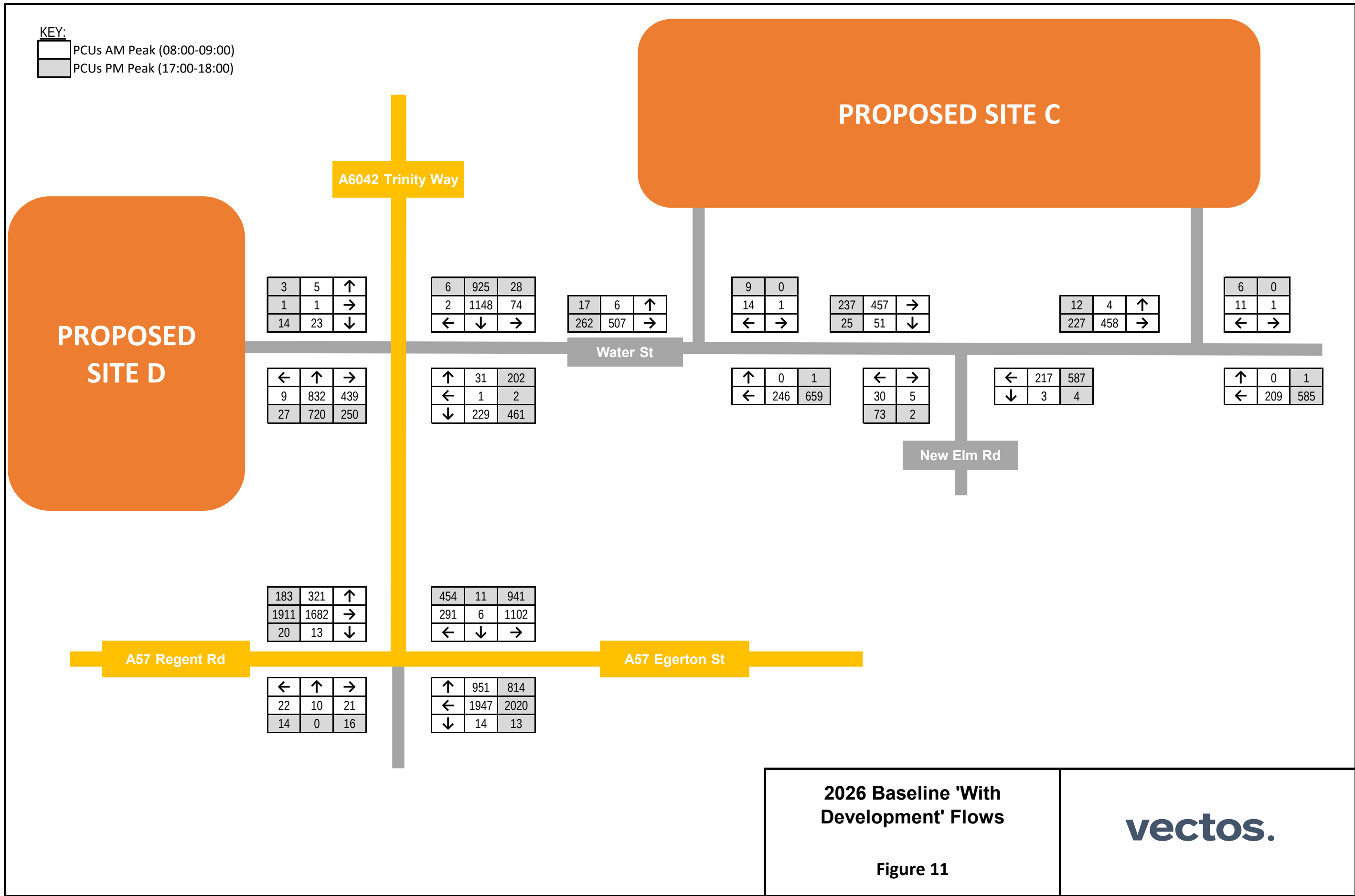
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	PCUs PM Peak (17:00-18:00)



KEY:

	PCUs AM Peak (08:00-09:00)
	PCUs PM Peak (17:00-18:00)



Appendix A

Scoping Correspondence

From: [Neil Bayliss-Rowe](#)
To: [Oliver McLaughlin](#)
Cc: [Gareth Davis](#)
Subject: Fw: KRN Ref. 21/195 - Trinity Islands Sites C & DFW: Trinity Islands -
Date: 24 June 2021 09:42:16

Hi Olly,

I've received the below email from Riccardo in Richard's Team.

He's requested new surveys and that all junctions experiencing an increase of 30 vehicles per hour be assessed.

Please let me know if you have any questions.

Thanks,

Neil

Neil Bayliss-Rowe
Highways Development Control & Flood Risk Manager
Internal Tel: 801 31171
External Tel: 0161 234 1171
Mobile: 07971384537
Email: neil.bayliss-rowe@manchester.gov.uk

Highways Service,
Growth and Neighbourhoods Directorate
Manchester City Council
PO Box 532
Town Hall
Manchester
M60 2LA
Web: <http://www.manchester.gov.uk>

From: Leanne Chapman <leanne.chapman@manchester.gov.uk>
Sent: 23 June 2021 07:25
To: Neil Bayliss-Rowe <neil.bayliss-rowe@manchester.gov.uk>
Subject: Fw: KRN Ref. 21/195 - Trinity Islands Sites C & DFW: Trinity Islands -

FYI

From: Riccardo Boncinelli <Riccardo.Boncinelli@tfgm.com>
Sent: 22 June 2021 16:14
To: Leanne Chapman <leanne.chapman@manchester.gov.uk>

Cc: Landuse <Landuse@tfgm.com>

Subject: KRN Ref. 21/195 - Trinity Islands Sites C & DFW: Trinity Islands -

Hello Leanne,

The scope listed below is broadly acceptable however we would recommend the collection of new surveys for the junction analysis and would suggest that all junctions experiencing an increase of 30 vehicle per hours due to the development be assessed.

Regards,

Riccardo Boncinelli

From: Neil Bayliss-Rowe <neil.bayliss-rowe@manchester.gov.uk>

Sent: 17 June 2021 11:02

To: Richard Dolphin <Richard.Dolphin@tfgm.com>

Subject: Re: Trinity Islands - Sites C&D Transport Assessment Scope

Hi Richard,

Are you happy with the scope set out below?

Thanks,

Neil

Neil Bayliss-Rowe

Highways Development Control & Flood Risk Manager

Internal Tel: 801 31171

External Tel: 0161 234 1171

Mobile: 07971384537

Email: neil.bayliss-rowe@manchester.gov.uk

Highways Service,

Growth and Neighbourhoods Directorate

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PO Box 532

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Manchester

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Web: <http://www.manchester.gov.uk>

From: Oliver McLaughlin <oliver.mclaughlin@vectos.co.uk>

Sent: 07 June 2021 15:25

To: richard.dolphin@tfgm.com <richard.dolphin@tfgm.com>; Neil Bayliss-Rowe <neil.bayliss-rowe@manchester.gov.uk>; Glyn Boucher <Glyn.Boucher@tfgm.com>

Cc: Gareth Davis <gareth.davis@vectos.co.uk>

Subject: RE: Trinity Islands - Sites C&D Transport Assessment Scope

Hi all,

Please can you let me know your thoughts on the below scope? I am looking to get traffic surveys sorted as soon as possible.

Many thanks
Olly

Oliver McLaughlin
Principal Transport Planner

-

0161 228 1008
07946 840 681

-

4th Floor Oxford Place, 61 Oxford Street
Manchester, M1 6EQ

vectos.

Consider the environment. Do you really need to print this email?

From: Oliver McLaughlin

Sent: 01 June 2021 09:42

To: Richard Dolphin <Richard.Dolphin@tfgm.com>; Neil Bayliss-Rowe <neil.bayliss-rowe@manchester.gov.uk>; Glyn Boucher <Glyn.Boucher@tfgm.com>

Cc: Gareth Davis <gareth.davis@vectos.co.uk>

Subject: Trinity Islands - Sites C&D Transport Assessment Scope

Hi all,

Thanks for your time on the 6th May to discuss latest development proposals for Trinity Islands Sites C&D and in particular your comments on the access proposals. We are still working up an access solution for Site D which I will share in due course.

As discussed at the meeting, we have prepared an scope for our transport work and I would be very grateful for comments on the proposed approach.

Proposed Development

As discussed at the meeting, the development proposals will be across four tower blocks with the latest development quantum summarised below:

- C1 - 400 apartments
- C2 – 507 apartments
- D1 – 532 apartments
- D2 – 483 apartments

Details of the proposed parking provision are summarised below:

- 30% car parking ratio
- 10% EVCP
- 100% cycle parking ratio

Transport Assessment

To support the planning application a TA will be prepared. Details of the supporting traffic impact assessment are provided below:

Scope of Assessment

The study area for the TIA will include the following junctions:

- Trinity/ Water Street (includes Site D Proposed Site Access)

- Trinity Way/ Regent Road
- Site C Proposed Access Junction

As discussed the above junctions will be assessed using the LinSig or JUNCTIONS modelling software package. I would be grateful if you could confirm if there are LinSig models of the Trinity Way junction available which have recently been used and accepted by MCC/ TfGM.

Assessment Time Periods and Baseline Traffic

The assessment will focus on the weekday AM and PM peak periods (0700-1000 and 1600-1900). The busiest hour during these periods will be identified through the traffic surveys and adopted for the assessment to provide a reasonable worst case assessment.

As discussed in the meeting, we will undertake new traffic surveys at the identified junctions. Richard D confirmed that traffic flows have returned to pre-pandemic levels and are therefore considered representative.

Committed Developments

We have identified the following committed developments that assign development vehicle traffic to our study network:

- Manchester Goods Yard (MCC ref: 121511/FO/2018)
- Globe and Simpson (MCC ref: 121721/FO/2018)
- Middlewood Locks Plot N, Salford Central (SCC ref: 14/65793/OUT)
- St Johns Place (MCC re 109660/FO/2015/C1)

Future Baseline

A future baseline scenario of 2026 (+5 years from application registration) will be adopted for the assessment and incorporate committed developments. We will examine recent traffic trends to understand if there has been any trends in traffic growth on the local network in recent years. We will agree with MCC the application of the local traffic growth factors or if appropriate, TEMPro derived growth factors to be applied to the surveyed flows to generate a future baseline.

Development Traffic Flows

Development trips have been forecast using the TRICS database, this will include total person trip forecasts and the modal share will be derived from local Journey to Work/census based factors. Predicted service vehicle movements will also derived from TRICS.

Given the site's city centre location and limited parking provision a trip rate per parking space will be adopted. The sites used to the calculate this trip rate and the supporting TRICS outputs are attached to this email.

Trip Distribution

2011 Census JTW data and GIS Routefinder software will be used to determine the distribution of resident vehicle trips.

I trust the above is clear, any questions please let me know.

Regards
Olly

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Minutes

Trinity Islands – Site D Access Arrangements

Date: 12th August 2021

Time: 15:00

Attendees:

Name	Organisation
James Sidlow	Renaker
Antony Jones	WSP
Neil Bayliss-Rowe	Manchester City Council
Richard Dolphin	Transport for Greater Manchester
Glyn Boucher	Transport for Greater Manchester
Gareth Davis	Vectos
Oliver McLaughlin	Vectos

Reference	Description	Action Required	
		Initials	Date
1.0	Site D Access Proposals		
1.1	Due to widths/ constraints the final proposed design of the junction will need to be undertaken using a topographical survey to ensure any constraints are fully accounted for.	Vectos	
1.2	The works effectively remove the on highway cycle lane across the Trinity Way bridge, however the parallel off highway cycle lane provides the alternative. TfGM will need the justification that the alternative is just as convenient. The off highway cycle lane needs to come around the corner to tie in directly with the Advance Cycle Stopline and the Toucan crossing on Water Street.	Vectos	
1.3	The toucan crossing on Water Street is currently not operating due to substandard design (insufficient offset between staggered crossings). GB to provide details. There was a discussion on how to fix this error. TfGM said that they did not have funds available to do that and suggested the development could pay. Following the meeting the client has rejected that approach.	TfGM	
1.4	Signal equipment – dedicated arrow into the site access not required due to low development trip movements.		

Reference	Description	Action Required	
		Initials	Date
1.5	GB/ RD - the site access arm will need to run in its own stage to avoid potential conflict with traffic from Water Street. Vectos to test in LinSig.	Vectos	
1.6	General principle of the site access design is considered acceptable – Vectos to update to account for the above points and issue in pdf and .dwg to MCC/ TfGM for final review.	Vectos	
2.0	Background Traffic Growth		
2.1	TfGM/ MCC confirmed that background traffic growth will not need to be applied for the supporting assessment work of the highway network.		
3.0	Stopping Up and Site Access Structural Requirements		
3.1	The Basement Car Park lies underneath what is currently adopted highway for the site access into the site and effectively runs along the back of footway. AJ outlined the interface between the basement car parking and the site access. The site access arm sits directly above this area and Renaker want to stop up all the highway that lies above the basement structure.	WSP	
3.2	Extent of adoption/ stopping up of site access arm. GB/RD advised that the adopted highway will need to extend around 2-2.5m back from the site access stopline so that the signal infrastructure can be maintained. Vectos to draw up site access and TfGM to confirm exact extent. Part of the existing adopted highway may be stopped up depending on the outcomes of this exercise.	Vectos/ TfGM	
3.3	AJ to liaise with relevant contacts at MCC and their consultants to understand requirements for adopted highway.	Vectos/ TfGM	
4.0	Other Matters		
4.1	MCC/ TfGM are keen on further cycle improvements along Water Street to be delivered by the development. TfGM/ MCC to feedback in more detail on desired enhancements.	MCC/ TfGM	

Appendix B

Injury Accident Data

TRANSPORT FOR GREATER MANCHESTER



Traffic Accident Data for

Vectos

**Reported Road Injury Accidents in the Specified Area of
Water Street, Deansgate, Quay Street and
Inner Relief Road, Manchester City Centre.
01/03/2015 to 29/02/2020**

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Severity Symbol Key

▲

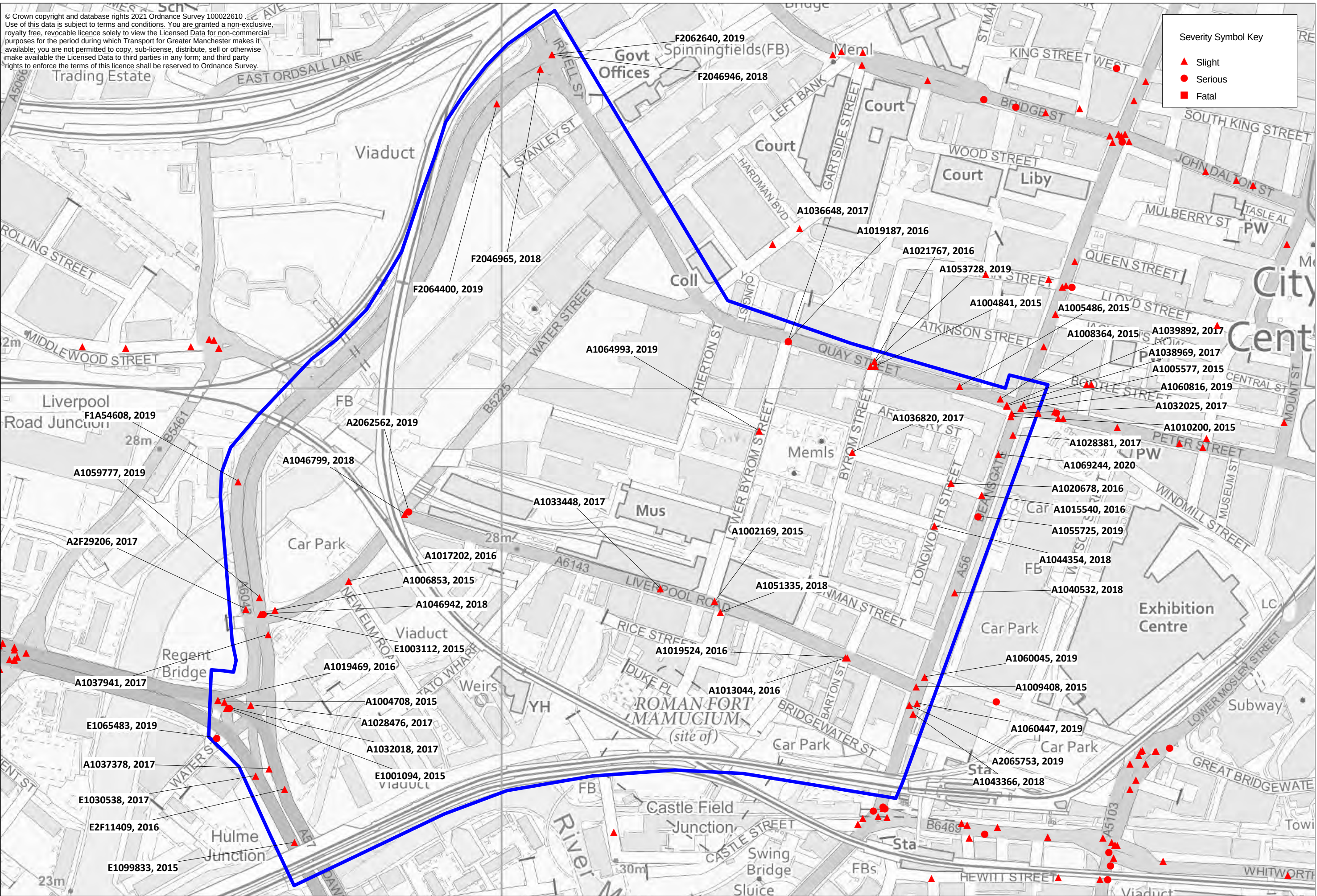
Slight

●

Serious

■

Fatal



TRANSPORT FOR GREATER MANCHESTER



**Reported Road Injury Accidents in the Specified Area of
Water Street, Deansgate, Quay Street and
Inner Relief Road, Manchester City Centre.
01/03/2015 - 29/02/2020**

Injury Accidents	Mar – Dec 2015	2016	2017	2018	2019	Jan – Feb 2020	Total
Fatal	0	0	0	0	0	0	0
Serious	1	0	2	0	3	0	6
Slight	11	9	11	8	10	1	50
Total	12	9	13	8	13	1	56

Standard Totals Report : Reported Road Injury Accidents in the Specified Area of Water Street, Deansgate, Quay Street and Inner Relief Road, Manchester, 01/03/2015 to 29/02/2020

Accidents

Serious	6
Slight	50
Total Accidents	56

Casualties By Age and Sex

Severity	0 - 15	16 - 59	60 - 69	70 +	Total
Serious					
Male	0	3	0	0	3
Female	0	3	0	0	3
Total	0	6	0	0	6
Slight					
Male	1	42	0	0	43
Female	1	20	0	1	22
Total	2	62	0	1	65
Total Casualties	2	68	0	1	71

Casualties By Age and Class

Severity	0 - 15	16 - 59	60 - 69	70 +	Total
Serious					
Driver or rider	0	3	0	0	3
Veh or pillion pas	0	2	0	0	2
Pedestrian	0	1	0	0	1
Total	0	6	0	0	6
Slight					
Driver or rider	0	39	0	0	39
Veh or pillion pas	2	9	0	1	12
Pedestrian	0	14	0	0	14
Total	2	62	0	1	65
Total Casualties	2	68	0	1	71

Cyclist (Rider and Pillion) and Pedestrian Casualties By Age

Severity	0 - 15	16 - 59	60 - 69	70 +	Total
Serious	0	3	0	0	3
Slight	0	24	0	0	24
Total Casualties	0	27	0	0	27

Casualties Broken Down By Type

Car (Driver)	0-15	16+	Total
Serious	0	1	1
Slight	0	25	25
Total	0	26	26
Car (Passenger)	0-15	16+	Total
Serious	0	1	1
Slight	2	10	12
Total	2	11	13
Pedestrian	0-15	16+	Total
Serious	0	1	1
Slight	0	14	14
Total	0	15	15
TWPV (Rider)	0-15	16+	Total
Slight	0	4	4
Total	0	4	4
TWPV (Pillion)	0-15	16+	Total
Serious	0	1	1
Total	0	1	1
Cyclist (Rider)	0-15	16+	Total
Serious	0	2	2
Slight	0	10	10
Total	0	12	12
Total	2	69	71

Standard Report - Reported Road Injury Accidents in the Specified Area of Water Street, Deansgate, Quay Street and Inner Relief Road, Manchester, 01/03/2015 to 29/02/2020

This printout has been generated from the Transport for Greater Manchester's database of road traffic accident records using the query system, GMAXI.

The road traffic accident database contains STATS19 data supplied by Greater Manchester Police and further validated by the Highways Forecasting and Analytical Services (HFAS) section of Transport for Greater Manchester. It is maintained by HFAS on behalf of the ten District Councils in Greater Manchester.

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Accident Reference Number: E1065483				Day: Friday		Contributory Factors			Date: 06/12/2019					Time: 23:25				
Place Reported: Scene				District: Manchester		Factor Conf Ref			Vehicle Details					Casualty Details				
Location: Water Street at junction with Regent Road									Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: V2 (Pedal Cycle) Trav Nw-bd Crossing Water St, V1 Trav E Regent Rd Turns Right Onto Water St & Across Path Of V2, V1 Collides Head On With V2									Car p/c	TurnR Ahead	W SE	SW NW		1 Rid	M	23	Serious	
Locational Details				Conditions		Accident Details												
Road:	U/A57		Junction Details:	Xrds		Road Surface:	Wet		Severity:	Serious								
OSGR:	382706	397639	Junction Control:	TS		Light Conditions:	Dark		No. of Vehicles:	2								
Speed Limit:	30		Ped Crossing:	TSX		Weather Conditions:	Rain		No. of Casualties:	1								

Accident Reference Number: A1019469				Day: Tuesday		Contributory Factors			Date: 09/08/2016					Time: 18:15				
Place Reported: Else				District: Manchester		Factor Conf Ref			Vehicle Details					Casualty Details				
Location: Regent Road at junction with Water Street						DTgate VLike V1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: Both Vehs Trav E Regent Rd. V1 Collides Rear V2						DJudg VLike V1			LGV	Ahead	W	E						
Locational Details				Conditions		Accident Details			DCare Poss V1	Car	Stopg	W	E		1 Drv	F	41	Slight
Road:	A57/A6042		Junction Details:	Mult		Road Surface:	Dry		Severity:	Slight								
OSGR:	382707	397678	Junction Control:	TS		Light Conditions:	Light		No. of Vehicles:	2								
Speed Limit:	40		Ped Crossing:	TSX		Weather Conditions:	Fine		No. of Casualties:	1								

Accident Reference Number: A1004708				Day: Thursday		Contributory Factors			Date: 20/08/2015					Time: 11:24				
Place Reported: Scene				District: Manchester														
Location: Regent Road at junction with Water Street						Factor Conf Ref												
Description: Both Veh Trav E Regent Rd. V1 (HGV) Moved From L2 To L1 Chipping Corner Of V2 Sending It Into A Spin						DTurn VLike V1			Type Move From To Skid					Type Sex Age Sev Pupil				
						DFLoo VLike V1			HGV chInL W SE									
									Car Ahead W SE Skid					1 Drv F 31 Slight				
Locational Details				Conditions		Accident Details												
Road: A57/U Junction Details: Xrds				Road Surface: Dry		Severity: Slight												
OSGR: 382714 397676 Junction Control: TS				Light Conditions: Light		No. of Vehicles: 2												
Speed Limit: 40 Ped Crossing: TSX				Weather Conditions: Fine		No. of Casualties: 1												

Accident Reference Number: E1001094				Day: Monday		Contributory Factors			Date: 11/05/2015					Time: 21:14				
Place Reported: Scene				District: Manchester														
Location: Dawson Street at junction with Water Street						Factor Conf Ref			Type Move From To Skid					Type Sex Age Sev Pupil				
Description: Veh1 Trav Se Dawson St Swerved And Hit Traffic Lights						DSwer VLike V1			Car Ahead NW SE					1 Pas F 79 Slight				
						DDisO Poss V1												
						DEye Poss V1												
Locational Details				Conditions		Accident Details												
Road: A57/U Junction Details: Xrds				Road Surface: Dry		Severity: Slight												
OSGR: 382716 397670 Junction Control: TS				Light Conditions: Dark		No. of Vehicles: 1												
Speed Limit: 40 Ped Crossing: TSX				Weather Conditions: Fine		No. of Casualties: 1												

Accident Reference Number: A1032018				Day: Sunday		Contributory Factors			Date: 02/07/2017					Time: 21:25				
Place Reported: Scene				District: Manchester														
Location: Regent Road at Junction with Trinity Way						Factor Conf Ref			Type Move From To Skid					Type Sex Age Sev Pupil				
Description: V1 (PCV) Trav E Regent Rd Behind V2 (Motorcycle). At Jct V2 Stops At Ats. V1 Collides With Rear Of V2 Knocking Pillion Passenger From Motorcycle						DJudg VLike V1			PCV Stopg W SE									
						DFast VLike V1			m/cl Stopg W SE					1 Pas F 19 Serious				
						DBrake Poss V2												
Locational Details				Conditions		Accident Details												
Road: A57/A6042 Junction Details: Xrds				Road Surface: Dry		Severity: Serious												
OSGR: 382719 397670 Junction Control: TS				Light Conditions: Dark		No. of Vehicles: 2												
Speed Limit: 40 Ped Crossing: TSX				Weather Conditions: Fine		No. of Casualties: 1												

Accident Reference Number: F1A54608				Day: Sunday		Contributory Factors			Date: 10/03/2019					Time: 15:55				
Place Reported: Scene				District: Salford														
Location: Trinity Way 110 metres SW Of Hampson Street (Middlewood Street)						Factor Conf Ref			Type Move From To Skid					Type Sex Age Sev Pupil				
Description: All Vehs Trav N Trinity Way Approaching Right Hand Bend. V2, V3 & V4 Are Slowing. V1 Fails To React To This, Hitting V2, Which Hits V3. V3 Hits V4. V1 FTS						DFLoo Poss V1			Car Ahead S N									
						DCare Poss V1			Car Stopg S N					1 Drv M 27 Slight				
						DInDrL Poss V1								4 Pas F 25 Slight				
						DAggre Poss V1			Car Stopg S N					2 Drv M 38 Slight				
Locational Details				Conditions		Accident Details								5 Pas F 29 Slight				
Road: A6042 Junction Details:				Road Surface: Dry		Severity: Slight								3 Drv M 25 Slight				
OSGR: 382728 397904 Junction Control: n/a				Light Conditions: Light		No. of Vehicles: 4								6 Pas F 30 Slight				
Speed Limit: 30 Ped Crossing:				Weather Conditions: Rain		No. of Casualties: 6												

Accident Reference Number: A2F29206			Day: Saturday			Contributory Factors			Date: 01/04/2017			Time: 20:16		
Place Reported: Scene			District: Manchester			Factor Conf Ref			Vehicle Details			Casualty Details		
Location: Trinity Way at junction with Water Street						DJudg VLike V1			Type Move From To Skid			Type Sex Age Sev Pupil		
Description: Both Vehs Trav Nw Trinity Way From The Mancunian Way. V2 Slows And Is Then Hit By V1 On Rear Offside. V1 Makes Off									Car Ahead SE NW					
									Car Stopg SE NW			1 Drv M 36 Slight		
												2 Pas F 36 Slight		
												3 Pas F 39 Slight		
Locational Details			Conditions			Accident Details								
Road:	A6042/A6143	Junction Details: Tjun	Road Surface:	Dry		Severity:	Slight							
OSGR:	382736 397772	Junction Control: TS	Light Conditions:	Dark		No. of Vehicles:	2							
Speed Limit:	30	Ped Crossing: TSX	Weather Conditions:	Fine		No. of Casualties:	3							
Accident Reference Number: A1028476			Day: Friday			Contributory Factors			Date: 14/04/2017			Time: 13:54		
Place Reported: Scene			District: Manchester			Factor Conf Ref			Vehicle Details			Casualty Details		
Location: Trinity Way at junction with Dawson Street						DAlcoh VLike V1			Type Move From To Skid			Type Sex Age Sev Pupil		
Description: V2 Trav Sw Trinity Way Is Waiting In Traffic. Driver Of V1 Trav Same Not Looking And Hits Rear Of V2. Driver Of V1 Over Alcohol Limit						DMobP Poss V1			Car Ahead NE SW					
									Car Ahead NE SW			1 Drv M 54 Slight		
Locational Details			Conditions			Accident Details								
Road:	A6042/A57	Junction Details: Xrds	Road Surface:	Dry		Severity:	Slight							
OSGR:	382741 397673	Junction Control: TS	Light Conditions:	Light		No. of Vehicles:	2							
Speed Limit:	30	Ped Crossing: TSX	Weather Conditions:	Fine		No. of Casualties:	1							
Accident Reference Number: E1030538			Day: Tuesday			Contributory Factors			Date: 09/05/2017			Time: 16:05		
Place Reported: Else			District: Manchester			Factor Conf Ref			Vehicle Details			Casualty Details		
Location: Dawson Street 50 metres South East of Regent Road									Type Move From To Skid			Type Sex Age Sev Pupil		
Description: V2 Trav Nw Dawson St In Queue Of Traffic Approaching Lights At Junction With Regent Rd. V1, Trav Same, Hits V2 From Behind And Drives Off. V2 Hits V3 As Result									Car chInL SE NW					
									Car Waitg SE NW			1 Drv M 30 Slight		
									Car Waitg SE NW					
Locational Details			Conditions			Accident Details								
Road:	A57	Junction Details:	Road Surface:	Dry		Severity:	Slight							
OSGR:	382746 397600	Junction Control: n/a	Light Conditions:	Light		No. of Vehicles:	3							
Speed Limit:	40	Ped Crossing:	Weather Conditions:	Fine		No. of Casualties:	1							
Accident Reference Number: A1059777			Day: Thursday			Contributory Factors			Date: 01/08/2019			Time: 19:45		
Place Reported: Else			District: Manchester			Factor Conf Ref			Vehicle Details			Casualty Details		
Location: Trinity Way 15 metres N Of Water Street									Type Move From To Skid			Type Sex Age Sev Pupil		
Description: Both Vehs Trav S Trinity Way Approaching Jct, V2 Waiting In Traffic, V1 Collides With Rear Of V2									Car Ahead N S					
									Car Waitg N S			1 Drv M 36 Slight		
Locational Details			Conditions			Accident Details								
Road:	A6042/A6143	Junction Details: Tjun	Road Surface:	Wet		Severity:	Slight							
OSGR:	382750 397784	Junction Control: TS	Light Conditions:	Light		No. of Vehicles:	2							
Speed Limit:	30	Ped Crossing: TSX	Weather Conditions:	Rain		No. of Casualties:	1							

Accident Reference Number: A1046942			Day: Saturday			Contributory Factors			Date: 21/07/2018			Time: 18:50		
Place Reported: Scene			District: Manchester			Factor Conf Ref			Vehicle Details			Casualty Details		
Location: Trinity Way at junction with Water Street						DCare VLike V1			Type Move From To Skid			Type Sex Age Sev Pupil		
Description: V2 Trav N Trinity Wy Turns Right & Collides With V1 (Taxi) Trav S Trinity Wy At High Speed.									Taxi Ahead N S			1 Drv M 36 Slight		
									Car TurnR S E			2 Drv M 22 Slight		
Locational Details			Conditions			Accident Details								
Road:	A6042/A6143	Junction Details: Tjun	Road Surface:	Dry		Severity:	Slight							
OSGR:	382751 397767	Junction Control: TS	Light Conditions:	Light		No. of Vehicles:	2							
Speed Limit:	30	Ped Crossing: TSX	Weather Conditions:	Fine		No. of Casualties:	2							
Accident Reference Number: E1003112			Day: Sunday			Contributory Factors			Date: 28/06/2015			Time: 18:55		
Place Reported: Scene			District: Manchester			Factor Conf Ref			Vehicle Details			Casualty Details		
Location: Trinity Way at junction with Water Street						DFLoo VLike V1			Type Move From To Skid			Type Sex Age Sev Pupil		
Description: V1 Trav N Trinity Way Turns Right At Ats And Collides With V2 Trav S Trinity Way						DJJudg VLike V1			Car TurnR S E			1 Drv M 23 Slight		
									Car Ahead N S Skid			2 Pas M 30 Slight		
Locational Details			Conditions			Accident Details						3 Pas M 30 Serious		
Road:	A6042/A6143	Junction Details: Tjun	Road Surface:	Dry		Severity:	Serious							
OSGR:	382754 397767	Junction Control: TS	Light Conditions:	Light		No. of Vehicles:	2							
Speed Limit:	30	Ped Crossing: TSX	Weather Conditions:	Fine		No. of Casualties:	3							
Accident Reference Number: A1037941			Day: Monday			Contributory Factors			Date: 20/11/2017			Time: 08:30		
Place Reported: Else			District: Manchester			Factor Conf Ref			Vehicle Details			Casualty Details		
Location: Trinity Way at junction with Water Street						DATS Poss V2			Type Move From To Skid			Type Sex Age Sev Pupil		
Description: V1 (Car) Trav S Trinity Way. V2 (Pedal Cycle) Trav Sw Water St Turns Left Onto Trinity Way. V1 Collides With Rear Of V2. Slow Moving Traffic						DStat Poss V1			Car Ahead N S					
						DJnRst Poss V1			p/c TurnL NE S			1 Rid M 59 Slight		
Locational Details			Conditions			Accident Details								
Road:	A6042/A6143	Junction Details: Xrds	Road Surface:	Wet		Severity:	Slight							
OSGR:	382759 397746	Junction Control: TS	Light Conditions:	Light		No. of Vehicles:	2							
Speed Limit:	30	Ped Crossing: TSX	Weather Conditions:	Fine		No. of Casualties:	1							
Accident Reference Number: A1037378			Day: Wednesday			Contributory Factors			Date: 15/11/2017			Time: 15:45		
Place Reported: Scene			District: Manchester			Factor Conf Ref			Vehicle Details			Casualty Details		
Location: Dawson Street 50 metres South East of Trinity Way						DJnOvr Poss V1			Type Move From To Skid			Type Sex Age Sev Pupil		
Description: V1 (Motorcycle) Trav Se Twds Mancunian Way. Unknown Veh Changes Lanes, V1 Loses Control Falls Into Central Barrier									m/s Ahead NW SE			1 Rid M 30 Slight		
Locational Details			Conditions			Accident Details								
Road:	A57	Junction Details:	Road Surface:	Dry		Severity:	Slight							
OSGR:	382760 397607	Junction Control: n/a	Light Conditions:	Light		No. of Vehicles:	1							
Speed Limit:	40	Ped Crossing: TSX	Weather Conditions:	Fine		No. of Casualties:	1							

Accident Reference Number: A1006853				Day: Monday		Contributory Factors			Date: 05/10/2015					Time: 07:45					
Place Reported: Scene				District: Manchester		Factor Conf Ref			Vehicle Details					Casualty Details					
Location: Water Street at junction with A6042										Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: V1 (Pedal Cycle) Trav W On Footpath Goes Onto Road Fails To Give Way, Hits V2 Trav E Water St.										p/c Car	Ahead Start	E W	W E		1 Rid	M	21	Slight	
Locational Details				Conditions		Accident Details													
Road:	A6143/A6042		Junction Details:		Tjun	Road Surface:	Dry	Severity:	Slight										
OSGR:	382766	397771	Junction Control:		TS	Light Conditions:	Light	No. of Vehicles:	2										
Speed Limit:	30		Ped Crossing:		TSX	Weather Conditions:	Fine	No. of Casualties:	1										
Accident Reference Number: E2F11409				Day: Tuesday		Contributory Factors			Date: 26/01/2016					Time: 01:15					
Place Reported: Scene				District: Manchester		Factor Conf Ref			Vehicle Details					Casualty Details					
Location: Dawson Street 35 metres SE Of Trinity Way										Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: V1 Trav Se Dawson St Taking A Right Hand Bend Leaves Carriageway Collides With Gantry							DAggre DCare			Poss Poss	V1 V1				1 Drv	M	26	Slight	
Locational Details				Conditions		Accident Details													
Road:	A57		Junction Details:			Road Surface:	Dry	Severity:	Slight										
OSGR:	382776	397586	Junction Control:		n/a	Light Conditions:	Dark	No. of Vehicles:	1										
Speed Limit:	40		Ped Crossing:			Weather Conditions:	Fine	No. of Casualties:	1										
Accident Reference Number: E1099833				Day: Sunday		Contributory Factors			Date: 12/04/2015					Time: 18:40					
Place Reported: Scene				District: Manchester		Factor Conf Ref			Vehicle Details					Casualty Details					
Location: Dawson Street 130 Metres North West of Egerton Street										Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: All Vehicles Travel Nw Dawson St. V1 Hits Rear of V2 Which Collides with Rear of V3 And Collision Occurs							DJudg DFLoo			VLike VLike	V1 V1								
Locational Details				Conditions		Accident Details													
Road:	A57		Junction Details:			Road Surface:	Dry	Severity:	Slight										
OSGR:	382786	397531	Junction Control:		n/a	Light Conditions:	Light	No. of Vehicles:	3										
Speed Limit:	30		Ped Crossing:			Weather Conditions:	Fine	No. of Casualties:	2										
Accident Reference Number: A1017202				Day: Tuesday		Contributory Factors			Date: 14/06/2016					Time: 08:05					
Place Reported: Else				District: Manchester		Factor Conf Ref			Vehicle Details					Casualty Details					
Location: Water Street at junction with New Elm Road										Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: V1 Trav Sw Water St Starts to Turn Left Into New Elm Rd And Collides C1 Crossing N-bound							DCare DJudg DAlcoh			VLike Poss Poss	V1 V1 V1				1 Ped	F	50	Slight	
Locational Details				Conditions		Accident Details													
Road:	A6143/U		Junction Details:		Tjun	Road Surface:	Wet	Severity:	Slight										
OSGR:	382842	397801	Junction Control:		GW	Light Conditions:	Light	No. of Vehicles:	1										
Speed Limit:	30		Ped Crossing:			Weather Conditions:	Rain	No. of Casualties:	1										

Accident Reference Number: A1046799			Day: Monday			Contributory Factors			Date: 16/07/2018			Time: 11:39		
Place Reported: Else			District: Manchester			Factor Conf Ref			Vehicle Details			Casualty Details		
Location: Water Street at junction with Liverpool Road														
Description: V2 (Pedal Cycle) Trav Ne Water St Bending Right Twds Liverpool Rd. V1 Trav Sw Water St Fails To Give Way, V2 Collides With Os V1														
Locational Details			Conditions			Accident Details								
Road:	A6143/A6143	Junction Details: Tjun	Road Surface:	Dry		Severity:	Slight							
OSGR:	382900 397870	Junction Control: TS	Light Conditions:	Light		No. of Vehicles:	2							
Speed Limit:	30	Ped Crossing:	Weather Conditions:	Fine		No. of Casualties:	1							
Accident Reference Number: A2062562			Day: Monday			Contributory Factors			Date: 02/09/2019			Time: 04:05		
Place Reported: Scene			District: Manchester			Factor Conf Ref			Vehicle Details			Casualty Details		
Location: Water Street at junction with Liverpool Road														
Description: V2 Trav Sw Water St Turns Left Onto Liverpool Rd, V1 (Taxi) Trav Ne Water St Turns Right Onto Liverpool Rd & Collides With Oncoming V2														
Locational Details			Conditions			Accident Details								
Road:	B5225/A6143	Junction Details: Tjun	Road Surface:	Wet		Severity:	Serious							
OSGR:	382904 397873	Junction Control: TS	Light Conditions:	Dark		No. of Vehicles:	2							
Speed Limit:	30	Ped Crossing:	Weather Conditions:	Rain		No. of Casualties:	2							
Accident Reference Number: F2064400			Day: Thursday			Contributory Factors			Date: 14/11/2019			Time: 18:25		
Place Reported: Else			District: Salford			Factor Conf Ref			Vehicle Details			Casualty Details		
Location: Trinity Way 70 metres SW Of Irwell Street														
Description: Both Vehs Trav Sw Trinity Way, V1 Waiting In Traffic When V2 Fails To Slow & Hits Rear Of V1														
Locational Details			Conditions			Accident Details								
Road:	A6042	Junction Details:	Road Surface:	Wet		Severity:	Slight							
OSGR:	382995 398294	Junction Control: n/a	Light Conditions:	Dark		No. of Vehicles:	2							
Speed Limit:	30	Ped Crossing:	Weather Conditions:	Rain		No. of Casualties:	1							
Accident Reference Number: F2046965			Day: Monday			Contributory Factors			Date: 06/08/2018			Time: 07:40		
Place Reported: Else			District: Salford			Factor Conf Ref			Vehicle Details			Casualty Details		
Location: Trinity Way 10 metres SW of Irwell Street														
Description: Both Vehs Trav Sw Trinity Way. V2 Trav L Hand Lane When V1 Pulls Into L Hand Lane & Collides V2.														
Locational Details			Conditions			Accident Details								
Road:	A6042/A34	Junction Details: Mult	Road Surface:	Dry		Severity:	Slight							
OSGR:	383040 398330	Junction Control: TS	Light Conditions:	Light		No. of Vehicles:	2							
Speed Limit:	30	Ped Crossing: TSX	Weather Conditions:	Fine		No. of Casualties:	1							

Accident Reference Number: F2046946	Day: Wednesday	Contributory Factors	Date: 08/08/2018	Time: 19:10
Place Reported: Scene	District: Salford	Factor Conf Ref	Vehicle Details	Casualty Details
Location: Irwell Street at junction with Trinity Way			Type Move From To Skid	Type Sex Age Sev Pupil
Description: V1 (Stolen) Trav Se Irwell St Pursued By V2 (Police) & V3 (Police). V1 Collides V4 Trav Nw Irwell St.				
Locational Details	Conditions	Accident Details		
Road: A34/A6042 Junction Details: Tjun	Road Surface: Dry	Severity: Slight	Car Ahead NW SE	
OSGR: 383052 398345 Junction Control: TS	Light Conditions: Light	No. of Vehicles: 4	Car Ahead NW SE	
Speed Limit: 30 Ped Crossing: TSX	Weather Conditions: Fine	No. of Casualties: 2	Car Ahead SE NW	1 Drv M 50 Slight
				2 Pas M 28 Slight
Accident Reference Number: F2062640	Day: Saturday	Contributory Factors	Date: 14/09/2019	Time: 08:10
Place Reported: Else	District: Salford	Factor Conf Ref	Vehicle Details	Casualty Details
Location: Trinity Way at Junction with Irwell Street			Type Move From To Skid	Type Sex Age Sev Pupil
Description: Both Vehs Trav Ne Trinity Way, V2 Performs A U Turn At Jct, O/s Of V2 Collides With Front Of V1				
Locational Details	Conditions	Accident Details		
Road: A6042/A34 Junction Details: Xrds	Road Surface: Dry	Severity: Slight	Car Ahead SW NE	1 Drv M 31 Slight
OSGR: 383052 398345 Junction Control: TS	Light Conditions: Light	No. of Vehicles: 2	Car Uturn SW SW	
Speed Limit: 30 Ped Crossing: TSX	Weather Conditions: Fine	No. of Casualties: 1		
Accident Reference Number: A1033448	Day: Friday	Contributory Factors	Date: 30/06/2017	Time: 22:35
Place Reported: Else	District: Manchester	Factor Conf Ref	Vehicle Details	Casualty Details
Location: Liverpool Road 50 metres NW Of Lower Byrom Street			Type Move From To Skid	Type Sex Age Sev Pupil
Description: V2 Trav Se Liverpool Rd, Stops To Let Large Van Pass In Opposite Dir. V1 (Taxi) Pulls Out From Side Road To Trav Se Liverpool Rd & Collides Rear N/S Of V2. V1 FTS				
Locational Details	Conditions	Accident Details		
Road: A6143 Junction Details:	Road Surface: Dry	Severity: Slight	Taxi Start NW SE	
OSGR: 383164 397793 Junction Control: n/a	Light Conditions: Dark	No. of Vehicles: 2	Car Waitg NW SE	1 Drv M 55 Slight
Speed Limit: 30 Ped Crossing: ZebX	Weather Conditions: Fine	No. of Casualties: 1		
Accident Reference Number: A1002169	Day: Tuesday	Contributory Factors	Date: 02/06/2015	Time: 17:47
Place Reported: Scene	District: Manchester	Factor Conf Ref	Vehicle Details	Casualty Details
Location: Liverpool Road at junction with Lower Byrom Street			Type Move From To Skid	Type Sex Age Sev Pupil
Description: V1 Trav S On Lower Byrom St. V2 (Pedal Cycle) Trav E On Liverpool Rd. V1 Turns Left On To Liverpool Rd Into Path Of V2 And Collision Occurs		DFLoo VLike V1		
Locational Details	Conditions	Accident Details		
Road: A6143/U Junction Details: Tjun	Road Surface: Dry	Severity: Slight	Car TurnL N E	
OSGR: 383220 397780 Junction Control: GW	Light Conditions: Light	No. of Vehicles: 2	p/c Ahead W E O/tn	1 Rid M 43 Slight
Speed Limit: 30 Ped Crossing: ZebX	Weather Conditions: Fine	No. of Casualties: 1		

Accident Reference Number: A1051335				Day: Saturday		Contributory Factors			Date: 17/11/2018				Time: 19:40						
Place Reported: Else				District: Manchester															
Location: Duke Street at junction with Liverpool Road							Factor Conf Ref			Vehicle Details				Casualty Details					
										Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: V1 Trav W Liverpool Rd Turns Left Onto Duke St, C1 (Pedestrian) Crossing Duke St On Drivers N/s Dir Unknown, When V1 Turns & Runs Over C1 Foot										Car	TurnL	SE	SW		1 Ped	F	29	Slight	
Locational Details				Conditions		Accident Details													
Road:	U/A6143		Junction Details:		Tjun	Road Surface:	Dry		Severity:	Slight									
OSGR:	383226	397769	Junction Control:		GW	Light Conditions:	Dark		No. of Vehicles:	1									
Speed Limit:	30		Ped Crossing:			Weather Conditions:	N/A		No. of Casualties:	1									
Accident Reference Number: A1064993				Day: Saturday		Contributory Factors			Date: 09/11/2019				Time: 23:40						
Place Reported: Scene				District: Manchester															
Location: Lower Byrom Street at junction with Great John Street							Factor Conf Ref			Vehicle Details				Casualty Details					
							PALcoh VLike C1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: V1 (Minibus) Trav N Lower Byrom St Appr Jct, C1 (Drunken Pedestrian) Crossing From Drivers N/s Heading E-bd. Collision Occurs							PFLoo VLike C1			Mbus	Ahead	S	N		1 Ped	F	29	Slight	
Locational Details				Conditions		Accident Details													
Road:	U/U		Junction Details:		Tjun	Road Surface:	Dry		Severity:	Slight									
OSGR:	383266	397956	Junction Control:		GW	Light Conditions:	Dark		No. of Vehicles:	1									
Speed Limit:	30		Ped Crossing:			Weather Conditions:	Fine		No. of Casualties:	1									
Accident Reference Number: A1019187				Day: Sunday		Contributory Factors			Date: 03/07/2016				Time: 14:15						
Place Reported: Scene				District: Manchester															
Location: Quay Street at junction with Lower Byrom Street							Factor Conf Ref			Vehicle Details				Casualty Details					
							DFLoo Poss V1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: Both Vehicles Are On Quay St, Trav In Opposite Directions. V1, Trav Se, Begins To Turn Right And Into Path Of V2 (Motorcycle) Trav Nw. Collision Occurs							DJudg Poss V1			Car m/cl	TurnR Ahead	NW SE	SW NW		1 Rid	M	36	Slight	
Locational Details				Conditions		Accident Details													
Road:	A34/U		Junction Details:		Xrds	Road Surface:	Dry		Severity:	Slight									
OSGR:	383296	398049	Junction Control:		GW	Light Conditions:	Light		No. of Vehicles:	2									
Speed Limit:	30		Ped Crossing:			Weather Conditions:	Fine		No. of Casualties:	1									
Accident Reference Number: A1036648				Day: Monday		Contributory Factors			Date: 30/10/2017				Time: 09:25						
Place Reported: Scene				District: Manchester															
Location: Quay Street at junction with Lower Byrom Street							Factor Conf Ref			Vehicle Details				Casualty Details					
							DTurn VLike V1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: V1 Trav Se Quay St, Turns Right Twds Lower Byrom St & Collides Mid-Junction With V2 (Pedal Cycle) Trav Nw Quay St.							DFLoo VLike V1			Car p/c	TurnR Ahead	NW SE	SW NW		1 Rid	M	35	Serious	
Locational Details				Conditions		Accident Details													
Road:	A34/U		Junction Details:		Tjun	Road Surface:	Dry		Severity:	Serious									
OSGR:	383296	398049	Junction Control:		GW	Light Conditions:	Light		No. of Vehicles:	2									
Speed Limit:	30		Ped Crossing:			Weather Conditions:	Fine		No. of Casualties:	1									

Accident Reference Number: A1019524				Day: Wednesday		Contributory Factors			Date: 17/08/2016				Time: 16:45			
Place Reported: Scene				District: Manchester												
Location: Liverpool Road at junction with Barton Street						Factor Conf Ref			Vehicle Details				Casualty Details			
Description: V2 (Pedal Cycle) Trav Nw On Liverpool Rd. V1 Trav Sw On Barton St. At Junction V1 Collides With V2						DFLoo VLike V1			Type Move From To Skid				Type Sex Age Sev Pupil			
						DJJudg VLike V1			LGV Ahead NE SW p/c Ahead SE NW				1 Rid M 40 Slight			
Locational Details				Conditions		Accident Details										
Road:	A6143/U		Junction Details: Xrds		Road Surface:	Dry		Severity:	Slight							
OSGR:	383355	397722	Junction Control: GW		Light Conditions:	Light		No. of Vehicles:	2							
Speed Limit:	30		Ped Crossing:		Weather Conditions:	Fine		No. of Casualties:	1							

Accident Reference Number: A1013044				Day: Friday		Contributory Factors			Date: 04/03/2016				Time: 17:15			
Place Reported: Scene				District: Manchester												
Location: Liverpool Road at junction with Barton Street						Factor Conf Ref			Vehicle Details				Casualty Details			
Description: V1 Trav S On Barton St. Crossing Jct Of Liverpool Rd. V2 (Pedal Cycle) Trav W On Liverpool Rd. V1 Collides With V2						Slip Poss V1			Type Move From To Skid				Type Sex Age Sev Pupil			
						DTurn Poss V1			Car Ahead N S				1 Rid M 33 Slight			
						DFLoo Poss V1			p/c Ahead E W							
Locational Details				Conditions		Accident Details										
Road:	A6143/U		Junction Details: Xrds		Road Surface:	Wet		Severity:	Slight							
OSGR:	383357	397722	Junction Control: GW		Light Conditions:	Dark		No. of Vehicles:	2							
Speed Limit:	30		Ped Crossing:		Weather Conditions:	Snow		No. of Casualties:	1							

Accident Reference Number: A1036820				Day: Monday		Contributory Factors			Date: 30/10/2017				Time: 18:40			
Place Reported: Scene				District: Manchester												
Location: Byrom Street at junction with St John Street						Factor Conf Ref			Vehicle Details				Casualty Details			
Description: V1 Trav Ne Byrom St, Stationary In Traffic. V2 Trav Sw Byrom St. V1 Attempts A U-turn And Collides With V2 Mid-junction						DTurn VLike V1			Type Move From To Skid				Type Sex Age Sev Pupil			
						DDisIn VLike V1			Car Uturn SW SW				1 Pas F 12 Slight			
									Car Ahead NE SW				2 Pas M 9 Slight			
Locational Details				Conditions		Accident Details										
Road:	U/U		Junction Details: Tjun		Road Surface:	Dry		Severity:	Slight							
OSGR:	383362	397934	Junction Control: GW		Light Conditions:	Dark		No. of Vehicles:	2							
Speed Limit:	30		Ped Crossing:		Weather Conditions:	Fine		No. of Casualties:	2							

Accident Reference Number: A1053728				Day: Tuesday		Contributory Factors			Date: 19/02/2019				Time: 14:15			
Place Reported: Scene				District: Manchester												
Location: Quay Street at junction with Byrom Street						Factor Conf Ref			Vehicle Details				Casualty Details			
Description: V1 Trav Ne Byrom St Entering Quay Street, C1 (Pedestrian) Crossing From Drivers O/s Heading W-bd, V1 Hits C1									Type Move From To Skid				Type Sex Age Sev Pupil			
									Car Ahead SW NE				1 Ped F 26 Slight			
Locational Details				Conditions		Accident Details										
Road:	A34/U		Junction Details: Xrds		Road Surface:	Dry		Severity:	Slight							
OSGR:	383381	398023	Junction Control: Man		Light Conditions:	Light		No. of Vehicles:	1							
Speed Limit:	30		Ped Crossing: PelX		Weather Conditions:	Fine		No. of Casualties:	1							

Accident Reference Number: A1021767			Day: Monday			Contributory Factors			Date: 10/10/2016			Time: 06:18		
Place Reported: Scene			District: Manchester			Factor Conf Ref			Vehicle Details			Casualty Details		
Location: Quay Street at junction with Byrom Street						Type	Move	From To	Skid	Type	Sex	Age	Sev	Pupil
Description: V1 Trav Sw Byrom St Pulls Slowly Into Jct, View Obscured By Building Work Collides With V2 (Motorcycle) Trav Se Quay St						Slip	VLike	V2						
						DJudg	VLike	V1	Car	wtgTL	NE	SW		
						DBuild	VLike	V1	m/s	Ahead	NW	SE	S&O	1 Rid M 33 Slight
Locational Details			Conditions			Accident Details								
Road:	A34/U	Junction Details: Xrds	Road Surface:	Wet		Severity:		Slight						
OSGR:	383385 398028	Junction Control: GW	Light Conditions:	Dark		No. of Vehicles:		2						
Speed Limit:	30	Ped Crossing:	Weather Conditions:	Rain		No. of Casualties:		1						
Accident Reference Number: A1004841			Day: Saturday			Contributory Factors			Date: 15/08/2015			Time: 23:25		
Place Reported: Scene			District: Manchester			Factor Conf Ref			Vehicle Details			Casualty Details		
Location: Quay Street at junction with Byrom Street						Type	Move	From To	Skid	Type	Sex	Age	Sev	Pupil
Description: V1 Trav E Quay St Begins To Turn R Into Byrom St Across Path Of V2 (Motorcycle) Trav Opposite, Causing Collision						DJudg	VLike	V1	Car	TurnR	W	S		
						m/s	Ahead	E W						
														1 Rid M 25 Slight
Locational Details			Conditions			Accident Details								
Road:	A34/U	Junction Details: Xrds	Road Surface:	Dry		Severity:		Slight						
OSGR:	383386 398023	Junction Control: GW	Light Conditions:	Dark		No. of Vehicles:		2						
Speed Limit:	30	Ped Crossing:	Weather Conditions:	Fine		No. of Casualties:		1						
Accident Reference Number: A2065753			Day: Sunday			Contributory Factors			Date: 08/12/2019			Time: 22:30		
Place Reported: Scene			District: Manchester			Factor Conf Ref			Vehicle Details			Casualty Details		
Location: Deansgate at junction with Liverpool Road						Type	Move	From To	Skid	Type	Sex	Age	Sev	Pupil
Description: V1 (Taxi) Trav N Deansgate Appr Jct With Liverpool Rd, C2 (Pedal Cycle) Trav S In Opp C/way Moves Suddenly To Middle Of Road. V1 Attempts To Avoid But Collision Occurs						DTurn	Poss	V2	Taxi	Ahead	S	N		
						DClose	Poss	V1	p/c	Ahead	N	S		
														1 Rid M 24 Slight
Locational Details			Conditions			Accident Details								
Road:	A56/A6143	Junction Details: Tjun	Road Surface:	Wet		Severity:		Slight						
OSGR:	383421 397673	Junction Control: TS	Light Conditions:	Dark		No. of Vehicles:		2						
Speed Limit:	30	Ped Crossing: TSX	Weather Conditions:	Rain		No. of Casualties:		1						
Accident Reference Number: A1043366			Day: Saturday			Contributory Factors			Date: 05/05/2018			Time: 17:30		
Place Reported: Else			District: Manchester			Factor Conf Ref			Vehicle Details			Casualty Details		
Location: Deansgate 21 metres South West of Liverpool Road						Type	Move	From To	Skid	Type	Sex	Age	Sev	Pupil
Description: Both Vehs Trav Sw Deansgate. V1 Attempts To Overtake V2 (Pedal Cycle) Makes Contact Causing Rider To Fall						Car	O/Tkg	NE	SW					
						p/c	Ahead	NE	SW					
														1 Rid F 47 Slight
Locational Details			Conditions			Accident Details								
Road:	A56	Junction Details:	Road Surface:	Dry		Severity:		Slight						
OSGR:	383425 397664	Junction Control: n/a	Light Conditions:	Light		No. of Vehicles:		2						
Speed Limit:	30	Ped Crossing:	Weather Conditions:	Fine		No. of Casualties:		1						

Accident Reference Number: A1009408				Day: Saturday		Contributory Factors			Date: 05/12/2015				Time: 05:15			
Place Reported: Scene				District: Manchester												
Location: Deansgate at junction with Liverpool Road						Factor Conf Ref			Vehicle Details				Casualty Details			
Description: V1 Trav Sw On Deansgate And Turns Right On To Liverpool Rd. V2 Trav Ne On Deansgate, Collision Occurs						DFLoo VLike V1 DTurn VLike V1			Type Move From To Skid				Type Sex Age Sev Pupil			
									Car TurnR NE NW Car Ahead SW NE				1 Drv M 42 Slight			
Locational Details				Conditions		Accident Details										
Road: A56/A6143		Junction Details: Xrds		Road Surface: Wet		Severity: Slight										
OSGR: 383428 397692		Junction Control: TS		Light Conditions: Dark		No. of Vehicles: 2										
Speed Limit: 30		Ped Crossing: TSX		Weather Conditions: R&W		No. of Casualties: 1										

Accident Reference Number: A1060447				Day: Tuesday		Contributory Factors			Date: 13/08/2019				Time: 07:15			
Place Reported: Else				District: Manchester												
Location: Deansgate 10 metres SW Of Liverpool Road						Factor Conf Ref			Vehicle Details				Casualty Details			
Description: Both Vehs Trav Sw Deansgate, V2 Overtakes V1 (Pedal Cycle) On Its O/s, Knocking Rider Off The Bike									Type Move From To Skid				Type Sex Age Sev Pupil			
									p/c Ahead NE SW Car O/Tkg NE SW				1 Rid M 23 Slight			
Locational Details				Conditions		Accident Details										
Road: A56/A6143		Junction Details: Xrds		Road Surface: Dry		Severity: Slight										
OSGR: 383429 397675		Junction Control: TS		Light Conditions: Light		No. of Vehicles: 2										
Speed Limit: 30		Ped Crossing: TSX		Weather Conditions: Fine		No. of Casualties: 1										

Accident Reference Number: A1060045				Day: Sunday		Contributory Factors			Date: 28/07/2019				Time: 02:50			
Place Reported: Else				District: Manchester												
Location: Deansgate at junction with Great Bridgewater Street						Factor Conf Ref			Vehicle Details				Casualty Details			
Description: V2 Trav Ne Deansgate Waiting To Go Ahead But Held Up, V1 Trav Nw Great Bridgewater St, Loses Control & Collides Head On With V2. V1 Fts									Type Move From To Skid				Type Sex Age Sev Pupil			
									Car Start SE NW Car Waitg SW NE				1 Drv M 45 Slight			
Locational Details				Conditions		Accident Details										
Road: A56/C		Junction Details: Tjun		Road Surface: Dry		Severity: Slight										
OSGR: 383437 397702		Junction Control: TS		Light Conditions: Dark		No. of Vehicles: 2										
Speed Limit: 30		Ped Crossing: TSX		Weather Conditions: Fine		No. of Casualties: 1										

Accident Reference Number: A1044354				Day: Sunday		Contributory Factors			Date: 20/05/2018				Time: 04:53			
Place Reported: Else				District: Manchester												
Location: Camp Street at junction with Longworth Street						Factor Conf Ref			Vehicle Details				Casualty Details			
Description: V2 Trav Se Camp St Twds Deansgate. Carries Out U Turn When Deansgate Is Closed. V1 Trav Opposite Way Collides With V2									Type Move From To Skid				Type Sex Age Sev Pupil			
									Car Ahead SE NW O/tn Car Uturn NW NW				1 Drv M 37 Slight			
Locational Details				Conditions		Accident Details										
Road: U/U		Junction Details: Xrds		Road Surface: Dry		Severity: Slight										
OSGR: 383447 397858		Junction Control: GW		Light Conditions: Light		No. of Vehicles: 2										
Speed Limit: 30		Ped Crossing:		Weather Conditions: Fine		No. of Casualties: 1										

Accident Reference Number: A1015540					Day: Tuesday		Contributory Factors			Date: 03/05/2016					Time: 10:27				
Place Reported: Scene					District: Manchester														
Location: Deansgate at junction with St John Street							Factor Conf Ref			Vehicle Details					Casualty Details				
Description: V1 & V2 (Pedal Cycle) Trav N On Deansgate. V1 Turns Left Across Path Of V2 Causing Collision							DTurn VLike V1			Type Move From To Skid					Type Sex Age Sev Pupil				
							DFLoo VLike V1			Car p/c TurnL S W Ahead S N					1 Rid M 37 Slight				
Locational Details					Conditions		Accident Details												
Road: A56/U Junction Details: Tjun					Road Surface: Dry		Severity: Slight												
OSGR: 383496 397890 Junction Control: GW					Light Conditions: Light		No. of Vehicles: 2												
Speed Limit: 30 Ped Crossing:					Weather Conditions: Fine		No. of Casualties: 1												

Accident Reference Number: A1069244					Day: Saturday		Contributory Factors			Date: 29/02/2020					Time: 19:45				
Place Reported: Else					District: Manchester														
Location: Deansgate 50 metres SW Of Quay Street							Factor Conf Ref			Vehicle Details					Casualty Details				
Description: Both Vehs Trav Ne Deansgate, V1 Comes To Traffic & Brakes, But V2 Fails To Brake Behind V1 & Collides With Rear Of V1										Type Move From To Skid					Type Sex Age Sev Pupil				
										Car Ahead SW NE					1 Drv M 26 Slight				
										Car Ahead SW NE									
Locational Details					Conditions		Accident Details												
Road: A56 Junction Details:					Road Surface: Wet		Severity: Slight												
OSGR: 383513 397932 Junction Control: n/a					Light Conditions: Dark		No. of Vehicles: 2												
Speed Limit: 30 Ped Crossing:					Weather Conditions: Rain		No. of Casualties: 1												

Accident Reference Number: A1008364					Day: Saturday		Contributory Factors			Date: 07/11/2015					Time: 13:38				
Place Reported: Else					District: Manchester														
Location: Quay Street at junction with Deansgate							Factor Conf Ref			Vehicle Details					Casualty Details				
Description: Both Veh Trav E Quay St. V1 Fails To Put On Hand Brake Hits V2										Type Move From To Skid					Type Sex Age Sev Pupil				
										Car Stopg W E									
										Car Waitg W E					1 Drv F 35 Slight				
Locational Details					Conditions		Accident Details												
Road: A34/A56 Junction Details: Xrds					Road Surface: Wet		Severity: Slight												
OSGR: 383515 397989 Junction Control: TS					Light Conditions: Light		No. of Vehicles: 2												
Speed Limit: 30 Ped Crossing: TSX					Weather Conditions: Rain		No. of Casualties: 1												

Accident Reference Number: A1038969					Day: Saturday		Contributory Factors			Date: 16/12/2017					Time: 23:20				
Place Reported: Scene					District: Manchester														
Location: Quay Street at junction with Deansgate							Factor Conf Ref			Vehicle Details					Casualty Details				
Description: V1 Trav Ne Deansgate Turns Left Onto Quay St. C1 In Group Crossing Quay St S-bound. V1 Stops To Allow Them To Cross But On Moving Off Clips C1							PFLoo VLike C1			Type Move From To Skid					Type Sex Age Sev Pupil				
							PAlcoh VLike C1			Car TurnL SW NW					1 Ped F 27 Slight				
							DFLoo VLike V1												
							DCare Poss V1												
Locational Details					Conditions		Accident Details												
Road: A34/A56 Junction Details: Xrds					Road Surface: Dry		Severity: Slight												
OSGR: 383522 397982 Junction Control: TS					Light Conditions: Dark		No. of Vehicles: 1												
Speed Limit: 30 Ped Crossing: TSX					Weather Conditions: Fine		No. of Casualties: 1												

Accident Reference Number: A1039892				Day: Sunday		Contributory Factors			Date: 24/12/2017				Time: 04:53		
Place Reported: Scene				District: Manchester											
Location: Quay Street at junction with Deansgate						Factor Conf Ref			Vehicle Details				Casualty Details		
Description: V1 Trav Nw Peter St/Quay St Straight Across Jnct On Green ATS, As V1 Enters Quay St, C1 Runs Se-bound Into Path Of V1. Collision Occurs.						PAIcoh VLike C1			Type Move From To Skid				Type Sex Age Sev Pupil		
						PFLoo VLike C1			Taxi Ahead SE NW				1 Ped M 22 Slight		
						PJudge Poss C1									
Locational Details				Conditions		Accident Details									
Road:	A34/A56		Junction Details: Xrds		Road Surface:	Dry		Severity:		Slight					
OSGR:	383522	397983	Junction Control: TS		Light Conditions:	Dark		No. of Vehicles:		1					
Speed Limit:	30		Ped Crossing: TSX		Weather Conditions:	Fine		No. of Casualties:		1					

Accident Reference Number: A1010200				Day: Monday		Contributory Factors			Date: 28/12/2015				Time: 17:00		
Place Reported: Scene				District: Manchester											
Location: Deansgate at junction with Peter Street						Factor Conf Ref			Vehicle Details				Casualty Details		
Description: V1 Travels Ne On Deansgate As C1 Crosses Road Se-bound On Red. V1 And C1 Collide						PFLoo VLike C1			Type Move From To Skid				Type Sex Age Sev Pupil		
						PPedX VLike C1			Car Ahead SW NE				1 Ped M 17 Slight		
						PCare VLike C1									
						PJudge VLike C1									
Locational Details				Conditions		Accident Details									
Road:	A56/A34		Junction Details: Xrds		Road Surface:	Wet		Severity:		Slight					
OSGR:	383526	397971	Junction Control: TS		Light Conditions:	Dark		No. of Vehicles:		1					
Speed Limit:	30		Ped Crossing: TSX		Weather Conditions:	Othr		No. of Casualties:		1					

Accident Reference Number: A1032025				Day: Saturday		Contributory Factors			Date: 01/07/2017				Time: 22:58		
Place Reported: Scene				District: Manchester											
Location: Deansgate at junction with Quay Street						Factor Conf Ref			Vehicle Details				Casualty Details		
Description: V1 Trav N Deansgate Collides With C1 and C2 Crossing E-Bound						PFLoo Poss C1			Type Move From To Skid				Type Sex Age Sev Pupil		
						PFLoo Poss C2			Car Ahead S N				1 Ped F 41 Slight		
						DFLoo Poss V1							2 Ped F 41 Slight		
Locational Details				Conditions		Accident Details									
Road:	A56/A34		Junction Details: Xrds		Road Surface:	Wet		Severity:		Slight					
OSGR:	383527	397974	Junction Control: TS		Light Conditions:	Dark		No. of Vehicles:		1					
Speed Limit:	30		Ped Crossing: TSX		Weather Conditions:	Rain		No. of Casualties:		2					

Accident Reference Number: A1028381				Day: Saturday		Contributory Factors			Date: 08/04/2017				Time: 02:03		
Place Reported: Scene				District: Manchester											
Location: Deansgate 25 metres South West of Peter Streeet						Factor Conf Ref			Vehicle Details				Casualty Details		
Description: V1 Trav Sw Deansgate, Behind Taxi. Taxi Stops, Flashes C1 And Friend To Cross. V1 Overtakes Taxi, Hits C1 Crossing W-bound						DTurn VLike V1			Type Move From To Skid				Type Sex Age Sev Pupil		
						DFLoo VLike V1			othr O/Ts N E				1 Ped F 24 Slight		
						DAIcoh VLike V1									
						DCare VLike V1									
Locational Details				Conditions		Accident Details									
Road:	A56		Junction Details:		Road Surface:	Dry		Severity:		Slight					
OSGR:	383528	397952	Junction Control: n/a		Light Conditions:	Dark		No. of Vehicles:		1					
Speed Limit:	30		Ped Crossing: TSX		Weather Conditions:	Fine		No. of Casualties:		1					

Accident Reference Number: A1060816				Day: Sunday		Contributory Factors			Date: 01/09/2019					Time: 03:15																																																
Place Reported: Else				District: Manchester		Factor			Conf			Ref			Vehicle Details					Casualty Details																																										
Location: Deansgate at junction with Quay Street				Type											Move					From					To					Skid					Type					Sex					Age					Sev					Pupil							
Description: V1 Trav S Deansgate, C1 (Pedestrian) Walks Onto Road & Staty On C/way, V1 Which Is Reversing N-bd & Collides With C1				Car											Revg					S					N					1 Ped					M					45					Slight																	
Locational Details				Conditions				Accident Details																																																						
Road:		A56/A34		Junction Details:		Xrds		Road Surface:		Dry		Severity:		Slight																																																
OSGR:		383536 397979		Junction Control:		TS		Light Conditions:		Dark		No. of Vehicles:		1																																																
Speed Limit:		30		Ped Crossing:		TSX		Weather Conditions:		Fine		No. of Casualties:		1																																																

Accident Reference Number: A1005577				Day: Tuesday		Contributory Factors			Date: 25/08/2015					Time: 16:05																																																
Place Reported: Else				District: Manchester		Factor			Conf			Ref			Vehicle Details					Casualty Details																																										
Location: Deansgate at junction with Peter Street				Type											Move					From					To					Skid					Type					Sex					Age					Sev					Pupil							
Description: V1 Trav E Peter St Collides With C1 Mid Junction				Car											Ahead					W					E					1 Ped					M					26					Slight																	
Locational Details				Conditions				Accident Details																																																						
Road:		A56/A34		Junction Details:		Xrds		Road Surface:		Dry		Severity:		Slight																																																
OSGR:		383539 397983		Junction Control:		TS		Light Conditions:		Light		No. of Vehicles:		1																																																
Speed Limit:		30		Ped Crossing:		TSX		Weather Conditions:		Fine		No. of Casualties:		1																																																

Abbreviations used in GMAXI Reports for New Contributory Factors - 2005/06

WARNING: Please note that -

Codes 101 to 999 only relate to accidents from 1 April 2005. - New National Factors introduced by DfT

Codes 1001 to 1154 relate to accidents from 1 April 1999 to 31 March 2005 only. - Local Factors introduced

Accidents before 1 April 1999 do not have contributory factors attached.

Code	ContribFactor1Name	ContribFactor1Abb
0	None	
101	Poor or defective road surface	Surf
102	Deposit on road (eg oil, mud, chippings)	Dposit
103	Slippery road (due to weather)	Slip
104	Inadequate/masked signs or road markings	Mark
105	Defective traffic signals	DefATS
106	Traffic calming (eg speed cushions, road humps, chicanes)	TCalm
107	Temporary road layout (eg contraflow)	TmpRd
108	Road layout (eg bend, hill, narrow carriageway)	RdLay
109	Animal or object in carriageway	ObjInC
201	Tyres illegal, defective or under inflated	VTyres
202	Defective lights or indicators	VLight
203	Defective brakes	VBrake
204	Defective steering or suspension	VSteer
205	Defective or missing mirrors	VMirr
206	Overloaded or poorly loaded vehicle or trailer	VLoad
301	Disobeyed automatic traffic signal	DATS
302	Disobeyed Give Way or Stop sign or markings	DGWorS
303	Disobeyed double white line	DWhite
304	Disobeyed pedestrian crossing facility	DPedX
305	Illegal turn or direction of travel	DITurn
306	Exceeding speed limit	DSpeed
307	Travelling too fast for conditions	DFast
308	Following too close	DTgate
309	Vehicle travelling along pavement	DPave
310	Cyclist entering road from pavement	DCPave
401	Junction overshoot	DJnOvr
402	Junction restart	DJnRst
403	Poor turn or manoeuvre	DTurn
404	Failed to signal/misleading signal	DSign
405	Failed to look properly	DFLook
406	Failed to judge other person's path or speed	DJudge
407	Passing too close to cyclist, horse rider or pedestrian	DClose
408	Sudden braking	DBrake
409	Swerved	DSwerv
410	Loss of control	DLossC
501	Impaired by alcohol	DAlcoh
502	Impaired by drugs (illicit or medicinal)	DDrugs
503	Fatigue	DTired
504	Uncorrected, defective eyesight	DEye
505	Illness or disability, mental or physical	DIllns
506	Not displaying lights at night or in poor visibility	DNoLit
507	Cyclist wearing dark clothing at night	DCDark
508	Driver using mobile phone	DMobPh
509	Distraction in vehicle	DDisIn
510	Distraction outside vehicle	DDisOu
601	Aggressive driving	DAggre
602	Careless/reckless/in a hurry	DCare

603	Nervous/uncertain/panic	DPanic
604	Driving too slow or conditions or slow vehicle (eg tractor)	DSlow
605	Learner or inexperienced driver/rider	DLearn
606	Inexperience of driving on the left	DInDrL
607	Inexperience with type of vehicle	DInVeh
701	Stationary or parked vehicle(s)	DStat
702	Vegetation	DVeg
703	Road layout (eg bend, winding road, hill crest)	DRdLay
704	Buildings, road signs, street furniture	DBuild
705	Dazzling headlights	DHLigt
706	Dazzling sun	DSun
707	Rain, sleet, snow, or fog	DRain
708	Spray from other vehicles	DFog
709	Visor or windscreen dirty or scratched	DSpray
710	Vehicle blind spot	DWscrn
801	Crossed road masked by stationary or parked vehicle	PXMask
802	Failed to look properly	PFLook
803	Failed to judge vehicle's path or speed	PJudge
804	Wrong use of pedestrian crossing facility	PPedX
805	Dangerous action in carriageway (eg playing)	PDange
806	Impaired by alcohol	PAlcoh
807	Impaired by drugs (illicit or medicinal)	PDrugs
808	Careless/reckless/in a hurry	PCare
809	Pedestrian wearing dark clothing at night	PCloth
810	Disability or illness, mental or physical	Pllns
901	Stolen vehicle	StoVeh
902	Vehicle in course of crime	VCrime
903	Emergency vehicle on call	EmVeh
904	Vehicle door opened or closed negligently	VDoor
999	Other	Other
1001	Failed to stop (mandatory sign)	Fstop
1002	Failed to give way	Fgive
1003	Failed to avoid pedestrian (pedestrian not to blame)	FAPed
1004	Failed to avoid vehicle or object in carriageway	FAObj
1005	Failure to signal/misleading signal	Fsig
1006	Loss of control of vehicle	Loss
1007	Pedestrian entered carriageway without due care	Ped
1008	Passenger fell in or near PSV	Pfell
1009	Swerved to avoid object in carriageway	Swerv
1010	Sudden braking	Brake
1011	Poor turn/manoeuvre	Turn
1012	Poor overtaking	Over
1013	Drove wrong way (e.g. 1-way street)	1Way
1014	Opening door carelessly	Door
1015	Other	Other
1101	Impairment alcohol	Alcoh
1102	Impairment drugs	Drugs
1103	Impairment fatigue	Tired
1104	Impairment illness	Ill
1105	Distraction stress/emotional state of mind	Stress
1106	Distraction physical in/on vehicle	DPhIn
1107	Distraction physical outside vehicle	DPhOut
1108	Behaviour panic	Panic
1109	Behaviour careless/thoughtless/reckless	Care
1110	Behaviour nervous/uncertain	Nerve
1111	Behaviour in a hurry	Hurry

1112	Failure to judge other person's path or speed	Fjudg
1113	Disability	Disab
1114	Failed to look	F2look
1115	Looked but did not see	Nsee
1116	Inattention	Inatt
1117	Person hit wore dark or inconspicuous clothing	Cloth
1118	Other (Personal details)	Pother
1119	Crossed from behind parked vehicle etc	Cross
1120	Ignored lights at crossing	Xlight
1121	Excessive Speed	Speed
1122	Following too close	Tgate
1123	Inexperience of driving	InDri
1124	Inexperience of vehicle	InVeh
1125	Interaction or competition with other road users	Users
1126	Aggressive driving	Aggr
1127	Lack of judgement of own path	Judge
1128	Tyres wrong pressure	Press
1129	Tyres deflation before impact	Deflat
1130	Tyres worn/insufficient tread	Tread
1131	Defective lights or signals	Signal
1132	Defective brakes	Brakes
1133	Other (Vehicle defects)	Vother
1134	Site details poor road surface	Surf
1135	Site details poor/no street lighting	Lightg
1136	Site details inadequate signing	Sign
1137	Site details steep hill	Hill
1138	Site details narrow road	Narr
1139	Site details bend/winding road	Rbend
1140	Site details roadworks	Works
1141	Slippery road	Slip
1142	High winds	Winds
1143	Earlier accident	Earli
1144	Other (Local conditions)	Lother
1145	View windows obscured	Obs
1146	View glare from sun	Glare
1147	View glare from headlights	Head
1148	Surroundings bend/winding road	Bend
1149	Surroundings stationary parked vehicle	Stat
1150	Surroundings moving vehicle	Move
1151	Surroundings buildings, fences, vegetation etc	Fence
1152	Weather (e.g. mist or sleet)	Weath
1153	Failed to see pedestrian or vehicle in blindspot	Blind
1154	Animal out of control	Animal
9999	GMP Out of Range	OoR

Appendix C

Proposed Site Layouts



This drawing is copyright.
Do not scale off dimensions.

All dimensions to be checked on site by contractor.

Contractor to report any dimensional discrepancies, errors or omissions prior to commencing on site.

	Residential FOH		Refuse
	Commercial		Amenity
	Staff		Terrace
	BOH		

NORTH

Rev	Date	Description
D01	2021-06-14	BAPA Drawings
D02	2021-07-02	Update to internal layout
D03	2021-07-26	BAPA Drawings - updated to include 10m zone from boundary and revised external levels
D04	2021-09-30	Generator and stair position amended
D05	2021-09-30	Baseline topo amended
D06	2021-09-30	Tracking amended
D07	2021-09-30	Note added
D08	2021-10-07	Updated tracking
D09	2021-11-08	Stage 3 Issue

Project Title
**Trinity Islands
Trinity Way
Manchester**

Status
FOR INFORMATION

Drawing Title Site C Site Plan Ground Floor Plan	
Project No 10364	Scale 1 : 250@ A1
Revision D09	

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LEGEND

HARDWORKS

- Proposed Adopted Footway (MCC Ownership)**
Product: Local Pennant Stone Flag and Bloc Trim
To match existing on Water Street
Plan Size: To adoptable standards
Laying Bond: Staggered
- Proposed High Quality Block Paving**
Plan Size: 200x65 (depth tbc)
Colour: Buff
Finish: Flamed
Laying Bond: Herringbone
- Proposed High Quality Cube Blocks**
Plan Size: 100x100x80mm
Colour: Light buff
Finish: Flamed
Laying Bond: Stack Bond
- Proposed Porous Resin Bound Gravel**
Homogenous porous paving treatment
Colour: Light buff
- Proposed Resin Bound Gravel**
Homogenous impermeable paving treatment
Colour: Light buff
- Proposed Asphalt**
To Engineers specification
- Proposed Plank Paving**
Plan Size: 0.2 wide x length varies
Colour: Silver Grey
Finish: Flamed
- Proposed Pimple Tactile Paving**
To adoptable standards
- Proposed Corduroy Tactile Paving**
Product: High quality stone
Plan Size: 400x400mm
Colour: Silver grey
Laying Bond: Stack Bond
- Proposed Solid Stone Steps**
Plan Size: 300mm wide x length varies
Unit Depth: height varies
Colour: Silver Grey
Finish: Flamed
Other: Contrast nosings
- Proposed Solid Stone Kerbs**
Plan Size: 300mm wide x length varies
Unit Depth: height varies 0 -120mm
Colour: Silver Grey
Finish: Flamed
- Proposed Metal Edge**
Product: Aluxcel by Kinley (or similar approved)
Material: Aluminium alloy
Height above ground: 0-150mm
Other: To form edge between grass and resin bound gravel
- Proposed Metal Edge**
Product: Aluxcel by Kinley (or similar approved)
Material: Aluminium alloy
Height above ground: varies
Other: To form edge between planting beds and resin bound gravel

FURNITURE

- Proposed Cycle Racks**
- Proposed Step Seat**
- Proposed Monolithic Seat**
- Proposed Feature Seat**
- Proposed Large Picnic Table**
- Proposed Medium Picnic Table**
- Proposed Feature Swing**
- Proposed Bin**
- Proposed Feature Lighting Column**
- Proposed Handrail**
- Proposed Balustrade**
- Proposed Height Barrier / Gateway Structure**
- Indicative Locations of Water Safety Info / Ring**
Details: tbc

SOFTWORKS

- Existing Tree / Group Removed**
Refer to arboricultural reports
- Existing Tree / Group Retained**
Refer to arboricultural reports
- Proposed Tree in Soft Landscape**
Clear Stem specimen parkland tree
Height: 6m
- Proposed Tree in Soft Landscape**
Clear Stem tree
Height: 4.5m
- Proposed Tree in Hard Landscape**
Clear Stem specimen parkland tree
Height: 6m
- Proposed Tree in Hard Landscape**
Clear Stem tree
Height: 4.5m
- Proposed Instant Hedge**
Height: 1, 1.5 & 2m refer to planting plans
- Proposed Ornamental Planting**
Mixed shrub and herbaceous planting
5-7ltr pots with 10ltr specimens
Planting beds to receive 75mm depth ornamental bark mulch.
- Proposed Turf**
Hard wearing turf
- Proposed Green Wall**
Ornamental Wall with inbuilt irrigation system
- Proposed Sedum Roof**
Typical specification: Bauder XF301
- Proposed Community Grow Zones**
Promoted for herb gardens etc as part of the healthy walk along the river corridor
- Proposed Vertical Climbers**
Located on podium wall along river edge to provide valuable wildlife habitat
- Offsite Proposal - Ornamental Planting**
Subject to agreement with land owner
- Offsite Proposal - Wildflower Planting**
Subject to agreement with land owner
- Offsite Proposal - Grass**
Subject to agreement with land owner

BAFFLES

- Proposed Feature Entrance Baffles**
Height: 4.5m
- Proposed Landscape Baffles**
Height: 3m (3.5m by generators)
- Proposed Car Park Access Ramps Baffles**
Height: 1.5m
- Proposed Building Corner Baffles**
Height: 8.55m / 4.275m
- Proposed Temporary Baffles**
(to be removed on completion of D1 and D2)
Height: 5m
Width: 2.5m
- Offsite Proposal - Hard Surfacing (Network Rail Land)**
Subject to agreement with private land owner

+26.26 EXISTING LEVEL

+27.20 PROPOSED LEVEL

GENERAL NOTES

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- This drawing is to be read in conjunction with detail landscape drawings, details and specification.
- This drawing is to be read in conjunction with all relevant Architects', Engineer's, Specialists, Bills of Quantities and Specifications.
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- The Contractor is responsible for accurately ascertaining the position of underground services and responding to all relevant service easement requirements.
- All dimensions are in millimetres unless stated otherwise, for the purposes of construction this drawing must not be scaled and only written dimensions used. Written and scaled dimensions to be checked on site, any discrepancies reported prior to work commencing. IF IN DOUBT PLEASE ASK.
- All work and materials are to be in accordance with the relevant British Standards and Code of Practice.
- All Proprietary products are to be used strictly in accordance with the manufacturer's instructions and details.

REVISION NOTES

Rev	By	Description	Date
P4	KH	Fourth Formal Issue	19.10.2021
P3	KH	Third Formal Issue	14.10.2021
P2	KH	Second Formal Issue	07.10.2021
P1	KH	First Formal Issue	08.09.21

Client

Renaker Build LTD

Project

Trinity Island

Description

Site C - Landscape Layout

Status

For Information

Scale @ A1

1:250

Drawn

KH

Checked

KH

Date

08.09.21

Drawing number

ZC-TPM-G710-PL-XX-3852 101

Revision

P4

tpm landscape

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All dimensions to be checked on site by contractor.

Contractor to report any dimensional discrepancies, errors or omissions prior to commencing on site.

Cycle Store

Plant - Water Tanks

Plant - Commercial

Plant - Smoke Vents

C1
Parking Spaces - 109
Cycle Spaces - 414

C2
Parking Spaces - 152
Cycle Spaces - 521

NORTH

D1

D2

C1

C2

Rev	Date	Description
D01	2021-05-28	First Issue
D02	2021-06-14	BAPA Drawings
D03	2021-07-16	Revised to Client and SE Information
D04	2021-08-02	Revised to Client and SE Information
D05	2021-09-03	Revised to Client and SE Information
D06	2021-11-08	Stage 3 Issue

TRINITY ISLANDS

Project Title

Trinity Islands
Trinity Way
Manchester

Status

FOR INFORMATION

Drawing Title

Site C
Site Plan
Basement Level 01

Project No

10364

Scale

1 : 250@ A1

Revision

D06

10364-ZC-SHP-G100-PL-B1-0001

Manchester
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Contractor to report any dimensional discrepancies, errors or omissions prior to commencing on site.

Cycle Store

Plant - Water Tanks

Plant - Commercial

Plant - Smoke Vents

C1

Parking Spaces - 109

Cycle Spaces - 414

C2

Parking Spaces - 152

Cycle Spaces - 521

D1

D2

C1

C2

NORTH

Rev	Date	Description
D01	2021-05-28	First Issue
D02	2021-06-14	BAPA Drawings
D03	2021-07-16	Revised to Client and SE Information
D04	2021-08-02	Revised to Client and SE Information
D05	2021-09-03	Revised to Client and SE Information
D06	2021-11-08	Stage 3 Issue

Project Title

Trinity Islands
Trinity Way
Manchester

Status

FOR INFORMATION

Drawing Title

Site C
Site Plan
Basement Level 02

Project No

10364

Scale

1 : 250@ A1

Revision

D06

10364-ZC-SHP-G100-PL-B2-0001

Manchester
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Residential FOH

Commercial

Staff

BOH

Refuse

Amenity

Terrace

D1

D2

C1

C2

NORTH

Rev	Date	Description
D01	2021-07-05	First Issue
D02	2021-08-02	Landscape & structure revised
D03	2021-08-02	Wind screens shown
D04	2021-11-08	Stage 3 Issue

Project Title
Trinity Islands
Trinity Way
Manchester

Status
FOR INFORMATION

Drawing Title
Site D
Site Plan
Ground Floor Plan

Project No
10364

Scale
1 : 250@ A1

Revision
D04

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HARDWORKS

Proposed Adopted Footway (MCC Ownership)
Product: Local Pennant Stone Flag and Bloc Trim to match existing on Water Street
Plan Size: To adoptable standards
Laying Bond: Staggered

Proposed High Quality Block Paving
Plan Size: 200x65 (depth tbc)
Colour: Buff
Finish: Flamed
Laying Bond: Fish Scale

Proposed High Quality Cube Blocks
Plan Size: 100x100x80mm
Colour: Light buff
Finish: Flamed
Laying Bond: Stack Bond

Proposed Resin Bound Gravel
Homogenous impermeable paving treatment
Colour: Light buff

Proposed Asphalt
To Engineers specification

Proposed Play Surface
Typical specification: Wet pour play surface

Proposed Pimple Tactile Paving
To adoptable standards

Proposed Corduroy Tactile Paving
Product: High quality stone
Plan Size: 400x400mm
Colour: Silver grey
Laying Bond: Stack Bond

Proposed Solid Stone Steps
Plan Size: 300mm wide x length varies
Unit Depth: height varies
Colour: Silver Grey
Finish: Flamed
Other: Contrast nosings

Proposed Solid Stone Kerbs
Plan Size: 300mm wide x length varies
Unit Depth: height varies 0-120mm
Colour: Silver Grey
Finish: Flamed

Proposed Metal Edge
Product: Aluxcel by Kinley (or similar approved)
Material: Aluminium alloy
Height above ground: 0-150mm
Other: To form edge between grass and resin bound gravel

Proposed Metal Edge
Product: Aluxcel by Kinley (or similar approved)
Material: Aluminium alloy
Height above ground: varies
Other: To form edge between planting beds and resin bound gravel

Proposed Cycle Racks

Proposed Step Seat

Proposed Monolithic Seat

Proposed Feature Seat

Proposed Large Picnic Table

Proposed Medium Picnic Table

Proposed Feature Pebble Stone Seat

Proposed Bin

Proposed Feature Lighting Column

Proposed Handrail

Proposed Balustrade

Proposed Height Barrier / Gateway Structure

Indicative Locations of Water Safety Info / Ring
Details: tbc

Existing Tree / Group Removed
Refer to arboricultural reports

Existing Tree / Group Retained
Refer to arboricultural reports

Proposed Tree in Soft Landscape
Clear Stem specimen parkland tree
Height: 6m

Proposed Tree in Soft Landscape
Clear Stem tree
Height: 4.5m

Proposed Tree in Hard Landscape
Clear Stem specimen parkland tree
Height: 6m

Proposed Tree in Hard Landscape
Clear Stem tree
Height: 4.5m

Proposed Instant Hedge
Height: Height: 1, 1.5 & 2m refer to planting plans

Proposed Ornamental Planting
Mixed shrub and herbaceous planting
5-7ltr pots with 10ltr specimens
Planting beds to receive 75mm depth ornamental bark mulch.

Proposed Turf
Hard wearing turf

Proposed Green Wall
Ornamental Wall with inbuilt irrigation system

Proposed Vertical Climbers
Located on podium wall along river edge to provide valuable wildlife habitat

Proposed Low Maintenance Planting
Mixed shrubs and native stock to create buffer

Proposed Landscape Baffles
Height: 3m (3.5m by generators)

Proposed Car Park Access Ramps Baffles
Height: 1.5m

Proposed Building / Landscape Baffles
Height: to alignment with architects First Floor

+26.26 EXISTING LEVEL

+27.20 PROPOSED LEVEL

- GENERAL NOTES
1.

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2.

This drawing is to be read in conjunction with detail landscape drawings, details and specification.
3.

This drawing is to be read in conjunction with all relevant Architects', Engineer's, Specialists, Bills of Quantities and Specifications.
4.

The insertion of any firm or proprietary brand on this drawing is an indication of the class or quality required and does not exclude the use of alternative materials that are equal in performance, quality and appearance, provided that they have been approved in writing by the Landscape Architect.
5.

The Contractor is responsible for accurately ascertaining the position of underground services and responding to all relevant service easement requirements.
6.

All dimensions are in millimetres unless stated otherwise, for the purposes of construction this drawing must not be scaled and only written dimensions used. Written and scaled dimensions to be checked on site, any discrepancies reported prior to work commencing. IF IN DOUBT PLEASE ASK.
7.

All work and materials are to be in accordance with the relevant British Standards and Code of Practice.
8.

All Proprietary products are to be used strictly in accordance with the manufacturer's instructions and details.



REVISION NOTES

Rev	By	Description	Date
P4	KH	Fourth Formal Issue	19.10.2021
P3	KH	Third Formal Issue	14.10.2021
P2	KH	Second Formal Issue	07.10.2021
P1	KH	First Formal Issue	08.09.21

Client
Renaker Build LTD

Project
Trinity Island

Description
Site D - Landscape Layout

Status
For Information

Scale @ A1
1:250

Drawn
KH

Checked
KH

Date
08.09.21

Drawing number
ZD-TPM-G710-PL-XX-3852 102

Revision
P4



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All dimensions to be checked on site by contractor.

Contractor to report any dimensional discrepancies, errors or omissions prior to commencing on site.

Cycle Store

Plant - Water Tanks

Plant - Smoke Vents

D1

Parking Spaces - 154

Cycle Spaces - 532

D2

Parking Spaces - 141

Cycle Spaces - 483

C1

C2

D1

D2

NORTH

Rev	Date	Description
D01	2021-05-27	First Issue
D02	2021-06-16	Updated to reflect coordination
D03	2021-07-16	Revised to Client and SE Information
D04	2021-08-02	Revised to Client and SE Information
D05	2021-09-03	Revised to Client and SE Information
D06	2021-11-08	Stage 3 Issue

TRINITY ISLANDS

Project Title

Trinity Islands

Trinity Way

Manchester

Status

FOR INFORMATION

Drawing Title

Site D

Site Plan

Basement Level 01

Project No

10364

Scale

1 : 250@ A1

Revision

D06

10364-ZD-SHP-G100-PL-B1-0001

Manchester

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Cycle Store

Plant - Water Tanks

Plant - Smoke Vents

D1
Parking Spaces - 154
Cycle Spaces - 532

D2
Parking Spaces - 141
Cycle Spaces - 483

C1

C2

D1

D2

NORTH

Rev	Date	Description
D01	2021-05-27	First Issue
D02	2021-06-16	Updated to reflect coordination
D03	2021-07-16	Revised to Client and SE Information
D04	2021-08-02	Revised to Client and SE Information
D05	2021-09-03	Revised to Client and SE Information
D06	2021-11-08	Stage 3 Issue

TRINITY ISLANDS

Project Title

Trinity Islands
Trinity Way
Manchester

Status

FOR INFORMATION

Drawing Title

Site D
Site Plan
Bsement Level 02

Project No

10364

Scale

1 : 250@ A1

Revision

D06

10364-ZD-SHP-G100-PL-B2-0001

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London
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Appendix D

Traffic Survey Data

Manchester
Classified Junction Count

Site 1 of 3
A6143 Water Street
A6042 Ring Road. (South)
Local Access
A6042 Ring Road. (North)

Lat/Long
lat 53.476305° lon -2.261401°

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

Movement 1.1: Left from A6143 Water Street to A6042 Ring Road. (South)									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	1	0	13	0	1	0	0	0	15	14.20
0715 - 0730	2	0	14	0	2	0	0	1	19	18.40
0730 - 0745	0	0	15	0	1	0	0	0	16	16.00
0745 - 0800	0	0	20	0	2	0	0	1	23	24.00
Hourly Total	3	0	62	0	6	0	0	2	73	72.60
Hourly Average	0.75	0.00	15.50	0.00	1.50	0.00	0.00	0.50	18.25	18.15
0800 - 0815	0	0	14	0	2	1	0	0	17	17.50
0815 - 0830	0	0	10	0	3	1	0	1	15	16.50
0830 - 0845	0	0	16	0	5	0	0	0	21	21.00
0845 - 0900	0	0	20	0	7	0	0	0	27	27.00
Hourly Total	0	0	60	0	17	2	0	1	80	82.00
Hourly Average	0.00	0.00	15.00	0.00	4.25	0.50	0.00	0.25	20.00	20.50
0900 - 0915	0	0	14	0	7	3	0	1	25	27.50
0915 - 0930	1	0	15	0	4	1	0	0	21	20.70
0930 - 0945	0	0	11	0	7	1	1	1	21	23.80
0945 - 1000	0	0	15	0	1	0	0	0	16	16.00
Hourly Total	1	0	55	0	19	5	1	2	83	88.00
Hourly Average	0.25	0.00	13.75	0.00	4.75	1.25	0.25	0.50	20.75	22.00
Session Total	4	0	177	0	42	7	1	5	236	242.60
Session Average	0.33	0.00	14.75	0.00	3.50	0.58	0.08	0.42	19.67	20.22

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

Movement 1.1: Left from A6143 Water Street to A6042 Ring Road. (South)									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	0	1	47	0	17	0	0	1	66	66.40
1615 - 1630	0	2	43	1	11	0	0	0	57	55.80
1630 - 1645	1	0	55	0	13	0	0	1	70	70.20
1645 - 1700	0	0	63	0	8	0	0	0	71	71.00
Hourly Total	1	3	208	1	49	0	0	2	264	263.40
Hourly Average	0.25	0.75	52.00	0.25	12.25	0.00	0.00	0.50	66.00	65.85
1700 - 1715	0	0	73	0	6	1	0	1	81	82.50
1715 - 1730	0	2	72	0	10	1	0	0	85	84.30
1730 - 1745	0	1	66	0	3	0	0	1	71	71.40
1745 - 1800	0	0	62	1	6	1	0	0	70	70.50
Hourly Total	0	3	273	1	25	3	0	2	307	308.70
Hourly Average	0.00	0.75	68.25	0.25	6.25	0.75	0.00	0.50	76.75	77.18
1800 - 1815	1	2	55	0	1	0	0	0	59	57.00
1815 - 1830	0	1	56	0	3	1	0	0	61	60.90
1830 - 1845	1	0	54	1	4	0	0	1	61	61.20
1845 - 1900	1	0	50	0	2	0	0	0	53	52.20
Hourly Total	3	3	215	1	10	1	0	1	234	231.30
Hourly Average	0.75	0.75	53.75	0.25	2.50	0.25	0.00	0.25	58.50	57.83
Session Total	4	9	696	3	84	4	0	5	805	803.40
Session Average	0.33	0.75	58.00	0.25	7.00	0.33	0.00	0.42	67.08	66.95

Site 1 of 3
A6143 Water Street
A6042 Ring Road. (South)
Local Access
A6042 Ring Road. (North)

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

[illegible]

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

[illegible]

Manchester
Classified Junction Count

Site 1 of 3
A6143 Water Street
A6042 Ring Road. (South)
Local Access
A6042 Ring Road. (North)

Lat/Long
lat 53.476305° lon -2.261401°

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

Movement 1.3: Right from A6143 Water Street to A6042 Ring Road. (North)									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	4	0	0	0	0	0	4	4.00
0715 - 0730	0	0	2	1	1	2	0	0	6	7.00
0730 - 0745	0	0	4	0	0	0	0	0	4	4.00
0745 - 0800	1	0	4	0	0	0	0	0	5	4.20
Hourly Total	1	0	14	1	1	2	0	0	19	19.20
Hourly Average	0.25	0.00	3.50	0.25	0.25	0.50	0.00	0.00	4.75	4.80
0800 - 0815	0	0	4	1	1	1	0	0	7	7.50
0815 - 0830	0	0	2	0	0	0	0	0	2	2.00
0830 - 0845	1	0	2	0	3	0	1	0	7	7.50
0845 - 0900	0	0	5	2	2	0	0	0	9	9.00
Hourly Total	1	0	13	3	6	1	1	0	25	26.00
Hourly Average	0.25	0.00	3.25	0.75	1.50	0.25	0.25	0.00	6.25	6.50
0900 - 0915	0	0	8	0	0	0	0	0	8	8.00
0915 - 0930	0	0	2	0	2	1	0	0	5	5.50
0930 - 0945	0	0	2	1	3	1	0	0	7	7.50
0945 - 1000	0	0	4	1	0	0	0	0	5	5.00
Hourly Total	0	0	16	2	5	2	0	0	25	26.00
Hourly Average	0.00	0.00	4.00	0.50	1.25	0.50	0.00	0.00	6.25	6.50
Session Total	2	0	43	6	12	5	1	0	69	71.20
Session Average	0.17	0.00	3.58	0.50	1.00	0.42	0.08	0.00	5.75	5.93

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

Movement 1.3: Right from A6143 Water Street to A6042 Ring Road. (North)									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	1	1	27	4	13	0	0	0	46	44.60
1615 - 1630	0	0	34	3	9	0	0	0	46	46.00
1630 - 1645	3	0	54	3	6	0	0	0	66	63.60
1645 - 1700	2	0	30	0	0	1	0	0	33	31.90
Hourly Total	6	1	145	10	28	1	0	0	191	186.10
Hourly Average	1.50	0.25	36.25	2.50	7.00	0.25	0.00	0.00	47.75	46.53
1700 - 1715	3	0	47	4	3	0	0	0	57	54.60
1715 - 1730	5	1	58	2	5	0	0	0	71	66.40
1730 - 1745	2	0	32	2	1	0	0	0	37	35.40
1745 - 1800	3	0	40	1	0	1	0	0	45	43.10
Hourly Total	13	1	177	9	9	1	0	0	210	199.50
Hourly Average	3.25	0.25	44.25	2.25	2.25	0.25	0.00	0.00	52.50	49.88
1800 - 1815	0	1	26	1	5	0	0	0	33	32.40
1815 - 1830	0	1	17	0	0	0	0	0	18	17.40
1830 - 1845	4	0	12	1	1	0	0	0	18	14.80
1845 - 1900	1	1	13	1	0	0	0	0	16	14.60
Hourly Total	5	3	68	3	6	0	0	0	85	79.20
Hourly Average	1.25	0.75	17.00	0.75	1.50	0.00	0.00	0.00	21.25	19.80
Session Total	24	5	390	22	43	2	0	0	486	464.80
Session Average	2.00	0.42	32.50	1.83	3.58	0.17	0.00	0.00	40.50	38.73

Site 1 of 3
A6143 Water Street
A6042 Ring Road. (South)
Local Access
A6042 Ring Road. (North)

Date
Tuesday 15 June 2021

0700 - 1000 (Weekday AM Peak)

Date
Tuesday 15 June 2021

1600 - 1900 (Weekday PM Peak)

[illegible]

Manchester
Classified Junction Count

Site 1 of 3
A6143 Water Street
A6042 Ring Road. (South)
Local Access
A6042 Ring Road. (North)

Lat/Long
lat 53.476305° lon -2.261401°

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

Movement 1.5: Left from A6042 Ring Road. (South) to A6042 Ring Road. (North)									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	4	3	119	2	17	4	1	1	151	150.30
0715 - 0730	1	1	148	0	15	8	4	0	177	184.80
0730 - 0745	1	1	172	4	22	7	3	0	210	216.00
0745 - 0800	2	4	148	3	13	2	2	0	174	173.60
Hourly Total	8	9	587	9	67	21	10	1	712	724.70
Hourly Average	2.00	2.25	146.75	2.25	16.75	5.25	2.50	0.25	178.00	181.18
0800 - 0815	0	0	170	4	14	2	1	0	191	193.30
0815 - 0830	3	0	182	6	22	4	2	1	220	223.20
0830 - 0845	3	2	163	2	12	8	6	1	197	206.20
0845 - 0900	3	0	173	6	15	5	3	0	205	209.00
Hourly Total	9	2	688	18	63	19	12	2	813	831.70
Hourly Average	2.25	0.50	172.00	4.50	15.75	4.75	3.00	0.50	203.25	207.93
0900 - 0915	1	1	154	2	24	6	1	0	189	191.90
0915 - 0930	0	2	134	4	13	9	2	1	165	171.90
0930 - 0945	0	2	147	5	29	3	5	1	192	199.80
0945 - 1000	0	1	159	8	20	6	0	0	194	196.40
Hourly Total	1	6	594	19	86	24	8	2	740	760.00
Hourly Average	0.25	1.50	148.50	4.75	21.50	6.00	2.00	0.50	185.00	190.00
Session Total	18	17	1869	46	216	64	30	5	2265	2316.40
Session Average	1.50	1.42	155.75	3.83	18.00	5.33	2.50	0.42	188.75	193.03

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

Movement 1.5: Left from A6042 Ring Road. (South) to A6042 Ring Road. (North)									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	1	3	143	9	20	4	1	1	182	183.70
1615 - 1630	2	1	134	1	6	0	0	0	144	141.80
1630 - 1645	1	5	130	3	16	3	1	0	159	158.00
1645 - 1700	0	3	136	5	15	3	1	0	163	164.00
Hourly Total	4	12	543	18	57	10	3	1	648	647.50
Hourly Average	1.00	3.00	135.75	4.50	14.25	2.50	0.75	0.25	162.00	161.88
1700 - 1715	1	1	145	3	11	2	0	1	164	164.60
1715 - 1730	0	1	170	6	11	0	0	0	188	187.40
1730 - 1745	0	2	172	1	12	2	0	0	189	188.80
1745 - 1800	1	2	160	3	12	1	0	1	180	179.50
Hourly Total	2	6	647	13	46	5	0	2	721	720.30
Hourly Average	0.50	1.50	161.75	3.25	11.50	1.25	0.00	0.50	180.25	180.08
1800 - 1815	1	4	155	1	7	4	0	0	172	170.80
1815 - 1830	3	2	187	10	7	2	0	0	211	208.40
1830 - 1845	1	0	133	8	13	0	1	0	156	156.50
1845 - 1900	3	1	144	6	12	0	0	0	166	163.00
Hourly Total	8	7	619	25	39	6	1	0	705	698.70
Hourly Average	2.00	1.75	154.75	6.25	9.75	1.50	0.25	0.00	176.25	174.68
Session Total	14	25	1809	56	142	21	4	3	2074	2066.50
Session Average	1.17	2.08	150.75	4.67	11.83	1.75	0.33	0.25	172.83	172.21

Manchester
Classified Junction Count

Site 1 of 3
A6143 Water Street
A6042 Ring Road. (South)
Local Access
A6042 Ring Road. (North)

Lat/Long
lat 53.476305° lon -2.261401°

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

Movement 1.6: Right from A6042 Ring Road. (South) to A6143 Water Street									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	1	1	34	1	15	0	0	0	52	50.60
0715 - 0730	1	0	35	0	12	1	0	1	50	50.70
0730 - 0745	1	0	44	0	16	3	0	0	64	64.70
0745 - 0800	2	0	45	0	10	0	0	1	58	57.40
Hourly Total	5	1	158	1	53	4	0	2	224	223.40
Hourly Average	1.25	0.25	39.50	0.25	13.25	1.00	0.00	0.50	56.00	55.85
0800 - 0815	3	0	43	2	7	1	0	0	56	54.10
0815 - 0830	4	0	53	0	14	1	0	1	73	71.30
0830 - 0845	6	0	66	6	11	1	0	0	90	85.70
0845 - 0900	3	0	53	3	8	3	0	1	71	71.10
Hourly Total	16	0	215	11	40	6	0	2	290	282.20
Hourly Average	4.00	0.00	53.75	2.75	10.00	1.50	0.00	0.50	72.50	70.55
0900 - 0915	1	0	53	5	10	1	0	0	70	69.70
0915 - 0930	1	0	46	3	9	1	0	1	61	61.70
0930 - 0945	2	1	43	2	6	0	1	0	55	54.10
0945 - 1000	0	0	34	5	6	0	1	1	47	49.30
Hourly Total	4	1	176	15	31	2	2	2	233	234.80
Hourly Average	1.00	0.25	44.00	3.75	7.75	0.50	0.50	0.50	58.25	58.70
Session Total	25	2	549	27	124	12	2	6	747	740.40
Session Average	2.08	0.17	45.75	2.25	10.33	1.00	0.17	0.50	62.25	61.70

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

Movement 1.6: Right from A6042 Ring Road. (South) to A6143 Water Street									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	2	0	12	1	2	0	0	0	17	15.40
1615 - 1630	2	0	22	2	4	0	0	1	31	30.40
1630 - 1645	0	0	32	4	4	0	0	0	40	40.00
1645 - 1700	2	0	22	1	4	0	0	1	30	29.40
Hourly Total	6	0	88	8	14	0	0	2	118	115.20
Hourly Average	1.50	0.00	22.00	2.00	3.50	0.00	0.00	0.50	29.50	28.80
1700 - 1715	0	0	14	1	1	0	0	0	16	16.00
1715 - 1730	3	0	28	4	2	1	0	1	39	38.10
1730 - 1745	0	0	34	2	1	0	0	0	37	37.00
1745 - 1800	3	0	31	3	0	0	0	1	38	36.60
Hourly Total	6	0	107	10	4	1	0	2	130	127.70
Hourly Average	1.50	0.00	26.75	2.50	1.00	0.25	0.00	0.50	32.50	31.93
1800 - 1815	1	1	28	2	4	0	0	0	36	34.60
1815 - 1830	4	1	31	5	1	0	0	1	43	40.20
1830 - 1845	2	1	15	4	3	0	0	0	25	22.80
1845 - 1900	3	1	31	2	2	0	1	0	40	38.30
Hourly Total	10	4	105	13	10	0	1	1	144	135.90
Hourly Average	2.50	1.00	26.25	3.25	2.50	0.00	0.25	0.25	36.00	33.98
Session Total	22	4	300	31	28	1	1	5	392	378.80
Session Average	1.83	0.33	25.00	2.58	2.33	0.08	0.08	0.42	32.67	31.57

Site 1 of 3
A6143 Water Street
A6042 Ring Road. (South)
Local Access
A6042 Ring Road. (North)

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

[illegible]

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

[illegible]

Site 1 of 3
A6143 Water Street
A6042 Ring Road. (South)
Local Access
A6042 Ring Road. (North)

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

[illegible]

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

[illegible]

Site 1 of 3
A6143 Water Street
A6042 Ring Road. (South)
Local Access
A6042 Ring Road. (North)

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

[illegible]

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

[illegible]

Manchester
Classified Junction Count

Site 1 of 3
A6143 Water Street
A6042 Ring Road. (South)
Local Access
A6042 Ring Road. (North)

Lat/Long
lat 53.476305° lon -2.261401°

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

Movement 1.10: Left from A6042 Ring Road. (North) to A6143 Water Street									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	2	1	17	0	5	0	0	0	25	22.80
0715 - 0730	1	0	19	0	9	0	0	0	29	28.20
0730 - 0745	2	0	15	0	11	1	0	0	29	27.90
0745 - 0800	1	0	22	0	3	0	0	0	26	25.20
Hourly Total	6	1	73	0	28	1	0	0	109	104.10
Hourly Average	1.50	0.25	18.25	0.00	7.00	0.25	0.00	0.00	27.25	26.03
0800 - 0815	0	1	6	0	2	1	0	0	10	9.90
0815 - 0830	0	1	17	1	2	0	0	0	21	20.40
0830 - 0845	0	0	15	1	2	0	0	0	18	18.00
0845 - 0900	0	0	21	0	1	1	0	0	23	23.50
Hourly Total	0	2	59	2	7	2	0	0	72	71.80
Hourly Average	0.00	0.50	14.75	0.50	1.75	0.50	0.00	0.00	18.00	17.95
0900 - 0915	2	0	15	0	1	0	0	0	18	16.40
0915 - 0930	0	0	17	0	1	0	0	0	18	18.00
0930 - 0945	0	0	21	1	2	0	0	0	24	24.00
0945 - 1000	0	0	11	0	3	0	0	0	14	14.00
Hourly Total	2	0	64	1	7	0	0	0	74	72.40
Hourly Average	0.50	0.00	16.00	0.25	1.75	0.00	0.00	0.00	18.50	18.10
Session Total	8	3	196	3	42	3	0	0	255	248.30
Session Average	0.67	0.25	16.33	0.25	3.50	0.25	0.00	0.00	21.25	20.69

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

Movement 1.10: Left from A6042 Ring Road. (North) to A6143 Water Street									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	0	0	4	0	1	0	0	0	5	5.00
1615 - 1630	0	0	4	0	0	0	0	0	4	4.00
1630 - 1645	0	0	0	0	1	0	0	0	1	1.00
1645 - 1700	0	0	4	0	0	0	0	0	4	4.00
Hourly Total	0	0	12	0	2	0	0	0	14	14.00
Hourly Average	0.00	0.00	3.00	0.00	0.50	0.00	0.00	0.00	3.50	3.50
1700 - 1715	0	0	6	0	0	0	0	0	6	6.00
1715 - 1730	0	0	3	1	0	0	0	0	4	4.00
1730 - 1745	0	0	12	0	0	0	0	0	12	12.00
1745 - 1800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	21	1	0	0	0	0	22	22.00
Hourly Average	0.00	0.00	5.25	0.25	0.00	0.00	0.00	0.00	5.50	5.50
1800 - 1815	0	0	5	0	1	0	0	0	6	6.00
1815 - 1830	0	0	8	0	0	0	0	0	8	8.00
1830 - 1845	0	0	6	0	0	0	0	0	6	6.00
1845 - 1900	0	0	5	0	1	0	0	0	6	6.00
Hourly Total	0	0	24	0	2	0	0	0	26	26.00
Hourly Average	0.00	0.00	6.00	0.00	0.50	0.00	0.00	0.00	6.50	6.50
Session Total	0	0	57	1	4	0	0	0	62	62.00
Session Average	0.00	0.00	4.75	0.08	0.33	0.00	0.00	0.00	5.17	5.17

Manchester
Classified Junction Count

Site 1 of 3
A6143 Water Street
A6042 Ring Road. (South)
Local Access
A6042 Ring Road. (North)

Lat/Long
lat 53.476305° lon -2.261401°

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

Movement 1.11: Right from A6042 Ring Road. (North) to A6042 Ring Road. (South)									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	3	203	8	24	7	1	0	246	249.00
0715 - 0730	1	4	206	3	39	5	2	1	261	263.90
0730 - 0745	1	1	253	5	33	5	2	0	300	303.70
0745 - 0800	2	2	201	9	35	6	3	1	259	264.10
Hourly Total	4	10	863	25	131	23	8	2	1066	1080.70
Hourly Average	1.00	2.50	215.75	6.25	32.75	5.75	2.00	0.50	266.50	270.18
0800 - 0815	2	3	260	7	41	11	1	0	325	328.40
0815 - 0830	1	3	221	3	28	13	3	1	273	281.80
0830 - 0845	0	2	218	6	42	4	4	3	279	288.00
0845 - 0900	0	2	187	6	23	10	8	0	236	250.20
Hourly Total	3	10	886	22	134	38	16	4	1113	1148.40
Hourly Average	0.75	2.50	221.50	5.50	33.50	9.50	4.00	1.00	278.25	287.10
0900 - 0915	0	1	156	8	31	9	5	0	210	220.40
0915 - 0930	0	2	139	8	33	9	6	0	197	208.10
0930 - 0945	0	2	165	8	28	14	5	0	222	234.30
0945 - 1000	0	0	157	7	38	11	0	0	213	218.50
Hourly Total	0	5	617	31	130	43	16	0	842	881.30
Hourly Average	0.00	1.25	154.25	7.75	32.50	10.75	4.00	0.00	210.50	220.33
Session Total	7	25	2366	78	395	104	40	6	3021	3110.40
Session Average	0.58	2.08	197.17	6.50	32.92	8.67	3.33	0.50	251.75	259.20

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

Movement 1.11: Right from A6042 Ring Road. (North) to A6042 Ring Road. (South)									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	1	3	179	10	31	5	3	0	232	235.80
1615 - 1630	0	1	172	4	22	5	3	0	207	212.80
1630 - 1645	1	0	168	5	22	3	2	0	201	204.30
1645 - 1700	1	2	218	2	17	1	3	0	244	246.40
Hourly Total	3	6	737	21	92	14	11	0	884	899.30
Hourly Average	0.75	1.50	184.25	5.25	23.00	3.50	2.75	0.00	221.00	224.83
1700 - 1715	5	1	220	1	26	2	0	0	255	251.40
1715 - 1730	0	4	214	3	9	1	1	0	232	231.40
1730 - 1745	4	3	192	1	16	1	1	0	218	214.80
1745 - 1800	0	1	203	4	11	3	2	0	224	227.50
Hourly Total	9	9	829	9	62	7	4	0	929	925.10
Hourly Average	2.25	2.25	207.25	2.25	15.50	1.75	1.00	0.00	232.25	231.28
1800 - 1815	0	3	210	6	11	0	1	0	231	230.50
1815 - 1830	1	1	225	3	13	2	1	0	246	246.90
1830 - 1845	1	2	175	8	11	4	1	0	202	203.30
1845 - 1900	1	0	203	9	10	0	0	0	223	222.20
Hourly Total	3	6	813	26	45	6	3	0	902	902.90
Hourly Average	0.75	1.50	203.25	6.50	11.25	1.50	0.75	0.00	225.50	225.73
Session Total	15	21	2379	56	199	27	18	0	2715	2727.30
Session Average	1.25	1.75	198.25	4.67	16.58	2.25	1.50	0.00	226.25	227.28

Site 1 of 3
A6143 Water Street
A6042 Ring Road. (South)
Local Access
A6042 Ring Road. (North)

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

[illegible]

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

[illegible]

Manchester
Classified Junction Count

Site 2 of 3
A6042 Ring Road.
A57 Ring Road.
Water Street
A57 Regent Road

Lat/Long
lat 53.475452° lon -2.261479°

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

Movement 2.1: Left from A6042 Ring Road. to A57 Ring Road.									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	3	193	8	24	5	1	0	234	236.00
0715 - 0730	1	3	180	3	38	3	1	0	229	229.20
0730 - 0745	1	1	230	5	25	5	2	0	269	272.70
0745 - 0800	0	2	179	9	34	3	2	0	229	231.90
Hourly Total	2	9	782	25	121	16	6	0	961	969.80
Hourly Average	0.50	2.25	195.50	6.25	30.25	4.00	1.50	0.00	240.25	242.45
0800 - 0815	0	3	235	7	32	5	0	0	282	282.70
0815 - 0830	0	2	201	3	28	7	3	1	245	252.20
0830 - 0845	0	3	195	6	32	2	2	1	241	243.80
0845 - 0900	0	2	168	6	21	6	7	0	210	220.90
Hourly Total	0	10	799	22	113	20	12	2	978	999.60
Hourly Average	0.00	2.50	199.75	5.50	28.25	5.00	3.00	0.50	244.50	249.90
0900 - 0915	0	1	131	8	29	7	2	0	178	183.50
0915 - 0930	0	2	124	8	29	6	4	0	173	180.00
0930 - 0945	0	2	144	7	29	9	3	0	194	201.20
0945 - 1000	0	0	128	7	34	7	0	0	176	179.50
Hourly Total	0	5	527	30	121	29	9	0	721	744.20
Hourly Average	0.00	1.25	131.75	7.50	30.25	7.25	2.25	0.00	180.25	186.05
Session Total	2	24	2108	77	355	65	27	2	2660	2713.60
Session Average	0.17	2.00	175.67	6.42	29.58	5.42	2.25	0.17	221.67	226.13

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

Movement 2.1: Left from A6042 Ring Road. to A57 Ring Road.									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	0	1	151	10	24	4	2	0	192	196.00
1615 - 1630	0	0	136	5	21	4	3	0	169	174.90
1630 - 1645	0	0	151	5	17	0	2	0	175	177.60
1645 - 1700	0	1	197	2	16	0	0	0	216	215.40
Hourly Total	0	2	635	22	78	8	7	0	752	763.90
Hourly Average	0.00	0.50	158.75	5.50	19.50	2.00	1.75	0.00	188.00	190.98
1700 - 1715	2	0	213	1	18	2	0	0	236	235.40
1715 - 1730	1	2	198	3	8	1	1	0	214	213.80
1730 - 1745	1	4	176	1	13	0	1	0	196	194.10
1745 - 1800	1	0	179	4	12	2	0	0	198	198.20
Hourly Total	5	6	766	9	51	5	2	0	844	841.50
Hourly Average	1.25	1.50	191.50	2.25	12.75	1.25	0.50	0.00	211.00	210.38
1800 - 1815	0	2	200	7	9	0	1	0	219	219.10
1815 - 1830	0	0	214	3	10	2	0	0	229	230.00
1830 - 1845	0	1	161	5	14	2	1	0	184	185.70
1845 - 1900	1	0	189	5	6	1	0	0	202	201.70
Hourly Total	1	3	764	20	39	5	2	0	834	836.50
Hourly Average	0.25	0.75	191.00	5.00	9.75	1.25	0.50	0.00	208.50	209.13
Session Total	6	11	2165	51	168	18	11	0	2430	2441.90
Session Average	0.50	0.92	180.42	4.25	14.00	1.50	0.92	0.00	202.50	203.49

Manchester
Classified Junction Count

Site 2 of 3
A6042 Ring Road.
A57 Ring Road.
Water Street
A57 Regent Road

Lat/Long
lat 53.475452° lon -2.261479°

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

Movement 2.2: Right from A6042 Ring Road. to Water Street									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	0	0	1	0	0	1	0	0	2	2.50
0730 - 0745	0	0	0	0	1	0	0	0	1	1.00
0745 - 0800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	1	0	1	1	0	0	3	3.50
Hourly Average	0.00	0.00	0.25	0.00	0.25	0.25	0.00	0.00	0.75	0.88
0800 - 0815	0	0	2	0	0	0	0	0	2	2.00
0815 - 0830	0	0	2	0	0	0	0	0	2	2.00
0830 - 0845	0	0	1	0	0	0	0	0	1	1.00
0845 - 0900	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	6	0	0	0	0	0	6	6.00
Hourly Average	0.00	0.00	1.50	0.00	0.00	0.00	0.00	0.00	1.50	1.50
0900 - 0915	0	0	0	0	1	0	0	0	1	1.00
0915 - 0930	0	0	0	0	1	0	0	0	1	1.00
0930 - 0945	0	0	1	1	0	0	0	0	2	2.00
0945 - 1000	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	2	1	2	0	0	0	5	5.00
Hourly Average	0.00	0.00	0.50	0.25	0.50	0.00	0.00	0.00	1.25	1.25
Session Total	0	0	9	1	3	1	0	0	14	14.50
Session Average	0.00	0.00	0.75	0.08	0.25	0.08	0.00	0.00	1.17	1.21

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

Movement 2.2: Right from A6042 Ring Road. to Water Street									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	0	0	2	0	0	0	0	0	2	2.00
1615 - 1630	0	0	0	0	3	0	0	0	3	3.00
1630 - 1645	0	0	1	0	0	0	0	0	1	1.00
1645 - 1700	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	4	0	3	0	0	0	7	7.00
Hourly Average	0.00	0.00	1.00	0.00	0.75	0.00	0.00	0.00	1.75	1.75
1700 - 1715	0	0	4	0	0	0	0	0	4	4.00
1715 - 1730	0	0	2	0	0	0	0	0	2	2.00
1730 - 1745	0	0	3	0	0	0	0	0	3	3.00
1745 - 1800	0	0	2	0	0	0	0	0	2	2.00
Hourly Total	0	0	11	0	0	0	0	0	11	11.00
Hourly Average	0.00	0.00	2.75	0.00	0.00	0.00	0.00	0.00	2.75	2.75
1800 - 1815	0	0	0	0	0	0	0	0	0	0.00
1815 - 1830	0	0	8	0	1	0	0	0	9	9.00
1830 - 1845	0	0	6	0	0	0	0	0	6	6.00
1845 - 1900	0	0	4	0	0	0	0	0	4	4.00
Hourly Total	0	0	18	0	1	0	0	0	19	19.00
Hourly Average	0.00	0.00	4.50	0.00	0.25	0.00	0.00	0.00	4.75	4.75
Session Total	0	0	33	0	4	0	0	0	37	37.00
Session Average	0.00	0.00	2.75	0.00	0.33	0.00	0.00	0.00	3.08	3.08

Manchester
Classified Junction Count

Site 2 of 3
A6042 Ring Road.
A57 Ring Road.
Water Street
A57 Regent Road

Lat/Long
lat 53.475452° lon -2.261479°

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

Movement 2.3: Right from A6042 Ring Road. to A57 Regent Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	1	0	25	0	1	2	0	0	29	29.20
0715 - 0730	2	1	39	0	3	1	0	1	47	46.30
0730 - 0745	0	0	38	0	8	0	1	1	48	50.30
0745 - 0800	0	0	42	0	3	3	1	1	50	53.80
Hourly Total	3	1	144	0	15	6	2	3	174	179.60
Hourly Average	0.75	0.25	36.00	0.00	3.75	1.50	0.50	0.75	43.50	44.90
0800 - 0815	0	0	34	0	11	6	1	1	53	58.30
0815 - 0830	0	0	31	0	3	8	0	1	43	48.00
0830 - 0845	1	0	38	0	15	2	2	1	59	62.80
0845 - 0900	0	0	38	0	6	4	0	1	49	52.00
Hourly Total	1	0	141	0	35	20	3	4	204	221.10
Hourly Average	0.25	0.00	35.25	0.00	8.75	5.00	0.75	1.00	51.00	55.28
0900 - 0915	0	0	37	0	11	4	4	1	57	65.20
0915 - 0930	1	0	32	0	7	5	2	0	47	51.30
0930 - 0945	0	0	30	0	5	6	3	1	45	52.90
0945 - 1000	0	0	44	0	6	4	0	0	54	56.00
Hourly Total	1	0	143	0	29	19	9	2	203	225.40
Hourly Average	0.25	0.00	35.75	0.00	7.25	4.75	2.25	0.50	50.75	56.35
Session Total	5	1	428	0	79	45	14	9	581	626.10
Session Average	0.42	0.08	35.67	0.00	6.58	3.75	1.17	0.75	48.42	52.18

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

Movement 2.3: Right from A6042 Ring Road. to A57 Regent Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	1	3	72	0	17	1	1	1	96	96.20
1615 - 1630	0	2	80	0	16	1	0	0	99	98.30
1630 - 1645	1	1	71	0	14	3	0	1	91	92.10
1645 - 1700	1	0	77	0	13	1	2	0	94	96.30
Hourly Total	3	6	300	0	60	6	3	2	380	382.90
Hourly Average	0.75	1.50	75.00	0.00	15.00	1.50	0.75	0.50	95.00	95.73
1700 - 1715	0	2	82	0	14	0	1	1	100	101.10
1715 - 1730	0	4	78	0	9	2	0	0	93	91.60
1730 - 1745	0	0	87	0	8	1	0	1	97	98.50
1745 - 1800	0	1	84	0	5	2	1	0	93	94.70
Hourly Total	0	7	331	0	36	5	2	2	383	385.90
Hourly Average	0.00	1.75	82.75	0.00	9.00	1.25	0.50	0.50	95.75	96.48
1800 - 1815	1	2	52	0	3	0	1	0	59	58.30
1815 - 1830	1	3	72	0	3	1	1	0	81	80.20
1830 - 1845	2	1	62	4	3	1	0	1	74	73.30
1845 - 1900	1	0	58	4	6	0	0	0	69	68.20
Hourly Total	5	6	244	8	15	2	2	1	283	280.00
Hourly Average	1.25	1.50	61.00	2.00	3.75	0.50	0.50	0.25	70.75	70.00
Session Total	8	19	875	8	111	13	7	5	1046	1048.80
Session Average	0.67	1.58	72.92	0.67	9.25	1.08	0.58	0.42	87.17	87.40

Manchester
Classified Junction Count

Site 2 of 3
A6042 Ring Road.
A57 Ring Road.
Water Street
A57 Regent Road

Lat/Long
lat 53.475452° lon -2.261479°

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

Movement 2.4: Left from A57 Ring Road. to Water Street									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	1	0	0	0	1	1.00
0715 - 0730	0	0	0	0	1	0	0	0	1	1.00
0730 - 0745	0	0	1	0	1	0	0	0	2	2.00
0745 - 0800	0	0	1	1	0	0	0	0	2	2.00
Hourly Total	0	0	2	1	3	0	0	0	6	6.00
Hourly Average	0.00	0.00	0.50	0.25	0.75	0.00	0.00	0.00	1.50	1.50
0800 - 0815	0	0	2	0	1	0	0	0	3	3.00
0815 - 0830	0	0	3	0	0	1	0	0	4	4.50
0830 - 0845	0	0	3	0	0	0	0	0	3	3.00
0845 - 0900	0	0	3	0	0	0	0	0	3	3.00
Hourly Total	0	0	11	0	1	1	0	0	13	13.50
Hourly Average	0.00	0.00	2.75	0.00	0.25	0.25	0.00	0.00	3.25	3.38
0900 - 0915	0	0	3	0	0	0	0	0	3	3.00
0915 - 0930	0	0	4	1	2	0	0	0	7	7.00
0930 - 0945	0	0	3	0	2	0	0	0	5	5.00
0945 - 1000	0	0	7	0	0	0	0	0	7	7.00
Hourly Total	0	0	17	1	4	0	0	0	22	22.00
Hourly Average	0.00	0.00	4.25	0.25	1.00	0.00	0.00	0.00	5.50	5.50
Session Total	0	0	30	2	8	1	0	0	41	41.50
Session Average	0.00	0.00	2.50	0.17	0.67	0.08	0.00	0.00	3.42	3.46

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

Movement 2.4: Left from A57 Ring Road. to Water Street									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	0	0	2	0	0	0	0	0	2	2.00
1615 - 1630	0	0	2	0	0	0	0	0	2	2.00
1630 - 1645	0	0	3	0	0	0	0	0	3	3.00
1645 - 1700	0	0	5	0	0	0	0	0	5	5.00
Hourly Total	0	0	12	0	0	0	0	0	12	12.00
Hourly Average	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	3.00	3.00
1700 - 1715	0	0	4	1	0	0	0	0	5	5.00
1715 - 1730	0	0	3	0	0	0	0	0	3	3.00
1730 - 1745	0	0	4	0	0	0	0	0	4	4.00
1745 - 1800	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	12	1	0	0	0	0	13	13.00
Hourly Average	0.00	0.00	3.00	0.25	0.00	0.00	0.00	0.00	3.25	3.25
1800 - 1815	0	0	9	0	0	1	0	0	10	10.50
1815 - 1830	0	0	3	0	0	0	0	0	3	3.00
1830 - 1845	0	0	10	1	1	0	0	0	12	12.00
1845 - 1900	0	0	4	0	1	0	0	0	5	5.00
Hourly Total	0	0	26	1	2	1	0	0	30	30.50
Hourly Average	0.00	0.00	6.50	0.25	0.50	0.25	0.00	0.00	7.50	7.63
Session Total	0	0	50	2	2	1	0	0	55	55.50
Session Average	0.00	0.00	4.17	0.17	0.17	0.08	0.00	0.00	4.58	4.63

Manchester
Classified Junction Count

Site 2 of 3
A6042 Ring Road.
A57 Ring Road.
Water Street
A57 Regent Road

Lat/Long
lat 53.475452° lon -2.261479°

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

Movement 2.5: Left from A57 Ring Road. to A57 Regent Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	4	2	260	0	68	10	11	3	358	375.90
0715 - 0730	0	5	354	0	80	15	9	1	464	481.20
0730 - 0745	1	2	396	0	69	15	5	0	488	500.00
0745 - 0800	2	1	362	2	69	17	11	0	464	484.60
Hourly Total	7	10	1372	2	286	57	36	4	1774	1841.70
Hourly Average	1.75	2.50	343.00	0.50	71.50	14.25	9.00	1.00	443.50	460.43
0800 - 0815	0	0	365	1	81	23	7	3	480	503.60
0815 - 0830	0	4	395	0	55	16	7	0	477	491.70
0830 - 0845	1	1	403	0	46	21	9	0	481	501.80
0845 - 0900	0	0	337	0	70	18	7	0	432	450.10
Hourly Total	1	5	1500	1	252	78	30	3	1870	1947.20
Hourly Average	0.25	1.25	375.00	0.25	63.00	19.50	7.50	0.75	467.50	486.80
0900 - 0915	1	1	298	1	72	23	12	0	408	433.70
0915 - 0930	1	1	276	0	64	19	15	0	376	403.60
0930 - 0945	1	1	304	0	62	28	11	1	408	435.90
0945 - 1000	0	0	275	0	67	27	11	0	380	407.80
Hourly Total	3	3	1153	1	265	97	49	1	1572	1681.00
Hourly Average	0.75	0.75	288.25	0.25	66.25	24.25	12.25	0.25	393.00	420.25
Session Total	11	18	4025	4	803	232	115	8	5216	5469.90
Session Average	0.92	1.50	335.42	0.33	66.92	19.33	9.58	0.67	434.67	455.83

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

Movement 2.5: Left from A57 Ring Road. to A57 Regent Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	0	1	412	0	76	13	4	0	506	517.10
1615 - 1630	0	3	411	0	62	10	2	1	489	495.80
1630 - 1645	0	3	413	0	68	15	4	0	503	513.90
1645 - 1700	2	3	439	0	50	10	6	0	510	519.40
Hourly Total	2	10	1675	0	256	48	16	1	2008	2046.20
Hourly Average	0.50	2.50	418.75	0.00	64.00	12.00	4.00	0.25	502.00	511.55
1700 - 1715	0	2	432	0	38	6	5	0	483	491.30
1715 - 1730	0	6	426	0	41	3	6	0	482	487.70
1730 - 1745	0	7	474	1	35	6	2	1	526	528.40
1745 - 1800	1	0	468	1	31	5	2	0	508	512.30
Hourly Total	1	15	1800	2	145	20	15	1	1999	2019.70
Hourly Average	0.25	3.75	450.00	0.50	36.25	5.00	3.75	0.25	499.75	504.93
1800 - 1815	3	1	476	0	44	4	1	2	531	533.30
1815 - 1830	1	4	462	0	31	1	3	0	502	503.20
1830 - 1845	0	4	423	12	27	5	4	0	475	480.30
1845 - 1900	0	3	414	8	27	1	0	1	454	453.70
Hourly Total	4	12	1775	20	129	11	8	3	1962	1970.50
Hourly Average	1.00	3.00	443.75	5.00	32.25	2.75	2.00	0.75	490.50	492.63
Session Total	7	37	5250	22	530	79	39	5	5969	6036.40
Session Average	0.58	3.08	437.50	1.83	44.17	6.58	3.25	0.42	497.42	503.03

Manchester
Classified Junction Count

Site 2 of 3
A6042 Ring Road.
A57 Ring Road.
Water Street
A57 Regent Road

Lat/Long
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Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

Movement 2.6: Right from A57 Ring Road. to A6042 Ring Road.									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	1	4	132	3	25	3	1	1	170	170.60
0715 - 0730	0	1	154	0	21	7	1	0	184	188.20
0730 - 0745	0	2	186	4	28	8	1	0	229	233.10
0745 - 0800	0	2	159	3	14	2	1	0	181	182.10
Hourly Total	1	9	631	10	88	20	4	1	764	774.00
Hourly Average	0.25	2.25	157.75	2.50	22.00	5.00	1.00	0.25	191.00	193.50
0800 - 0815	0	0	180	5	10	3	1	0	199	201.80
0815 - 0830	1	0	185	5	22	4	2	0	219	222.80
0830 - 0845	1	1	169	5	11	8	3	1	199	206.50
0845 - 0900	1	0	186	8	13	8	1	0	217	221.50
Hourly Total	3	1	720	23	56	23	7	1	834	852.60
Hourly Average	0.75	0.25	180.00	5.75	14.00	5.75	1.75	0.25	208.50	213.15
0900 - 0915	1	1	155	4	27	6	0	0	194	195.60
0915 - 0930	0	2	129	7	14	8	1	0	161	165.10
0930 - 0945	0	3	150	7	25	3	5	1	194	201.20
0945 - 1000	0	1	154	8	16	6	1	0	186	189.70
Hourly Total	1	7	588	26	82	23	7	1	735	751.60
Hourly Average	0.25	1.75	147.00	6.50	20.50	5.75	1.75	0.25	183.75	187.90
Session Total	5	17	1939	59	226	66	18	3	2333	2378.20
Session Average	0.42	1.42	161.58	4.92	18.83	5.50	1.50	0.25	194.42	198.18

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

Movement 2.6: Right from A57 Ring Road. to A6042 Ring Road.									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	1	2	140	10	18	4	1	0	176	177.30
1615 - 1630	1	0	132	3	10	0	0	0	146	145.20
1630 - 1645	0	5	128	7	14	2	1	0	157	156.30
1645 - 1700	0	3	133	6	16	2	0	0	160	159.20
Hourly Total	2	10	533	26	58	8	2	0	639	638.00
Hourly Average	0.50	2.50	133.25	6.50	14.50	2.00	0.50	0.00	159.75	159.50
1700 - 1715	0	1	152	3	12	2	0	0	170	170.40
1715 - 1730	0	0	150	10	12	0	0	0	172	172.00
1730 - 1745	0	2	177	1	12	2	0	0	194	193.80
1745 - 1800	1	1	167	6	12	1	0	1	189	189.10
Hourly Total	1	4	646	20	48	5	0	1	725	725.30
Hourly Average	0.25	1.00	161.50	5.00	12.00	1.25	0.00	0.25	181.25	181.33
1800 - 1815	0	4	159	3	11	4	0	0	181	180.60
1815 - 1830	2	2	181	14	8	1	0	0	208	205.70
1830 - 1845	1	0	124	11	13	0	1	0	150	150.50
1845 - 1900	1	0	135	7	12	0	1	0	156	156.50
Hourly Total	4	6	599	35	44	5	2	0	695	693.30
Hourly Average	1.00	1.50	149.75	8.75	11.00	1.25	0.50	0.00	173.75	173.33
Session Total	7	20	1778	81	150	18	4	1	2059	2056.60
Session Average	0.58	1.67	148.17	6.75	12.50	1.50	0.33	0.08	171.58	171.38

Manchester
Classified Junction Count

Site 2 of 3
A6042 Ring Road.
A57 Ring Road.
Water Street
A57 Regent Road

Lat/Long
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Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

Movement 2.7: Left from Water Street to A57 Regent Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	4	0	0	0	0	0	4	4.00
0715 - 0730	0	0	3	0	0	0	0	0	3	3.00
0730 - 0745	0	0	5	0	2	0	0	0	7	7.00
0745 - 0800	0	0	3	0	0	0	0	0	3	3.00
Hourly Total	0	0	15	0	2	0	0	0	17	17.00
Hourly Average	0.00	0.00	3.75	0.00	0.50	0.00	0.00	0.00	4.25	4.25
0800 - 0815	0	0	6	0	0	0	0	0	6	6.00
0815 - 0830	0	0	5	0	0	0	0	0	5	5.00
0830 - 0845	0	0	8	0	0	0	0	0	8	8.00
0845 - 0900	0	0	3	0	0	0	0	0	3	3.00
Hourly Total	0	0	22	0	0	0	0	0	22	22.00
Hourly Average	0.00	0.00	5.50	0.00	0.00	0.00	0.00	0.00	5.50	5.50
0900 - 0915	0	3	0	0	0	0	0	0	3	1.20
0915 - 0930	0	2	0	1	0	0	0	0	3	1.80
0930 - 0945	0	3	0	0	0	0	0	0	3	1.20
0945 - 1000	0	1	0	0	0	0	0	0	1	0.40
Hourly Total	0	9	0	1	0	0	0	0	10	4.60
Hourly Average	0.00	2.25	0.00	0.25	0.00	0.00	0.00	0.00	2.50	1.15
Session Total	0	9	37	1	2	0	0	0	49	43.60
Session Average	0.00	0.75	3.08	0.08	0.17	0.00	0.00	0.00	4.08	3.63

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

Movement 2.7: Left from Water Street to A57 Regent Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	0	0	4	0	0	0	0	0	4	4.00
1615 - 1630	0	0	1	0	1	0	0	0	2	2.00
1630 - 1645	0	0	5	0	0	0	0	0	5	5.00
1645 - 1700	0	0	5	0	0	0	0	0	5	5.00
Hourly Total	0	0	15	0	1	0	0	0	16	16.00
Hourly Average	0.00	0.00	3.75	0.00	0.25	0.00	0.00	0.00	4.00	4.00
1700 - 1715	0	0	2	0	1	0	0	0	3	3.00
1715 - 1730	0	0	4	0	0	0	0	0	4	4.00
1730 - 1745	0	1	3	0	0	0	0	0	4	3.40
1745 - 1800	0	0	4	0	0	0	0	0	4	4.00
Hourly Total	0	1	13	0	1	0	0	0	15	14.40
Hourly Average	0.00	0.25	3.25	0.00	0.25	0.00	0.00	0.00	3.75	3.60
1800 - 1815	0	0	7	0	0	0	0	0	7	7.00
1815 - 1830	0	1	4	0	0	0	0	0	5	4.40
1830 - 1845	0	0	6	0	0	0	0	0	6	6.00
1845 - 1900	0	0	5	0	1	0	0	0	6	6.00
Hourly Total	0	1	22	0	1	0	0	0	24	23.40
Hourly Average	0.00	0.25	5.50	0.00	0.25	0.00	0.00	0.00	6.00	5.85
Session Total	0	2	50	0	3	0	0	0	55	53.80
Session Average	0.00	0.17	4.17	0.00	0.25	0.00	0.00	0.00	4.58	4.48

Site 2 of 3
A6042 Ring Road.
A57 Ring Road.
Water Street
A57 Regent Road

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

	Movement 2.8: Left from Water Street to A6042 Ring Road.								Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	1	0	1	0	0	0	2	2.00
0715 - 0730	0	0	0	0	0	0	0	0	0	0.00
0730 - 0745	1	0	2	0	0	0	0	0	3	2.20
0745 - 0800	0	0	0	1	0	0	0	0	1	1.00
Hourly Total	1	0	3	1	1	0	0	0	6	5.20
Hourly Average	0.25	0.00	0.75	0.25	0.25	0.00	0.00	0.00	1.50	1.30
0800 - 0815	0	0	1	0	0	0	0	0	1	1.00
0815 - 0830	0	0	1	1	0	0	0	0	2	2.00
0830 - 0845	0	0	2	0	0	1	0	0	3	3.50
0845 - 0900	1	0	3	0	0	0	0	0	4	3.20
Hourly Total	1	0	7	1	0	1	0	0	10	9.70
Hourly Average	0.25	0.00	1.75	0.25	0.00	0.25	0.00	0.00	2.50	2.43
0900 - 0915	0	0	1	0	0	0	0	0	1	1.00
0915 - 0930	0	0	0	0	0	0	0	0	0	0.00
0930 - 0945	0	0	0	0	1	0	0	0	1	1.00
0945 - 1000	0	0	1	1	1	0	0	0	3	3.00
Hourly Total	0	0	2	1	2	0	0	0	5	5.00
Hourly Average	0.00	0.00	0.50	0.25	0.50	0.00	0.00	0.00	1.25	1.25
Session Total	2	0	12	3	3	1	0	0	21	19.90
Session Average	0.17	0.00	1.00	0.25	0.25	0.08	0.00	0.00	1.75	1.66

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

[illegible]

Manchester
Classified Junction Count

Site 2 of 3
A6042 Ring Road.
A57 Ring Road.
Water Street
A57 Regent Road

Lat/Long
lat 53.475452° lon -2.261479°

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

Movement 2.9: Right from Water Street to A57 Ring Road.									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	2	1	0	0	0	0	3	3.00
0715 - 0730	0	0	3	1	0	0	0	0	4	4.00
0730 - 0745	0	0	2	0	1	1	0	0	4	4.50
0745 - 0800	0	0	5	0	0	0	0	0	5	5.00
Hourly Total	0	0	12	2	1	1	0	0	16	16.50
Hourly Average	0.00	0.00	3.00	0.50	0.25	0.25	0.00	0.00	4.00	4.13
0800 - 0815	0	1	0	1	0	0	0	0	2	1.40
0815 - 0830	0	0	10	0	0	0	0	0	10	10.00
0830 - 0845	0	0	9	0	0	0	0	0	9	9.00
0845 - 0900	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	1	20	1	0	0	0	0	22	21.40
Hourly Average	0.00	0.25	5.00	0.25	0.00	0.00	0.00	0.00	5.50	5.35
0900 - 0915	0	0	8	0	1	0	0	0	9	9.00
0915 - 0930	0	0	2	0	0	0	0	0	2	2.00
0930 - 0945	0	0	2	1	0	0	0	0	3	3.00
0945 - 1000	0	0	3	0	0	0	0	0	3	3.00
Hourly Total	0	0	15	1	1	0	0	0	17	17.00
Hourly Average	0.00	0.00	3.75	0.25	0.25	0.00	0.00	0.00	4.25	4.25
Session Total	0	1	47	4	2	1	0	0	55	54.90
Session Average	0.00	0.08	3.92	0.33	0.17	0.08	0.00	0.00	4.58	4.58

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

Movement 2.9: Right from Water Street to A57 Ring Road.									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	0	0	3	0	0	0	0	0	3	3.00
1615 - 1630	0	0	5	0	1	0	1	0	7	8.30
1630 - 1645	0	0	3	0	0	0	0	0	3	3.00
1645 - 1700	0	0	2	2	0	0	0	0	4	4.00
Hourly Total	0	0	13	2	1	0	1	0	17	18.30
Hourly Average	0.00	0.00	3.25	0.50	0.25	0.00	0.25	0.00	4.25	4.58
1700 - 1715	0	0	2	2	0	0	0	0	4	4.00
1715 - 1730	0	0	4	0	0	0	0	0	4	4.00
1730 - 1745	0	0	5	0	0	0	0	0	5	5.00
1745 - 1800	0	0	3	0	0	0	0	0	3	3.00
Hourly Total	0	0	14	2	0	0	0	0	16	16.00
Hourly Average	0.00	0.00	3.50	0.50	0.00	0.00	0.00	0.00	4.00	4.00
1800 - 1815	0	0	3	0	0	0	0	0	3	3.00
1815 - 1830	0	0	2	0	0	1	0	0	3	3.50
1830 - 1845	0	0	0	0	1	0	0	0	1	1.00
1845 - 1900	0	0	5	0	1	0	0	0	6	6.00
Hourly Total	0	0	10	0	2	1	0	0	13	13.50
Hourly Average	0.00	0.00	2.50	0.00	0.50	0.25	0.00	0.00	3.25	3.38
Session Total	0	0	37	4	3	1	1	0	46	47.80
Session Average	0.00	0.00	3.08	0.33	0.25	0.08	0.08	0.00	3.83	3.98

Manchester
Classified Junction Count

Site 2 of 3
A6042 Ring Road.
A57 Ring Road.
Water Street
A57 Regent Road

Lat/Long
lat 53.475452° lon -2.261479°

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

Movement 2.10: Left from A57 Regent Road to A6042 Ring Road.									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	3	0	25	0	6	1	0	0	35	33.10
0715 - 0730	2	0	24	0	6	2	3	1	38	42.30
0730 - 0745	1	0	29	0	10	2	2	0	44	46.80
0745 - 0800	3	1	33	0	9	0	1	1	48	47.30
Hourly Total	9	1	111	0	31	5	6	2	165	169.50
Hourly Average	2.25	0.25	27.75	0.00	7.75	1.25	1.50	0.50	41.25	42.38
0800 - 0815	3	0	37	0	11	0	0	1	52	50.60
0815 - 0830	5	0	44	0	14	1	1	1	66	64.80
0830 - 0845	6	1	58	3	12	0	2	0	82	79.20
0845 - 0900	3	0	40	1	10	0	2	1	57	58.20
Hourly Total	17	1	179	4	47	1	5	3	257	252.80
Hourly Average	4.25	0.25	44.75	1.00	11.75	0.25	1.25	0.75	64.25	63.20
0900 - 0915	1	0	48	3	7	1	1	1	62	64.00
0915 - 0930	1	0	51	0	8	2	1	1	64	66.50
0930 - 0945	1	0	40	1	9	0	1	0	52	52.50
0945 - 1000	0	0	40	3	9	0	0	1	53	54.00
Hourly Total	3	0	179	7	33	3	3	3	231	237.00
Hourly Average	0.75	0.00	44.75	1.75	8.25	0.75	0.75	0.75	57.75	59.25
Session Total	29	2	469	11	111	9	14	8	653	659.30
Session Average	2.42	0.17	39.08	0.92	9.25	0.75	1.17	0.67	54.42	54.94

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

Movement 2.10: Left from A57 Regent Road to A6042 Ring Road.									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	2	1	18	0	4	0	0	1	26	24.80
1615 - 1630	1	1	21	0	2	0	0	1	26	25.60
1630 - 1645	2	0	36	0	4	1	0	0	43	41.90
1645 - 1700	1	0	23	0	3	1	1	1	30	32.00
Hourly Total	6	2	98	0	13	2	1	3	125	124.30
Hourly Average	1.50	0.50	24.50	0.00	3.25	0.50	0.25	0.75	31.25	31.08
1700 - 1715	1	0	16	1	0	0	0	1	19	19.20
1715 - 1730	2	1	39	0	2	1	0	1	46	45.30
1730 - 1745	1	0	29	2	0	0	0	0	32	31.20
1745 - 1800	1	1	24	0	0	0	0	1	27	26.60
Hourly Total	5	2	108	3	2	1	0	3	124	122.30
Hourly Average	1.25	0.50	27.00	0.75	0.50	0.25	0.00	0.75	31.00	30.58
1800 - 1815	2	1	30	0	0	0	0	0	33	30.80
1815 - 1830	4	1	31	1	0	1	0	1	39	36.70
1830 - 1845	2	1	24	1	4	0	0	0	32	29.80
1845 - 1900	3	2	40	1	1	0	0	0	47	43.40
Hourly Total	11	5	125	3	5	1	0	1	151	140.70
Hourly Average	2.75	1.25	31.25	0.75	1.25	0.25	0.00	0.25	37.75	35.18
Session Total	22	9	331	6	20	4	1	7	400	387.30
Session Average	1.83	0.75	27.58	0.50	1.67	0.33	0.08	0.58	33.33	32.28

Manchester
Classified Junction Count

Site 2 of 3
A6042 Ring Road.
A57 Ring Road.
Water Street
A57 Regent Road

Lat/Long
lat 53.475452° lon -2.261479°

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

Movement 2.11: Right from A57 Regent Road to A57 Ring Road.									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	4	332	11	74	15	4	2	442	454.30
0715 - 0730	0	5	353	5	87	6	4	1	461	467.20
0730 - 0745	0	1	307	6	68	14	10	1	407	427.40
0745 - 0800	1	4	340	11	68	18	13	0	455	477.70
Hourly Total	1	14	1332	33	297	53	31	4	1765	1826.60
Hourly Average	0.25	3.50	333.00	8.25	74.25	13.25	7.75	1.00	441.25	456.65
0800 - 0815	0	2	318	13	76	9	11	1	430	448.60
0815 - 0830	0	2	304	8	57	10	6	0	387	398.60
0830 - 0845	1	2	305	16	60	12	8	0	404	418.40
0845 - 0900	0	4	311	12	53	12	8	1	401	416.00
Hourly Total	1	10	1238	49	246	43	33	2	1622	1681.60
Hourly Average	0.25	2.50	309.50	12.25	61.50	10.75	8.25	0.50	405.50	420.40
0900 - 0915	2	0	276	12	61	8	8	1	368	381.80
0915 - 0930	0	0	290	13	57	11	12	0	383	404.10
0930 - 0945	0	2	278	14	72	11	8	1	386	401.70
0945 - 1000	0	2	265	30	47	10	7	0	361	373.90
Hourly Total	2	4	1109	69	237	40	35	2	1498	1561.50
Hourly Average	0.50	1.00	277.25	17.25	59.25	10.00	8.75	0.50	374.50	390.38
Session Total	4	28	3679	151	780	136	99	8	4885	5069.70
Session Average	0.33	2.33	306.58	12.58	65.00	11.33	8.25	0.67	407.08	422.48

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

Movement 2.11: Right from A57 Regent Road to A57 Ring Road.									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	0	1	342	13	68	4	11	0	439	454.70
1615 - 1630	0	4	328	22	56	6	6	1	423	432.40
1630 - 1645	0	2	387	12	57	4	2	0	464	467.40
1645 - 1700	0	3	370	16	46	8	5	1	449	458.70
Hourly Total	0	10	1427	63	227	22	24	2	1775	1813.20
Hourly Average	0.00	2.50	356.75	15.75	56.75	5.50	6.00	0.50	443.75	453.30
1700 - 1715	0	2	398	7	56	10	5	2	480	492.30
1715 - 1730	0	2	420	4	41	7	1	1	476	480.60
1730 - 1745	0	1	431	6	34	1	3	4	480	487.80
1745 - 1800	3	0	386	23	29	3	3	0	447	450.00
Hourly Total	3	5	1635	40	160	21	12	7	1883	1910.70
Hourly Average	0.75	1.25	408.75	10.00	40.00	5.25	3.00	1.75	470.75	477.68
1800 - 1815	0	1	406	13	26	3	2	1	452	456.50
1815 - 1830	1	1	333	15	17	7	2	0	376	380.70
1830 - 1845	0	1	390	16	28	1	3	4	443	450.80
1845 - 1900	1	1	410	16	25	3	0	2	458	460.10
Hourly Total	2	4	1539	60	96	14	7	7	1729	1748.10
Hourly Average	0.50	1.00	384.75	15.00	24.00	3.50	1.75	1.75	432.25	437.03
Session Total	5	19	4601	163	483	57	43	16	5387	5472.00
Session Average	0.42	1.58	383.42	13.58	40.25	4.75	3.58	1.33	448.92	456.00

Manchester
Classified Junction Count

Site 2 of 3
A6042 Ring Road.
A57 Ring Road.
Water Street
A57 Regent Road

Lat/Long
lat 53.475452° lon -2.261479°

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

Movement 2.12: Right from A57 Regent Road to Water Street									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	2	0	0	0	0	0	2	2.00
0715 - 0730	0	0	1	0	1	0	0	0	2	2.00
0730 - 0745	0	0	0	0	0	0	0	0	0	0.00
0745 - 0800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	1	0	0	0	4	4.00
Hourly Average	0.00	0.00	0.75	0.00	0.25	0.00	0.00	0.00	1.00	1.00
0800 - 0815	0	0	1	0	0	0	0	0	1	1.00
0815 - 0830	0	0	2	1	1	0	0	0	4	4.00
0830 - 0845	0	0	3	0	1	0	0	0	4	4.00
0845 - 0900	0	0	2	0	0	0	1	0	3	4.30
Hourly Total	0	0	8	1	2	0	1	0	12	13.30
Hourly Average	0.00	0.00	2.00	0.25	0.50	0.00	0.25	0.00	3.00	3.33
0900 - 0915	0	0	3	0	2	0	0	0	5	5.00
0915 - 0930	0	0	0	0	2	0	0	0	2	2.00
0930 - 0945	0	0	0	0	0	0	0	0	0	0.00
0945 - 1000	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	4	0	0	0	7	7.00
Hourly Average	0.00	0.00	0.75	0.00	1.00	0.00	0.00	0.00	1.75	1.75
Session Total	0	0	14	1	7	0	1	0	23	24.30
Session Average	0.00	0.00	1.17	0.08	0.58	0.00	0.08	0.00	1.92	2.03

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

Movement 2.12: Right from A57 Regent Road to Water Street									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	0	0	2	0	0	0	0	0	2	2.00
1615 - 1630	0	0	5	0	1	0	0	0	6	6.00
1630 - 1645	0	0	6	0	0	0	0	0	6	6.00
1645 - 1700	0	0	3	0	0	0	0	0	3	3.00
Hourly Total	0	0	16	0	1	0	0	0	17	17.00
Hourly Average	0.00	0.00	4.00	0.00	0.25	0.00	0.00	0.00	4.25	4.25
1700 - 1715	0	0	7	0	0	0	0	0	7	7.00
1715 - 1730	0	0	4	0	0	0	0	0	4	4.00
1730 - 1745	0	0	4	0	0	0	0	0	4	4.00
1745 - 1800	0	0	5	0	0	0	0	0	5	5.00
Hourly Total	0	0	20	0	0	0	0	0	20	20.00
Hourly Average	0.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	5.00	5.00
1800 - 1815	0	0	5	0	0	0	0	0	5	5.00
1815 - 1830	0	0	7	0	0	0	0	0	7	7.00
1830 - 1845	0	0	6	0	1	0	0	0	7	7.00
1845 - 1900	0	0	2	0	0	0	0	0	2	2.00
Hourly Total	0	0	20	0	1	0	0	0	21	21.00
Hourly Average	0.00	0.00	5.00	0.00	0.25	0.00	0.00	0.00	5.25	5.25
Session Total	0	0	56	0	2	0	0	0	58	58.00
Session Average	0.00	0.00	4.67	0.00	0.17	0.00	0.00	0.00	4.83	4.83

Manchester
Classified Junction Count

Site 3 of 3
A6143 Water Street (East)
New Elm Road
A6143 Water Street (West)

Lat/Long
lat 53.476634° lon -2.260107°

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

Movement 3.1: Left from A6143 Water Street (East) to New Elm Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	0	0	0	0	0	0	0	0	0	0.00
0730 - 0745	0	0	0	0	0	0	0	0	0	0.00
0745 - 0800	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	1	0	0	0	0	0	1	1.00
Hourly Average	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.25
0800 - 0815	0	0	0	0	1	0	0	0	1	1.00
0815 - 0830	0	0	0	0	0	0	0	0	0	0.00
0830 - 0845	0	0	0	0	1	0	0	0	1	1.00
0845 - 0900	1	0	0	0	1	0	0	0	2	1.20
Hourly Total	1	0	0	0	3	0	0	0	4	3.20
Hourly Average	0.25	0.00	0.00	0.00	0.75	0.00	0.00	0.00	1.00	0.80
0900 - 0915	0	0	1	0	2	0	0	0	3	3.00
0915 - 0930	0	0	1	0	0	1	0	0	2	2.50
0930 - 0945	0	0	1	0	0	0	0	0	1	1.00
0945 - 1000	1	0	0	0	0	0	0	0	1	0.20
Hourly Total	1	0	3	0	2	1	0	0	7	6.70
Hourly Average	0.25	0.00	0.75	0.00	0.50	0.25	0.00	0.00	1.75	1.68
Session Total	2	0	4	0	5	1	0	0	12	10.90
Session Average	0.17	0.00	0.33	0.00	0.42	0.08	0.00	0.00	1.00	0.91

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

Movement 3.1: Left from A6143 Water Street (East) to New Elm Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	1	0	2	0	3	0	0	0	6	5.20
1615 - 1630	0	0	1	0	0	0	0	0	1	1.00
1630 - 1645	0	0	1	0	0	0	0	0	1	1.00
1645 - 1700	0	0	2	0	1	0	0	0	3	3.00
Hourly Total	1	0	6	0	4	0	0	0	11	10.20
Hourly Average	0.25	0.00	1.50	0.00	1.00	0.00	0.00	0.00	2.75	2.55
1700 - 1715	0	0	0	0	0	0	0	0	0	0.00
1715 - 1730	1	0	0	0	0	0	0	0	1	0.20
1730 - 1745	0	0	2	0	0	0	0	0	2	2.00
1745 - 1800	0	0	2	0	0	0	0	0	2	2.00
Hourly Total	1	0	4	0	0	0	0	0	5	4.20
Hourly Average	0.25	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.25	1.05
1800 - 1815	0	0	0	0	0	0	0	0	0	0.00
1815 - 1830	0	0	3	0	0	0	0	0	3	3.00
1830 - 1845	1	0	1	0	0	0	0	0	2	1.20
1845 - 1900	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	1	0	5	0	0	0	0	0	6	5.20
Hourly Average	0.25	0.00	1.25	0.00	0.00	0.00	0.00	0.00	1.50	1.30
Session Total	3	0	15	0	4	0	0	0	22	19.60
Session Average	0.25	0.00	1.25	0.00	0.33	0.00	0.00	0.00	1.83	1.63

Manchester
Classified Junction Count

Site 3 of 3
A6143 Water Street (East)
New Elm Road
A6143 Water Street (West)

Lat/Long
lat 53.476634° lon -2.260107°

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

Movement 3.2: Westbound from A6143 Water Street (East) to A6143 Water Street (West)									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	2	0	17	0	2	0	0	0	21	19.40
0715 - 0730	3	0	12	1	2	2	0	1	21	20.60
0730 - 0745	1	0	17	0	0	0	0	0	18	17.20
0745 - 0800	3	0	17	0	2	0	0	1	23	21.60
Hourly Total	9	0	63	1	6	2	0	2	83	78.80
Hourly Average	2.25	0.00	15.75	0.25	1.50	0.50	0.00	0.50	20.75	19.70
0800 - 0815	0	0	11	1	3	2	0	0	17	18.00
0815 - 0830	0	0	11	0	3	0	0	1	15	16.00
0830 - 0845	2	0	12	1	3	0	1	0	19	18.70
0845 - 0900	1	0	18	0	7	0	0	0	26	25.20
Hourly Total	3	0	52	2	16	2	1	1	77	77.90
Hourly Average	0.75	0.00	13.00	0.50	4.00	0.50	0.25	0.25	19.25	19.48
0900 - 0915	2	0	17	0	4	2	0	1	26	26.40
0915 - 0930	1	0	13	0	7	1	0	0	22	21.70
0930 - 0945	0	0	9	1	7	2	1	1	21	24.30
0945 - 1000	0	0	17	1	1	0	0	0	19	19.00
Hourly Total	3	0	56	2	19	5	1	2	88	91.40
Hourly Average	0.75	0.00	14.00	0.50	4.75	1.25	0.25	0.50	22.00	22.85
Session Total	15	0	171	5	41	9	2	5	248	248.10
Session Average	1.25	0.00	14.25	0.42	3.42	0.75	0.17	0.42	20.67	20.68

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

Movement 3.2: Westbound from A6143 Water Street (East) to A6143 Water Street (West)									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	4	2	63	4	26	0	0	1	100	96.60
1615 - 1630	0	2	81	4	19	0	0	0	106	104.80
1630 - 1645	4	0	98	3	15	0	0	1	121	118.80
1645 - 1700	3	0	83	1	8	1	0	0	96	94.10
Hourly Total	11	4	325	12	68	1	0	2	423	414.30
Hourly Average	2.75	1.00	81.25	3.00	17.00	0.25	0.00	0.50	105.75	103.58
1700 - 1715	8	0	108	3	9	0	0	1	129	123.60
1715 - 1730	10	4	108	3	12	1	0	0	138	128.10
1730 - 1745	2	0	89	1	4	0	0	1	97	96.40
1745 - 1800	4	1	79	2	5	2	0	0	93	90.20
Hourly Total	24	5	384	9	30	3	0	2	457	438.30
Hourly Average	6.00	1.25	96.00	2.25	7.50	0.75	0.00	0.50	114.25	109.58
1800 - 1815	3	2	72	1	6	0	0	0	84	80.40
1815 - 1830	7	2	58	0	3	1	0	0	71	64.70
1830 - 1845	6	0	52	3	3	0	0	1	65	61.20
1845 - 1900	3	1	49	0	2	0	0	0	55	52.00
Hourly Total	19	5	231	4	14	1	0	1	275	258.30
Hourly Average	4.75	1.25	57.75	1.00	3.50	0.25	0.00	0.25	68.75	64.58
Session Total	54	14	940	25	112	5	0	5	1155	1110.90
Session Average	4.50	1.17	78.33	2.08	9.33	0.42	0.00	0.42	96.25	92.58

Manchester
Classified Junction Count

Site 3 of 3
A6143 Water Street (East)
New Elm Road
A6143 Water Street (West)

Lat/Long
lat 53.476634° lon -2.260107°

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

Movement 3.3: Left from New Elm Road to A6143 Water Street (West)									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	2	0	0	0	0	0	2	2.00
0715 - 0730	0	0	3	0	0	0	0	0	3	3.00
0730 - 0745	0	0	3	0	1	0	0	0	4	4.00
0745 - 0800	0	0	7	0	0	0	0	0	7	7.00
Hourly Total	0	0	15	0	1	0	0	0	16	16.00
Hourly Average	0.00	0.00	3.75	0.00	0.25	0.00	0.00	0.00	4.00	4.00
0800 - 0815	0	0	4	0	0	0	0	0	4	4.00
0815 - 0830	0	0	3	0	1	1	0	0	5	5.50
0830 - 0845	1	0	7	0	4	0	0	0	12	11.20
0845 - 0900	0	0	6	1	2	0	0	0	9	9.00
Hourly Total	1	0	20	1	7	1	0	0	30	29.70
Hourly Average	0.25	0.00	5.00	0.25	1.75	0.25	0.00	0.00	7.50	7.43
0900 - 0915	0	0	5	0	3	1	0	0	9	9.50
0915 - 0930	0	0	5	0	1	1	0	0	7	7.50
0930 - 0945	1	0	3	0	1	0	0	0	5	4.20
0945 - 1000	0	0	3	0	0	0	0	0	3	3.00
Hourly Total	1	0	16	0	5	2	0	0	24	24.20
Hourly Average	0.25	0.00	4.00	0.00	1.25	0.50	0.00	0.00	6.00	6.05
Session Total	2	0	51	1	13	3	0	0	70	69.90
Session Average	0.17	0.00	4.25	0.08	1.08	0.25	0.00	0.00	5.83	5.83

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

Movement 3.3: Left from New Elm Road to A6143 Water Street (West)									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	1	0	9	0	4	0	0	0	14	13.20
1615 - 1630	0	0	5	0	2	0	0	0	7	7.00
1630 - 1645	1	0	9	0	3	0	0	0	13	12.20
1645 - 1700	0	0	5	0	0	0	0	0	5	5.00
Hourly Total	2	0	28	0	9	0	0	0	39	37.40
Hourly Average	0.50	0.00	7.00	0.00	2.25	0.00	0.00	0.00	9.75	9.35
1700 - 1715	0	0	20	0	2	1	0	0	23	23.50
1715 - 1730	1	0	14	0	1	0	0	0	16	15.20
1730 - 1745	0	0	11	0	1	0	0	0	12	12.00
1745 - 1800	0	0	22	0	0	0	0	0	22	22.00
Hourly Total	1	0	67	0	4	1	0	0	73	72.70
Hourly Average	0.25	0.00	16.75	0.00	1.00	0.25	0.00	0.00	18.25	18.18
1800 - 1815	0	0	9	0	0	0	0	0	9	9.00
1815 - 1830	0	0	11	0	1	0	0	0	12	12.00
1830 - 1845	1	0	13	0	1	0	0	0	15	14.20
1845 - 1900	0	0	12	0	0	0	0	0	12	12.00
Hourly Total	1	0	45	0	2	0	0	0	48	47.20
Hourly Average	0.25	0.00	11.25	0.00	0.50	0.00	0.00	0.00	12.00	11.80
Session Total	4	0	140	0	15	1	0	0	160	157.30
Session Average	0.33	0.00	11.67	0.00	1.25	0.08	0.00	0.00	13.33	13.11

Manchester
Classified Junction Count

Site 3 of 3
A6143 Water Street (East)
New Elm Road
A6143 Water Street (West)

Lat/Long
lat 53.476634° lon -2.260107°

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

Movement 3.4: Right from New Elm Road to A6143 Water Street (East)									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0.00
0715 - 0730	0	0	2	0	0	0	0	0	2	2.00
0730 - 0745	0	0	1	0	0	0	0	0	1	1.00
0745 - 0800	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	3	0	0	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.75
0800 - 0815	0	0	0	0	2	0	0	0	2	2.00
0815 - 0830	0	0	0	0	2	0	0	0	2	2.00
0830 - 0845	0	0	0	0	0	0	0	0	0	0.00
0845 - 0900	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	1	0	4	0	0	0	5	5.00
Hourly Average	0.00	0.00	0.25	0.00	1.00	0.00	0.00	0.00	1.25	1.25
0900 - 0915	0	0	0	0	2	0	0	0	2	2.00
0915 - 0930	0	0	0	0	1	0	0	0	1	1.00
0930 - 0945	0	0	0	0	1	0	0	0	1	1.00
0945 - 1000	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	1	0	4	0	0	0	5	5.00
Hourly Average	0.00	0.00	0.25	0.00	1.00	0.00	0.00	0.00	1.25	1.25
Session Total	0	0	5	0	8	0	0	0	13	13.00
Session Average	0.00	0.00	0.42	0.00	0.67	0.00	0.00	0.00	1.08	1.08

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

Movement 3.4: Right from New Elm Road to A6143 Water Street (East)									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	0	0	0	0	0	0	0	0	0	0.00
1615 - 1630	0	0	1	0	0	0	0	0	1	1.00
1630 - 1645	0	0	0	0	1	0	0	0	1	1.00
1645 - 1700	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	2	0	1	0	0	0	3	3.00
Hourly Average	0.00	0.00	0.50	0.00	0.25	0.00	0.00	0.00	0.75	0.75
1700 - 1715	0	0	0	0	0	0	0	0	0	0.00
1715 - 1730	0	0	0	0	0	0	0	0	0	0.00
1730 - 1745	0	0	1	0	0	0	0	0	1	1.00
1745 - 1800	0	0	1	0	0	0	0	0	1	1.00
Hourly Total	0	0	2	0	0	0	0	0	2	2.00
Hourly Average	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.50
1800 - 1815	0	0	0	0	0	0	0	0	0	0.00
1815 - 1830	0	0	0	0	0	0	0	0	0	0.00
1830 - 1845	0	0	0	0	0	0	0	0	0	0.00
1845 - 1900	0	0	0	0	0	0	0	0	0	0.00
Hourly Total	0	0	0	0	0	0	0	0	0	0.00
Hourly Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Session Total	0	0	4	0	1	0	0	0	5	5.00
Session Average	0.00	0.00	0.33	0.00	0.08	0.00	0.00	0.00	0.42	0.42

Manchester
Classified Junction Count

Site 3 of 3
A6143 Water Street (East)
New Elm Road
A6143 Water Street (West)

Lat/Long
lat 53.476634° lon -2.260107°

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

Movement 3.5: Eastbound from A6143 Water Street (West) to A6143 Water Street (East)									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	5	2	44	1	18	0	0	0	70	64.80
0715 - 0730	1	0	42	0	20	1	0	1	65	65.70
0730 - 0745	4	0	53	0	20	4	0	0	81	79.80
0745 - 0800	4	0	57	0	11	0	0	1	73	70.80
Hourly Total	14	2	196	1	69	5	0	2	289	281.10
Hourly Average	3.50	0.50	49.00	0.25	17.25	1.25	0.00	0.50	72.25	70.28
0800 - 0815	3	1	39	2	7	1	0	0	53	50.50
0815 - 0830	3	1	59	1	13	1	0	1	79	77.50
0830 - 0845	7	0	75	5	8	0	0	0	95	89.40
0845 - 0900	3	0	64	5	9	3	0	1	85	85.10
Hourly Total	16	2	237	13	37	5	0	2	312	302.50
Hourly Average	4.00	0.50	59.25	3.25	9.25	1.25	0.00	0.50	78.00	75.63
0900 - 0915	4	0	65	3	10	1	0	0	83	80.30
0915 - 0930	0	0	56	3	10	1	0	1	71	72.50
0930 - 0945	2	1	61	3	7	0	1	0	75	74.10
0945 - 1000	0	0	33	4	8	0	1	1	47	49.30
Hourly Total	6	1	215	13	35	2	2	2	276	276.20
Hourly Average	1.50	0.25	53.75	3.25	8.75	0.50	0.50	0.50	69.00	69.05
Session Total	36	5	648	27	141	12	2	6	877	859.80
Session Average	3.00	0.42	54.00	2.25	11.75	1.00	0.17	0.50	73.08	71.65

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

Movement 3.5: Eastbound from A6143 Water Street (West) to A6143 Water Street (East)									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	3	0	15	1	3	0	0	0	22	19.60
1615 - 1630	1	0	21	2	2	0	0	1	27	27.20
1630 - 1645	0	0	25	3	2	0	0	0	30	30.00
1645 - 1700	2	0	23	2	3	0	0	1	31	30.40
Hourly Total	6	0	84	8	10	0	0	2	110	107.20
Hourly Average	1.50	0.00	21.00	2.00	2.50	0.00	0.00	0.50	27.50	26.80
1700 - 1715	1	0	17	1	0	0	0	0	19	18.20
1715 - 1730	3	0	29	4	1	1	0	1	39	38.10
1730 - 1745	0	0	33	3	2	0	0	0	38	38.00
1745 - 1800	3	0	25	3	0	0	0	1	32	30.60
Hourly Total	7	0	104	11	3	1	0	2	128	124.90
Hourly Average	1.75	0.00	26.00	2.75	0.75	0.25	0.00	0.50	32.00	31.23
1800 - 1815	1	1	20	2	4	0	0	0	28	26.60
1815 - 1830	4	1	31	5	1	0	0	1	43	40.20
1830 - 1845	1	1	19	4	3	0	0	0	28	26.60
1845 - 1900	4	1	33	2	3	0	1	0	44	41.50
Hourly Total	10	4	103	13	11	0	1	1	143	134.90
Hourly Average	2.50	1.00	25.75	3.25	2.75	0.00	0.25	0.25	35.75	33.73
Session Total	23	4	291	32	24	1	1	5	381	367.00
Session Average	1.92	0.33	24.25	2.67	2.00	0.08	0.08	0.42	31.75	30.58

Manchester
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Site 3 of 3
A6143 Water Street (East)
New Elm Road
A6143 Water Street (West)

Lat/Long
lat 53.476634° lon -2.260107°

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 13°C

0700 - 1000 (Weekday AM Peak)

Movement 3.6: Right from A6143 Water Street (West) to New Elm Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
0700 - 0715	0	0	7	0	2	0	0	0	9	9.00
0715 - 0730	1	0	12	0	1	0	0	0	14	13.20
0730 - 0745	0	0	6	0	6	0	0	0	12	12.00
0745 - 0800	0	0	9	0	3	0	0	0	12	12.00
Hourly Total	1	0	34	0	12	0	0	0	47	46.20
Hourly Average	0.25	0.00	8.50	0.00	3.00	0.00	0.00	0.00	11.75	11.55
0800 - 0815	0	0	11	0	2	1	0	0	14	14.50
0815 - 0830	0	0	9	0	3	0	0	0	12	12.00
0830 - 0845	2	0	8	0	5	1	0	0	16	14.90
0845 - 0900	0	0	8	0	0	1	0	0	9	9.50
Hourly Total	2	0	36	0	10	3	0	0	51	50.90
Hourly Average	0.50	0.00	9.00	0.00	2.50	0.75	0.00	0.00	12.75	12.73
0900 - 0915	1	0	4	1	1	0	0	0	7	6.20
0915 - 0930	1	0	7	1	0	0	0	0	9	8.20
0930 - 0945	0	0	3	0	1	0	0	0	4	4.00
0945 - 1000	0	0	12	1	1	0	0	0	14	14.00
Hourly Total	2	0	26	3	3	0	0	0	34	32.40
Hourly Average	0.50	0.00	6.50	0.75	0.75	0.00	0.00	0.00	8.50	8.10
Session Total	5	0	96	3	25	3	0	0	132	129.50
Session Average	0.42	0.00	8.00	0.25	2.08	0.25	0.00	0.00	11.00	10.79

Date
Tuesday 15 June 2021

Weather
Sunny Intervals
Temp: 18°C

1600 - 1900 (Weekday PM Peak)

Movement 3.6: Right from A6143 Water Street (West) to New Elm Road									Original Data	
TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL
1600 - 1615	0	0	1	0	0	0	0	0	1	1.00
1615 - 1630	1	0	5	0	0	0	0	0	6	5.20
1630 - 1645	0	0	5	0	5	0	0	0	10	10.00
1645 - 1700	0	0	5	0	1	0	0	0	6	6.00
Hourly Total	1	0	16	0	6	0	0	0	23	22.20
Hourly Average	0.25	0.00	4.00	0.00	1.50	0.00	0.00	0.00	5.75	5.55
1700 - 1715	0	0	3	0	1	0	0	0	4	4.00
1715 - 1730	0	0	2	0	0	0	0	0	2	2.00
1730 - 1745	1	0	11	0	0	0	0	0	12	11.20
1745 - 1800	0	0	8	0	0	0	0	0	8	8.00
Hourly Total	1	0	24	0	1	0	0	0	26	25.20
Hourly Average	0.25	0.00	6.00	0.00	0.25	0.00	0.00	0.00	6.50	6.30
1800 - 1815	0	0	13	0	1	0	0	0	14	14.00
1815 - 1830	0	0	6	0	0	0	0	0	6	6.00
1830 - 1845	0	0	4	0	0	0	0	0	4	4.00
1845 - 1900	0	0	3	0	0	0	0	0	3	3.00
Hourly Total	0	0	26	0	1	0	0	0	27	27.00
Hourly Average	0.00	0.00	6.50	0.00	0.25	0.00	0.00	0.00	6.75	6.75
Session Total	2	0	66	0	8	0	0	0	76	74.40
Session Average	0.17	0.00	5.50	0.00	0.67	0.00	0.00	0.00	6.33	6.20

Appendix E

TRICS Data

Calculation Reference: AUDIT-715001-210525-0515

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : C - FLATS PRIVATELY OWNED
 MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON	
	BM BROMLEY	1 days
	HM HAMMERSMITH AND FULHAM	1 days
	HO HOUNSLOW	1 days
	IS ISLINGTON	1 days
02	SOUTH EAST	
	BD BEDFORDSHIRE	2 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: 146 to 194 (units:)
 Range Selected by User: 100 to 493 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/13 to 14/11/19

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

Selected survey days:

Monday	1 days
Tuesday	3 days
Thursday	1 days
Friday	1 days

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

Selected survey types:

Manual count	6 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:

Town Centre	2
Edge of Town Centre	4

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

Selected Location Sub Categories:

Development Zone	2
Residential Zone	1
Built-Up Zone	2
No Sub Category	1

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

Secondary Filtering selection:

Use Class:

C3 6 days

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

25,001 to 50,000	4 days
50,001 to 100,000	1 days
100,001 or More	1 days

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

Population within 5 miles:

50,001 to 75,000	1 days
125,001 to 250,000	1 days
500,001 or More	4 days

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

Car ownership within 5 miles:

0.5 or Less	2 days
0.6 to 1.0	2 days
1.1 to 1.5	2 days

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

Travel Plan:

Yes	3 days
No	3 days

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

PTAL Rating:

No PTAL Present	2 days
2 Poor	1 days
5 Very Good	1 days
6a Excellent	1 days
6b (High) Excellent	1 days

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

LIST OF SITES relevant to selection parameters

1	BD-03-C-01	BLOCKS OF FLATS	BEDFORDSHIRE
	WING ROAD		
	LEIGHTON BUZZARD		
	LINSLADE		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	175	
	Survey date: TUESDAY	15/05/18	Survey Type: MANUAL
2	BD-03-C-03	BLOCKS OF FLATS	BEDFORDSHIRE
	COURT DRIVE		
	DUNSTABLE		
	Edge of Town Centre		
	No Sub Category		
	Total No of Dwellings:	146	
	Survey date: TUESDAY	15/05/18	Survey Type: MANUAL
3	BM-03-C-01	BLOCKS OF FLATS	BROMLEY
	RINGER'S ROAD		
	BROMLEY		
	Town Centre		
	Built-Up Zone		
	Total No of Dwellings:	160	
	Survey date: MONDAY	12/11/18	Survey Type: MANUAL
4	HM-03-C-02	BLOCKS OF FLATS	HAMMERSMITH AND FULHAM
	GLENTHORNE ROAD		
	HAMMERSMITH		
	Town Centre		
	Built-Up Zone		
	Total No of Dwellings:	194	
	Survey date: TUESDAY	30/04/19	Survey Type: MANUAL
5	HO-03-C-03	BLOCKS OF FLATS	HOUNSLOW
	COMMERCE ROAD		
	BRENTFORD		
	Edge of Town Centre		
	Development Zone		
	Total No of Dwellings:	150	
	Survey date: FRIDAY	18/11/16	Survey Type: MANUAL
6	IS-03-C-07	BLOCK OF FLATS	ISLINGTON
	CITY ROAD		
	ISLINGTON		
	Edge of Town Centre		
	Development Zone		
	Total No of Dwellings:	185	
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL

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

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

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	168	0.029	6	168	0.103	6	168	0.132
08:00 - 09:00	6	168	0.046	6	168	0.099	6	168	0.145
09:00 - 10:00	6	168	0.051	6	168	0.053	6	168	0.104
10:00 - 11:00	6	168	0.050	6	168	0.056	6	168	0.106
11:00 - 12:00	6	168	0.042	6	168	0.064	6	168	0.106
12:00 - 13:00	6	168	0.056	6	168	0.064	6	168	0.120
13:00 - 14:00	6	168	0.044	6	168	0.054	6	168	0.098
14:00 - 15:00	6	168	0.031	6	168	0.029	6	168	0.060
15:00 - 16:00	6	168	0.069	6	168	0.059	6	168	0.128
16:00 - 17:00	6	168	0.091	6	168	0.058	6	168	0.149
17:00 - 18:00	6	168	0.113	6	168	0.063	6	168	0.176
18:00 - 19:00	6	168	0.141	6	168	0.081	6	168	0.222
19:00 - 20:00	4	172	0.061	4	172	0.058	4	172	0.119
20:00 - 21:00	4	172	0.032	4	172	0.032	4	172	0.064
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.856			0.873			1.729

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: 146 - 194 (units:)
 Survey date range: 01/01/13 - 14/11/19
 Number of weekdays (Monday-Friday): 6
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 1
 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.

Vectos (North) Limited 4th Floor, Oxford Place, 61 Oxford St Manchester

Licence No: 715001

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	168	0.006	6	168	0.007	6	168	0.013
08:00 - 09:00	6	168	0.009	6	168	0.008	6	168	0.017
09:00 - 10:00	6	168	0.010	6	168	0.013	6	168	0.023
10:00 - 11:00	6	168	0.008	6	168	0.008	6	168	0.016
11:00 - 12:00	6	168	0.006	6	168	0.006	6	168	0.012
12:00 - 13:00	6	168	0.007	6	168	0.007	6	168	0.014
13:00 - 14:00	6	168	0.004	6	168	0.004	6	168	0.008
14:00 - 15:00	6	168	0.001	6	168	0.001	6	168	0.002
15:00 - 16:00	6	168	0.006	6	168	0.005	6	168	0.011
16:00 - 17:00	6	168	0.006	6	168	0.007	6	168	0.013
17:00 - 18:00	6	168	0.010	6	168	0.008	6	168	0.018
18:00 - 19:00	6	168	0.019	6	168	0.019	6	168	0.038
19:00 - 20:00	4	172	0.013	4	172	0.015	4	172	0.028
20:00 - 21:00	4	172	0.009	4	172	0.007	4	172	0.016
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		0.114			0.115				0.229

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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Licence No: 715001

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	168	0.000	6	168	0.000	6	168	0.000
08:00 - 09:00	6	168	0.001	6	168	0.001	6	168	0.002
09:00 - 10:00	6	168	0.004	6	168	0.003	6	168	0.007
10:00 - 11:00	6	168	0.000	6	168	0.000	6	168	0.000
11:00 - 12:00	6	168	0.003	6	168	0.001	6	168	0.004
12:00 - 13:00	6	168	0.000	6	168	0.001	6	168	0.001
13:00 - 14:00	6	168	0.003	6	168	0.004	6	168	0.007
14:00 - 15:00	6	168	0.000	6	168	0.000	6	168	0.000
15:00 - 16:00	6	168	0.000	6	168	0.001	6	168	0.001
16:00 - 17:00	6	168	0.000	6	168	0.000	6	168	0.000
17:00 - 18:00	6	168	0.000	6	168	0.000	6	168	0.000
18:00 - 19:00	6	168	0.000	6	168	0.000	6	168	0.000
19:00 - 20:00	4	172	0.000	4	172	0.000	4	172	0.000
20:00 - 21:00	4	172	0.000	4	172	0.000	4	172	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.011			0.011			0.022

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL PSVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	168	0.000	6	168	0.000	6	168	0.000
08:00 - 09:00	6	168	0.000	6	168	0.001	6	168	0.001
09:00 - 10:00	6	168	0.000	6	168	0.001	6	168	0.001
10:00 - 11:00	6	168	0.000	6	168	0.000	6	168	0.000
11:00 - 12:00	6	168	0.000	6	168	0.002	6	168	0.002
12:00 - 13:00	6	168	0.000	6	168	0.003	6	168	0.003
13:00 - 14:00	6	168	0.000	6	168	0.001	6	168	0.001
14:00 - 15:00	6	168	0.000	6	168	0.000	6	168	0.000
15:00 - 16:00	6	168	0.000	6	168	0.001	6	168	0.001
16:00 - 17:00	6	168	0.000	6	168	0.001	6	168	0.001
17:00 - 18:00	6	168	0.000	6	168	0.000	6	168	0.000
18:00 - 19:00	6	168	0.000	6	168	0.000	6	168	0.000
19:00 - 20:00	4	172	0.000	4	172	0.000	4	172	0.000
20:00 - 21:00	4	172	0.000	4	172	0.000	4	172	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.010			0.010

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	168	0.003	6	168	0.008	6	168	0.011
08:00 - 09:00	6	168	0.002	6	168	0.017	6	168	0.019
09:00 - 10:00	6	168	0.000	6	168	0.001	6	168	0.001
10:00 - 11:00	6	168	0.003	6	168	0.008	6	168	0.011
11:00 - 12:00	6	168	0.003	6	168	0.004	6	168	0.007
12:00 - 13:00	6	168	0.000	6	168	0.000	6	168	0.000
13:00 - 14:00	6	168	0.003	6	168	0.001	6	168	0.004
14:00 - 15:00	6	168	0.006	6	168	0.002	6	168	0.008
15:00 - 16:00	6	168	0.003	6	168	0.001	6	168	0.004
16:00 - 17:00	6	168	0.003	6	168	0.000	6	168	0.003
17:00 - 18:00	6	168	0.005	6	168	0.004	6	168	0.009
18:00 - 19:00	6	168	0.003	6	168	0.002	6	168	0.005
19:00 - 20:00	4	172	0.015	4	172	0.004	4	172	0.019
20:00 - 21:00	4	172	0.007	4	172	0.001	4	172	0.008
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.056			0.053			0.109

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

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

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

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	168	0.029	6	168	0.151	6	168	0.180
08:00 - 09:00	6	168	0.048	6	168	0.167	6	168	0.215
09:00 - 10:00	6	168	0.049	6	168	0.063	6	168	0.112
10:00 - 11:00	6	168	0.055	6	168	0.071	6	168	0.126
11:00 - 12:00	6	168	0.051	6	168	0.079	6	168	0.130
12:00 - 13:00	6	168	0.069	6	168	0.076	6	168	0.145
13:00 - 14:00	6	168	0.057	6	168	0.064	6	168	0.121
14:00 - 15:00	6	168	0.036	6	168	0.037	6	168	0.073
15:00 - 16:00	6	168	0.095	6	168	0.069	6	168	0.164
16:00 - 17:00	6	168	0.125	6	168	0.072	6	168	0.197
17:00 - 18:00	6	168	0.169	6	168	0.082	6	168	0.251
18:00 - 19:00	6	168	0.247	6	168	0.086	6	168	0.333
19:00 - 20:00	4	172	0.070	4	172	0.084	4	172	0.154
20:00 - 21:00	4	172	0.042	4	172	0.029	4	172	0.071
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		1.142			1.130				2.272

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	168	0.020	6	168	0.071	6	168	0.091
08:00 - 09:00	6	168	0.040	6	168	0.122	6	168	0.162
09:00 - 10:00	6	168	0.042	6	168	0.070	6	168	0.112
10:00 - 11:00	6	168	0.047	6	168	0.040	6	168	0.087
11:00 - 12:00	6	168	0.040	6	168	0.038	6	168	0.078
12:00 - 13:00	6	168	0.044	6	168	0.042	6	168	0.086
13:00 - 14:00	6	168	0.048	6	168	0.047	6	168	0.095
14:00 - 15:00	6	168	0.041	6	168	0.062	6	168	0.103
15:00 - 16:00	6	168	0.062	6	168	0.062	6	168	0.124
16:00 - 17:00	6	168	0.072	6	168	0.053	6	168	0.125
17:00 - 18:00	6	168	0.067	6	168	0.045	6	168	0.112
18:00 - 19:00	6	168	0.097	6	168	0.080	6	168	0.177
19:00 - 20:00	4	172	0.086	4	172	0.046	4	172	0.132
20:00 - 21:00	4	172	0.064	4	172	0.049	4	172	0.113
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.770			0.827			1.597

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.

Vectos (North) Limited 4th Floor, Oxford Place, 61 Oxford St Manchester

Licence No: 715001

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL BUS/TRAM PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	168	0.003	6	168	0.054	6	168	0.057
08:00 - 09:00	6	168	0.010	6	168	0.096	6	168	0.106
09:00 - 10:00	6	168	0.009	6	168	0.033	6	168	0.042
10:00 - 11:00	6	168	0.008	6	168	0.021	6	168	0.029
11:00 - 12:00	6	168	0.010	6	168	0.014	6	168	0.024
12:00 - 13:00	6	168	0.020	6	168	0.019	6	168	0.039
13:00 - 14:00	6	168	0.017	6	168	0.029	6	168	0.046
14:00 - 15:00	6	168	0.023	6	168	0.013	6	168	0.036
15:00 - 16:00	6	168	0.048	6	168	0.025	6	168	0.073
16:00 - 17:00	6	168	0.025	6	168	0.020	6	168	0.045
17:00 - 18:00	6	168	0.056	6	168	0.014	6	168	0.070
18:00 - 19:00	6	168	0.062	6	168	0.019	6	168	0.081
19:00 - 20:00	4	172	0.035	4	172	0.007	4	172	0.042
20:00 - 21:00	4	172	0.006	4	172	0.012	4	172	0.018
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		0.332			0.376			0.708	

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL RAIL PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	168	0.012	6	168	0.108	6	168	0.120
08:00 - 09:00	6	168	0.008	6	168	0.122	6	168	0.130
09:00 - 10:00	6	168	0.020	6	168	0.033	6	168	0.053
10:00 - 11:00	6	168	0.015	6	168	0.018	6	168	0.033
11:00 - 12:00	6	168	0.007	6	168	0.013	6	168	0.020
12:00 - 13:00	6	168	0.016	6	168	0.018	6	168	0.034
13:00 - 14:00	6	168	0.016	6	168	0.014	6	168	0.030
14:00 - 15:00	6	168	0.013	6	168	0.014	6	168	0.027
15:00 - 16:00	6	168	0.012	6	168	0.009	6	168	0.021
16:00 - 17:00	6	168	0.017	6	168	0.017	6	168	0.034
17:00 - 18:00	6	168	0.041	6	168	0.009	6	168	0.050
18:00 - 19:00	6	168	0.081	6	168	0.013	6	168	0.094
19:00 - 20:00	4	172	0.090	4	172	0.004	4	172	0.094
20:00 - 21:00	4	172	0.042	4	172	0.009	4	172	0.051
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.390			0.401			0.791

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
 MULTI-MODAL PUBLIC TRANSPORT USERS
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	168	0.015	6	168	0.162	6	168	0.177
08:00 - 09:00	6	168	0.018	6	168	0.218	6	168	0.236
09:00 - 10:00	6	168	0.029	6	168	0.065	6	168	0.094
10:00 - 11:00	6	168	0.023	6	168	0.039	6	168	0.062
11:00 - 12:00	6	168	0.017	6	168	0.027	6	168	0.044
12:00 - 13:00	6	168	0.036	6	168	0.037	6	168	0.073
13:00 - 14:00	6	168	0.033	6	168	0.043	6	168	0.076
14:00 - 15:00	6	168	0.036	6	168	0.027	6	168	0.063
15:00 - 16:00	6	168	0.059	6	168	0.034	6	168	0.093
16:00 - 17:00	6	168	0.042	6	168	0.037	6	168	0.079
17:00 - 18:00	6	168	0.097	6	168	0.023	6	168	0.120
18:00 - 19:00	6	168	0.144	6	168	0.032	6	168	0.176
19:00 - 20:00	4	172	0.125	4	172	0.012	4	172	0.137
20:00 - 21:00	4	172	0.048	4	172	0.020	4	172	0.068
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.722			0.776			1.498

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	168	0.066	6	168	0.393	6	168	0.459
08:00 - 09:00	6	168	0.107	6	168	0.524	6	168	0.631
09:00 - 10:00	6	168	0.119	6	168	0.200	6	168	0.319
10:00 - 11:00	6	168	0.128	6	168	0.157	6	168	0.285
11:00 - 12:00	6	168	0.111	6	168	0.148	6	168	0.259
12:00 - 13:00	6	168	0.149	6	168	0.154	6	168	0.303
13:00 - 14:00	6	168	0.141	6	168	0.154	6	168	0.295
14:00 - 15:00	6	168	0.118	6	168	0.128	6	168	0.246
15:00 - 16:00	6	168	0.220	6	168	0.166	6	168	0.386
16:00 - 17:00	6	168	0.242	6	168	0.162	6	168	0.404
17:00 - 18:00	6	168	0.339	6	168	0.153	6	168	0.492
18:00 - 19:00	6	168	0.490	6	168	0.200	6	168	0.690
19:00 - 20:00	4	172	0.295	4	172	0.147	4	172	0.442
20:00 - 21:00	4	172	0.161	4	172	0.100	4	172	0.261
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		2.686			2.786				5.472

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL CARS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	168	0.020	6	168	0.088	6	168	0.108
08:00 - 09:00	6	168	0.027	6	168	0.081	6	168	0.108
09:00 - 10:00	6	168	0.027	6	168	0.026	6	168	0.053
10:00 - 11:00	6	168	0.027	6	168	0.037	6	168	0.064
11:00 - 12:00	6	168	0.019	6	168	0.040	6	168	0.059
12:00 - 13:00	6	168	0.034	6	168	0.036	6	168	0.070
13:00 - 14:00	6	168	0.023	6	168	0.029	6	168	0.052
14:00 - 15:00	6	168	0.022	6	168	0.019	6	168	0.041
15:00 - 16:00	6	168	0.041	6	168	0.033	6	168	0.074
16:00 - 17:00	6	168	0.061	6	168	0.029	6	168	0.090
17:00 - 18:00	6	168	0.086	6	168	0.043	6	168	0.129
18:00 - 19:00	6	168	0.107	6	168	0.050	6	168	0.157
19:00 - 20:00	4	172	0.030	4	172	0.026	4	172	0.056
20:00 - 21:00	4	172	0.016	4	172	0.017	4	172	0.033
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		0.540			0.554			1.094	

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.

Vectos (North) Limited 4th Floor, Oxford Place, 61 Oxford St Manchester

Licence No: 715001

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL LGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	168	0.003	6	168	0.007	6	168	0.010
08:00 - 09:00	6	168	0.007	6	168	0.004	6	168	0.011
09:00 - 10:00	6	168	0.011	6	168	0.011	6	168	0.022
10:00 - 11:00	6	168	0.012	6	168	0.010	6	168	0.022
11:00 - 12:00	6	168	0.013	6	168	0.015	6	168	0.028
12:00 - 13:00	6	168	0.015	6	168	0.015	6	168	0.030
13:00 - 14:00	6	168	0.012	6	168	0.014	6	168	0.026
14:00 - 15:00	6	168	0.006	6	168	0.007	6	168	0.013
15:00 - 16:00	6	168	0.019	6	168	0.017	6	168	0.036
16:00 - 17:00	6	168	0.019	6	168	0.016	6	168	0.035
17:00 - 18:00	6	168	0.010	6	168	0.007	6	168	0.017
18:00 - 19:00	6	168	0.005	6	168	0.004	6	168	0.009
19:00 - 20:00	4	172	0.006	4	172	0.009	4	172	0.015
20:00 - 21:00	4	172	0.000	4	172	0.000	4	172	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.138			0.136			0.274

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.

Vectos (North) Limited 4th Floor, Oxford Place, 61 Oxford St Manchester

Licence No: 715001

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL MOTOR CYCLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	168	0.000	6	168	0.001	6	168	0.001
08:00 - 09:00	6	168	0.002	6	168	0.004	6	168	0.006
09:00 - 10:00	6	168	0.000	6	168	0.000	6	168	0.000
10:00 - 11:00	6	168	0.004	6	168	0.002	6	168	0.006
11:00 - 12:00	6	168	0.001	6	168	0.001	6	168	0.002
12:00 - 13:00	6	168	0.001	6	168	0.003	6	168	0.004
13:00 - 14:00	6	168	0.002	6	168	0.003	6	168	0.005
14:00 - 15:00	6	168	0.002	6	168	0.002	6	168	0.004
15:00 - 16:00	6	168	0.004	6	168	0.003	6	168	0.007
16:00 - 17:00	6	168	0.005	6	168	0.006	6	168	0.011
17:00 - 18:00	6	168	0.007	6	168	0.006	6	168	0.013
18:00 - 19:00	6	168	0.010	6	168	0.008	6	168	0.018
19:00 - 20:00	4	172	0.012	4	172	0.009	4	172	0.021
20:00 - 21:00	4	172	0.007	4	172	0.007	4	172	0.014
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.057			0.055			0.112

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL Underground Passengers

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	168	0.010	6	168	0.042	6	168	0.052
08:00 - 09:00	6	168	0.007	6	168	0.063	6	168	0.070
09:00 - 10:00	6	168	0.016	6	168	0.016	6	168	0.032
10:00 - 11:00	6	168	0.012	6	168	0.013	6	168	0.025
11:00 - 12:00	6	168	0.006	6	168	0.010	6	168	0.016
12:00 - 13:00	6	168	0.011	6	168	0.015	6	168	0.026
13:00 - 14:00	6	168	0.013	6	168	0.007	6	168	0.020
14:00 - 15:00	6	168	0.010	6	168	0.013	6	168	0.023
15:00 - 16:00	6	168	0.006	6	168	0.008	6	168	0.014
16:00 - 17:00	6	168	0.006	6	168	0.008	6	168	0.014
17:00 - 18:00	6	168	0.014	6	168	0.008	6	168	0.022
18:00 - 19:00	6	168	0.038	6	168	0.011	6	168	0.049
19:00 - 20:00	4	172	0.039	4	172	0.004	4	172	0.043
20:00 - 21:00	4	172	0.028	4	172	0.009	4	172	0.037
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.216			0.227			0.443

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL Overground Passengers

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	168	0.000	6	168	0.001	6	168	0.001
08:00 - 09:00	6	168	0.000	6	168	0.000	6	168	0.000
09:00 - 10:00	6	168	0.000	6	168	0.001	6	168	0.001
10:00 - 11:00	6	168	0.000	6	168	0.000	6	168	0.000
11:00 - 12:00	6	168	0.000	6	168	0.000	6	168	0.000
12:00 - 13:00	6	168	0.000	6	168	0.000	6	168	0.000
13:00 - 14:00	6	168	0.000	6	168	0.000	6	168	0.000
14:00 - 15:00	6	168	0.001	6	168	0.000	6	168	0.001
15:00 - 16:00	6	168	0.000	6	168	0.000	6	168	0.000
16:00 - 17:00	6	168	0.000	6	168	0.000	6	168	0.000
17:00 - 18:00	6	168	0.000	6	168	0.000	6	168	0.000
18:00 - 19:00	6	168	0.000	6	168	0.000	6	168	0.000
19:00 - 20:00	4	172	0.000	4	172	0.000	4	172	0.000
20:00 - 21:00	4	172	0.000	4	172	0.000	4	172	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.001			0.002			0.003

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL National Rail Passengers

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	168	0.002	6	168	0.058	6	168	0.060
08:00 - 09:00	6	168	0.001	6	168	0.048	6	168	0.049
09:00 - 10:00	6	168	0.004	6	168	0.012	6	168	0.016
10:00 - 11:00	6	168	0.000	6	168	0.004	6	168	0.004
11:00 - 12:00	6	168	0.001	6	168	0.003	6	168	0.004
12:00 - 13:00	6	168	0.003	6	168	0.002	6	168	0.005
13:00 - 14:00	6	168	0.002	6	168	0.006	6	168	0.008
14:00 - 15:00	6	168	0.001	6	168	0.001	6	168	0.002
15:00 - 16:00	6	168	0.004	6	168	0.001	6	168	0.005
16:00 - 17:00	6	168	0.005	6	168	0.009	6	168	0.014
17:00 - 18:00	6	168	0.022	6	168	0.001	6	168	0.023
18:00 - 19:00	6	168	0.039	6	168	0.002	6	168	0.041
19:00 - 20:00	4	172	0.051	4	172	0.000	4	172	0.051
20:00 - 21:00	4	172	0.015	4	172	0.000	4	172	0.015
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		0.150			0.147				0.297

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.

Vectos (North) Limited 4th Floor, Oxford Place, 61 Oxford St Manchester

Licence No: 715001

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL Bus Passengers

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	168	0.003	6	168	0.035	6	168	0.038
08:00 - 09:00	6	168	0.010	6	168	0.058	6	168	0.068
09:00 - 10:00	6	168	0.009	6	168	0.020	6	168	0.029
10:00 - 11:00	6	168	0.005	6	168	0.017	6	168	0.022
11:00 - 12:00	6	168	0.005	6	168	0.009	6	168	0.014
12:00 - 13:00	6	168	0.011	6	168	0.012	6	168	0.023
13:00 - 14:00	6	168	0.011	6	168	0.016	6	168	0.027
14:00 - 15:00	6	168	0.011	6	168	0.005	6	168	0.016
15:00 - 16:00	6	168	0.009	6	168	0.015	6	168	0.024
16:00 - 17:00	6	168	0.014	6	168	0.013	6	168	0.027
17:00 - 18:00	6	168	0.030	6	168	0.008	6	168	0.038
18:00 - 19:00	6	168	0.035	6	168	0.011	6	168	0.046
19:00 - 20:00	4	172	0.035	4	172	0.007	4	172	0.042
20:00 - 21:00	4	172	0.006	4	172	0.012	4	172	0.018
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.194			0.238			0.432

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL Servicing Vehicles

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	168	0.005	6	168	0.005	6	168	0.010
08:00 - 09:00	6	168	0.010	6	168	0.006	6	168	0.016
09:00 - 10:00	6	168	0.015	6	168	0.012	6	168	0.027
10:00 - 11:00	6	168	0.013	6	168	0.010	6	168	0.023
11:00 - 12:00	6	168	0.009	6	168	0.010	6	168	0.019
12:00 - 13:00	6	168	0.011	6	168	0.014	6	168	0.025
13:00 - 14:00	6	168	0.015	6	168	0.016	6	168	0.031
14:00 - 15:00	6	168	0.003	6	168	0.006	6	168	0.009
15:00 - 16:00	6	168	0.017	6	168	0.019	6	168	0.036
16:00 - 17:00	6	168	0.018	6	168	0.017	6	168	0.035
17:00 - 18:00	6	168	0.012	6	168	0.011	6	168	0.023
18:00 - 19:00	6	168	0.012	6	168	0.013	6	168	0.025
19:00 - 20:00	4	172	0.015	4	172	0.016	4	172	0.031
20:00 - 21:00	4	172	0.004	4	172	0.006	4	172	0.010
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		0.159			0.161				0.320

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

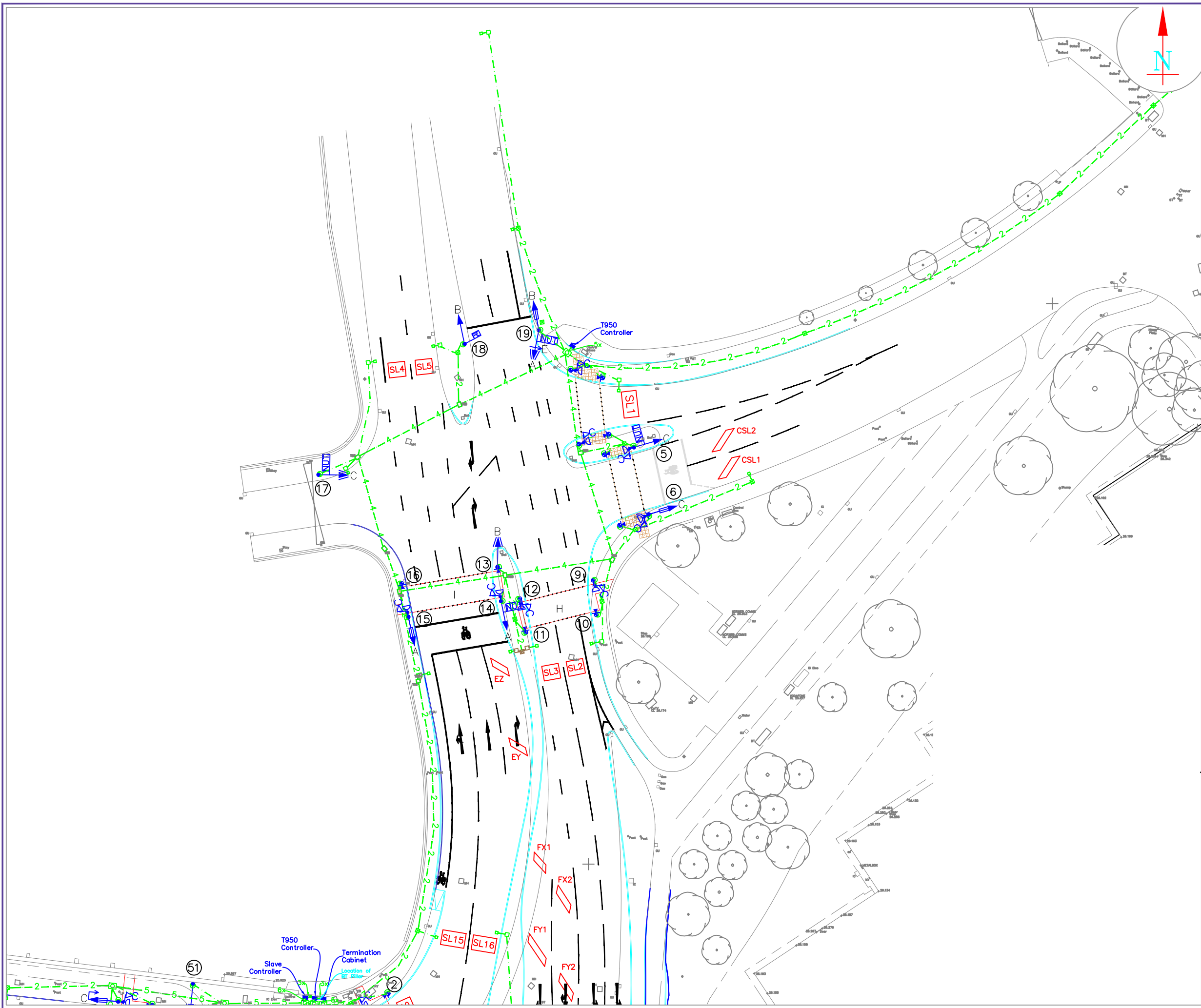
To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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

TRIP RATE PER SPACE (CARS)

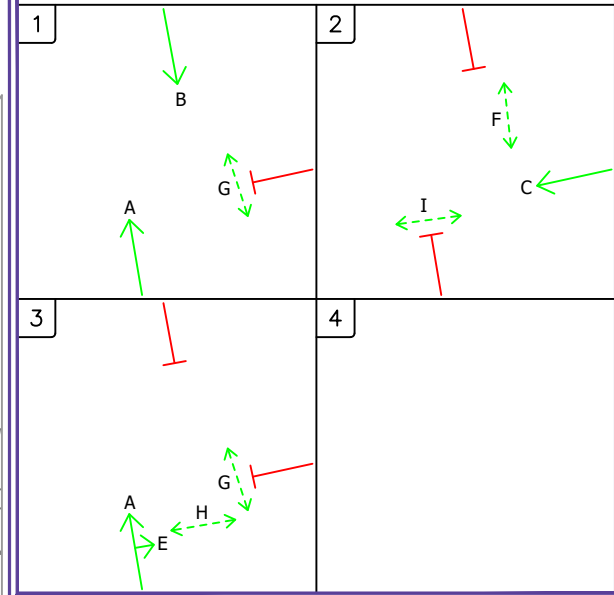
Site reference: BD-03-C-01 Survey date: Tuesday 15/05/2018					Site reference: BD-03-C-03 Survey date: Tuesday 15/05/2018					Site reference: BM-03-C-01 Survey date: Monday 12/11/2018				
Multi-Modal survey site					Multi-Modal survey site					Multi-Modal survey site				
Vehicles surveyed: Cars					Vehicles surveyed: Cars					Vehicles surveyed: Cars				
Arrivals					Arrivals					Arrivals				
Departures					Departures					Departures				
Car Arrivals					Car Arrivals					Car Arrivals				
Trip Rate per Space					Trip Rate per Space					Trip Rate per Space				
Car Departures					Car Departures					Car Departures				
Trip Rate per space					Trip Rate per space					Trip Rate per space				
00:00-01:00					00:00-01:00					00:00-01:00				
01:00-02:00					01:00-02:00					01:00-02:00				
02:00-03:00					02:00-03:00					02:00-03:00				
03:00-04:00					03:00-04:00					03:00-04:00				
04:00-05:00					04:00-05:00					04:00-05:00				
05:00-06:00					05:00-06:00					05:00-06:00				
06:00-07:00					06:00-07:00					06:00-07:00				
07:00-08:00	8	0.038	35	0.164	07:00-08:00	1	0.005	19	0.104	07:00-08:00	4	0.048	12	0.145
08:00-09:00	8	0.038	29	0.136	08:00-09:00	8	0.044	20	0.110	08:00-09:00	3	0.036	12	0.145
09:00-10:00	7	0.033	6	0.028	09:00-10:00	7	0.038	7	0.038	09:00-10:00	3	0.036	2	0.024
10:00-11:00	11	0.052	13	0.061	10:00-11:00	2	0.011	6	0.033	10:00-11:00	2	0.024	1	0.012
11:00-12:00	7	0.033	13	0.061	11:00-12:00	2	0.011	6	0.033	11:00-12:00	2	0.024	3	0.036
12:00-13:00	10	0.047	8	0.038	12:00-13:00	7	0.038	10	0.055	12:00-13:00	1	0.012	4	0.048
13:00-14:00	8	0.038	11	0.052	13:00-14:00	6	0.033	6	0.033	13:00-14:00	2	0.024	2	0.024
14:00-15:00	9	0.042	8	0.038	14:00-15:00	7	0.038	7	0.038	14:00-15:00	2	0.024	2	0.024
15:00-16:00	9	0.042	13	0.061	15:00-16:00	11	0.060	6	0.033	15:00-16:00	9	0.108	5	0.060
16:00-17:00	16	0.075	10	0.047	16:00-17:00	18	0.099	9	0.049	16:00-17:00	3	0.036	0	0.000
17:00-18:00	28	0.131	13	0.061	17:00-18:00	24	0.132	14	0.077	17:00-18:00	7	0.084	2	0.024
18:00-19:00	46	0.216	19	0.089	18:00-19:00	28	0.154	13	0.071	18:00-19:00	9	0.108	6	0.072
19:00-20:00					19:00-20:00					19:00-20:00	8	0.096	5	0.060
20:00-21:00					20:00-21:00					20:00-21:00	4	0.048	4	0.048
21:00-22:00					21:00-22:00					21:00-22:00				
22:00-23:00					22:00-23:00					22:00-23:00				
23:00-24:00					23:00-24:00					23:00-24:00				
Site reference: HM-03-C-02 Survey date: Tuesday 30/04/2019					Site reference: HO-03-C-03 Survey date: Friday 18/11/2016					Site reference: IS-03-C-04 Survey date: Thursday 14/07/2016				
Multi-Modal survey site					Multi-Modal survey site					Multi-Modal survey site				
Vehicles surveyed: Cars					Vehicles surveyed: Cars					Vehicles surveyed: Cars				
Arrivals					Arrivals					Arrivals				
Departures					Departures					Departures				
Car Arrivals					Car Arrivals					Car Arrivals				
Trip Rate per Space					Trip Rate per Space					Trip Rate per Space				
Car Departures					Car Departures					Car Departures				
Trip Rate per space					Trip Rate per space					Trip Rate per space				
00:00-01:00					00:00-01:00					00:00-01:00				
01:00-02:00					01:00-02:00					01:00-02:00				
02:00-03:00					02:00-03:00					02:00-03:00				
03:00-04:00					03:00-04:00					03:00-04:00				
04:00-05:00					04:00-05:00					04:00-05:00				
05:00-06:00					05:00-06:00					05:00-06:00				
06:00-07:00					06:00-07:00					06:00-07:00				
07:00-08:00	3	0.057	7	0.132	07:00-08:00	4	0.038	15	0.142	07:00-08:00	0	0.000	0	0.000
08:00-09:00	1	0.019	4	0.075	08:00-09:00	4	0.038	15	0.142	08:00-09:00	0	0.000	0	0.000
09:00-10:00	3	0.057	1	0.019	09:00-10:00	5	0.047	9	0.085	09:00-10:00	0	0.000	1	0.024
10:00-11:00	1	0.019	2	0.038	10:00-11:00	10	0.094	13	0.123	10:00-11:00	0	0.000	1	0.024
11:00-12:00	2	0.038	3	0.057	11:00-12:00	6	0.057	12	0.113	11:00-12:00	1	0.024	1	0.024
12:00-13:00	3	0.057	3	0.057	12:00-13:00	10	0.094	9	0.085	12:00-13:00	1	0.024	0	0.000
13:00-14:00	2	0.038	4	0.075	13:00-14:00	3	0.028	4	0.038	13:00-14:00	1	0.024	2	0.048
14:00-15:00	1	0.019	0	0.000	14:00-15:00	2	0.019	2	0.019	14:00-15:00	0	0.000	0	0.000
15:00-16:00	1	0.019	0	0.000	15:00-16:00	9	0.085	7	0.066	15:00-16:00	0	0.000	0	0.000
16:00-17:00	6	0.113	1	0.019	16:00-17:00	18	0.170	7	0.066	16:00-17:00	0	0.000	0	0.000
17:00-18:00	8	0.151	3	0.057	17:00-18:00	18	0.170	11	0.104	17:00-18:00	1	0.024	1	0.024
18:00-19:00	9	0.170	4	0.075	18:00-19:00	16	0.151	9	0.085	18:00-19:00	0	0.000	0	0.000
19:00-20:00	3	0.057	3	0.057	19:00-20:00	9	0.085	10	0.094	19:00-20:00	1	0.024	1	0.024
20:00-21:00	2	0.038	2	0.038	20:00-21:00	5	0.047	6	0.057	20:00-21:00	0	0.000	0	0.000
21:00-22:00					21:00-22:00					21:00-22:00				
22:00-23:00					22:00-23:00					22:00-23:00				
23:00-24:00					23:00-24:00					23:00-24:00				
Site reference: IS-03-C-07 Survey date: Thursday 06/06/2019					Average Trip Rate per Space									
Multi-Modal survey site														
Vehicles surveyed: Cars														
Arrivals					Arrivals									
Departures					Departures									
Car Arrivals					Car Arrivals									
Trip Rate per Space					Trip Rate per Space									
Car Departures					Car Departures									
Trip Rate per space					Trip Rate per space									
00:00-01:00					00:00-01:00					00:00-01:00				
01:00-02:00					01:00-02:00					01:00-02:00				
02:00-03:00					02:00-03:00					02:00-03:00				
03:00-04:00					03:00-04:00					03:00-04:00				
04:00-05:00					04:00-05:00					04:00-05:00				
05:00-06:00					05:00-06:00					05:00-06:00				
06:00-07:00					06:00-07:00					06:00-07:00				
07:00-08:00	2	0.023	3	0.035	07:00-08:00		0.030		0.103	07:00-08:00				
08:00-09:00	10	0.116	8	0.093	08:00-09:00		0.042		0.100	08:00-09:00				
09:00-10:00	12	0.140	12	0.140	09:00-10:00		0.050		0.051	09:00-10:00				
10:00-11:00	10	0.116	11	0.128	10:00-11:00		0.045		0.060	10:00-11:00				
11:00-12:00	7	0.081	9	0.105	11:00-12:00		0.038		0.061	11:00-12:00				
12:00-13:00	13	0.151	12	0.140	12:00-13:00		0.060		0.060	12:00-13:00				
13:00-14:00	10	0.116	12	0.140	13:00-14:00		0.043		0.058	13:00-14:00				
14:00-15:00	5	0.058	4	0.047	14:00-15:00		0.029		0.024	14:00-15:00				
15:00-16:00	7	0.081	9	0.105	15:00-16:00		0.057		0.046	15:00-16:00				
16:00-17:00	13	0.151	14	0.163	16:00-17:00		0.092		0.045	16:00-17:00				
17:00-18:00	11	0.128	7	0.081	17:00-18:00		0.117		0.061	17:00-18:00				
18:00-19:00	22	0.256	21	0.244	18:00-19:00		0.151		0.091	18:00-19:00				
19:00-20:00	15	0.174	14	0.163	19:00-20:00		0.062		0.057	19:00-20:00				
20:00-21:00	8	0.093	9	0.105	20:00-21:00		0.032		0.035	20:00-21:00				
21:00-22:00					21:00-22:00					21:00-22:00				
22:00-23:00					22:00-23:00					22:00-23:00				
23:00-24:00					23:00-24:00					23:00-24:00				

Appendix F

Trinity Way/ Water Street Signal Data



Staging Diagrams



REVISIONS		DATE	BY	APP
SCALE 1:500 0.0 5 10 15 20 25 30 metres				
MSIRR/Water Street/Network Rail Access Manchester (1028)				
SUBDISTRICT		Castlefield		
OS_REF		STATUS	Draft	
DATE	18/09/19	DWG CHCKD BY	-	
DRAWN BY	PAT	SITE CHCKD BY	-	
FILENAME	Devsig1028.dwg			
XREFS	X3-Regent_Road.dwg UV005699-Proposed Alignment_13-10-15.dwg Xref UV005699 Combined 2D Topo Survey.dwg			REV
DWG No.	A3 / 03 / 1028 / 02			E

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Transport for Greater Manchester
Urban Traffic Control Unit
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Urban Traffic Control Unit

Client: Vectos
Subject: Controller data and traffic signal timings information
Doc: UTC35/ORN1028/JC
Author: Jordan Christon
Location: Manchester & Salford Inner Relief Route (MSIRR) / Water St (x1028)

Contact:	E-Mail:	Tel:
Jordan Christon	Jordan.Christon@TfGM.com	0161 244 1633
Richard Dolphin	Richard.Dolphin@TfGM.com	0161 244 1800

This Site Operates under UTC Control

Staging

1.	Trinity Way from Regent Road (Phase A) Trinity Way from Salford (Phase B) Pedestrians across Phase C Stop Line (Phase G)
2.	Water Street (Phase C) Pedestrians across Water Street Entrance (Phase F) Pedestrians across Phase A and E Stop Line (Phase I)
3.	Trinity Way from Regent Road (Phase A) Trinity Way from Regent Road Right Turn Arrow (Phase E) Pedestrians across Phase C Stop Line (Phase G) Pedestrians across Phase B Exit Side (phase H)

*Phase D is an unused phase

Note: The attached drawing shows a detailed staging diagram. Note that this layout is based on Ordnance Survey data and is not taken from a topographical survey. The geometry and lane markings are correct to the best of our knowledge, however, changes may have been implemented by the Highway Authority without the involvement of the UTC Unit. The UTC Unit cannot be held responsible for any omissions or errors on the drawing.

Controller phase minimum greens and intergreens

Minimum phase green	To From	A	B	C	D	E	F	G	H	I
7	A		-	7	-	-	9	-	-	5
7	B	-		7	-	5	7	-	9	-
5	C	7	7		-	7	-	5	9	-
4	E	-	4	7	-		9	-	-	5
3	F	7	7	-	-	7		-	-	-
5	G	-	-	7	-	-	-		-	-
5	H	-	7	7	-	-	-	-		-
7	I	10	-	-	-	10	-	-	-	

Phase Delays

Phase E runs on for an additional 3 seconds on the change from stage 3 to 1
 Phase C runs on for an additional 3 seconds on the change from stage 2 to 3
 Phase F runs on for an additional 3 seconds on the change from stage 2 to 3

Stage Lengths

UTC

Time of Day	Stage		
	1	2	3
AM peak (06:00 – 09:00) Cycle time 100 seconds Offset 0 seconds	64	19	17
Off peak (09:00 – 15:30) Cycle time 100 seconds Offset 0 seconds	64	19	17
PM peak (15:30 – 19:00) Cycle time 100 seconds Offset 0 seconds	64	19	17

Note: The above stage times assume all stages are called in the cyclic order 1-2-3-4, with all timings in seconds.

Appendix G

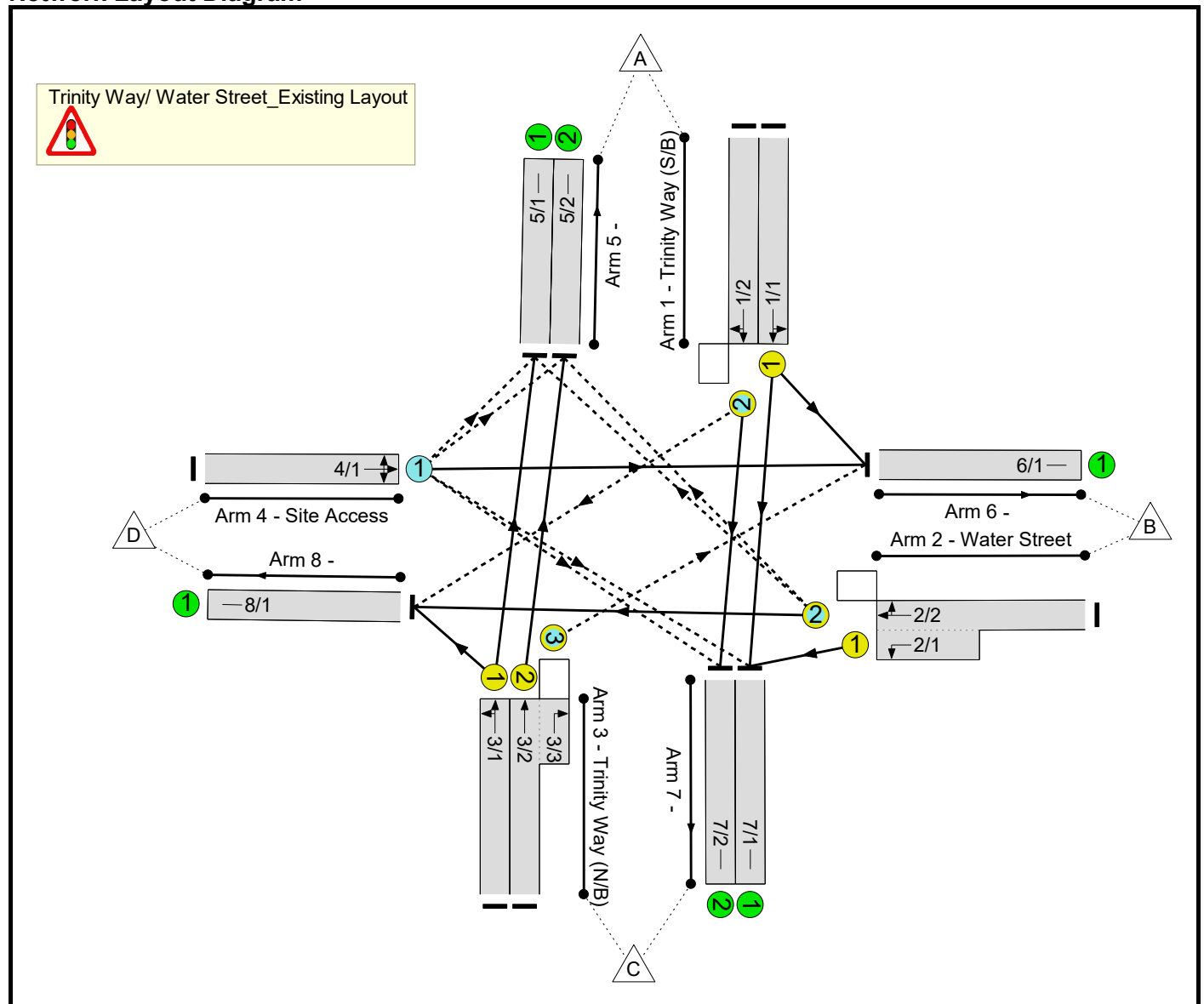
Trinity Way/ Water Street (Existing Layout) LinSig Outputs

Full Input Data And Results
Full Input Data And Results

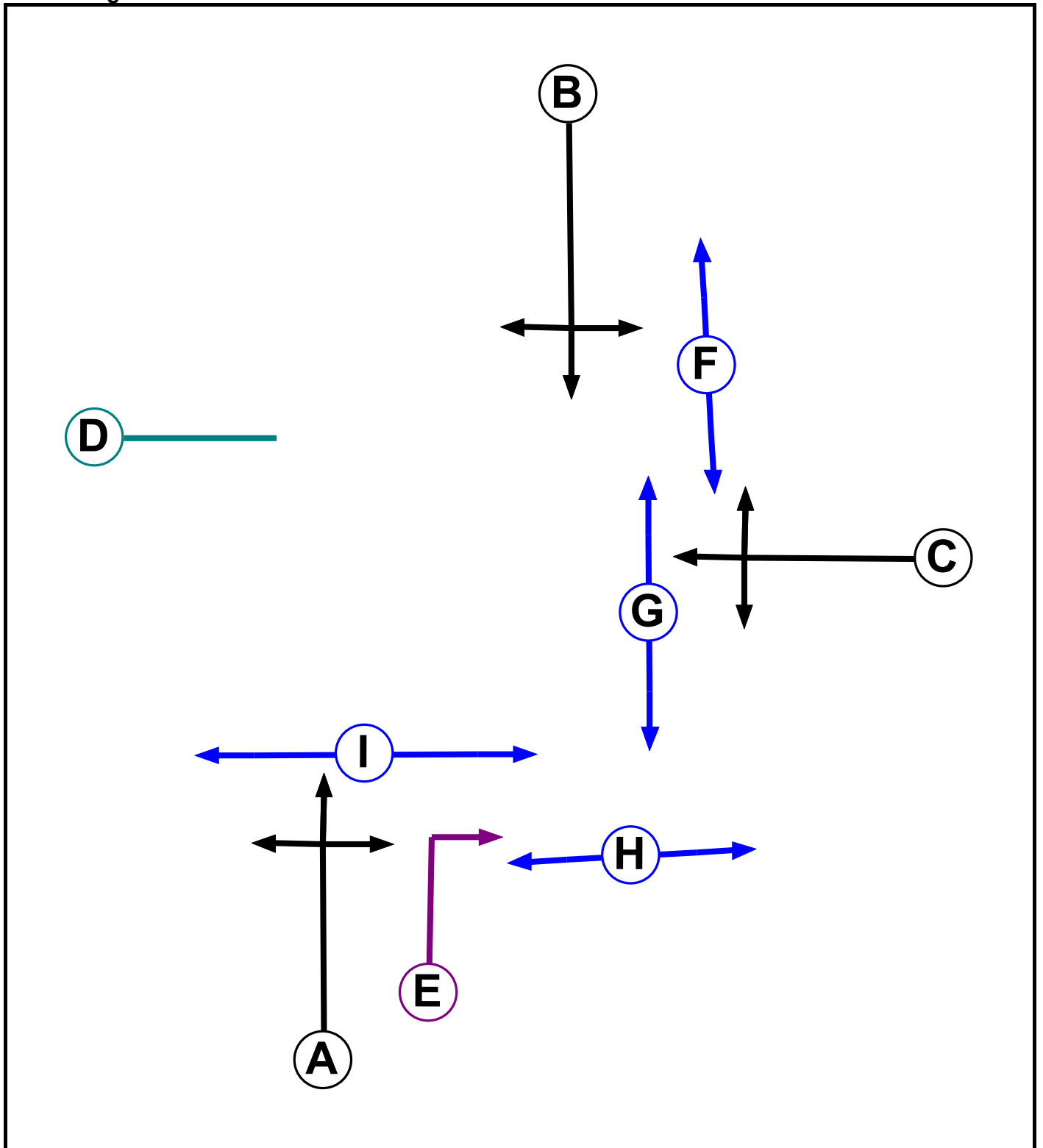
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Trinity Way-Water Street_Existing.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		5	5
D	Dummy		7	7
E	Ind. Arrow	A	4	4
F	Pedestrian		3	3
G	Pedestrian		5	5
H	Pedestrian		5	5
I	Pedestrian		7	7

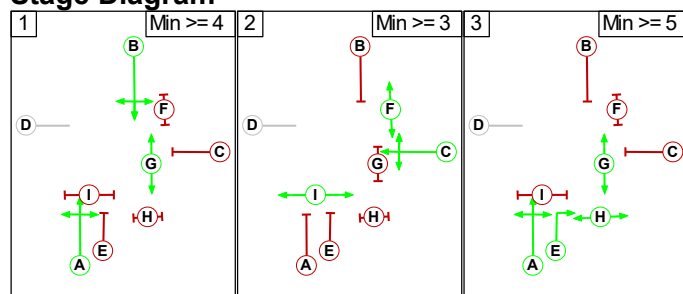
Phase Intergreens Matrix

Terminating Phase	Starting Phase									
		A	B	C	D	E	F	G	H	I
	A		-	7	-	-	9	-	-	5
	B	-		7	-	5	7	-	9	-
	C	7	7		-	7	-	5	9	-
	D	-	-	-		-	-	-	-	-
	E	-	4	7	-		9	-	-	5
	F	7	7	-	-	7		-	-	-
	G	-	-	7	-	-	-		-	-
	H	-	7	7	-	-	-	-		-
	I	10	-	-	-	10	-	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	A B G
2	C F I
3	A E G H

Stage Diagram



Full Input Data And Results

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
2	3	C	Losing	3	3
3	1	E	Losing	3	3

Prohibited Stage Change

From Stage	To Stage			
		1	2	3
	1		9	9
	2	10		12
	3	7	9	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Trinity Way/ Water Street_Existing Layout											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/2 (Trinity Way (S/B))	8/1 (Right)	1439	0	3/1	1.09	All	2.00	2.00	0.50	2	2.00
				3/2	1.09	All					
2/2 (Water Street)	5/1 (Right)	1439	0	4/1	1.09	All	2.00	2.00	0.50	2	2.00
	5/2 (Right)	1439	0	4/1	1.09	All					
3/3 (Trinity Way (N/B))	6/1 (Right)	1439	0	1/1	1.09	All	2.00	-	0.50	2	2.00
				1/2	1.09	All					
4/1 (Site Access)	5/1 (Left)	1439	0	2/2	1.09	To 5/1 (Right) To 5/2 (Right)	-	-	-	-	-
	5/2 (Left)	1439	0	2/2	1.09	To 5/1 (Right) To 5/2 (Right)					
	7/1 (Right)	1439	0	2/1	1.09	All					
				2/2	1.09	All					
	7/2 (Right)	1439	0	2/1	1.09	All					
				2/2	1.09	All					

Full Input Data And Results

Lane Input Data

Junction: Trinity Way/ Water Street_Existing Layout												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Trinity Way (S/B))	U	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 6 Left	15.00
											Arm 7 Ahead	Inf
1/2 (Trinity Way (S/B))	O	B	2	3	60.0	Geom	-	3.50	0.00	N	Arm 7 Ahead	Inf
											Arm 8 Right	30.00
2/1 (Water Street)	U	C	2	3	5.2	Geom	-	3.80	0.00	Y	Arm 7 Left	12.00
2/2 (Water Street)	O	C	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 5 Right	25.00
											Arm 8 Ahead	Inf
3/1 (Trinity Way (N/B))	U	A	2	3	60.0	Geom	-	3.10	0.00	Y	Arm 5 Ahead	Inf
											Arm 8 Left	20.00
3/2 (Trinity Way (N/B))	U	A	2	3	60.0	Geom	-	3.10	0.00	N	Arm 5 Ahead	Inf
3/3 (Trinity Way (N/B))	O	A E	2	3	3.3	Geom	-	3.20	0.00	Y	Arm 6 Right	30.00
											Arm 5 Left	10.00
4/1 (Site Access)	O		2	3	60.0	Geom	-	3.00	0.00	Y	Arm 6 Ahead	Inf
											Arm 7 Right	30.00
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/2	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2021 Survey AM Peak'	08:00	09:00	01:00	
2: '2021 Survey PM Peak'	17:00	18:00	01:00	
3: '2026 Base AM Peak'	08:00	09:00	01:00	
4: '2026 Base PM Peak'	17:00	18:00	01:00	

Full Input Data And Results

Scenario 1: '2021 Survey AM Peak' (FG1: '2021 Survey AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	72	1148	0	1220
	B	26	0	82	0	108
	C	832	282	0	0	1114
	D	0	0	0	0	0
	Tot.	858	354	1230	0	2442

Traffic Lane Flows

Lane	Scenario 1: 2021 Survey AM Peak
Junction: Trinity Way/ Water Street_Existing Layout	
1/1	577
1/2	643
2/1 (short)	82
2/2 (with short)	108(In) 26(Out)
3/1	832
3/2 (with short)	282(In) 0(Out)
3/3 (short)	282
4/1	0
5/1	845
5/2	13
6/1	354
7/1	587
7/2	643
8/1	0

Lane Saturation Flows

Junction: Trinity Way/ Water Street_Existing Layout								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Trinity Way (S/B))	3.50	0.00	Y	Arm 6 Left	15.00	12.5 %	1941	1941
				Arm 7 Ahead	Inf	87.5 %		
1/2 (Trinity Way (S/B))	3.50	0.00	N	Arm 7 Ahead	Inf	100.0 %	2105	2105
				Arm 8 Right	30.00	0.0 %		
2/1 (Water Street)	3.80	0.00	Y	Arm 7 Left	12.00	100.0 %	1773	1773
2/2 (Water Street)	3.20	0.00	Y	Arm 5 Right	25.00	100.0 %	1825	1825
				Arm 8 Ahead	Inf	0.0 %		
3/1 (Trinity Way (N/B))	3.10	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1925	1925
				Arm 8 Left	20.00	0.0 %		
3/2 (Trinity Way (N/B))	3.10	0.00	N	Arm 5 Ahead	Inf	0.0 %	2065	2065
3/3 (Trinity Way (N/B))	3.20	0.00	Y	Arm 6 Right	30.00	100.0 %	1843	1843
4/1 (Site Access)	3.00	0.00	Y	Arm 5 Left	10.00	0.0 %	1915	1915
				Arm 6 Ahead	Inf	0.0 %		
				Arm 7 Right	30.00	0.0 %		
5/1			Infinite Saturation Flow				Inf	Inf
5/2			Infinite Saturation Flow				Inf	Inf
6/1			Infinite Saturation Flow				Inf	Inf
7/1			Infinite Saturation Flow				Inf	Inf
7/2			Infinite Saturation Flow				Inf	Inf
8/1			Infinite Saturation Flow				Inf	Inf

Scenario 2: '2021 Survey PM Peak' (FG2: '2021 Survey PM Peak', Plan 1: 'Network Control Plan 1')**Traffic Flows, Desired****Desired Flow :**

	Destination					
		A	B	C	D	Tot.
Origin	A	0	22	925	0	947
	B	200	0	309	0	509
	C	720	128	0	0	848
	D	0	0	0	0	0
	Tot.	920	150	1234	0	2304

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2021 Survey PM Peak
Junction: Trinity Way/ Water Street_Existing Layout	
1/1	449
1/2	498
2/1 (short)	309
2/2 (with short)	509(In) 200(Out)
3/1	355
3/2 (with short)	493(In) 365(Out)
3/3 (short)	128
4/1	0
5/1	455
5/2	465
6/1	150
7/1	736
7/2	498
8/1	0

Lane Saturation Flows

Junction: Trinity Way/ Water Street_Existing Layout								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Trinity Way (S/B))	3.50	0.00	Y	Arm 6 Left	15.00	4.9 %	1955	1955
				Arm 7 Ahead	Inf	95.1 %		
1/2 (Trinity Way (S/B))	3.50	0.00	N	Arm 7 Ahead	Inf	100.0 %	2105	2105
				Arm 8 Right	30.00	0.0 %		
2/1 (Water Street)	3.80	0.00	Y	Arm 7 Left	12.00	100.0 %	1773	1773
2/2 (Water Street)	3.20	0.00	Y	Arm 5 Right	25.00	100.0 %	1825	1825
				Arm 8 Ahead	Inf	0.0 %		
3/1 (Trinity Way (N/B))	3.10	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1925	1925
				Arm 8 Left	20.00	0.0 %		
3/2 (Trinity Way (N/B))	3.10	0.00	N	Arm 5 Ahead	Inf	100.0 %	2065	2065
3/3 (Trinity Way (N/B))	3.20	0.00	Y	Arm 6 Right	30.00	100.0 %	1843	1843
4/1 (Site Access)	3.00	0.00	Y	Arm 5 Left	10.00	0.0 %	1915	1915
				Arm 6 Ahead	Inf	0.0 %		
				Arm 7 Right	30.00	0.0 %		
5/1			Infinite Saturation Flow				Inf	Inf
5/2			Infinite Saturation Flow				Inf	Inf
6/1			Infinite Saturation Flow				Inf	Inf
7/1			Infinite Saturation Flow				Inf	Inf
7/2			Infinite Saturation Flow				Inf	Inf
8/1			Infinite Saturation Flow				Inf	Inf

Scenario 3: '2026 Base AM Peak' (FG3: '2026 Base AM Peak', Plan 1: 'Network Control Plan 1')**Traffic Flows, Desired****Desired Flow :**

	Destination					
		A	B	C	D	Tot.
Origin	A	0	72	1148	0	1220
	B	26	0	209	0	235
	C	832	430	0	0	1262
	D	0	0	0	0	0
	Tot.	858	502	1357	0	2717

Traffic Lane Flows

Lane	Scenario 3: 2026 Base AM Peak
Junction: Trinity Way/ Water Street_Existing Layout	
1/1	577
1/2	643
2/1 (short)	209
2/2 (with short)	235(In) 26(Out)
3/1	832
3/2 (with short)	430(In) 0(Out)
3/3 (short)	430
4/1	0
5/1	845
5/2	13
6/1	502
7/1	714
7/2	643
8/1	0

Lane Saturation Flows

Junction: Trinity Way/ Water Street_Existing Layout								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Trinity Way (S/B))	3.50	0.00	Y	Arm 6 Left	15.00	12.5 %	1941	1941
				Arm 7 Ahead	Inf	87.5 %		
1/2 (Trinity Way (S/B))	3.50	0.00	N	Arm 7 Ahead	Inf	100.0 %	2105	2105
				Arm 8 Right	30.00	0.0 %		
2/1 (Water Street)	3.80	0.00	Y	Arm 7 Left	12.00	100.0 %	1773	1773
2/2 (Water Street)	3.20	0.00	Y	Arm 5 Right	25.00	100.0 %	1825	1825
				Arm 8 Ahead	Inf	0.0 %		
3/1 (Trinity Way (N/B))	3.10	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1925	1925
				Arm 8 Left	20.00	0.0 %		
3/2 (Trinity Way (N/B))	3.10	0.00	N	Arm 5 Ahead	Inf	0.0 %	2065	2065
3/3 (Trinity Way (N/B))	3.20	0.00	Y	Arm 6 Right	30.00	100.0 %	1843	1843
4/1 (Site Access)	3.00	0.00	Y	Arm 5 Left	10.00	0.0 %	1915	1915
				Arm 6 Ahead	Inf	0.0 %		
				Arm 7 Right	30.00	0.0 %		
5/1			Infinite Saturation Flow				Inf	Inf
5/2			Infinite Saturation Flow				Inf	Inf
6/1			Infinite Saturation Flow				Inf	Inf
7/1			Infinite Saturation Flow				Inf	Inf
7/2			Infinite Saturation Flow				Inf	Inf
8/1			Infinite Saturation Flow				Inf	Inf

Scenario 4: '2026 Base PM Peak' (FG4: '2026 Base PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

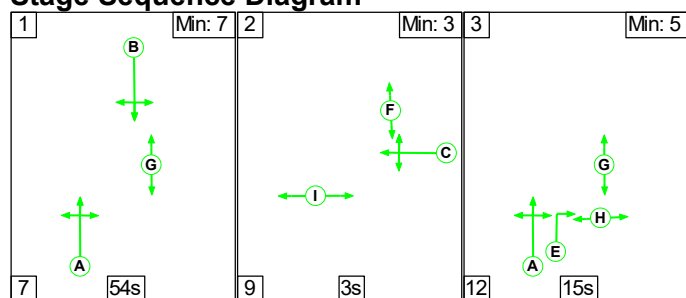
	Destination					
		A	B	C	D	Tot.
Origin	A	0	22	925	0	947
	B	200	0	449	0	649
	C	720	226	0	0	946
	D	0	0	0	0	0
	Tot.	920	248	1374	0	2542

Traffic Lane Flows

Lane	Scenario 4: 2026 Base PM Peak
Junction: Trinity Way/ Water Street_Existing Layout	
1/1	449
1/2	498
2/1 (short)	449
2/2 (with short)	649(In) 200(Out)
3/1	718
3/2 (with short)	228(In) 2(Out)
3/3 (short)	226
4/1	0
5/1	818
5/2	102
6/1	248
7/1	876
7/2	498
8/1	0

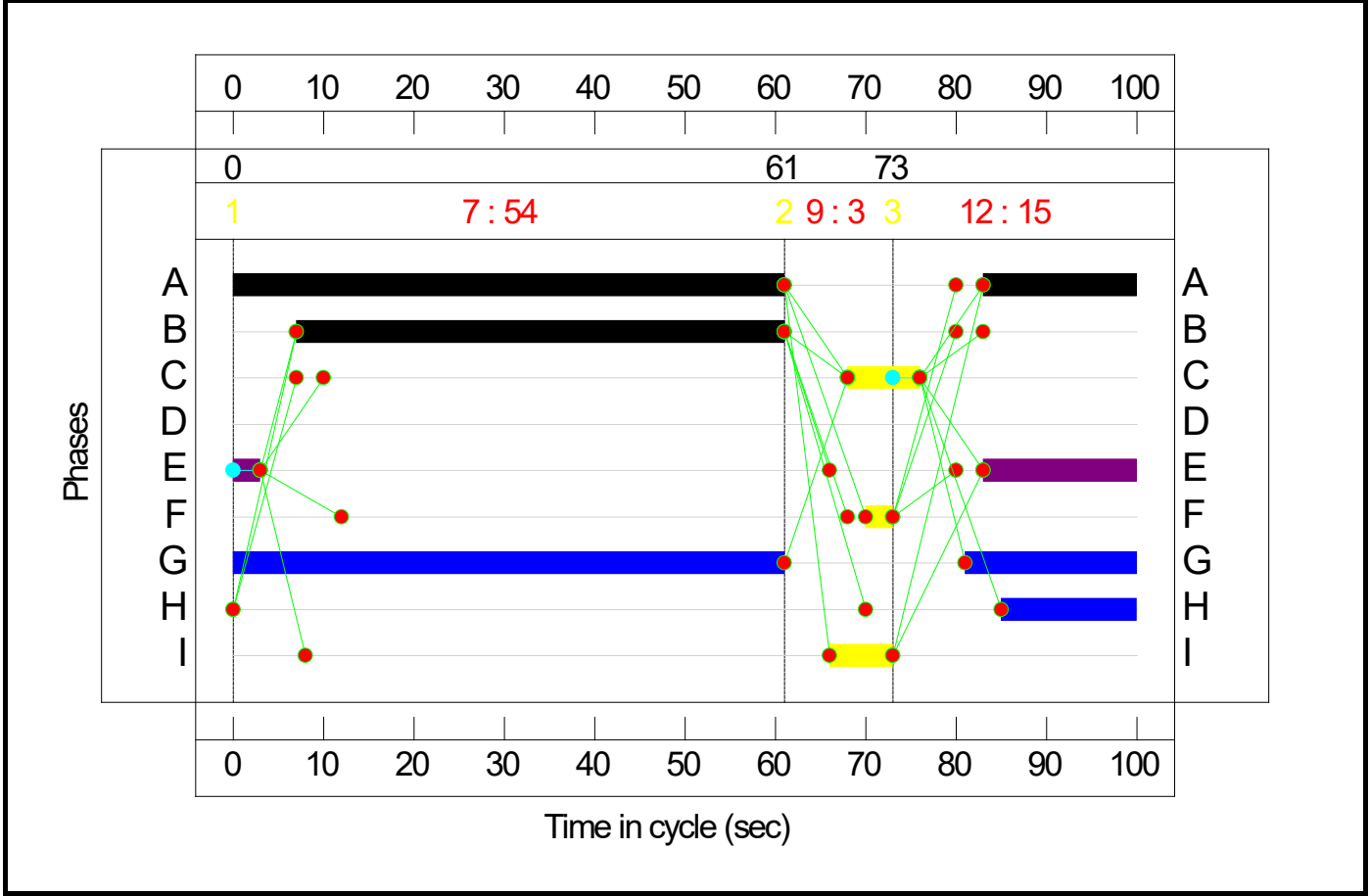
Lane Saturation Flows

Junction: Trinity Way/ Water Street_Existing Layout								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Trinity Way (S/B))	3.50	0.00	Y	Arm 6 Left	15.00	4.9 %	1955	1955
				Arm 7 Ahead	Inf	95.1 %		
1/2 (Trinity Way (S/B))	3.50	0.00	N	Arm 7 Ahead	Inf	100.0 %	2105	2105
				Arm 8 Right	30.00	0.0 %		
2/1 (Water Street)	3.80	0.00	Y	Arm 7 Left	12.00	100.0 %	1773	1773
2/2 (Water Street)	3.20	0.00	Y	Arm 5 Right	25.00	100.0 %	1825	1825
				Arm 8 Ahead	Inf	0.0 %		
3/1 (Trinity Way (N/B))	3.10	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1925	1925
				Arm 8 Left	20.00	0.0 %		
3/2 (Trinity Way (N/B))	3.10	0.00	N	Arm 5 Ahead	Inf	100.0 %	2065	2065
3/3 (Trinity Way (N/B))	3.20	0.00	Y	Arm 6 Right	30.00	100.0 %	1843	1843
4/1 (Site Access)	3.00	0.00	Y	Arm 5 Left	10.00	0.0 %	1915	1915
				Arm 6 Ahead	Inf	0.0 %		
				Arm 7 Right	30.00	0.0 %		
5/1			Infinite Saturation Flow				Inf	Inf
5/2			Infinite Saturation Flow				Inf	Inf
6/1			Infinite Saturation Flow				Inf	Inf
7/1			Infinite Saturation Flow				Inf	Inf
7/2			Infinite Saturation Flow				Inf	Inf
8/1			Infinite Saturation Flow				Inf	Inf

Scenario 1: '2021 Survey AM Peak' (FG1: '2021 Survey AM Peak', Plan 1: 'Network Control Plan 1')
Stage Sequence Diagram
**Stage Timings**

Stage	1	2	3
Duration	54	3	15
Change Point	0	61	73

Signal Timings Diagram

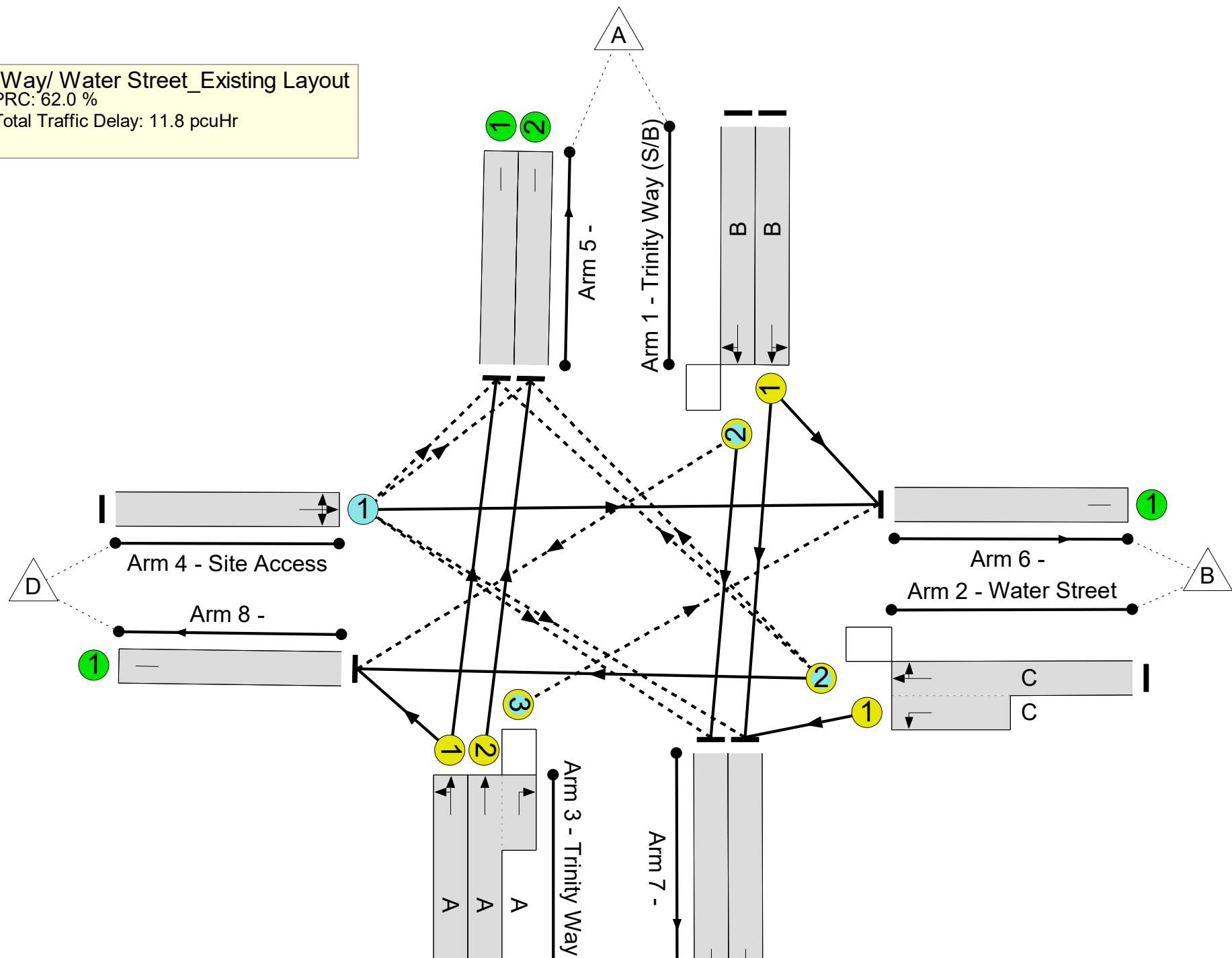




Trinity Way/ Water Street_Existing Layout

PRC: 62.0 %

Total Traffic Delay: 11.8 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	55.5%
Trinity Way/ Water Street_Existing Layout	-	-	N/A	-	-		-	-	-	-	-	-	55.5%
1/1	Trinity Way (S/B) Left Ahead	U	N/A	N/A	B		1	54	-	577	1941	1068	54.0%
1/2	Trinity Way (S/B) Ahead Right	O	N/A	N/A	B		1	54	-	643	2105	1158	55.5%
2/2+2/1	Water Street Right Left Ahead	O+U	N/A	N/A	C		1	8	-	108	1825:1773	51+160	51.4 : 51.4%
3/1	Trinity Way (N/B) Ahead Left	U	N/A	N/A	A		1	78	-	832	1925	1521	54.7%
3/2+3/3	Trinity Way (N/B) Ahead Right	U+O	N/A	N/A	A	E	1	78	20	282	2065:1843	0+513	0.0 : 54.9%
4/1	Site Access Left Ahead Right	O	N/A	N/A	-		-	-	-	0	1915	1498	0.0%
5/1		U	N/A	N/A	-		-	-	-	845	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	13	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	354	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	587	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	643	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%

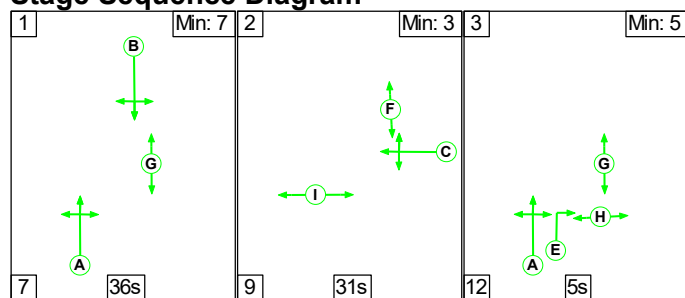
Full Input Data And Results

[illegible]

Full Input Data And Results

Scenario 2: '2021 Survey PM Peak' (FG2: '2021 Survey PM Peak', Plan 1: 'Network Control Plan 1')

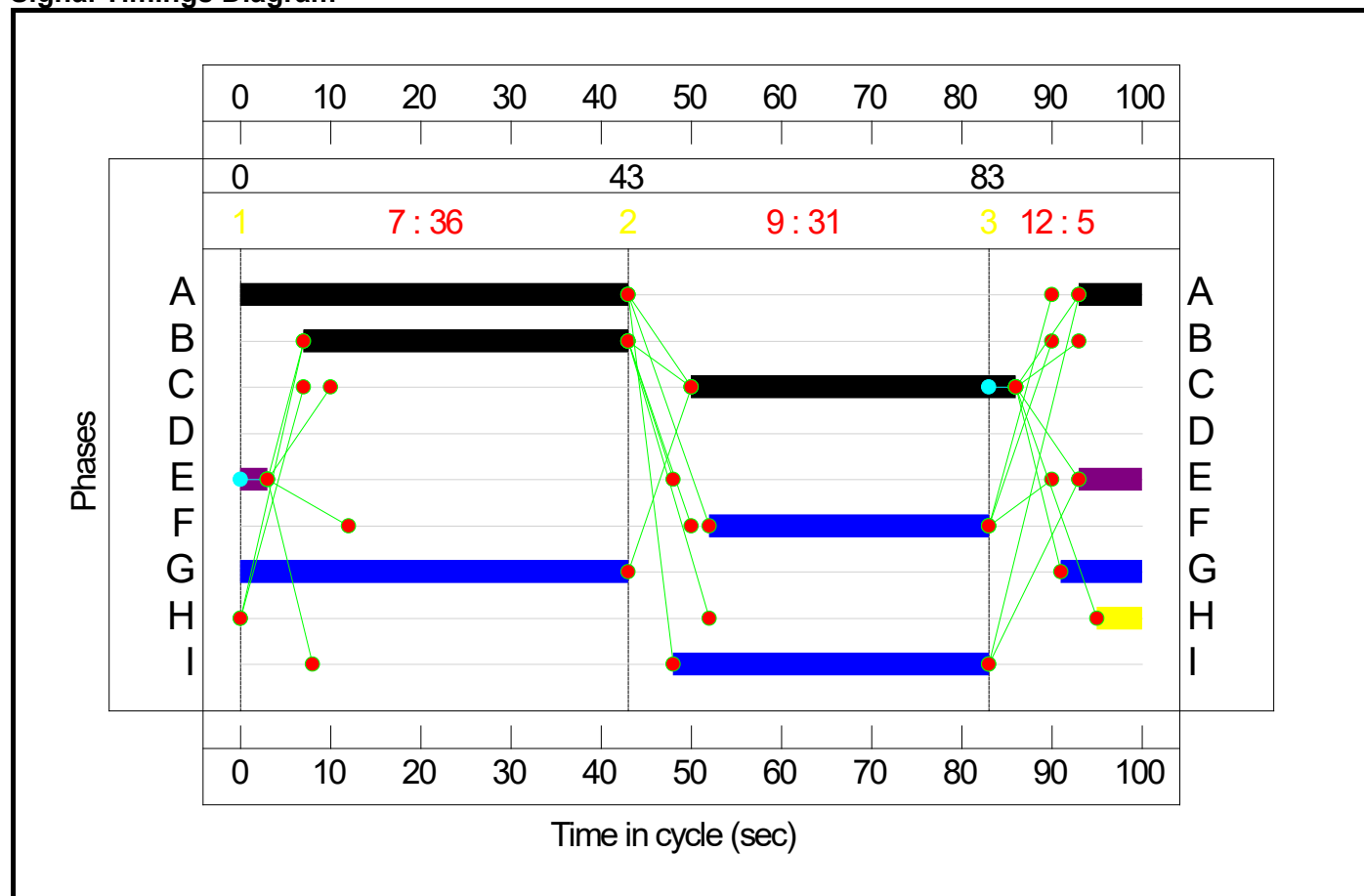
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	36	31	5
Change Point	0	43	83

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

PRC: 39.7 %

Total Traffic Delay: 17.1 pcuHr

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	64.4%
Trinity Way/ Water Street_Existing Layout	-	-	N/A	-	-		-	-	-	-	-	-	64.4%
1/1	Trinity Way (S/B) Left Ahead	U	N/A	N/A	B		1	36	-	449	1955	723	62.1%
1/2	Trinity Way (S/B) Ahead Right	O	N/A	N/A	B		1	36	-	498	2105	779	63.9%
2/2+2/1	Water Street Right Left Ahead	O+U	N/A	N/A	C		1	36	-	509	1825:1773	310+480	64.4 : 64.4%
3/1	Trinity Way (N/B) Ahead Left	U	N/A	N/A	A		1	50	-	355	1925	982	36.2%
3/2+3/3	Trinity Way (N/B) Ahead Right	U+O	N/A	N/A	A	E	1	50	10	493	2065:1843	797+279	45.8 : 45.8%
4/1	Site Access Left Ahead Right	O	N/A	N/A	-		-	-	-	0	1915	1244	0.0%
5/1		U	N/A	N/A	-		-	-	-	455	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	465	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	150	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	736	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	498	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%

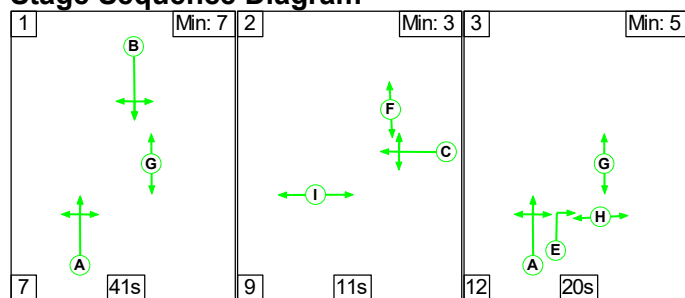
Full Input Data And Results

[illegible]

Full Input Data And Results

Scenario 3: '2026 Base AM Peak' (FG3: '2026 Base AM Peak', Plan 1: 'Network Control Plan 1')

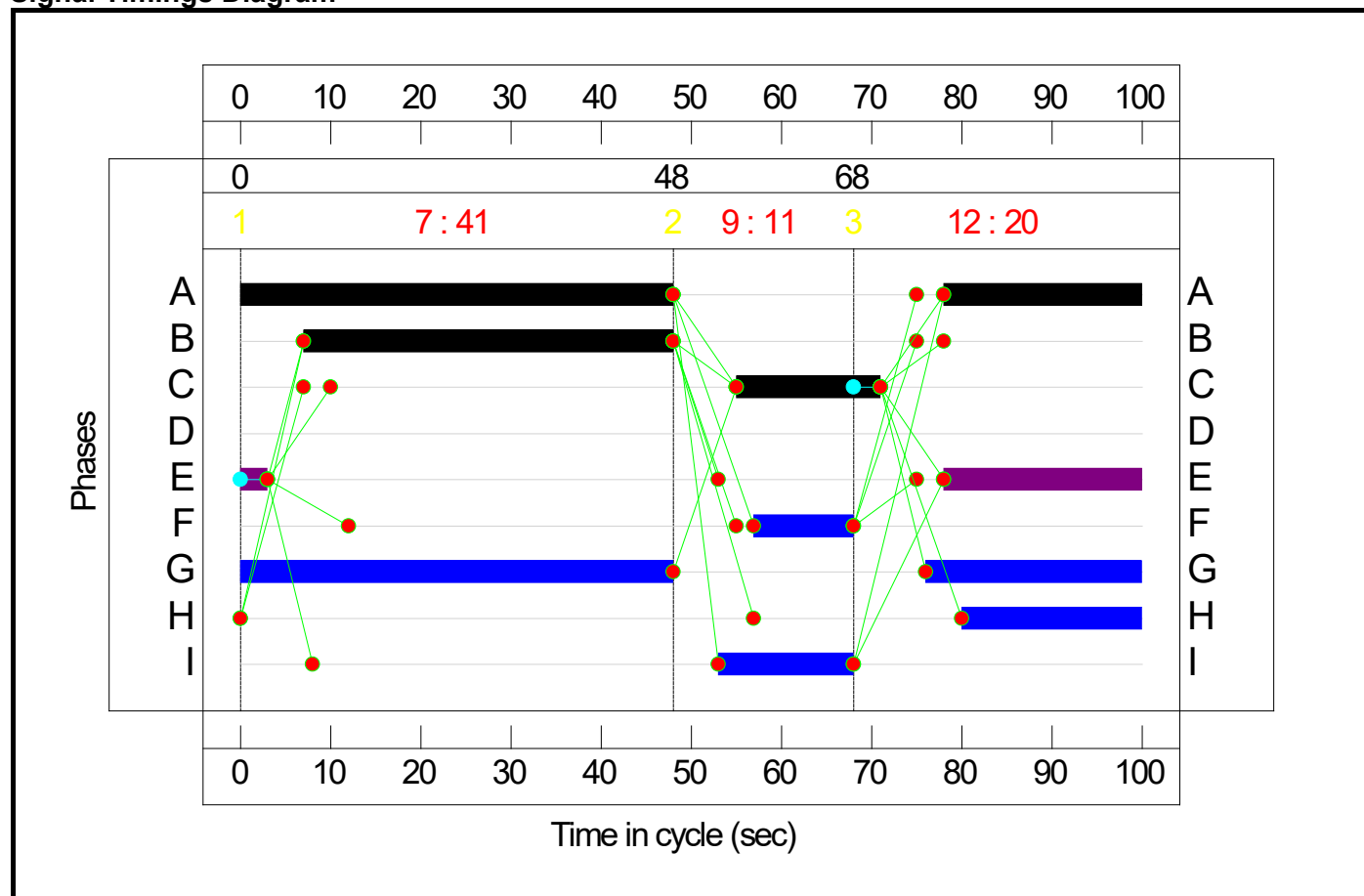
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	41	11	20
Change Point	0	48	68

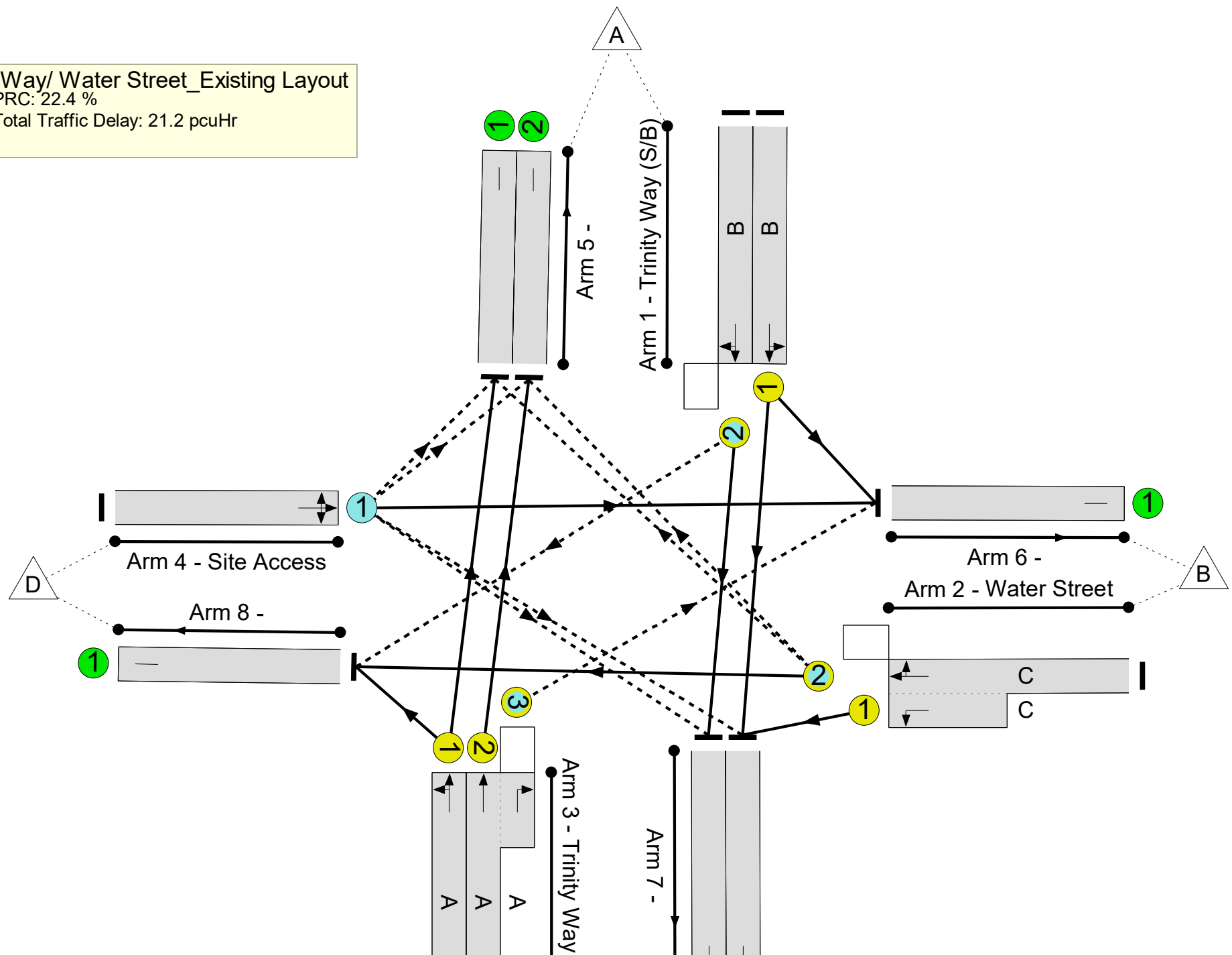
Signal Timings Diagram



Trinity Way/ Water Street_Existing Layout

PRC: 22.4 %

Total Traffic Delay: 21.2 pcuHr

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	73.5%
Trinity Way/ Water Street_Existing Layout	-	-	N/A	-	-		-	-	-	-	-	-	73.5%
1/1	Trinity Way (S/B) Left Ahead	U	N/A	N/A	B		1	41	-	577	1941	815	70.8%
1/2	Trinity Way (S/B) Ahead Right	O	N/A	N/A	B		1	41	-	643	2105	884	72.7%
2/2+2/1	Water Street Right Left Ahead	O+U	N/A	N/A	C		1	16	-	235	1825:1773	37+295	70.8 : 70.8%
3/1	Trinity Way (N/B) Ahead Left	U	N/A	N/A	A		1	70	-	832	1925	1367	60.9%
3/2+3/3	Trinity Way (N/B) Ahead Right	U+O	N/A	N/A	A	E	1	70	25	430	2065:1843	0+585	0.0 : 73.5%
4/1	Site Access Left Ahead Right	O	N/A	N/A	-		-	-	-	0	1915	1388	0.0%
5/1		U	N/A	N/A	-		-	-	-	845	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	13	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	502	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	714	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	643	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%

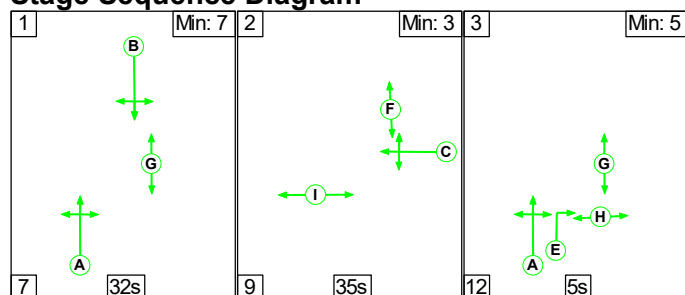
Full Input Data And Results

[illegible]

Full Input Data And Results

Scenario 4: '2026 Base PM Peak' (FG4: '2026 Base PM Peak', Plan 1: 'Network Control Plan 1')

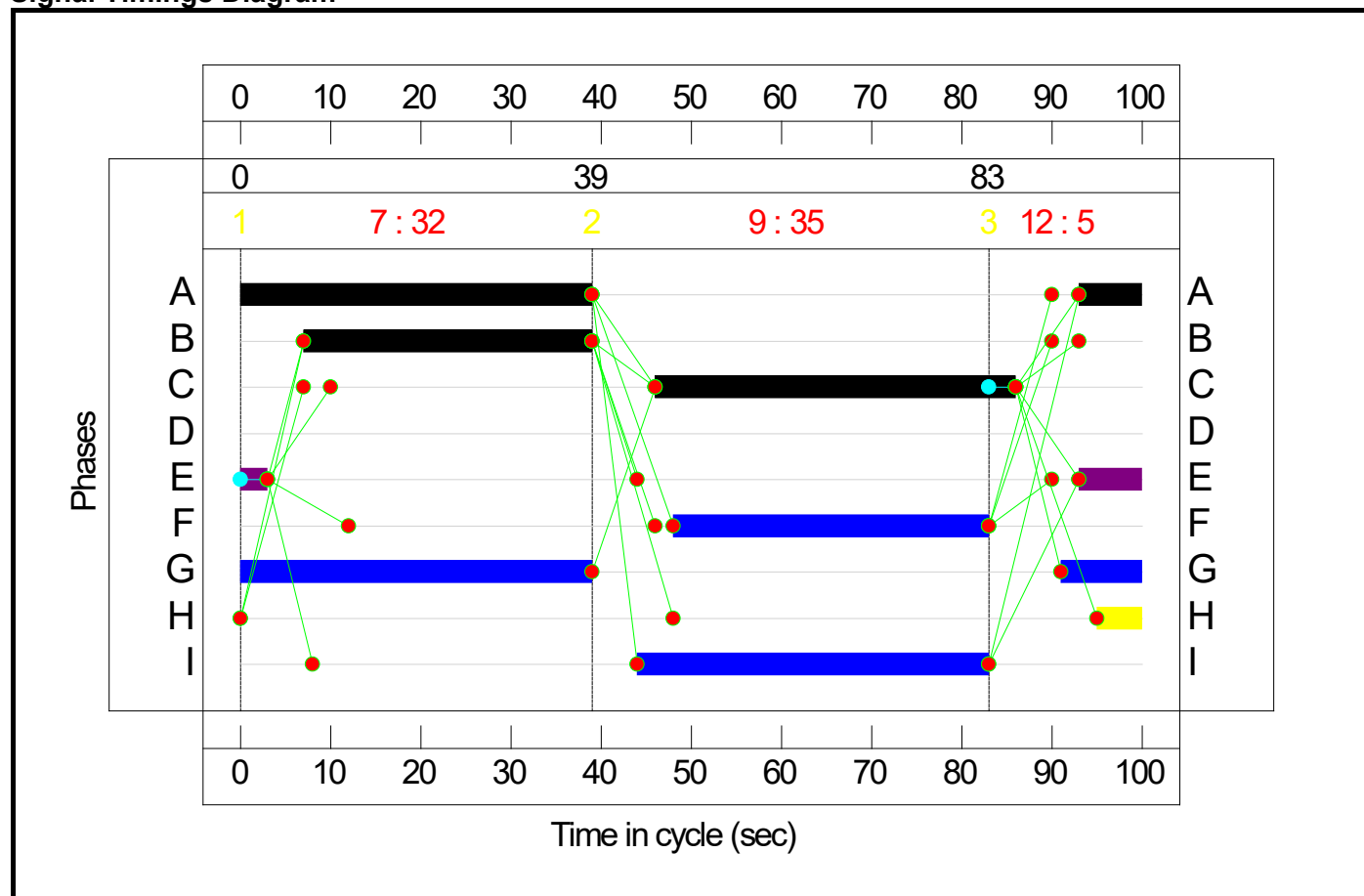
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	32	35	5
Change Point	0	39	83

Signal Timings Diagram



Full Input Data And Results

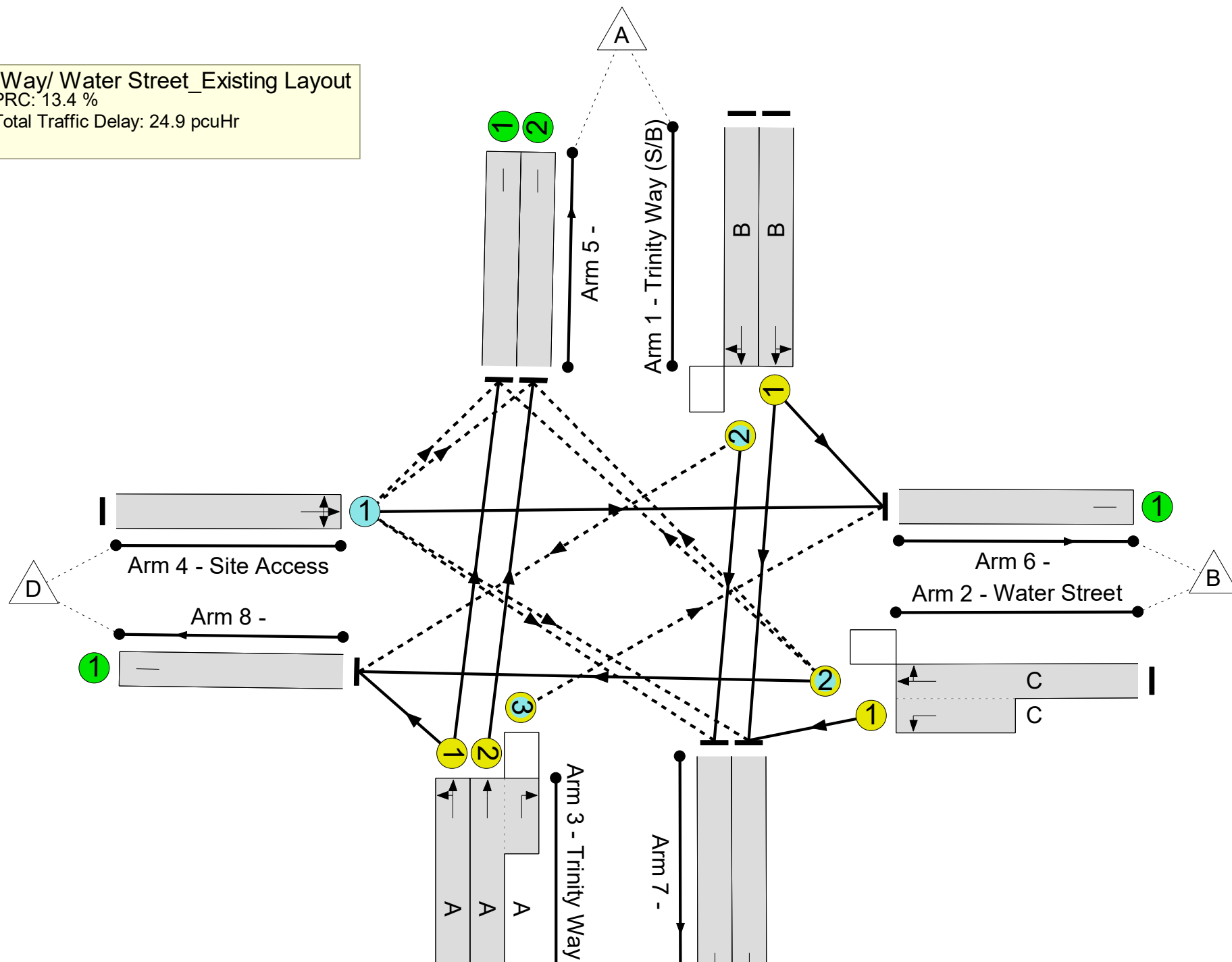
Network Layout Diagram



Trinity Way/ Water Street_Existing Layout

PRC: 13.4 %

Total Traffic Delay: 24.9 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	79.4%
Trinity Way/ Water Street_Existing Layout	-	-	N/A	-	-		-	-	-	-	-	-	79.4%
1/1	Trinity Way (S/B) Left Ahead	U	N/A	N/A	B		1	32	-	449	1955	645	69.6%
1/2	Trinity Way (S/B) Ahead Right	O	N/A	N/A	B		1	32	-	498	2105	695	71.7%
2/2+2/1	Water Street Right Left Ahead	O+U	N/A	N/A	C		1	40	-	649	1825:1773	253+569	78.9 : 78.9%
3/1	Trinity Way (N/B) Ahead Left	U	N/A	N/A	A		1	46	-	718	1925	905	79.4%
3/2+3/3	Trinity Way (N/B) Ahead Right	U+O	N/A	N/A	A	E	1	46	10	228	2065:1843	3+334	67.7 : 67.7%
4/1	Site Access Left Ahead Right	O	N/A	N/A	-		-	-	-	0	1915	1084	0.0%
5/1		U	N/A	N/A	-		-	-	-	818	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	102	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	248	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	876	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	498	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%

Full Input Data And Results

[illegible]

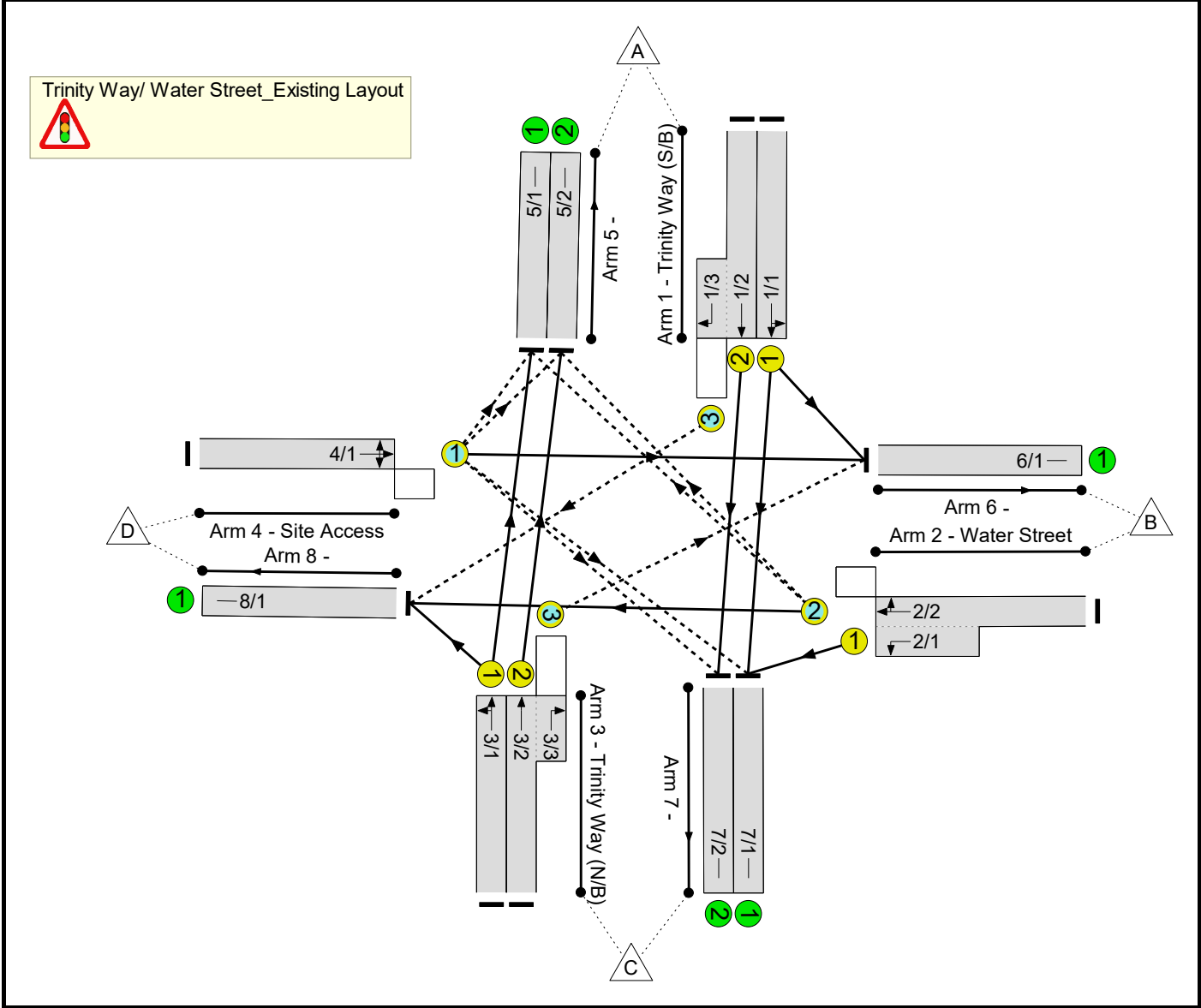
Appendix H

Trinity Way/ Water Street (Proposed Layout) LinSig Outputs

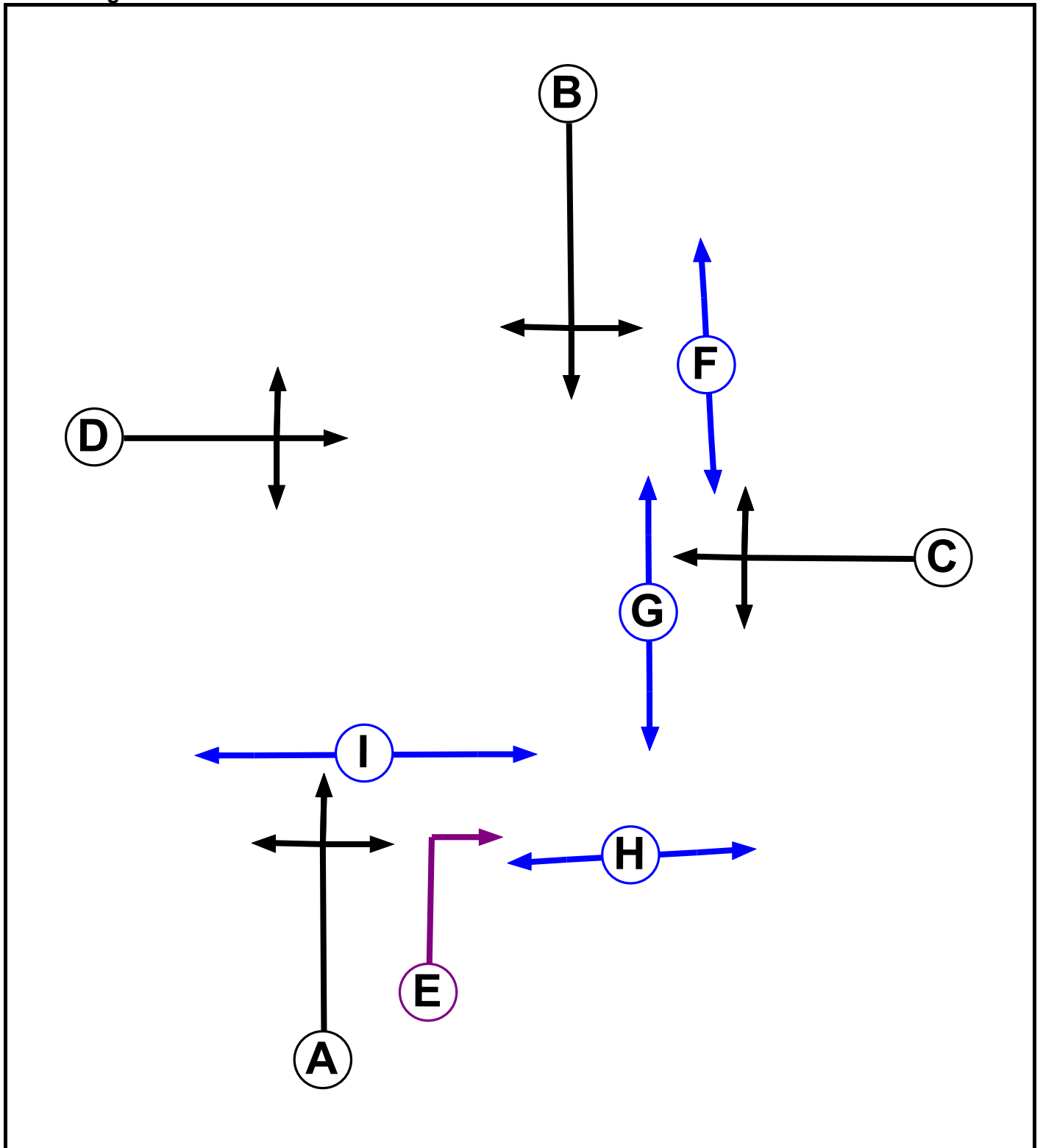
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Trinity Way-Water Street Proposed Option1.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		5	5
D	Traffic		7	7
E	Ind. Arrow	A	4	4
F	Pedestrian		3	3
G	Pedestrian		5	5
H	Pedestrian		5	5
I	Pedestrian		7	7

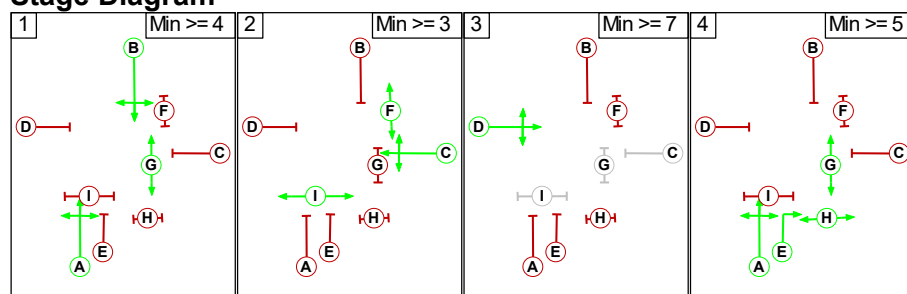
Phase Intergreens Matrix

Terminating Phase	Starting Phase									
		A	B	C	D	E	F	G	H	I
	A		-	7	6	-	9	-	-	5
	B	-		7	5	5	7	-	9	-
	C	7	7		-	7	-	5	9	-
	D	5	6	-		5	8	-	9	-
	E	-	4	7	6		9	-	-	5
	F	7	7	-	7	7		-	-	-
	G	-	-	7	-	-	-		-	-
	H	-	7	7	7	-	-	-		-
	I	10	-	-	-	10	-	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	A B G
2	C F I
3	D
4	A E G H

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
2	4	C	Losing	3	3
4	1	E	Losing	3	3

Prohibited Stage Change

From Stage	To Stage				
		1	2	3	4
	1		9	6	9
	2	10		7	12
	3	6	8		9
	4	7	9	7	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Trinity Way/ Water Street_Existing Layout											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/3 (Trinity Way (S/B))	8/1 (Right)	1439	0	3/1	1.09	All	3.00	-	0.50	3	3.00
				3/2	1.09	All					
2/2 (Water Street)	5/1 (Right)	1439	0	4/1	1.09	All	2.00	2.00	0.50	2	2.00
	5/2 (Right)	1439	0	4/1	1.09	All					
3/3 (Trinity Way (N/B))	6/1 (Right)	1439	0	1/1	1.09	All	3.00	-	0.50	3	3.00
				1/2	1.09	All					
4/1 (Site Access)	5/1 (Left)	1439	0	2/2	1.09	To 5/1 (Right) To 5/2 (Right)	2.00	2.00	0.50	2	2.00
	5/2 (Left)	1439	0	2/2	1.09	To 5/1 (Right) To 5/2 (Right)					
	7/1 (Right)	1439	0	2/1	1.09	All					
				2/2	1.09	All					
	7/2 (Right)	1439	0	2/1	1.09	All					
				2/2	1.09	All					

Full Input Data And Results

Lane Input Data

Junction: Trinity Way/ Water Street_Existing Layout												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Trinity Way (S/B))	U	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 6 Left	15.00
1/2 (Trinity Way (S/B))	U	B	2	3	60.0	Geom	-	3.50	0.00	N	Arm 7 Ahead	Inf
1/3 (Trinity Way (S/B))	O	B	2	3	4.0	Geom	-	3.00	0.00	Y	Arm 8 Right	30.00
2/1 (Water Street)	U	C	2	3	5.2	Geom	-	3.80	0.00	Y	Arm 7 Left	12.00
2/2 (Water Street)	O	C	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 5 Right	25.00
3/1 (Trinity Way (N/B))	U	A	2	3	60.0	Geom	-	3.10	0.00	Y	Arm 8 Ahead	Inf
3/2 (Trinity Way (N/B))	U	A	2	3	60.0	Geom	-	3.10	0.00	Y	Arm 5 Ahead	Inf
3/3 (Trinity Way (N/B))	U	A	2	3	60.0	Geom	-	3.10	0.00	N	Arm 8 Left	20.00
3/3 (Trinity Way (N/B))	O	A E	2	3	3.3	Geom	-	3.20	0.00	Y	Arm 5 Ahead	Inf
4/1 (Site Access)	O	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 6 Right	30.00
5/1	U		2	3	60.0	Inf	-	-	-	-	Arm 5 Left	10.00
5/2	U		2	3	60.0	Inf	-	-	-	-	Arm 6 Ahead	Inf
6/1	U		2	3	60.0	Inf	-	-	-	-	Arm 7 Right	30.00
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/2	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2026 With Dev AM Peak'	08:00	09:00	01:00	
2: '2026 With Dev PM Peak'	17:00	18:00	01:00	

Full Input Data And Results

Scenario 1: '2026 With Dev AM Peak' (FG1: '2026 With Dev AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	74	1148	2	1224
	B	31	0	229	1	261
	C	832	439	0	9	1280
	D	5	1	23	0	29
	Tot.	868	514	1400	12	2794

Traffic Lane Flows

Lane	Scenario 1: 2026 With Dev AM Peak
Junction: Trinity Way/ Water Street_Existing Layout	
1/1	585
1/2 (with short)	639(In) 637(Out)
1/3 (short)	2
2/1 (short)	229
2/2 (with short)	261(In) 32(Out)
3/1	841
3/2 (with short)	439(In) 0(Out)
3/3 (short)	439
4/1	29
5/1	851
5/2	17
6/1	514
7/1	752
7/2	648
8/1	12

Lane Saturation Flows

Junction: Trinity Way/ Water Street_Existing Layout								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Trinity Way (S/B))	3.50	0.00	Y	Arm 6 Left	15.00	12.6 %	1940	1940
				Arm 7 Ahead	Inf	87.4 %		
1/2 (Trinity Way (S/B))	3.50	0.00	N	Arm 7 Ahead	Inf	100.0 %	2105	2105
1/3 (Trinity Way (S/B))	3.00	0.00	Y	Arm 8 Right	30.00	100.0 %	1824	1824
2/1 (Water Street)	3.80	0.00	Y	Arm 7 Left	12.00	100.0 %	1773	1773
2/2 (Water Street)	3.20	0.00	Y	Arm 5 Right	25.00	96.9 %	1829	1829
				Arm 8 Ahead	Inf	3.1 %		
3/1 (Trinity Way (N/B))	3.10	0.00	Y	Arm 5 Ahead	Inf	98.9 %	1923	1923
				Arm 8 Left	20.00	1.1 %		
3/2 (Trinity Way (N/B))	3.10	0.00	N	Arm 5 Ahead	Inf	0.0 %	2065	2065
3/3 (Trinity Way (N/B))	3.20	0.00	Y	Arm 6 Right	30.00	100.0 %	1843	1843
				Arm 5 Left	10.00	17.2 %		
4/1 (Site Access)	3.00	0.00	Y	Arm 6 Ahead	Inf	3.4 %	1797	1797
				Arm 7 Right	30.00	79.3 %		
5/1				Infinite Saturation Flow			Inf	Inf
5/2				Infinite Saturation Flow			Inf	Inf
6/1				Infinite Saturation Flow			Inf	Inf
7/1				Infinite Saturation Flow			Inf	Inf
7/2				Infinite Saturation Flow			Inf	Inf
8/1				Infinite Saturation Flow			Inf	Inf

Scenario 2: '2026 With Dev PM Peak' (FG2: '2026 With Dev PM Peak', Plan 1: 'Network Control Plan 1')
Traffic Flows, Desired
Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	28	925	6	959
	B	202	0	461	2	665
	C	720	250	0	27	997
	D	3	1	14	0	18
	Tot.	925	279	1400	35	2639

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2026 With Dev PM Peak
Junction: Trinity Way/ Water Street_Existing Layout	
1/1	461
1/2 (with short)	498(In) 492(Out)
1/3 (short)	6
2/1 (short)	461
2/2 (with short)	665(In) 204(Out)
3/1	633
3/2 (with short)	364(In) 114(Out)
3/3 (short)	250
4/1	18
5/1	709
5/2	216
6/1	279
7/1	901
7/2	499
8/1	35

Lane Saturation Flows

Junction: Trinity Way/ Water Street_Existing Layout								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Trinity Way (S/B))	3.50	0.00	Y	Arm 6 Left	15.00	6.1 %	1953	1953
				Arm 7 Ahead	Inf	93.9 %		
1/2 (Trinity Way (S/B))	3.50	0.00	N	Arm 7 Ahead	Inf	100.0 %	2105	2105
1/3 (Trinity Way (S/B))	3.00	0.00	Y	Arm 8 Right	30.00	100.0 %	1824	1824
2/1 (Water Street)	3.80	0.00	Y	Arm 7 Left	12.00	100.0 %	1773	1773
2/2 (Water Street)	3.20	0.00	Y	Arm 5 Right	25.00	99.0 %	1826	1826
				Arm 8 Ahead	Inf	1.0 %		
3/1 (Trinity Way (N/B))	3.10	0.00	Y	Arm 5 Ahead	Inf	95.7 %	1919	1919
				Arm 8 Left	20.00	4.3 %		
3/2 (Trinity Way (N/B))	3.10	0.00	N	Arm 5 Ahead	Inf	100.0 %	2065	2065
3/3 (Trinity Way (N/B))	3.20	0.00	Y	Arm 6 Right	30.00	100.0 %	1843	1843
				Arm 5 Left	10.00	16.7 %		
4/1 (Site Access)	3.00	0.00	Y	Arm 6 Ahead	Inf	5.6 %	1800	1800
				Arm 7 Right	30.00	77.8 %		
5/1				Infinite Saturation Flow			Inf	Inf
5/2				Infinite Saturation Flow			Inf	Inf
6/1				Infinite Saturation Flow			Inf	Inf
7/1				Infinite Saturation Flow			Inf	Inf
7/2				Infinite Saturation Flow			Inf	Inf
8/1				Infinite Saturation Flow			Inf	Inf

Scenario 3: '2026 With Dev AM Peak (site access arm every other cycle)' (FG1: '2026 With Dev AM Peak', Plan 2: 'Double Cycle')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	74	1148	2	1224
	B	31	0	229	1	261
	C	832	439	0	9	1280
	D	5	1	23	0	29
	Tot.	868	514	1400	12	2794

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2026 With Dev AM Peak (site access arm every other cycle)
Junction: Trinity Way/ Water Street_Existing Layout	
1/1	584
1/2 (with short)	640(In) 638(Out)
1/3 (short)	2
2/1 (short)	229
2/2 (with short)	261(In) 32(Out)
3/1	841
3/2 (with short)	439(In) 0(Out)
3/3 (short)	439
4/1	29
5/1	851
5/2	17
6/1	514
7/1	751
7/2	649
8/1	12

Lane Saturation Flows

Junction: Trinity Way/ Water Street_Existing Layout								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Trinity Way (S/B))	3.50	0.00	Y	Arm 6 Left	15.00	12.7 %	1940	1940
				Arm 7 Ahead	Inf	87.3 %		
1/2 (Trinity Way (S/B))	3.50	0.00	N	Arm 7 Ahead	Inf	100.0 %	2105	2105
1/3 (Trinity Way (S/B))	3.00	0.00	Y	Arm 8 Right	30.00	100.0 %	1824	1824
2/1 (Water Street)	3.80	0.00	Y	Arm 7 Left	12.00	100.0 %	1773	1773
2/2 (Water Street)	3.20	0.00	Y	Arm 5 Right	25.00	96.9 %	1829	1829
				Arm 8 Ahead	Inf	3.1 %		
3/1 (Trinity Way (N/B))	3.10	0.00	Y	Arm 5 Ahead	Inf	98.9 %	1923	1923
				Arm 8 Left	20.00	1.1 %		
3/2 (Trinity Way (N/B))	3.10	0.00	N	Arm 5 Ahead	Inf	0.0 %	2065	2065
3/3 (Trinity Way (N/B))	3.20	0.00	Y	Arm 6 Right	30.00	100.0 %	1843	1843
				Arm 5 Left	10.00	17.2 %		
4/1 (Site Access)	3.00	0.00	Y	Arm 6 Ahead	Inf	3.4 %	1797	1797
				Arm 7 Right	30.00	79.3 %		
5/1				Infinite Saturation Flow			Inf	Inf
5/2				Infinite Saturation Flow			Inf	Inf
6/1				Infinite Saturation Flow			Inf	Inf
7/1				Infinite Saturation Flow			Inf	Inf
7/2				Infinite Saturation Flow			Inf	Inf
8/1				Infinite Saturation Flow			Inf	Inf

Scenario 4: '2026 With Dev PM Peak (site access arm every other cycle)' (FG2: '2026 With Dev PM Peak', Plan 2: 'Double Cycle')

Traffic Flows, Desired**Desired Flow :**

	Destination					
		A	B	C	D	Tot.
Origin	A	0	28	925	6	959
	B	202	0	461	2	665
	C	720	250	0	27	997
	D	3	1	14	0	18
	Tot.	925	279	1400	35	2639

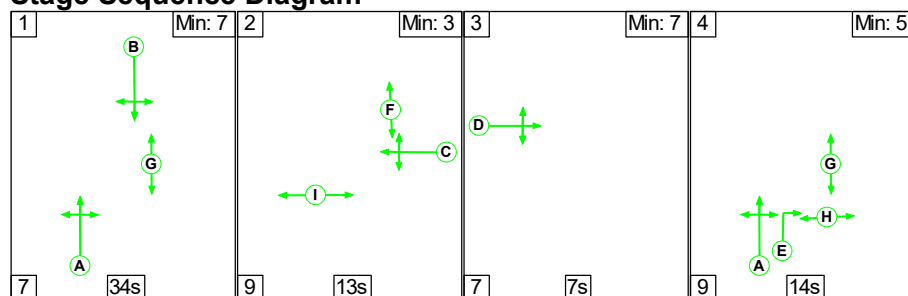
Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2026 With Dev PM Peak (site access arm every other cycle)
Junction: Trinity Way/ Water Street_Existing Layout	
1/1	460
1/2 (with short)	499(In) 493(Out)
1/3 (short)	6
2/1 (short)	461
2/2 (with short)	665(In) 204(Out)
3/1	656
3/2 (with short)	341(In) 91(Out)
3/3 (short)	250
4/1	18
5/1	732
5/2	193
6/1	279
7/1	900
7/2	500
8/1	35

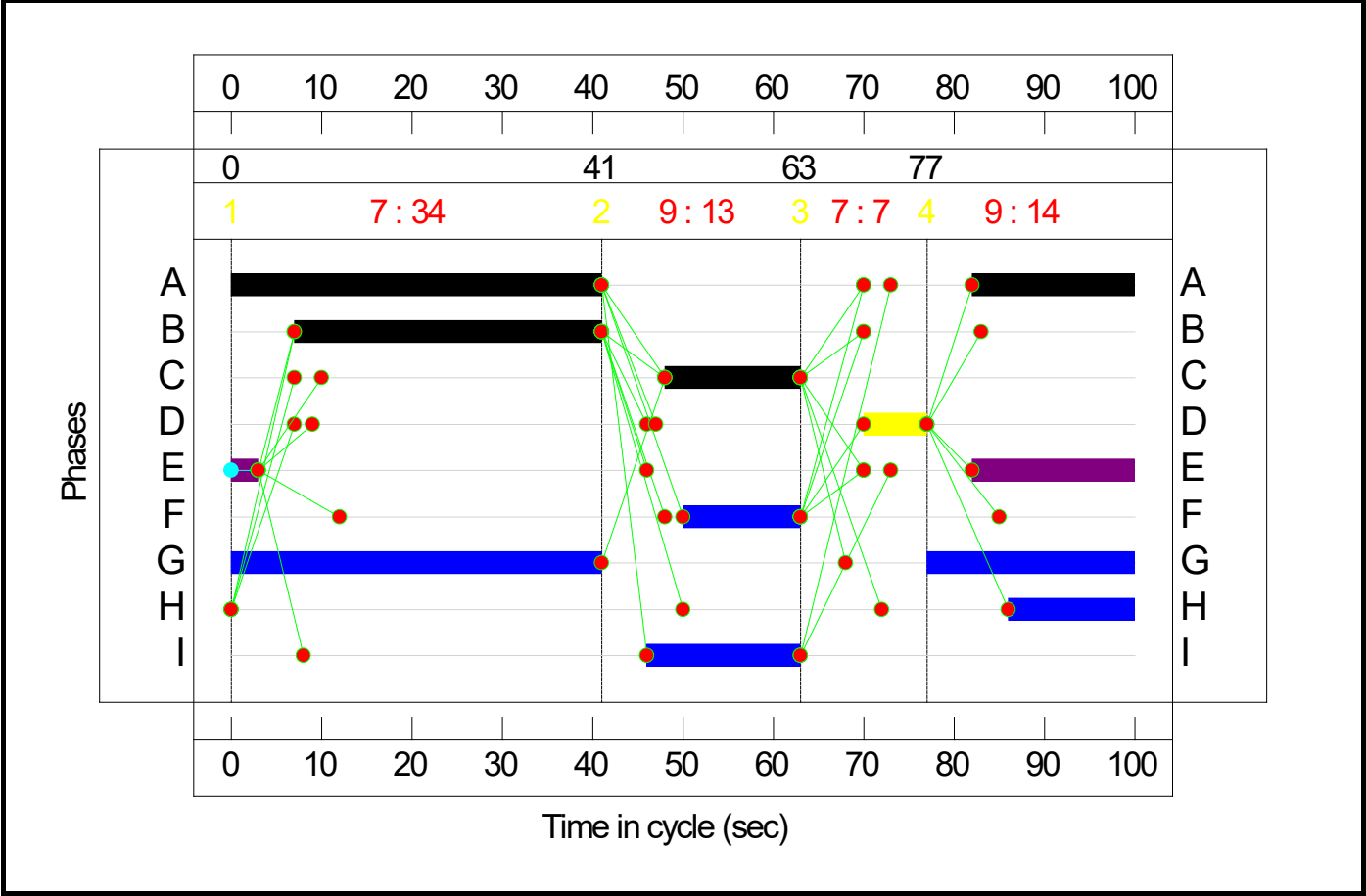
Lane Saturation Flows

Junction: Trinity Way/ Water Street_Existing Layout								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Trinity Way (S/B))	3.50	0.00	Y	Arm 6 Left	15.00	6.1 %	1953	1953
				Arm 7 Ahead	Inf	93.9 %		
1/2 (Trinity Way (S/B))	3.50	0.00	N	Arm 7 Ahead	Inf	100.0 %	2105	2105
1/3 (Trinity Way (S/B))	3.00	0.00	Y	Arm 8 Right	30.00	100.0 %	1824	1824
2/1 (Water Street)	3.80	0.00	Y	Arm 7 Left	12.00	100.0 %	1773	1773
2/2 (Water Street)	3.20	0.00	Y	Arm 5 Right	25.00	99.0 %	1826	1826
				Arm 8 Ahead	Inf	1.0 %		
3/1 (Trinity Way (N/B))	3.10	0.00	Y	Arm 5 Ahead	Inf	95.9 %	1919	1919
				Arm 8 Left	20.00	4.1 %		
3/2 (Trinity Way (N/B))	3.10	0.00	N	Arm 5 Ahead	Inf	100.0 %	2065	2065
3/3 (Trinity Way (N/B))	3.20	0.00	Y	Arm 6 Right	30.00	100.0 %	1843	1843
				Arm 5 Left	10.00	16.7 %		
4/1 (Site Access)	3.00	0.00	Y	Arm 6 Ahead	Inf	5.6 %	1800	1800
				Arm 7 Right	30.00	77.8 %		
5/1			Infinite Saturation Flow				Inf	Inf
5/2			Infinite Saturation Flow				Inf	Inf
6/1			Infinite Saturation Flow				Inf	Inf
7/1			Infinite Saturation Flow				Inf	Inf
7/2			Infinite Saturation Flow				Inf	Inf
8/1			Infinite Saturation Flow				Inf	Inf

Scenario 1: '2026 With Dev AM Peak' (FG1: '2026 With Dev AM Peak', Plan 1: 'Network Control Plan 1')**Stage Sequence Diagram****Stage Timings**

Stage	1	2	3	4
Duration	34	13	7	14
Change Point	0	41	63	77

Signal Timings Diagram

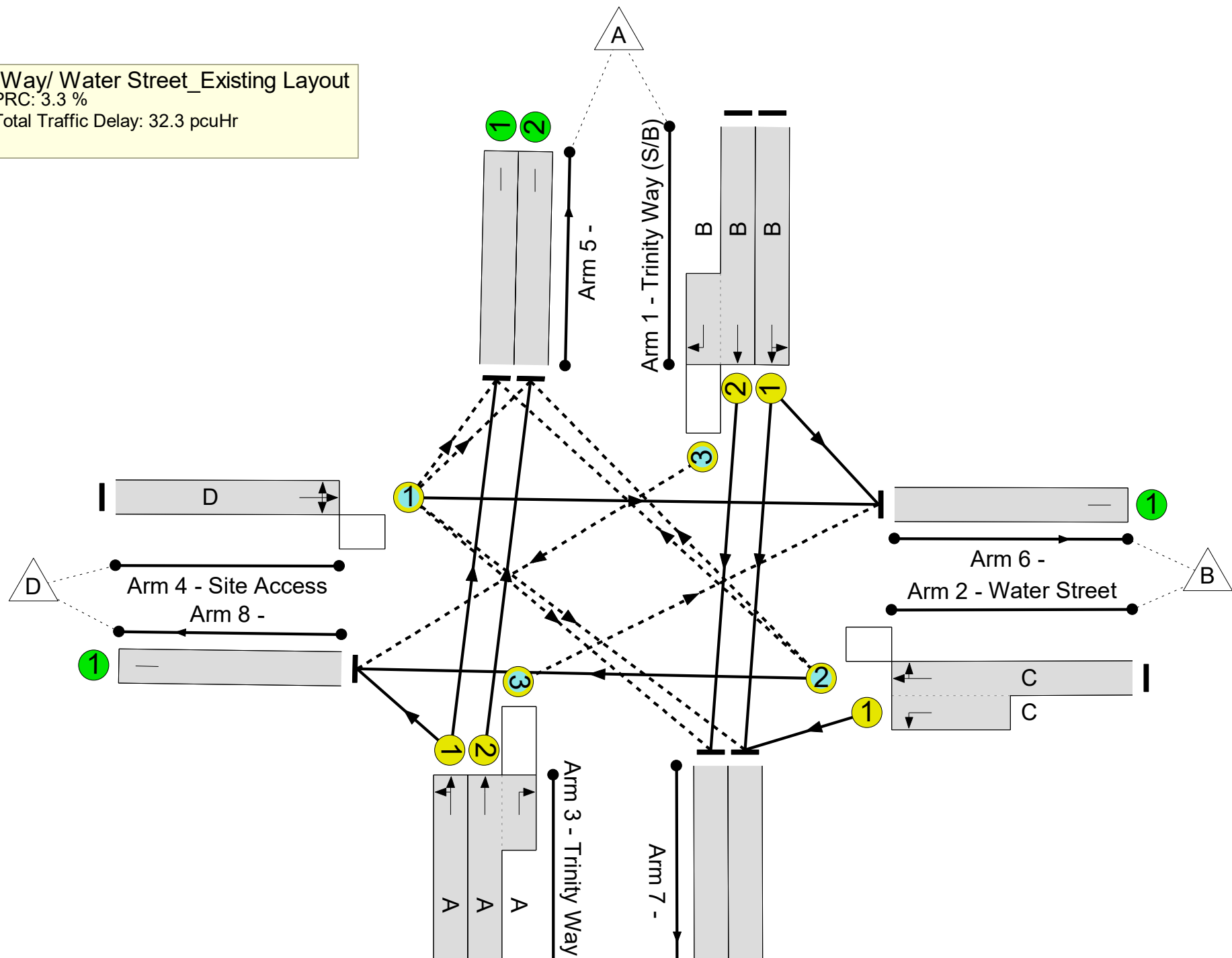




Trinity Way/ Water Street_Existing Layout

PRC: 3.3 %

Total Traffic Delay: 32.3 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	87.1%
Trinity Way/ Water Street_Existing Layout	-	-	N/A	-	-		-	-	-	-	-	-	87.1%
1/1	Trinity Way (S/B) Left Ahead	U	N/A	N/A	B		1	34	-	585	1940	679	86.2%
1/2+1/3	Trinity Way (S/B) Ahead Right	U+O	N/A	N/A	B		1	34	-	639	2105:1824	731+2	87.1 : 87.1%
2/2+2/1	Water Street Right Left Ahead	O+U	N/A	N/A	C		1	15	-	261	1829:1773	39+278	82.4 : 82.4%
3/1	Trinity Way (N/B) Ahead Left	U	N/A	N/A	A		1	59	-	841	1923	1154	72.9%
3/2+3/3	Trinity Way (N/B) Ahead Right	U+O	N/A	N/A	A	E	1	59	21	439	2065:1843	0+518	0.0 : 84.8%
4/1	Site Access Left Ahead Right	O	N/A	N/A	D		1	7	-	29	1797	144	20.2%
5/1		U	N/A	N/A	-		-	-	-	851	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	17	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	514	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	752	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	648	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	12	Inf	Inf	0.0%

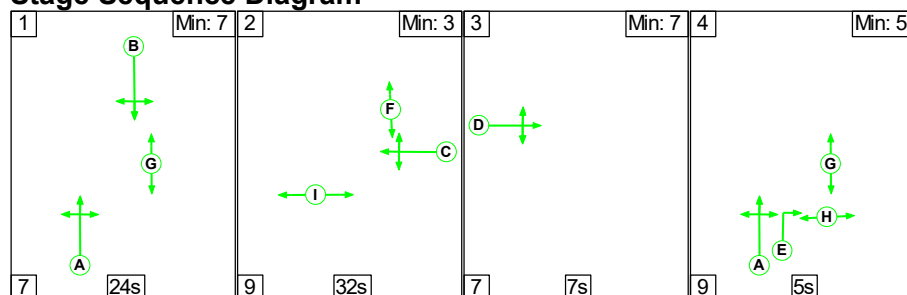
Full Input Data And Results

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Full Input Data And Results

Scenario 2: '2026 With Dev PM Peak' (FG2: '2026 With Dev PM Peak', Plan 1: 'Network Control Plan 1')

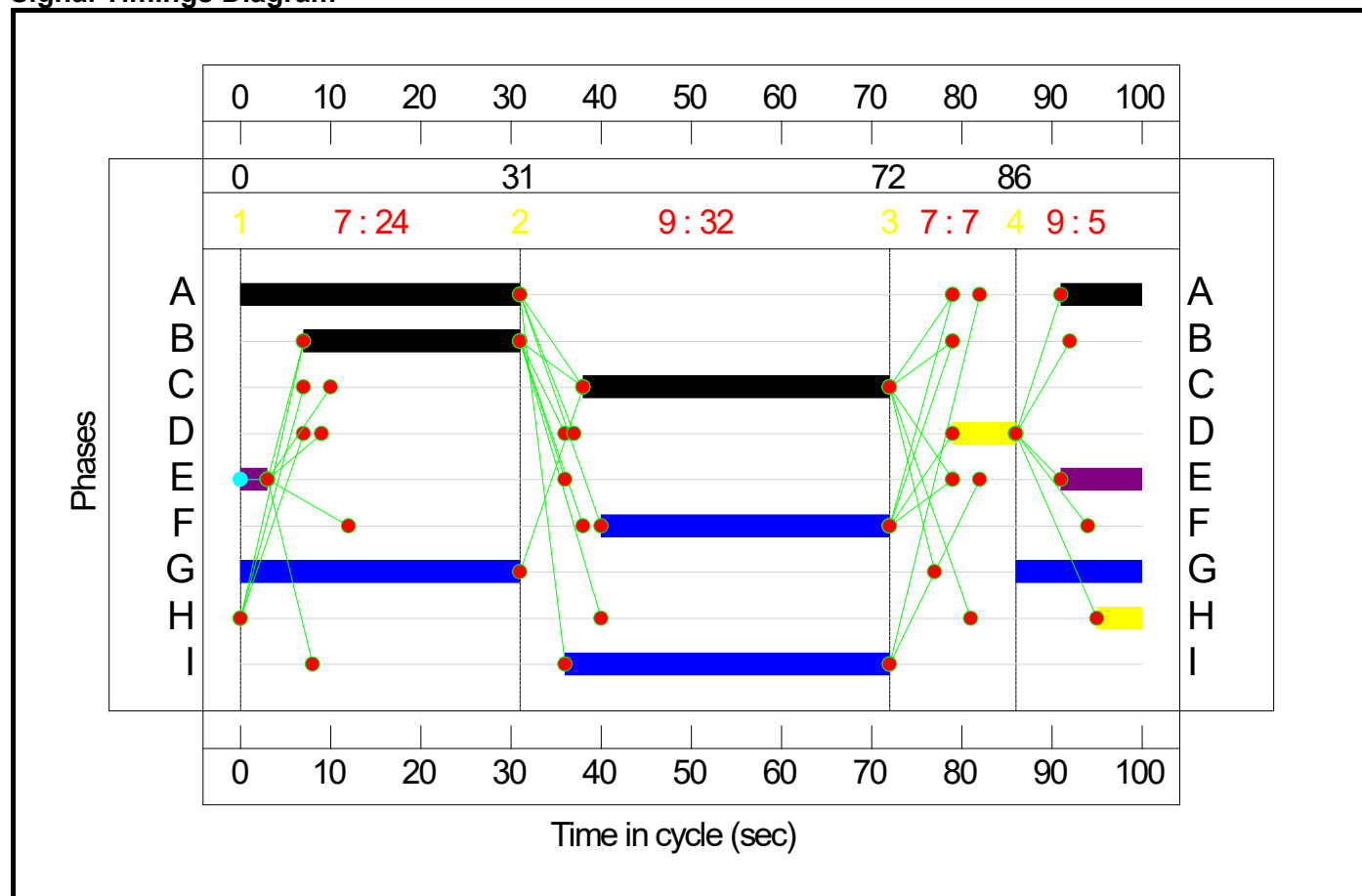
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	24	32	7	5
Change Point	0	31	72	86

Signal Timings Diagram



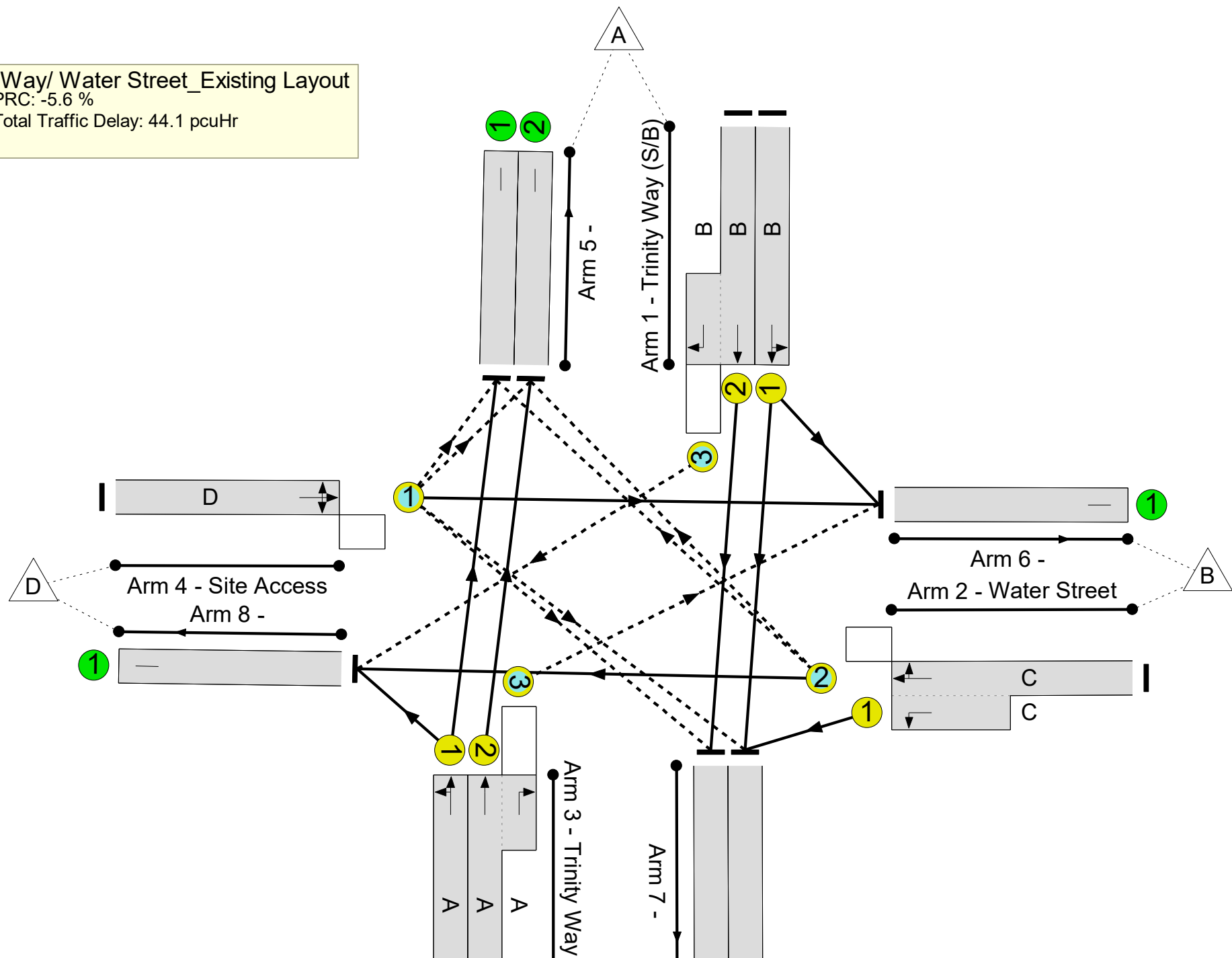
Full Input Data And Results

Network Layout Diagram

Trinity Way/ Water Street_Existing Layout



PRC: -5.6 %
Total Traffic Delay: 44.1 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	95.0%
Trinity Way/ Water Street_Existing Layout	-	-	N/A	-	-		-	-	-	-	-	-	95.0%
1/1	Trinity Way (S/B) Left Ahead	U	N/A	N/A	B		1	24	-	461	1953	488	94.4%
1/2+1/3	Trinity Way (S/B) Ahead Right	U+O	N/A	N/A	B		1	24	-	498	2105:1824	518+6	95.0 : 95.0%
2/2+2/1	Water Street Right Left Ahead	O+U	N/A	N/A	C		1	34	-	665	1826:1773	219+495	93.1 : 93.1%
3/1	Trinity Way (N/B) Ahead Left	U	N/A	N/A	A		1	40	-	633	1919	787	80.5%
3/2+3/3	Trinity Way (N/B) Ahead Right	U+O	N/A	N/A	A	E	1	40	12	364	2065:1843	144+315	79.3 : 79.3%
4/1	Site Access Left Ahead Right	O	N/A	N/A	D		1	7	-	18	1800	144	12.5%
5/1		U	N/A	N/A	-		-	-	-	709	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	216	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	279	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	901	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	499	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	35	Inf	Inf	0.0%

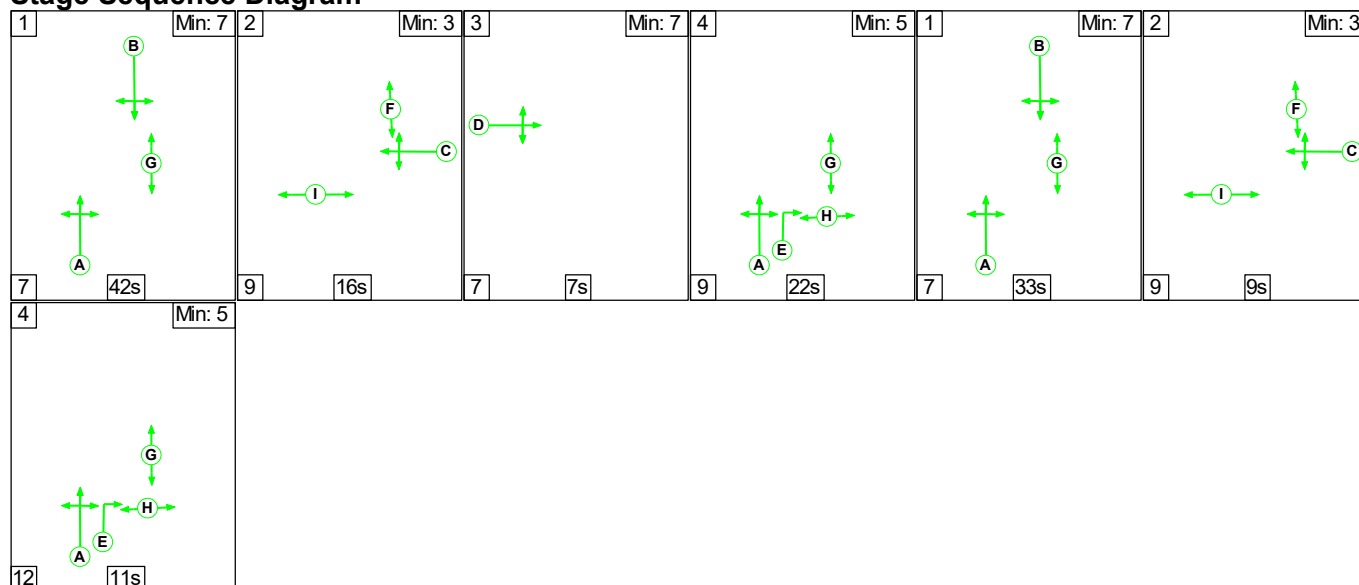
Full Input Data And Results

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Full Input Data And Results

Scenario 3: '2026 With Dev AM Peak (site access arm every other cycle)' (FG1: '2026 With Dev AM Peak', Plan 2: 'Double Cycle')

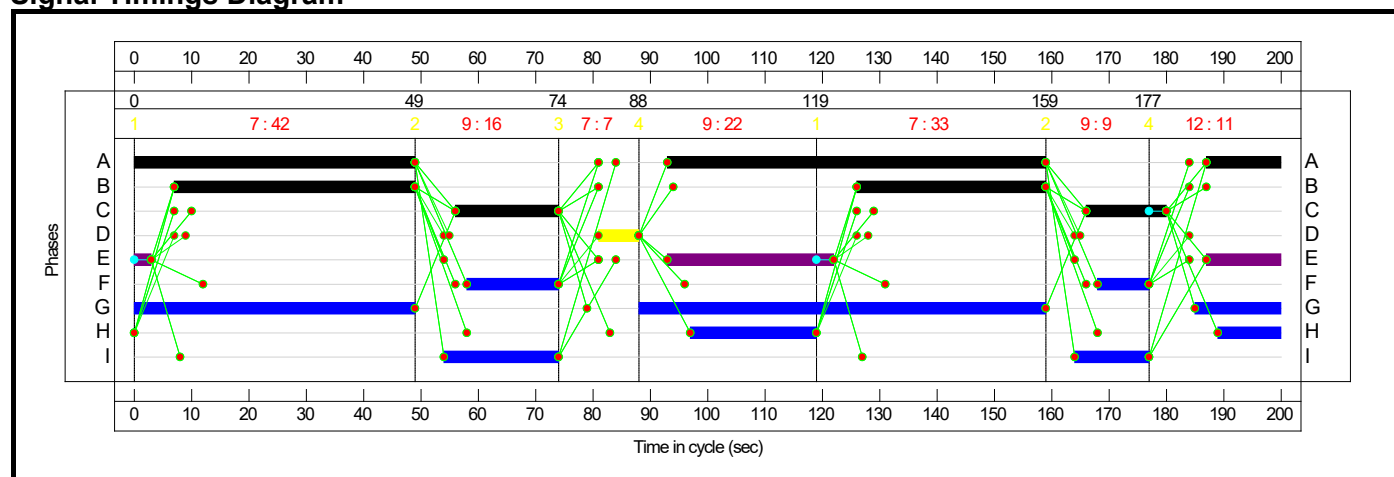
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	4
Duration	42	16	7	22	33	9	11
Change Point	0	49	74	88	119	159	177

Signal Timings Diagram



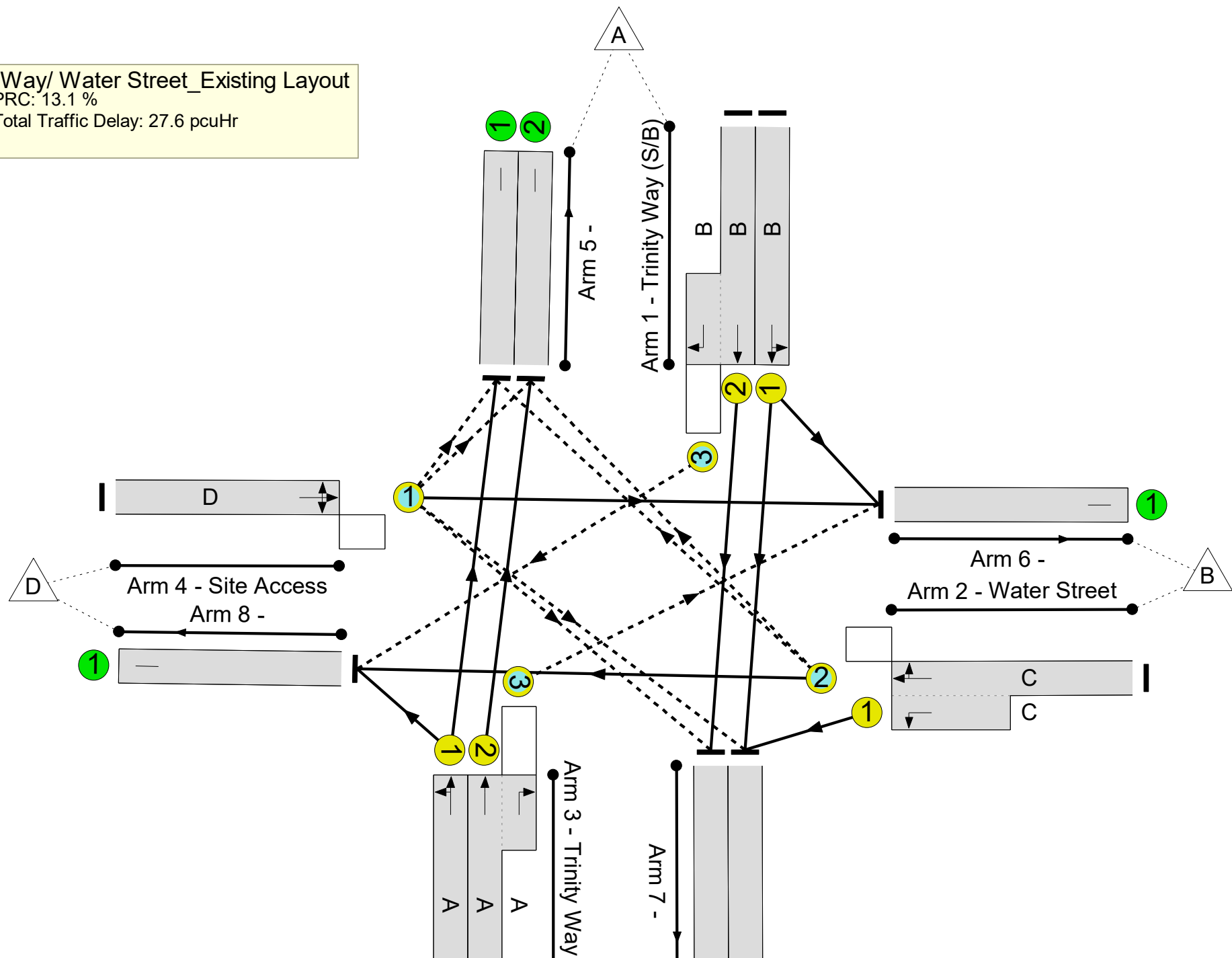
Full Input Data And Results

Network Layout Diagram

Trinity Way/ Water Street_Existing Layout



PRC: 13.1 %
Total Traffic Delay: 27.6 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	79.6%
Trinity Way/ Water Street_Existing Layout	-	-	N/A	-	-		-	-	-	-	-	-	79.6%
1/1	Trinity Way (S/B) Left Ahead	U	N/A	N/A	B		2	75	-	584	1940	747	78.2%
1/2+1/3	Trinity Way (S/B) Ahead Right	U+O	N/A	N/A	B		2	75	-	640	2105:1824	805+3	79.3 : 79.3%
2/2+2/1	Water Street Right Left Ahead	O+U	N/A	N/A	C		2	32	-	261	1829:1773	41+294	78.0 : 78.0%
3/1	Trinity Way (N/B) Ahead Left	U	N/A	N/A	A		2	128	-	841	1923	1250	67.3%
3/2+3/3	Trinity Way (N/B) Ahead Right	U+O	N/A	N/A	A	E	2	128	45	439	2065:1843	0+552	0.0 : 79.6%
4/1	Site Access Left Ahead Right	O	N/A	N/A	D		1	7	-	29	1797	72	40.3%
5/1		U	N/A	N/A	-		-	-	-	851	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	17	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	514	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	751	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	649	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	12	Inf	Inf	0.0%

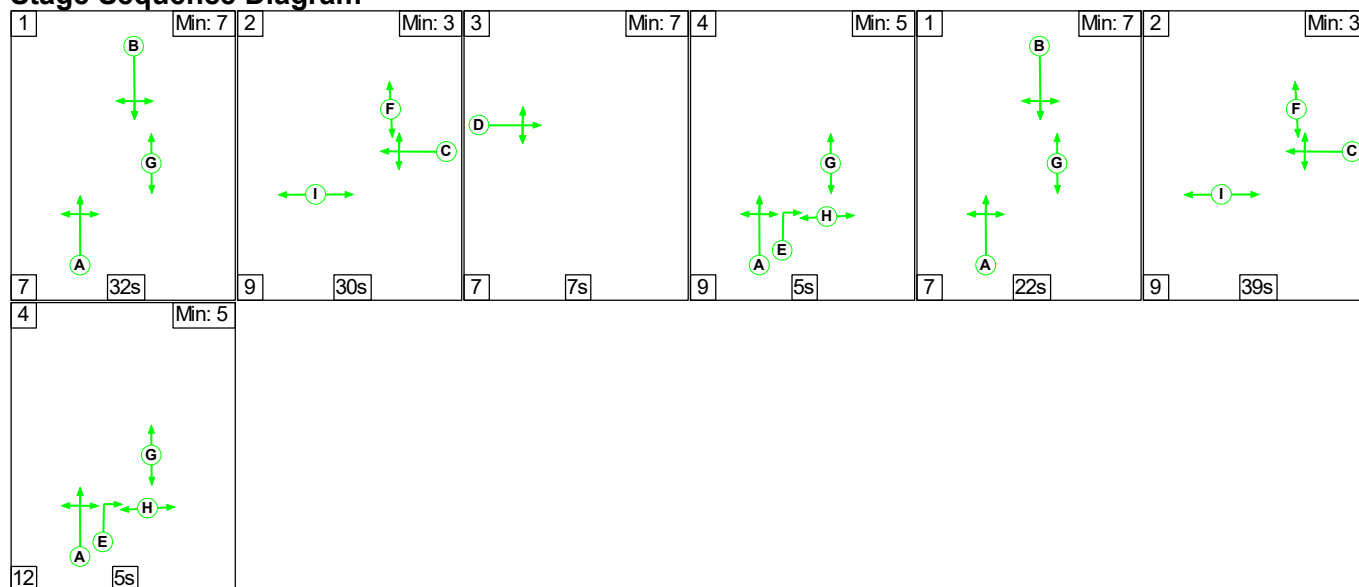
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	14	378	108	18.1	8.6	0.9	27.6	-	-	-	-
Trinity Way/ Water Street_Existing Layout	-	-	14	378	108	18.1	8.6	0.9	27.6	-	-	-	-
1/1	584	584	-	-	-	4.6	1.8	-	6.4	39.4	17.5	1.8	19.3
1/2+1/3	640	640	2	0	0	5.1	1.9	0.0	7.0	39.3	19.4	1.9	21.2
2/2+2/1	261	261	0	30	1	2.9	1.7	0.0	4.6	62.8	6.8	1.7	8.5
3/1	841	841	-	-	-	2.7	1.0	-	3.7	15.8	17.8	1.0	18.8
3/2+3/3	439	439	12	320	107	2.1	1.9	0.9	4.9	40.0	9.5	1.9	11.3
4/1	29	29	0	28	0	0.8	0.3	0.0	1.1	135.3	1.6	0.3	1.9
5/1	851	851	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	17	17	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	514	514	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	751	751	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	649	649	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	12	12	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 13.1 Total Delay for Signalled Lanes (pcuHr): 27.59 Cycle Time (s): 200 PRC Over All Lanes (%): 13.1 Total Delay Over All Lanes(pcuHr): 27.59													

Full Input Data And Results

Scenario 4: '2026 With Dev PM Peak (site access arm every other cycle)' (FG2: '2026 With Dev PM Peak', Plan 2: 'Double Cycle')

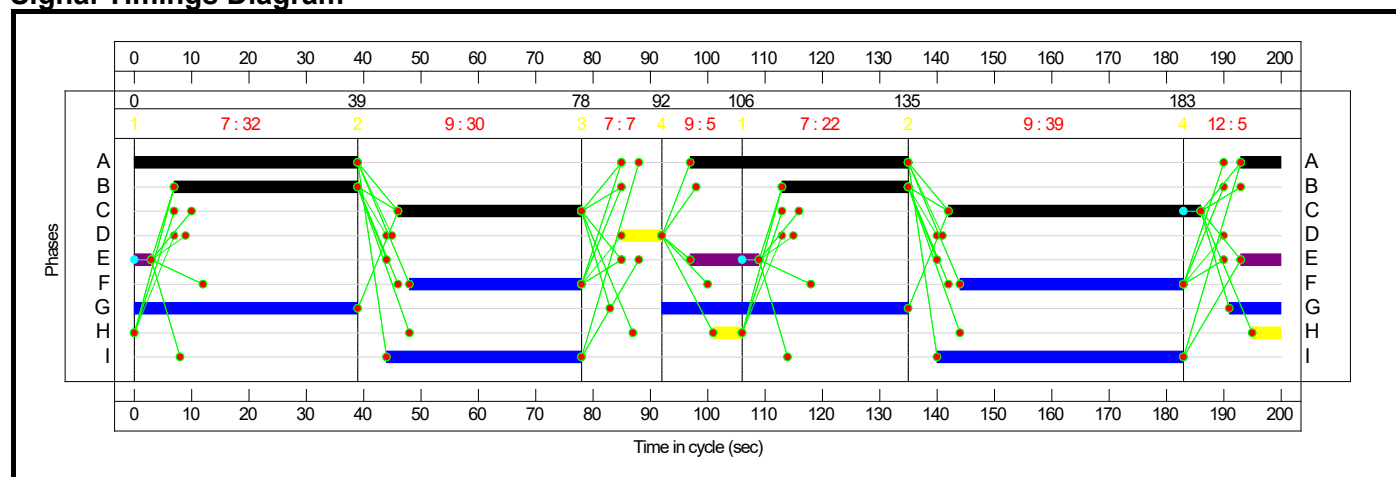
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	4
Duration	32	30	7	5	22	39	5
Change Point	0	39	78	92	106	135	183

Signal Timings Diagram



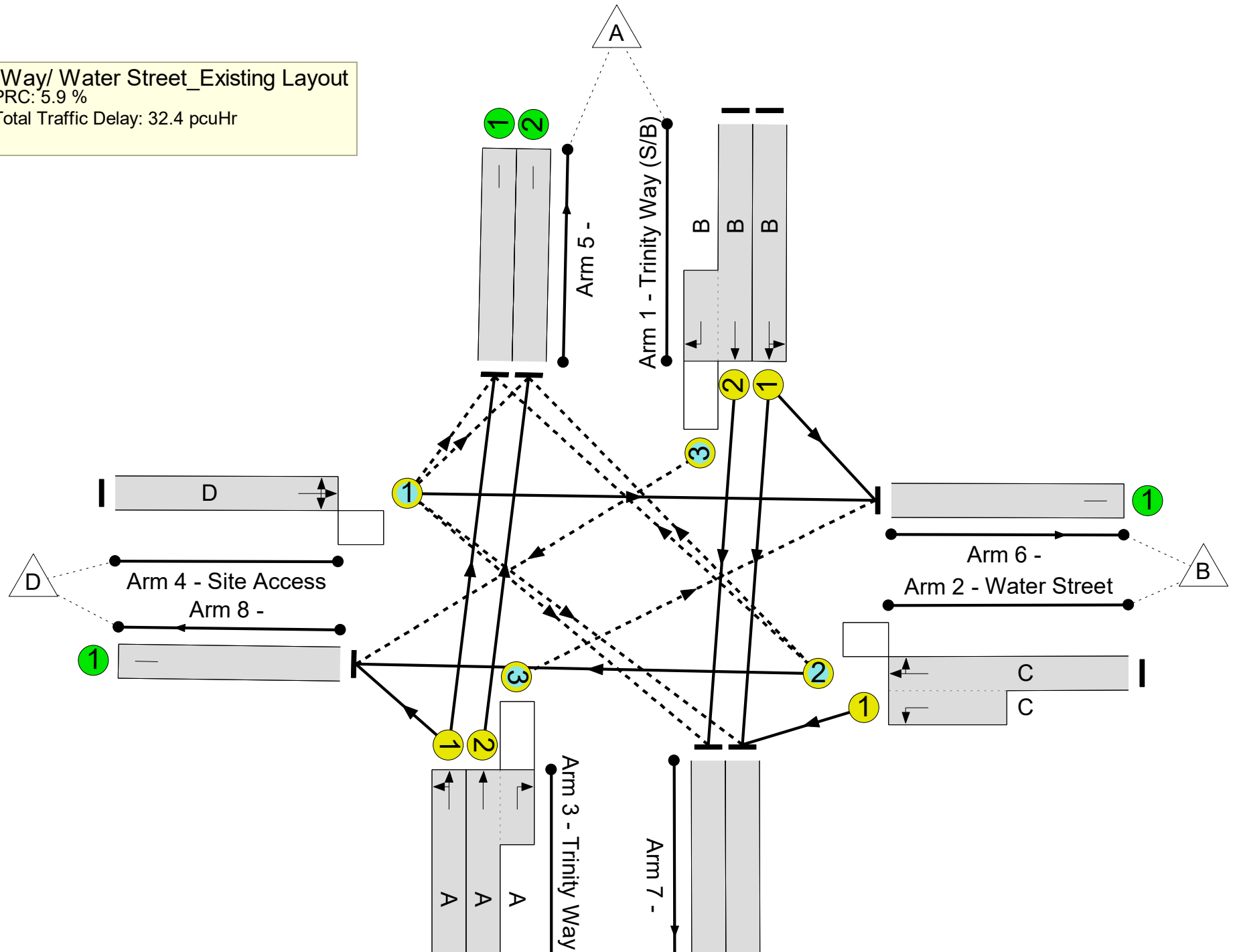
Full Input Data And Results

Network Layout Diagram

Trinity Way/ Water Street_Existing Layout

PRC: 5.9 %

Total Traffic Delay: 32.4 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	85.0%
Trinity Way/ Water Street_Existing Layout	-	-	N/A	-	-		-	-	-	-	-	-	85.0%
1/1	Trinity Way (S/B) Left Ahead	U	N/A	N/A	B		2	54	-	460	1953	547	84.1%
1/2+1/3	Trinity Way (S/B) Ahead Right	U+O	N/A	N/A	B		2	54	-	499	2105:1824	580+7	85.0 : 85.0%
2/2+2/1	Water Street Right Left Ahead	O+U	N/A	N/A	C		2	76	-	665	1826:1773	241+545	84.6 : 84.6%
3/1	Trinity Way (N/B) Ahead Left	U	N/A	N/A	A		2	84	-	656	1919	825	79.5%
3/2+3/3	Trinity Way (N/B) Ahead Right	U+O	N/A	N/A	A	E	2	84	22	341	2065:1843	118+323	77.4 : 77.4%
4/1	Site Access Left Ahead Right	O	N/A	N/A	D		1	7	-	18	1800	72	25.0%
5/1		U	N/A	N/A	-		-	-	-	732	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	193	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	279	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	900	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	500	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	35	Inf	Inf	0.0%

Full Input Data And Results

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