Gaelcholáiste An Phiarsaigh, Rathfarnham, Dublin

Traffic and Transport Assessment Report

190187-DBFL-TR-XX-RP-C-0001

TRANSPORTATION

April 2023

DBFL CONSULTING ENGINEERS

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1 INTRODUCTION

1.1 BACKGROUND

DBFL Consulting Engineers (DBFL) has been commissioned by Department of Education and Skills (DoES) to compile a Traffic and Transport Assessment (TTA) for proposed alteration and extension works at Gaelcholáiste an Phiarsaigh, Rathfarnham, Dublin 14. The scheme comprises the refurbishment of the existing buildings, the construction of a new link building and site works on the grounds of Gaelcholáiste an Phiarsaigh.

The proposed development consists of the following key elements:

i. Reconfiguration of the existing Dispensary Lane vehicle access route to accommodate one way vehicle route with set down area and new egress route onto Dispensary Lane with pedestrian path and new gates.

ii. Removal of existing temporary on-site car parking (SD19A/0368) and reinstate historic landscaping.

iii. Construction of new all-weather ball court in artificial grass.

iv. Construction of new palisade fence to boundary and new painted steel railings to boundary plinth wall.

v. Removal of shed belonging to crèche.

vi. Construction of concrete paving slabs brushed concrete ramps and soft landscaping maintaining some existing trees to crèche elevation.

vii. Addition of new fenced ball area with coloured tarmac finish

viii. Renovating of existing granite steps - salvaged, cleaned/repaired, and re-laid

ix. New brushed concrete ramp, Granite/concrete paving sets

x. Existing podium surface replaced with new paved area Waterproofing to vaults below.

xi. New 1100 x 1800 x 5100 mm high heat pump to M&E detail with a timber panel fence enclosure.

xii. Existing trees to west of chapel to be maintained.

xiii. New grassed area between chapel and ball court (south).

xiv. New fence and gates to new bike enclosure (107 spaces). New car parking with 26 no. car parking spaces in total with 2 no. accessible and 5no. EV Spaces

xv. Maintain existing ball court to facilitate fire tender turning and replace a section of the existing fence with gated access (pending future Phase 2 development to replace prefab. building, bicycle parking, and ball court with historical hard and soft landscaping)

xvi. Reconfiguration of Loreto Abbey apartment roadside parking

This TTA has been prepared in reference to the requirements of the National Roads Authority (TII) "Traffic and Transportation Assessment Guidelines" and references has also been made to the "South Dublin County Council Development Plan 2022-2028".

During the development of this report, traffic turning count surveys have been commissioned specifically for this assessment, with the objective of providing background information relating to existing traffic movement patterns across the local road network. This information has been supplemented with data obtained from site audits of the local road network, subsequently enabling the identification of existing local travel characteristics and an appreciation of the local receiving environment from a transportation perspective.

1.2 SCOPE

The objective of this TTA is to quantify the existing transport environment and to detail the results of assessment work undertaken to identify the potential level of any transport impact generated as a result of the proposed School development. The scope of the assessment covers transport and related sustainability issues including means of vehicular access, pedestrian, cyclist and local public transport connections.

This TTA has been produced in response to RFI items 9 and 10 as requested by SDCC as part of planning ref: SD22A/0153.

1.3 METHODOLOGY

Our approach to the study accords with policy and guidance both at a national and local level. Accordingly, the adopted methodology responds to best practices, current and emerging

guidance, exemplified by a series of publications, all of which advocate this method of analysis. Key publications consulted include;

- '*Traffic and Transport Assessment Guidelines*' (May 2014) TII;
- *'Traffic Management Guidelines'* Dublin Transportation Office & Department of the Environment and Local Government (May 2003);
- *'Guidelines for Traffic Impact Assessments'* The Institution of Highways and Transportation; and
- *South Dublin County Council Development Plan 2022-2028*.

Our methodology incorporated a number of key inter-related stages, including;

- **Site Audit**: A site audit was undertaken to quantify existing road network issues and identify local infrastructure characteristics, in addition to establishing the level of accessibility to the site in terms of walking, cycling and public transport. An inventory of the local road network was also developed during this stage of the assessment.
- **Traffic Counts**: Junction traffic counts in addition to vehicle queue length surveys were undertaken and analysed with the objective of establishing local traffic characteristics in the immediate area of the proposed school development.
- **Trip Generation**: A trip generation exercise has been carried out to establish the potential level of vehicle trips generated by the proposed school development.
- **Trip Distribution:** Based upon both the existing and future network characteristics, a distribution exercise has been undertaken to assign site generated vehicle trips across the local road network.
- **Network Analysis:** Further to quantifying the predicted impact of vehicle movements across the local road network for the adopted site access strategy more detailed computer simulations have been undertaken to assess the operational performance of key junctions in the post development 2023, 2028 and 2038 development scenarios.

1.4 REPORT STRUCTURE

As introduced above, this TTA seeks to clarify the potential level of influence generated by the proposed school development upon the local road network and subsequently ascertain the existing and future operational performance of the local transport system. The structure of the report responds to the various stages of this exercise including the key tasks summarised below.

Chapter 2 of this report describes the existing conditions at the proposed development location and surrounding area, whilst **Chapter 3** provides a summary of the relevant transport policies that influence the design and appraisal of the subject proposal.

A description of the proposed development scheme from a transportation perspective is described in **Chapter 4** whilst **Chapter 5** outlines the trip generation and distribution exercise carried out and the adopted methodology for applying growth factors to establish design year network traffic flows and the predicted scale of impact upon the local road network.

The operational performance of key local junctions is assessed for the 2024 Opening Year and the 2029 (Opening Year +5 years) and the 2039 (Opening Year +15 years) Horizon Years are summarised within **Chapter 6**. The road network analysis due to development proposals is outlined in **Chapter 7**.

A direct response to additional information request transport and traffic items is provided in **Chapter 8** whilst the main conclusions and recommendations derived from the analysis are summarised in **Chapter 9**.

2 RECEIVING ENVIRONMENT

2.1 LAND USE

The subject site is zoned *"Objective RES – To protect and/or improve residential amenity"* in the South Dublin County Council Development Plan (2022-2028). **Figure 2.1** below illustrates the location of the proposed development in the context of the Development Plan Land use zoning objectives.

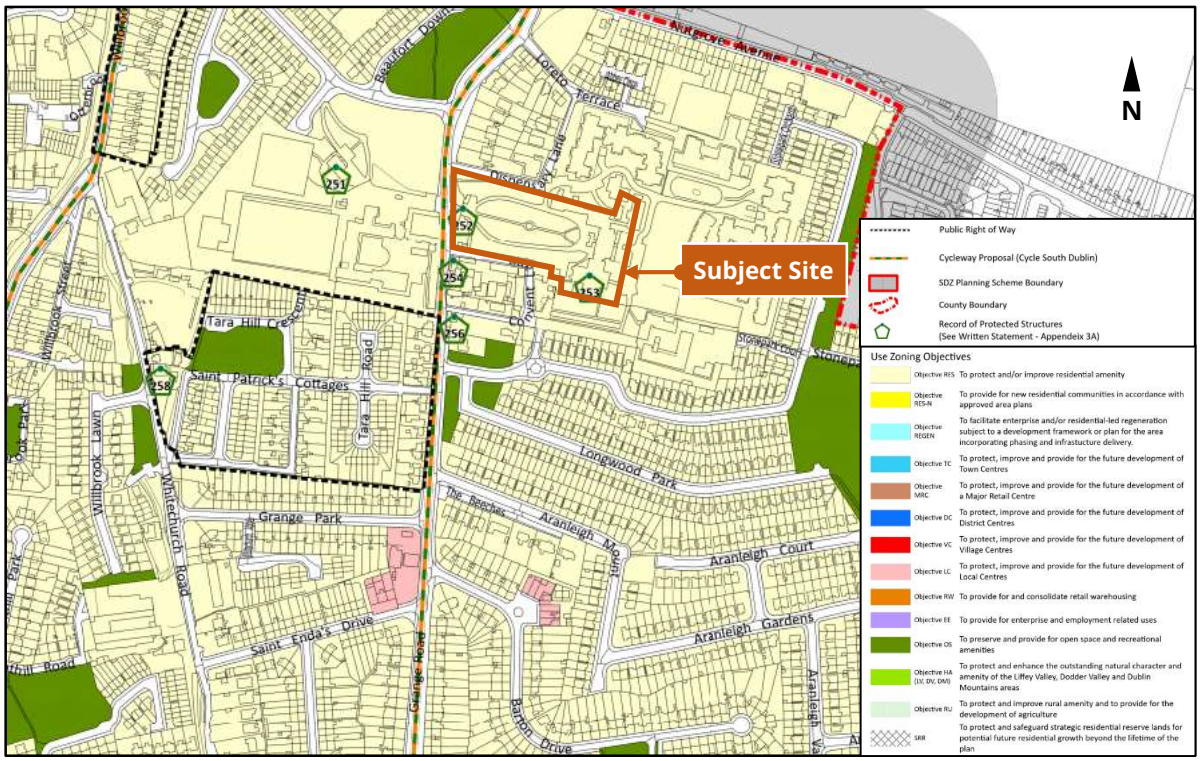


Figure 2.1 Subject Site Land Use Zoning (Reference: SDCC Development Plan 2022-2028 Map 6)

2.2 LOCATION

The proposed development site is located east of Grange Road in Rathfarnham, Dublin 16 bounded by Rathfarnham health centre and residential houses to the north, Grange Road to the west, Convent Lane to the south and residential apartments to the east. **Figure 2.2** below presents the general local of the subject site in regard to the surrounding road network whilst **Figure 2.3** shows the indicative subject site boundary.

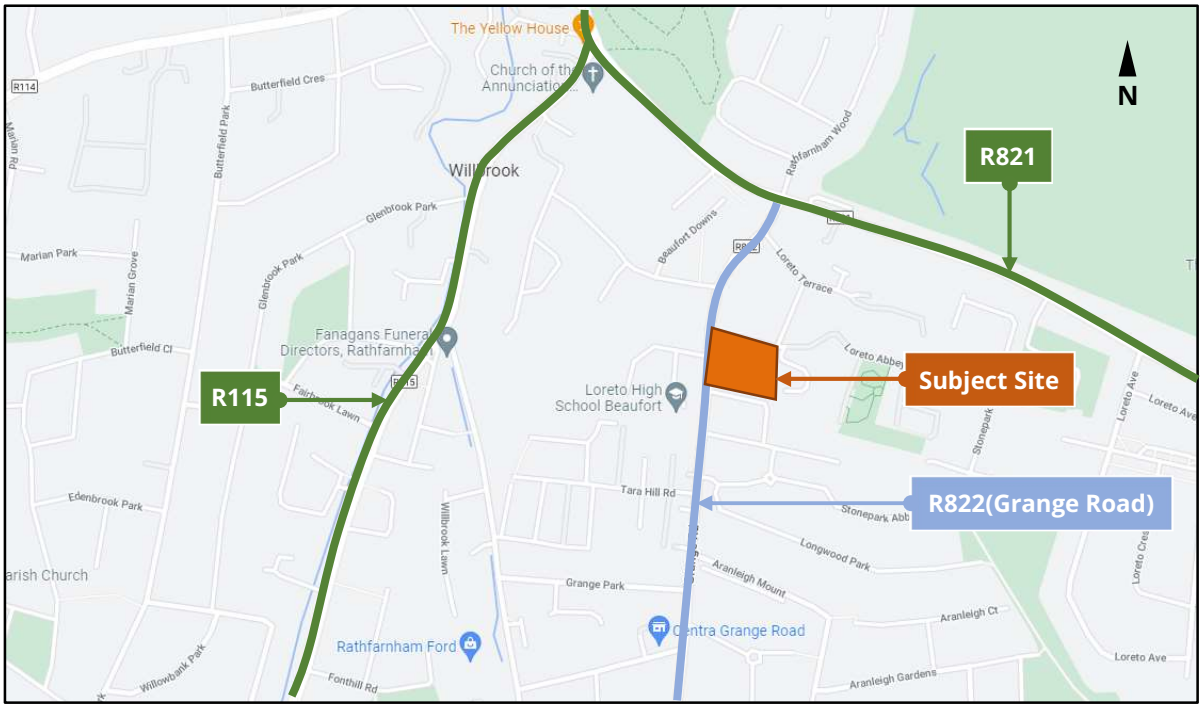


Figure 2.2: Site Location (Reference: Google Maps)

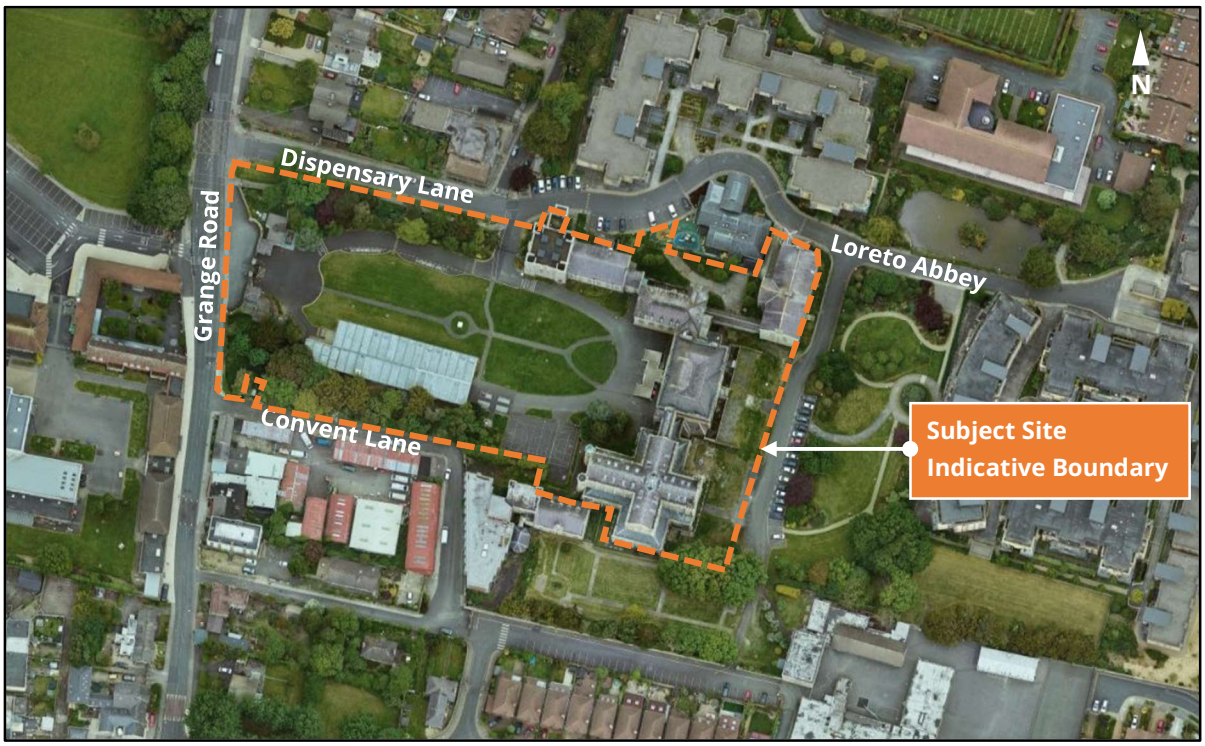


Figure 2.3: Indicative Site Boundary (Source: Google Maps)

2.3 EXISTING VEHICULAR ACCESS

At present, there are two vehicular access / egress points to the subject site, including an egress only to the west along Grange Road and an access / egress to the north along Dispensary Lane as illustrated in **Figure 2.4** and **Figure 2.5.**

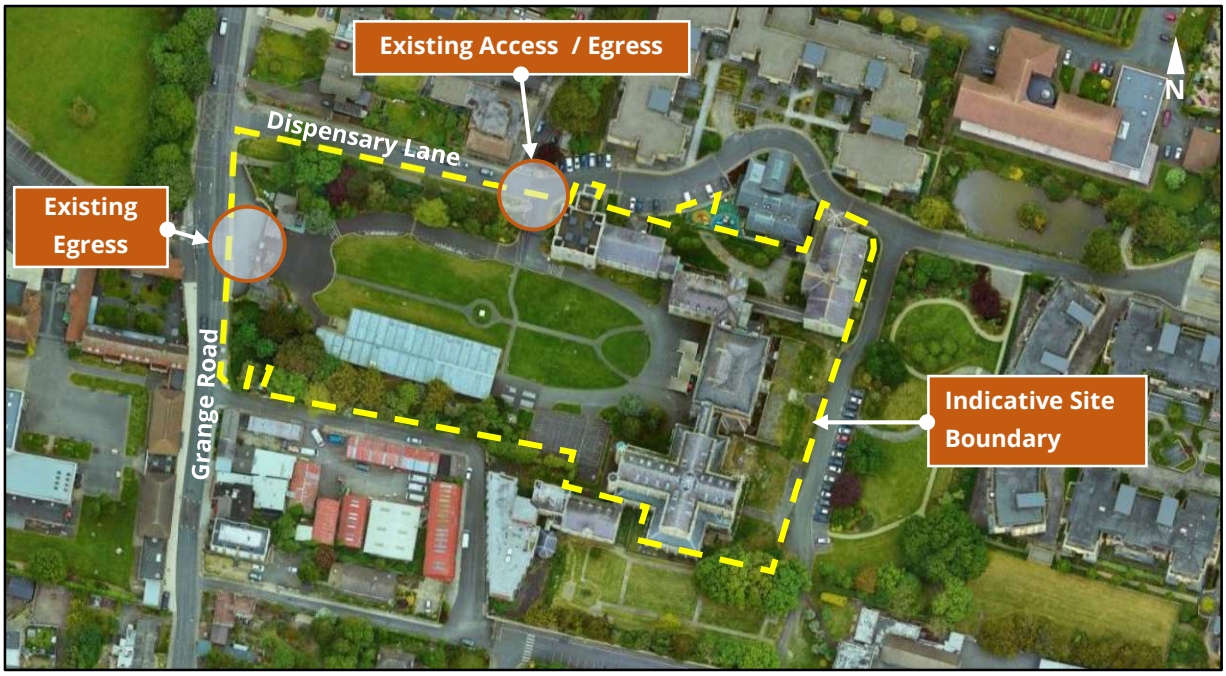


Figure 2.4: Existing Vehicular Access Locations (Source: Google Maps)

Figure 2.5: Existing Vehicular Access / Egress Layouts (Source: Google Maps)

2.4 EXISTING TRANSPORTATION INFRASTRUCTURE

2.4.1 Road Network

The subject Gaelcholáiste An Phiarsaigh is bounded to the north by Dispensary Lane and to the south by Convent Lane. The eastern boundary of the subject site is formed by an internal access road shared between the Abbey site and the Apartment development to the east, and ends at

emergency access gates into the grounds of the adjoining Loreto National School. Travelling northwards on the R822 Grange Road leads to the R821 Nutgrove Avenue. Travelling eastbound, the R821 Regional Road terminates with the R112 to the northeast and continues towards Dundrum. Travelling westbound on the R821 leads to the R114 Butterfield Avenue and R115 Willbrook Avenue.

Travelling southwards on the R822 leads to Taylor's lane and subsequently the M50 (J12) via Ballyboden Way and Scholarstown Road. **Figure 2.6** illustrates the surrounding road network in the vicinity of the subject site.

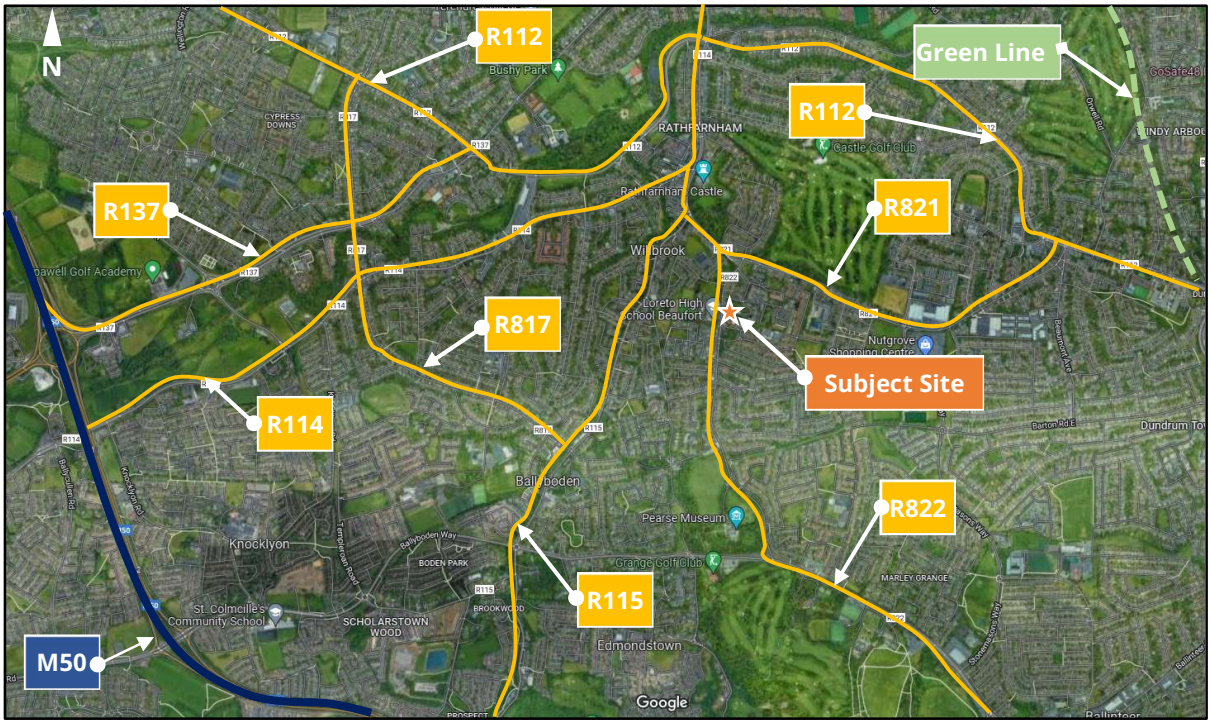


Figure 2.6: Site Location with surrounding Road network (Reference: Google Maps)

2.4.2 Existing Cycling and Pedestrian Facilities

To the west of the subject site, pedestrians benefit from existing footpaths and street lighting on both sides of the R822 Grange Road corridor as illustrated in **Figure 2.7**. Cyclists benefit from the availability of dedicated cycle infrastructure comprising a mix of advisory cycle lanes and cycle tracks along this corridor. Dispensary Lane, which forms the northern boundary of the subject site, has pedestrian footpaths available on both sides of the road and street lighting available on one side of the road corridor as shown in **Figure 2.8**. Convent Lane, which forms the southern boundary of the subject site, benefits from the provision of pedestrian footpaths and street lighting on the northern side of the street as presented in **Figure 2.9**.

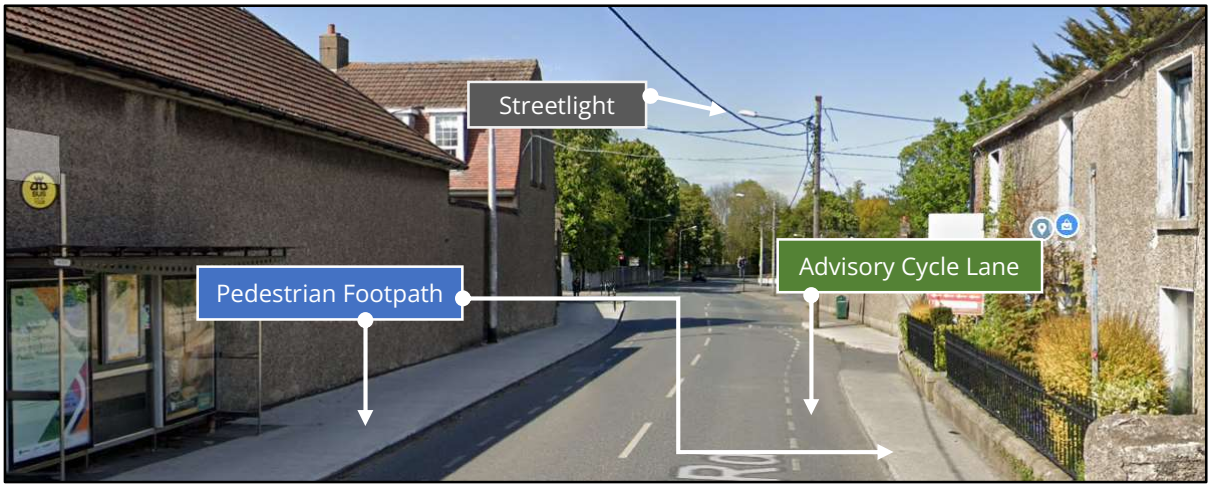


Figure 2.7: Pedestrian Facilities along Grange Road (Source: Google Maps)

Figure 2.8 : Pedestrian facilities along Dispensary Lane (Source: Google Maps)

Figure 2.9: Pedestrian facilities along Convent Lane (Source: Google Maps)

In December 2013, the NTA published the report entitled **Greater Dublin Area Cycle Network Plan**. The report summarises the findings of a comprehensive body of work detailing a proposed

Cycle Network incorporating Urban, Inter-urban and Green-route networks covering the seven local authority areas that together form the defined Greater Dublin Area (GDA). The subject site is located within the GDA cycle Network sector designated as the "Dublin South West". **Figure 2.10** below (extracted from the Existing Cycle Facility Map) illustrates the existing facilities in the near vicinity of the subject site.

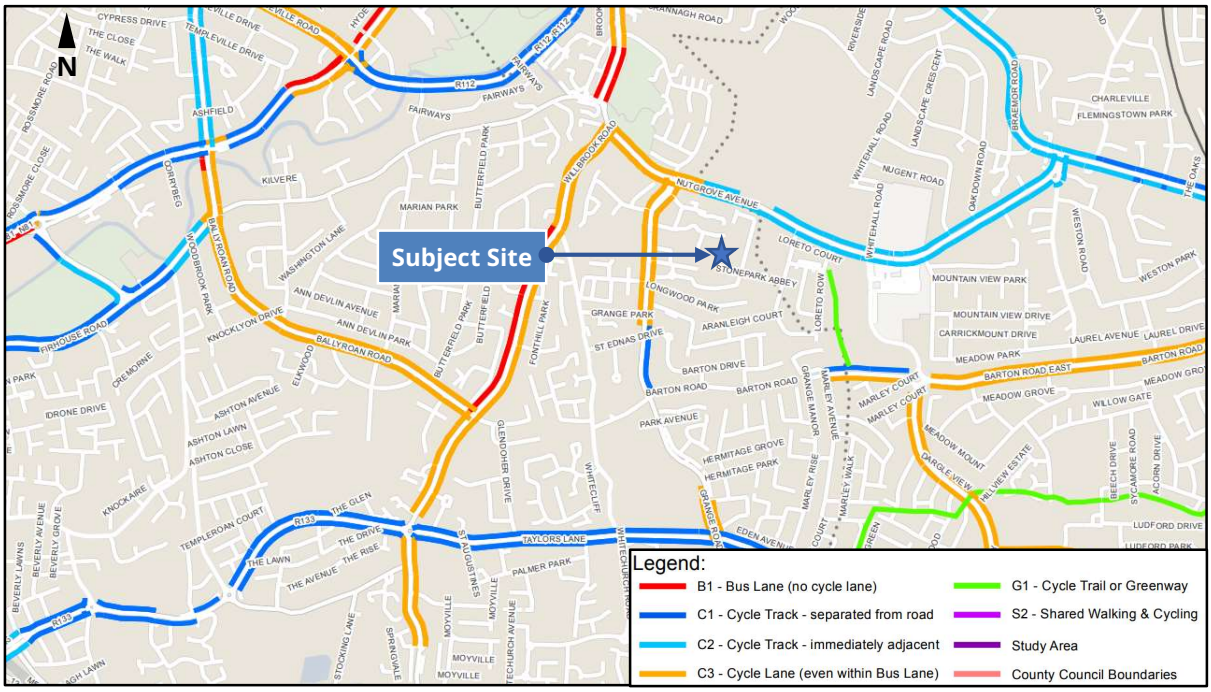


Figure 2.10: Existing Cycle Facilities (Reference: Sheet E6 GDA Cycle Network Plan)

2.4.3 Public Transport – Bus

The subject site benefits from convenient access to public transport services with Dublin Bus and Go-Ahead Ireland operating a total of seven bus routes, providing connections to locations including Dublin Airport, Ballinteer, Blackrock, Rialto, Dundrum, Eden Quay, Tallaght, Sandyford and Dun Laoghaire. Details of these bus routes, including the number of services per day per direction is summarised in **Table 2.1**.

Route 16 and Route 16D are accessible on Grange Road (R822) at local bus stops 1327, 1321, 1328, 1320 and 1329. Bus routes 17,17D,61,75,75A can all be accessed on the Nutgrove Avenue (R821) corridor at bus stops 1306,1271 and 1307. **Figure 2.11** presents bus stops within walking distance to the proposed development site.

Route No.	Route	No. of Services per day		
		Mon - Fri	Sat	Sun
16	Dublin Airport - Ballinteer (Kingston)	80	81	63
	Ballinteer (Kingston) - Dublin Airport	88	83	65
16D	Dublin Airport - Ballinteer (Kingston)	6	-	-
	Ballinteer (Kingston) - Dublin Airport	-	-	-
17	Blackrock-Rialto	45	41	28
	Rialto- Blackrock	45	41	28
17D	Dundrum-Rialto	1	1	1
	Rialto-Dundrum	1	1	1
61	Eden Quay - Whitechurch	17	15	13
	Whitechurch- Eden Quay	18	16	14
75	Tallaght - Dun Laoghaire (via Dundrum)	32	32	30
	Dun Laoghaire – Tallaght (via Dundrum)	34	32	29
75A	Tallaght - Dun Laoghaire (via Sandyford Ind Est)	5	2	-
	Tallaght - Dun Laoghaire (via Sandyford Ind Est	5	2	-

Table 2.1: Dublin Bus Service Frequency (No. of services per day)

Figure 2.11 : Existing Bus interchange serving Subject Site (Reference: Google Maps)

2.4.4 Public Transport – Luas

The proposed development site lies in close proximity to the Luas Green Line, which provides access to Dublin City Centre to the north and Brides Glen to the southeast. The Dundrum Luas

Stop and Windy Arbour Luas Stop are located just 3.1 km east and northeast of the site respectively.

Table 2.2 summarises the frequency of Luas services at both stops, while **Figure 2.12** illustrates the location of Luas Stops relative to the subject site.

LUAS Stop	Direction	Mon-Fri	Sat	Sun
Dundrum	Northbound	4-9	7-12	12-15
	Southbound	4-12	7-16	12-15
Windy Arbour	Northbound	4-9	7-12	12-15
	Southbound	4-12	7-15	12-15

Table 2.2 :Luas Green Line Service Frequency (Average Minutes)

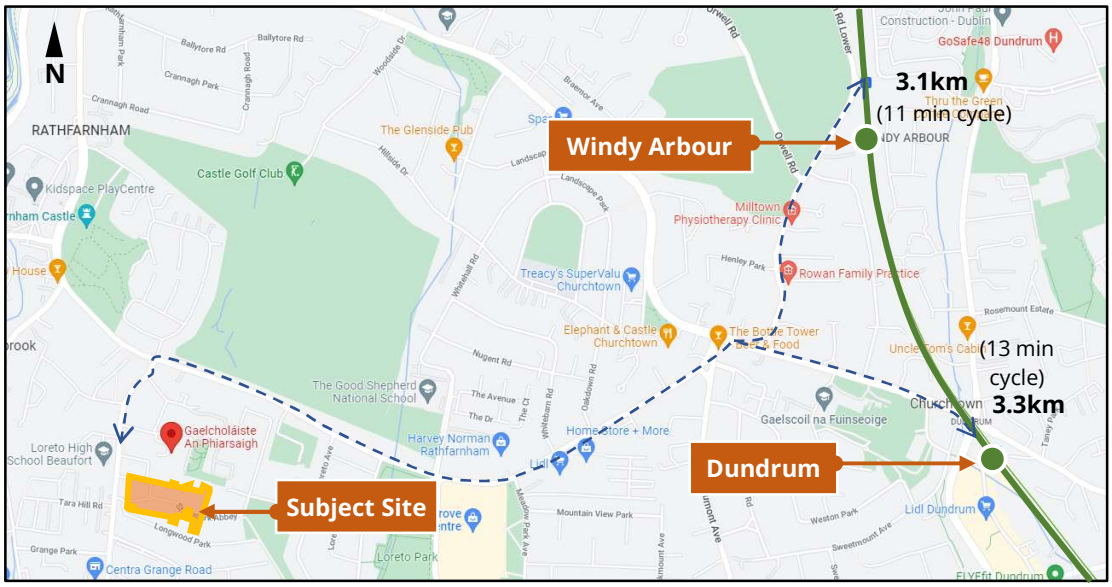


Figure 2.12: Existing Green Line Luas serving subject site (Google Maps)

2.5 SITE ACCESSIBILITY

2.5.1 Walking

Figure 2.13 presents the walking catchments from the subject site for different walking times ranging from 15 minutes to 45 minutes. A number of residential settlements are located within a 15-30-minute walking catchment including Willbrook, Ballyboden, Cypress Downs, Whitechurch, churchtown, Ballineer, Dundrum, Terenure.

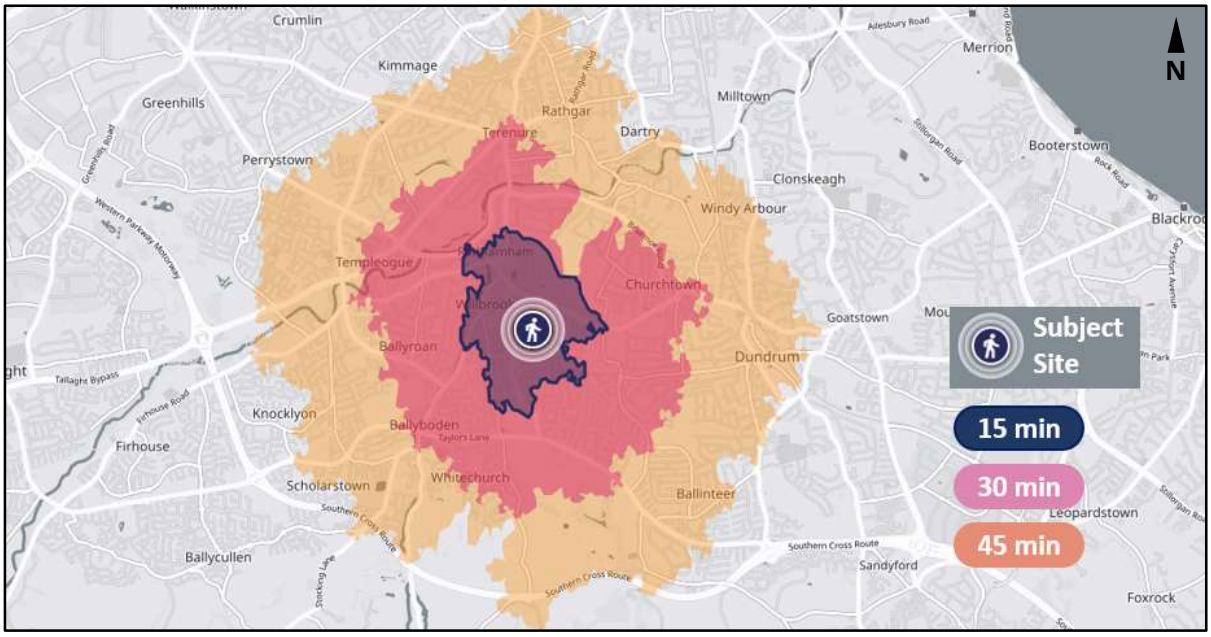


Figure 2.13: Pedestrian Accessibility (Walking from Site) (Reference: Travel Time)

2.5.2 Cycling

Figure 2.14 indicates cycle travel time catchment areas from the subject site. Within a **15 minute** cycle, a significant number of nearby neighbourhood centres and residential areas are accessible. Within a **30 minute** cycle, locations including Sandyford, Tallaght, Dublin, Sandymount, Booterstown, Stillorgan, Ballycullen can be reached. Areas including Clondalkin, Jobstown, Glasnevin, Clontarf, Dun Laoghaire, Kilternan ae located within a 45 minute cycle.

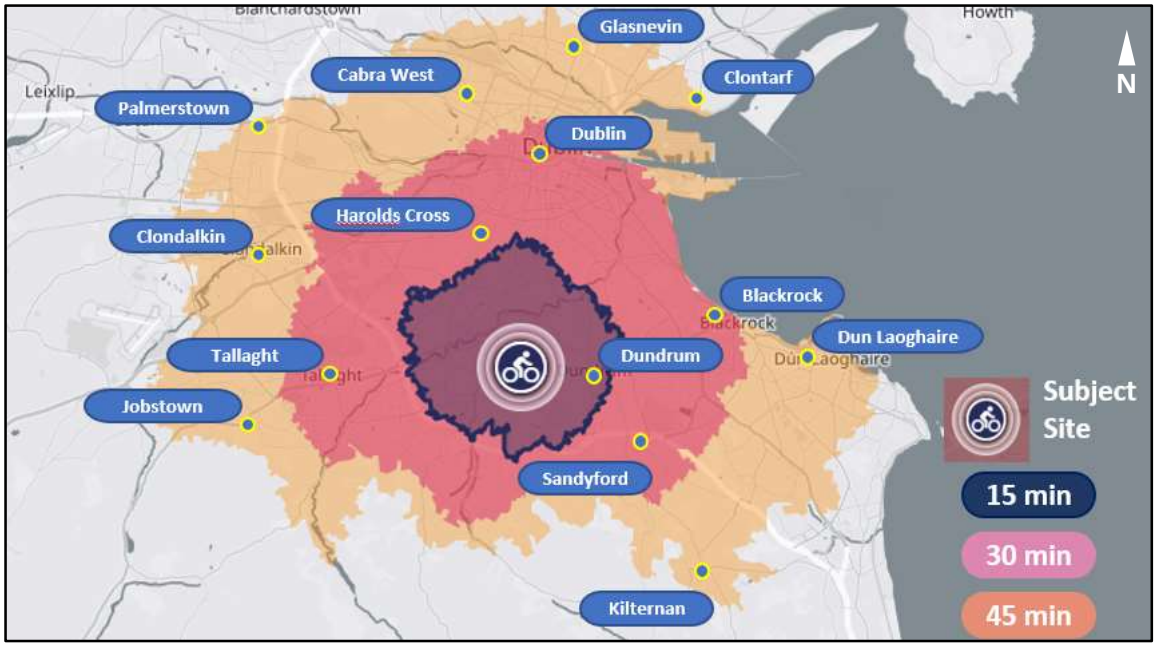


Figure 2.14: Cycling Accessibility (Reference: Travel Time)

2.5.3 Public Transport and Walking

The subject site benefits from a range of existing bus services in close proximity to the site as outlined previously in the **section 2.4.3**.

Figure 2.15 indicates public transport travel time catchment areas from the subject site. It is noted that the subject development location benefits from good accessibility to a number of different bus service and Luas interchanges being within close proximity. Within 30 minutes, locations including Kimmage, Harold's Cross, Milltown, Terenure, Scholarstown, Ballinteer, Dundrum and Windy Arbour can be reached. Areas such as Walkinstown, Tallaght, Greenhills, Scholarstown, Leopardstown, Blackrock and Dublin are located within 45 minutes public transport travel time from the subject site.

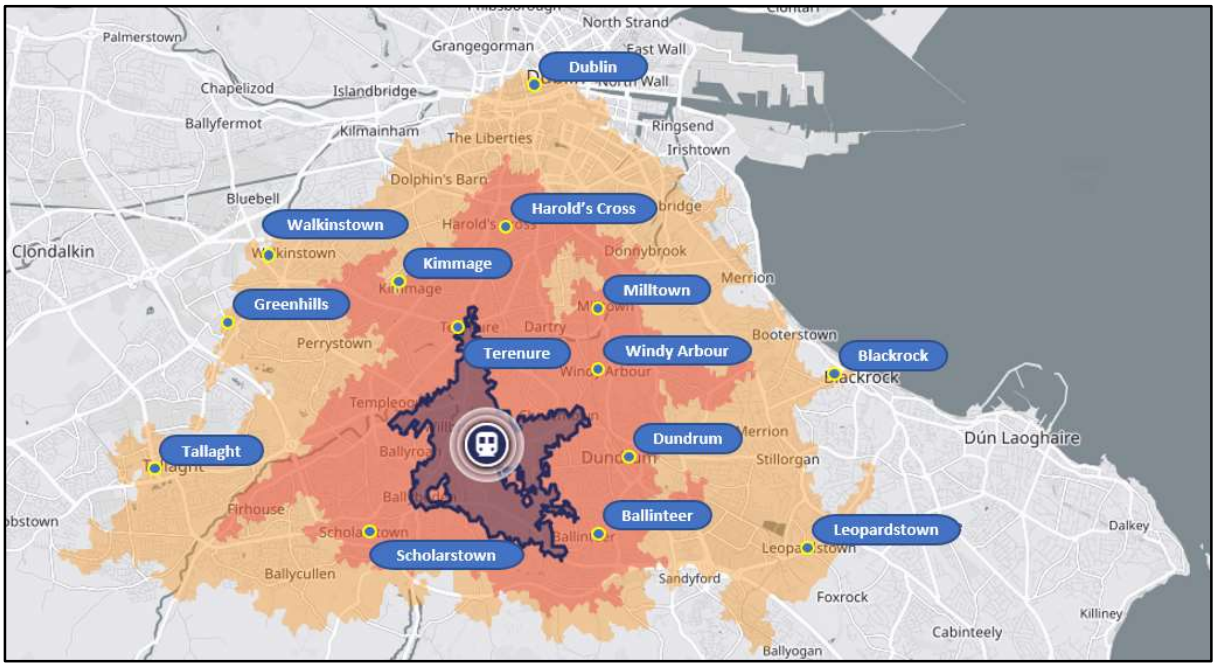


Figure 2.15: Public Transport Accessibility- Travel Time Catchments (Reference: Travel Time)

2.6 PROPOSED TRANSPORT INFRASTRUCTURE

2.6.1 Cycle Network Proposals

GDA Cycle Network Plan - 2013

The subject site lies within the **"Dublin South West Sector"** as outlined within the Greater Dublin Area Cycle Network Plan (2013). **Figure 2.16** below illustrates the cycle network proposals in the vicinity of the subject site as outlined within the Plan. In the vicinity of the subject site the plan

includes proposals for several secondary routes, feeder routes and a greenway running parallel to the M50 motorway. The routes running closest to the site include:

- **Route 10:** from Camden Street through Rathmines, Rathgar and Terenure to Rathfarnham, where it splits into several branches. South of Rathfarnham there are 3 branch routes that extend southward through the surrounding suburban area to connect with Orbital Route SO6 along Grange Road and Taylor's Lane;
- **Route 10B:** follows Willbrook Road and Ballyboden Road southward;
- **Route SO4:** from Dundrum, Churchtown and Nutgrove through Rathfarnham and Templeogue to Greenhills and Walkinstown;
- **SO5:** Dundrum to Tallaght via Ballyboden and Knocklyon and Firhouse. It will require new permeability links between Nutgrove, Ballyboden and Templeroan. Otherwise, the route could overlap with SO6 for a short section along Taylor's Lane; and

Figure 2.16: GDA Cycle Network Plan Proposals (Reference: Extract of Sheet N6)

Greater Dublin Area Cycle Network Plan - 2022

The Transport Strategy for the Greater Dublin Area 2022-2042 as compiled by the National Transport Authority sets out the Strategic Transport Plan for the Greater Dublin Area for the period up to 2042. It provides a substantial update and expanse of the 2013 GDA Cycle Network Plan,

supported with technical assessment and stakeholder input. The GDA Cycle Network comprises of Primary, Secondary, Feeder, Greenway and Inter-urban routes for the region, including dedicated town networks for all settlements. The revised network forms a key component of the overall transport network for the region

The GDA Cycle Network Plan 2022 routes within the vicinity of the subject site are indicated in **Figure 2.17.** In the vicinity of the subject site, the R822 Grange Road corridor and the R821 corridor are classified as a secondary routes.

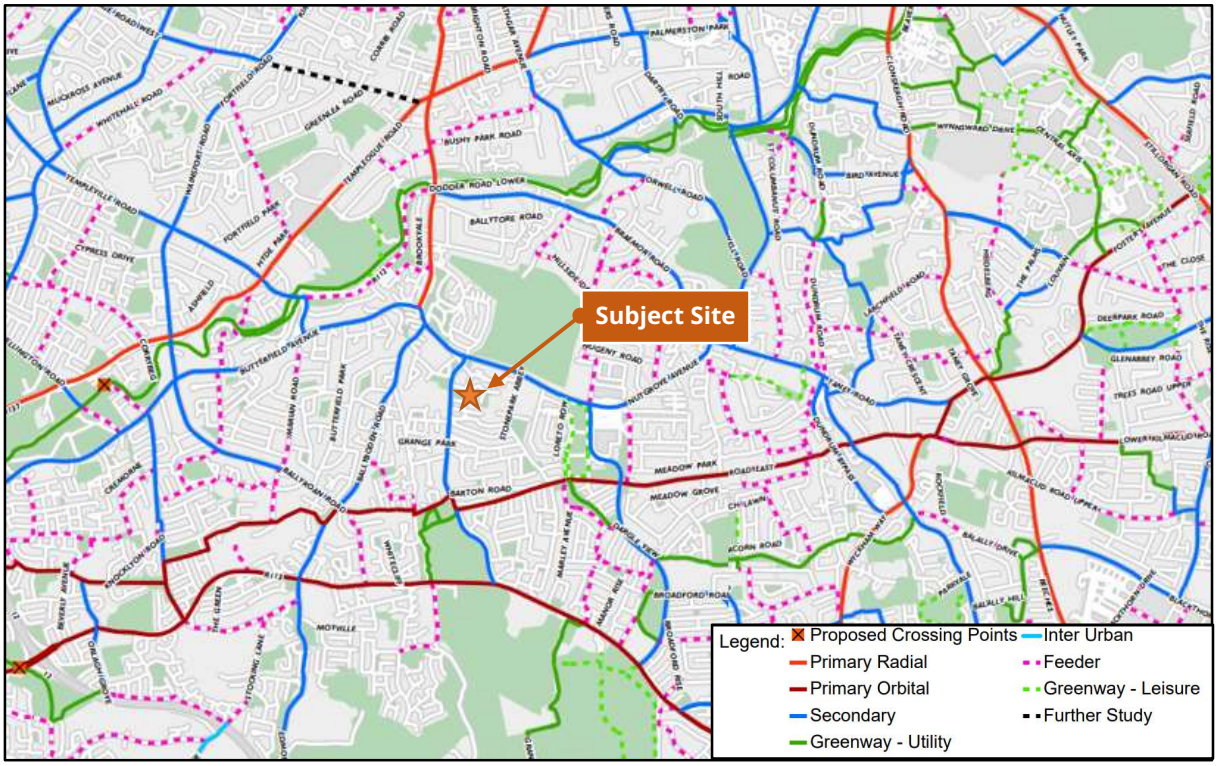


Figure 2.17: 2022 GDA cycle Proposal in vicinity of the Proposed Development Site

2.7 PUBLIC TRANSPORT PROPOSALS - BUS

2.7.1 BusConnects

BusConnects is an initiative launched by the National Transport Authority with the aim of overhauling the bus system in the Dublin Region. This initiative includes a review of bus services and the definition of a core bus network which comprises radial, orbital and regional core bus corridors. It also includes enhancements to ticketing and fare systems as well as transition to a new low emission vehicle fleet.

The proposed fundamental changes to the network can be summarised as follows:

- Increasing the overall amount of bus services. Providing new and frequent orbital services connecting more outer parts of the city together;
- Simplifying the bus services on the key radial into "spines" where all buses will operate under a common letter system and buses will run very frequently and be more evenly spaced;
- The frequent network would become a web-shaped grid, with many interchange opportunities to reach more destinations. Everywhere that two frequent routes cross, a fast interchange is possible; and
- Additional service would be provided at peak hours to limit overcrowding.

The Bus Network Redesign is the first step in a series of transformative changes to Dublin's bus network over the coming years. However, the next steps in this initiative are the improvements to the infrastructure and operation of the proposed bus network which include:

- Building a network of "next generation" bus corridors on the busiest bus lines to make bus journeys faster, predictable and reliable;
- Developing a state-of-the-art ticketing system using credit and debit cards or mobile phones to link with payment accounts and making payment much more convenient;
- Implementing a cashless payment system to vastly speed up passenger boarding times;
- A simpler fare structure, allowing seamless movement between different bus services without financial penalty;
- New bus stops with better signage and information and increasing the provision of additional bus shelters; and transitioning to a new bus fleet using low-emission vehicle technologies.

In relation to the subject site, following this redesign of the bus network, the proposed development will be located in close proximity to the following new BusConnects routes:

- **A2** Airport - City Centre - Ballinteer - Dundrum
- **A4** Swords - City Centre - Dundrum
- **S6** Tallaght - Dundrum - UCD – Blackrock

A summary of the proposed bus frequencies that can be expected on these routes is summarised in **Table 2.3** while **Figure 2.18** displays the location of these routes in relation to the subject site.

Route No.	Route	Mon - Fri	Sat	Sun
A2	Airport - City Centre - Ballinteer - Dundrum	12-30	15-30	20-30
A4	Swords - City Centre - Dundrum	12-30	15-30	20-30
S6	Tallaght - Dundrum - UCD - Blackrock	15-30	15-30	20-30

Table 2.3: Future Bus Routes with Frequencies (minutes) (Source: BusConnects)

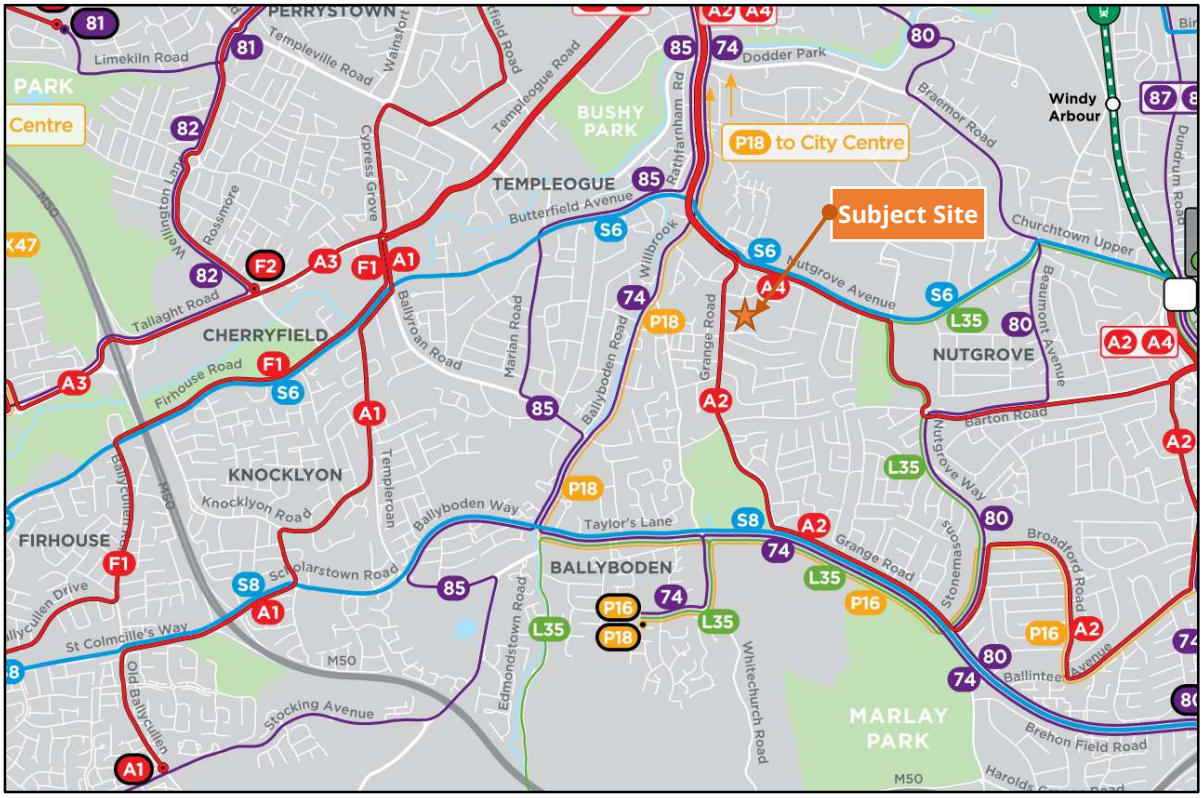


Figure 2.18 : Proposed Future Bus Network in the Vicinity of the Subject Site (Source: BusConnects)

A new Core Bus Corridor is proposed as part of the BusConnects programme. The preferred route (Route 12) is proposed to operate between Rathfarnham and Dublin City Centre. This Core Bus Corridor (CBC) will operate along Grange Road, Rathfarnham Road, Terenure Road East, Rathgar Road, Rathmines Road Lower, Richmond Street South, Camden Street Upper and Lower, and Wexford Street to its junction with Kevin Street Lower and Cuffe Street where priority bus lanes end as shown in **Figure 2.19**.

Figure 2.19: Emerging BusConnects Core Bus Corridor (Route 12) near the Proposed Development (Reference: BusConnects)

2.8 ROAD SAFETY REVIEW

With the objective of ascertaining the road safety record on the immediate routes leading to/from the subject site, the collision statistics as detailed on the Road Safety Authority's (RSA) website (www.rsa.ie) have been examined. Up until recently the RSA website included basic information relating to reported collisions over the most recent available twelve-year period, from 2005 to 2016 inclusive. At the time of writing, this data is being reviewed and therefore is not available. Accordingly, the RSA collision data available at the time the TTA submitted as part if the subject planning application has been reproduced here.

The RSA database records details where collision events have been officially recorded such as the when the Gardaí are present to formally record details of the incident. **Table 2.4** lists all of the collisions on the roads surrounding the subject site, while **Figure 2.20** shows the locations of all collisions that have occurred around the subject site. The RSA recorded 8 no. 'Minor' and 1 no. 'Serious' collisions that have occurred within proximity to the proposed school development.

The 1 no. serious incident occurred on the R821 Road corridor as located to the north of the school. It occurred on a Saturday, and during the night so it can be concluded that it was not related to school activities.

Ref	Severity	Year	Vehicle	Circumstances	Day	Time	Speed Limit	Casualty
1	Serious	2005	Motorcycle	Single Vehicle Only	Saturday	1900-2300	50 KPH	1
2	Minor	2005	Car	Rear end, right turn	Monday	1000-1600	60 KPH	1
3	Minor	2012	Car	Other	Sunday	0700-1000	50 KPH	1
4	Minor	2006	Car	Pedestrian	Sunday	0700-1000	50 KPH	1
5	Minor	2016	Bicycle	Other	Friday	1900-2300	50 KPH	1
6	Minor	2016	Undefined	Pedestrian	Tuesday	1600-1900	50 KPH	1
7	Minor	2008	Undefined	Pedestrian	Friday	1900-2300	50 KPH	1
8	Minor	2009	Car	Pedestrian	Tuesday	0700-1000	30 KPH	1
9	Minor	2008	Car	Other	Monday	0700-1000	50 KPH	1

Table 2.4: Collision Records (source www.rsa.ie)

Figure 2.20: Collision Records (source www.rsa.ie)

3 POLICY FRAMEWORK

3.1 GREATER DUBLIN AREA TRANSPORT STRATEGY 2022-2028

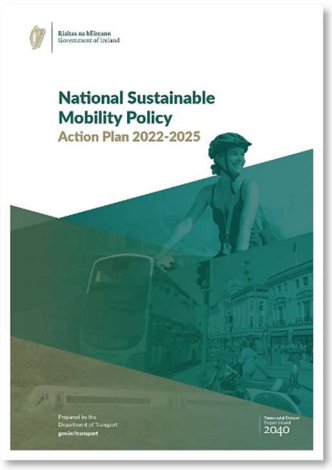
The Greater Dublin Area Transport Strategy 2022-2028 has arisen from a review of the original 2016 strategy. The updated document *"sets out the framework for investment in transport infrastructure and services over the next two years"*

The overall aim of the Transport Strategy is "To provide a sustainable, accessible and effective transport system for the Greater Dublin Area which meets the region's climate change requirements, serves the needs of urban and rural communities, and supports economic growth".

Four primary objectives have been identified as part of the Draft Greater Dublin Area Transport Strategy 2022-2028. These are:

- **An Enhanced Natural and Built Environment -** To Create a better environment and meet our environmental obligations by transitioning to a clean, low emission transport system, reducing car dependency, and increasing walking, cycling and public transport use.
- **Connected Communities and a Better Quality of Life –** To enhance the health and quality of life of our society by improving connectivity between people and places, delivering safe and integrated transport options, and increasing opportunities for walking and cycling.
- **A Strong Sustainable Economy** – To support economic activity and growth by improving the opportunity for people to travel for work or business where and when they need to, and facilitating the efficient movement of goods.
- **An Inclusive Transport System** – To deliver a high quality, equitable and accessible transport system, which caters for the needs of all members of society.

3.2 NATIONAL SUSTAINABLE MOBILITY POLICY ACTION PLAN 2022-2025



The Purpose of this policy is to set out a strategic framework for active travel and public transport to support Ireland's overall requirement to achieve a 51% reduction in carbon emissions by the end of 2030.

The targets are to deliver at least 500,000 additional daily active travel and public transport journeys and achieve a 10% reduction in kilometres driven by fossil fuelled cars by 2030 in line with metrics for transport set out in the Climate Action Plan 2021. Actions contained within this documentation aim to improve and expand sustainable mobility options by providing safe, green, accessible and efficient alternatives to car journeys. Demand management and behavioural changes measures have been included to manage daily travel demand more efficiently to reduce the journeys taken by private car. Action plans include;

- Continue to protect and renew road infrastructure for all road users including sustainable mobility users.
- Transition Dublin Metropolitan (Public Service Obligation - PSO) bus services to low/zero emission bus fleet.
- Develop pedestrian enhancement plans.
- Expand the operation of bike share schemes (including electric bikes).
- Deliver additional cycling infrastructure projects.
- Commence delivery of BusConnects network redesign.
- Expand Smarter Travel Workplaces and Campus Programmes to include:
    - Guidance for more types of companies and campus facilities.
    - Enhanced toolkit for workplace/campus assessment.
    - Support for in-work/in-business/ in-campus cycle uses through subsidised cycle provision for trial periods.
    - Cycle Friendly Employer Certification.
- Ensure all transport operators are contractually obliged to put in place operational procedures to assist people with mobility difficulties.

3.3 SOUTH DUBLIN COUNTY DEVELOPMENT PLAN 2022-2028

The South Dublin County Development Plan 2022-2028 sets the broad development framework for the county and the development areas within its administrative boundary. In the context of the subject proposals, the following are the relevant transport and development objectives set out in the plan: -

Policy COS8(a): Work in conjunction with the Department of Education to promote and support the provision of primary and post-primary schools in the County to reflect the diverse educational needs of communities.

Policy COS8(c): To review school site provision in the Development Plan, following the publication of full Census 2022 results, cross referencing with class size allocations being used during the period in question, engaging with the Department of Education, the elected members and through submissions by education stakeholders and the general public, so as to ensure accurate and adequate school provision requirements are identified and provided for primary and post primary schools at suitable locations.

COS8 Objective 2: To facilitate the development of new schools, ensuring that new school sites are retained for educational use, and the re-development of existing schools and extensions planned as part of the Government's School Building Programme.

COS8 Objective 6: To ensure new schools are designed and located to promote walking and cycling and access to public transport, by implementing the following measures:

- Ensuring school sites are in locations that are central and accessible to the communities they serve;
- Providing infrastructure including safe cycle ways and footpaths;
- Requiring a mobility management plan for all new schools that prioritises active travel modes and public transport;
- Incorporating measures to promote walking and cycling at design stage including permeability and connectivity with the surrounding area through provision of adequate access points for pedestrians and cyclists;
- Ensuring the provision of adequate secure bicycle storage;

- Working with existing and new schools to increase the proportion of students walking and cycling through the promotion of initiatives such as the 'Green Schools' and 'School Streets' projects. (Refer to Chapter 7: Sustainable Movement);
- Introducing measures that would support increased bus services to enable more students to travel to school through public transport.

COS8 Objective 7: To facilitate provision of parking for staff and parents and 'drop-off' areas for new schools, only as part of a mobility management plan, where a need has been demonstrated and where active travel modes (walking and cycling) and public transport have been prioritised having regard to the protection of nearby residential amenity.

Policy SM1: Overarching – Transport and Movement: Promote ease of movement within, and access to South Dublin County, by integrating sustainable land-use planning with a high-quality sustainable transport and movement network for people and goods.

SM1 Objective 1: To achieve and monitor a transition to more sustainable travel modes including walking, cycling and public transport over the lifetime of the County Development Plan, in line with the County mode share targets of 15% Walk; 10% Cycle; 20% Bus; 5% Rail; and 50% Private (Car / Van / HGV / Motorcycle).

SM1 Objective 4: To ensure that future development is planned and designed in a manner that facilitates sustainable travel patterns, with a particular focus on increasing the share of active modes (walking and cycling) and public transport use and creating a safe and attractive street environment for pedestrians and cyclists, in accordance with RPO 5.3 of the RSES / MASP.

Policy SM2: Walking and Cycling: Re-balance movement priorities towards sustainable modes of travel by prioritising the development of walking and cycling facilities and encouraging a shift to active travel for people of all ages and abilities, in line with the County targets

SM2 Objective 5: To ensure that all streets and street networks are designed in accordance with the principles, approaches and standards contained in the *Design Manual for Urban Roads and Streets* (2013; updated 2019) so that the movement of pedestrians and cyclists is prioritised within a safe and comfortable environment for a wide range of ages, abilities and journey types.

SM2 Objective 7: To promote walking and cycling for school trips by implementing the following measures:

- Identifying school sites that are as close as possible to the communities they serve;

- Ensuring that multiple access points are provided to school sites for pedestrians and cyclists;
- Ensuring that adequate and secure bicycle storage is provided within schools;
- Promoting initiatives such as the Green Schools and Schools Streets projects;
- Prioritising school routes for permeability projects and provision and enhancement of pedestrian and cycle ways;
- Supporting the use of a range of physical measures to provide improved safety for pedestrians and cyclists at and close to schools.

SM2 Objective 17: To support bike parking provision at villages, centres, parks and any other areas of interest, as well as near public transport nodes to support multi-modal transport options.

Policy SM3: Public Transport – General: Promote a significant shift from car-based travel to public transport in line with County targets and facilitate the sustainable development of the County by supporting and guiding national agencies in delivering major improvements to the public transport network.

SM3 Objective 4: To optimise accessibility to public transport, increase catchment and maximise permeability through the creation of new and upgrading of existing walking and cycling routes linking to public transport stops.

3.4 DEVELOPMENT CONTROL

3.4.1 Car Parking Standards

Reference has been made to Table 12.25 of the South Dublin County Council Development Plan (2022-2028) which outlines the maximum car parking standards for non-residential developments in the county. The standard of car parking for the proposed development from the local development management standards is summarised in **Table 3.1**.

In response to the SDCC Development Plan 2022-2028 requirements, the proposed development is required to provide a maximum of 26 no. on-site car parking spaces within the development for phase 1.

Land Use	No. of Classrooms	SDCC Standards	SDCC Maximum allowable Car Parking Spaces
Phase 1			
Block A and Block B	24	1 per classroom (Zone 1)	24
Interim Accommodation	2	1 per classroom (Zone 1)	2
Total (Phase 1)	**26**		**26**

Table 3.1: Maximum Car Parking Standards (Phase1)

3.4.2 Mobility Impaired Car Parking

SDCC Development Plan 2022-2028 includes provision for mobility impaired parking in accordance with Building Regulations 2010 Part M. At least 5% of the total number of car parking spaces provided at a development should be designated as mobility impaired parking spaces. The proposed development is required to provide 2 mobility impaired car parking spaces.

3.4.3 Electric Vehicles

In reference to section 12.7.5 of the South Dublin County Council Development Plan (2022-2028), 20% of all car parking spaces provided at a development need to be equipped with EV chargers. All other car parking spaces must be designed such that EV chargers may be installed at a later date if necessary. The proposed development is required to provide 2 EV car parking spaces.

3.4.4 Bicycle Parking

Reference has been made to Table 12.23 of the South Dublin County Council Development Plan (2022-2028) which outlines the minimum cycle parking provision sought for new developments within the county. The requirement of bicycle parking for the proposed development is as outlined in **Table 3.2**.

Land Use	Staff	Students	SDCC Standards		Requirement	
			Long Term	Short Stay	Long Term	Short Stay
Post Primary schools	33	500	1 per 5 staff, 1 per 5 students	-	107	-

Table 3.2: Phase 1 Bicycle Parking Standards

4 CHARACTERISTICS OF PROPOSALS

4.1 OVERVIEW

The development proposals as illustrated in Architects drawings include the following: -

i. Reconfiguration of Existing Dispensary Lane vehicle access route to accommodate one way vehicle route with set down area and new egress route onto dispensary lane with pedestrian path and new gates.

ii. Removal of existing temporary on-site car parking (SD19A/0368) and reinstate historic landscaping.

iii. Construction of new all-weather ball court in artificial grass.

iv. Construction of new palisade fence to boundary and new painted steel railings to boundary plinth wall.

v. Removal of shed belonging to crèche.

vi. Construction of concrete paving slabs brushed concrete ramps and soft landscaping maintaining some existing trees to crèche elevation.

vii. Addition of new fenced ball area with coloured tarmac finish

viii. Renovating of existing granite steps - salvaged, cleaned/repaired, and re-laid

ix. New brushed concrete ramp, granite/concrete paving sets

x. Existing podium surface replaced with new paved area waterproofing to vaults below.

xi. New 1100 x 1800 x 5100 mm high heat pump to M&E detail with a timber panel fence enclosure.

xii. Existing trees to west of chapel to be maintained.

xiii. New grassed area between chapel and ball court (south).

xiv. New fence and gates to new bike enclosure (107spaces). New car parking with 26 no. car parking spaces in total with 2 no. accessible and 5no. EV Spaces

xv. Maintain existing ball court to facilitate fire tender turning and replace a section of the existing fence with gated access (pending future Phase 2 development to replace prefab. building, bicycle parking, and ball court with historical hard and soft landscaping)

xvi. Reconfiguration of Loreto Abbey apartment roadside parking

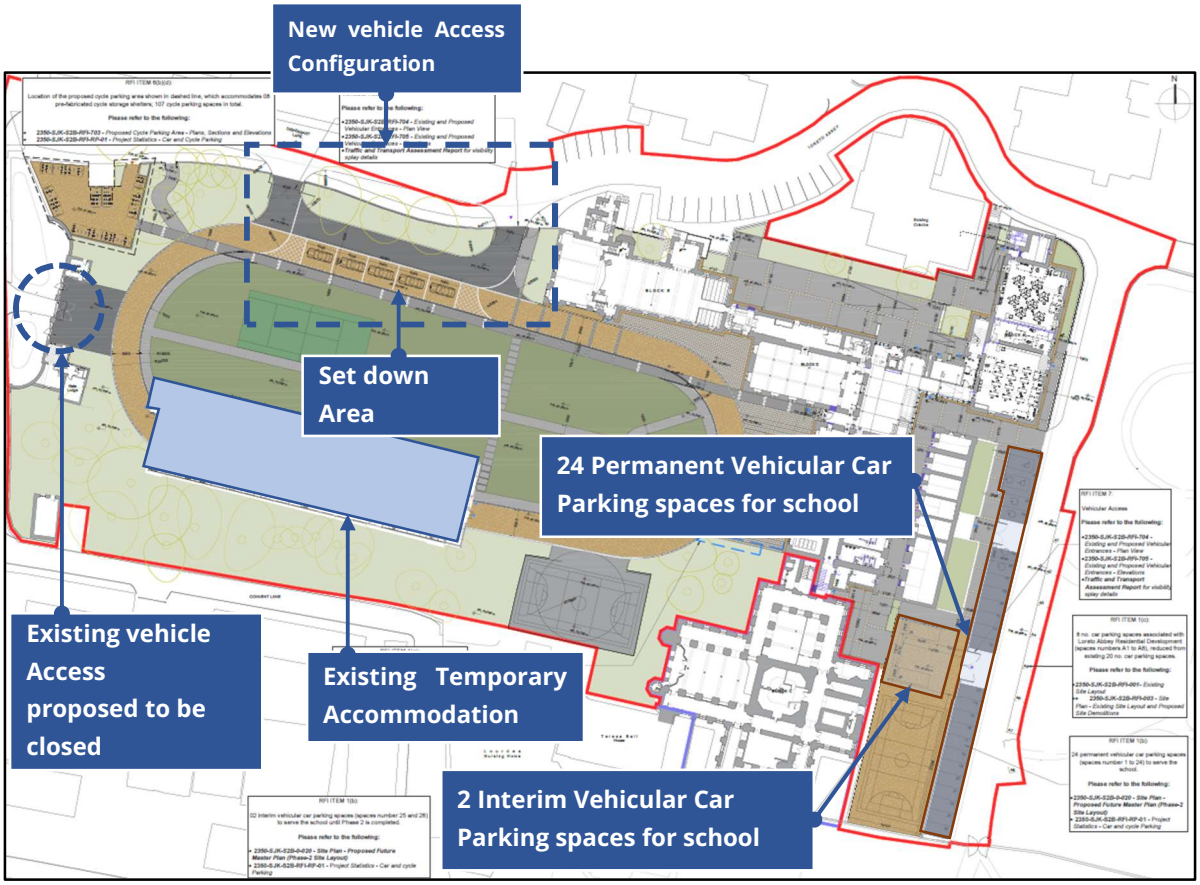


Figure 4.1: Layout of Proposed Development

4.2 SITE ACCESS

4.2.1 Proposed Vehicular Access Arrangements

As part of the subject development proposals, the existing vehicular entry/exit arrangement on Dispensary Lane is proposed to be altered to form a segregated vehicular entry and exit arrangement. This allows for the implementation of an internal one-way system accommodating a convenient set down / collection arrangement during school start / finish times.

The existing exit only arrangement on Grange Road on the western side of the subject site is proposed to be closed off to vehicular traffic to reduce the cross movements and conflicts associated with school traffic. The proposed vehicular access arrangements are illustrated in **Figure 4-4**.

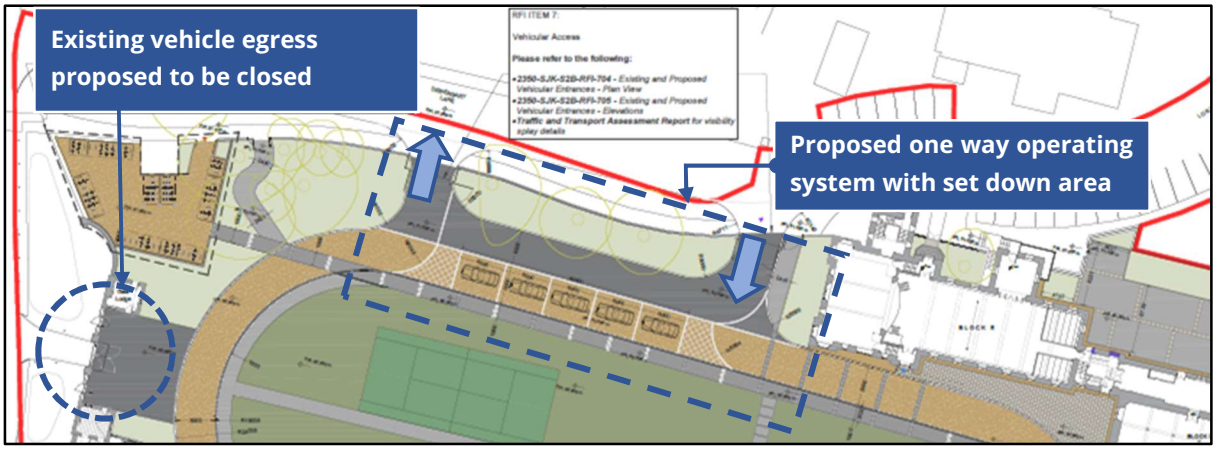


Figure 4.2: Proposed Site Layout with Proposed Vehicle arrangement

4.2.2 Pedestrians and Cyclists

Dedicated pedestrian and cyclist accesses to and from the subject school are proposed as part of the subject scheme as illustrated in **Figure 4.3**. The cycle access leads directly to a dedicated cycle parking facility located in the northwest corner of the subject site. From this dedicated cycle parking facility, direct access to internal pedestrian routes are proposed. The main dedicated pedestrian access is proposed adjacent to the aforementioned cycle access and leads directly to the internal pedestrian routes.

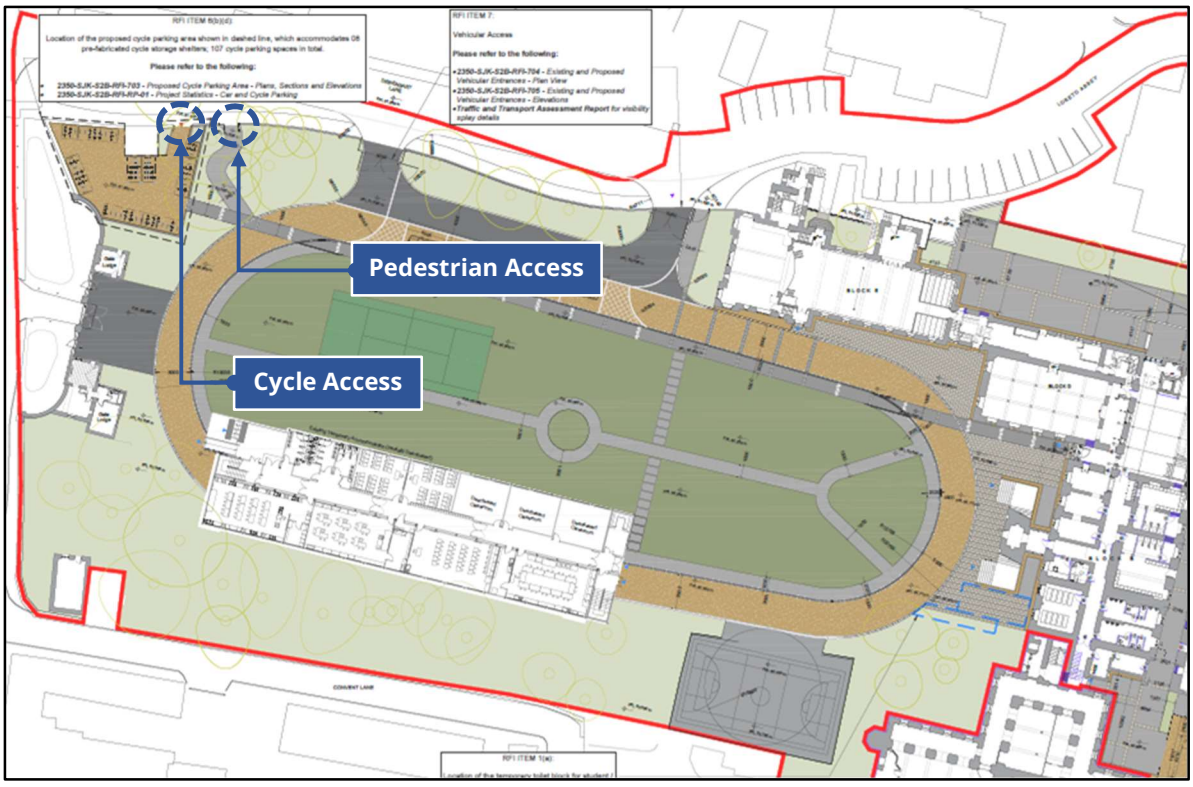


Figure 4.3: Proposed pedestrian/Cycle access points

4.2.3 Emergency Vehicle Access Arrangements

The proposed developments design accommodates the access/egress and manoeuvring requirements of an emergency vehicle (i.e., ambulance/fire tender) without obstructing the public road or obstructing the proposed development site access as shown in **Figure 4.4** below. The proposed site layout has been auto tracked (using AutoTrack software) to demonstrate that large vehicles such as fire tender and refuse vehicles can access and circulate around the site.

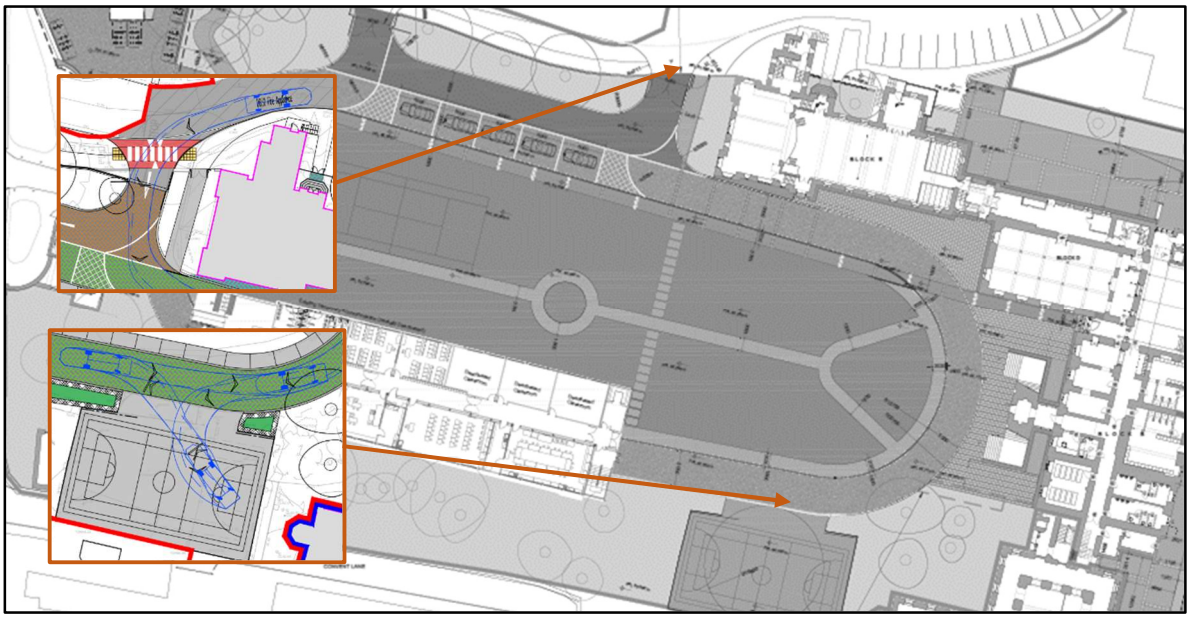


Figure 4.4: Emergency Vehicle Access Arrangements

4.3 PARKING PROVISION

4.3.1 Car Parking

The proposed phase 1 development incorporates a total of 26 (24 permanent and 2 Interim) car parking spaces with 5 EV spaces and 2 Mobility Impaired Car parking spaces as illustrated in **Figure 4.5.** This level of provision is consistent with the SDCC Development Plan standard 2022-2028.

The 24 no. permanent car parking spaces are proposed to the east of the subject school development. The 2 no. interim car parking spaces are proposed internally adjacent to Block C and will remain in place until Phase 2 of the scheme is completed. The proposed car parking assignment of car parking spaces and associated compliance with local development management standards is summarised in **Table 4.1** and **Figure 4.5.**

Land Use	No. of Classrooms	SDCC Maximum allowable Car Parking Spaces	Proposed Car Parking
Phase 1			
Block A and Block B	24	24	24
Interim Accommodation	2	2	2
Total (Phase 1)	**26**	**26**	**26**
Phase 2 *(Subject to Future Planning Application)*			
BLOCK A, B & E	28	28	28

Table 4.1 Car Parking schedule for the proposed Phase 1 and Future Phase 2 development

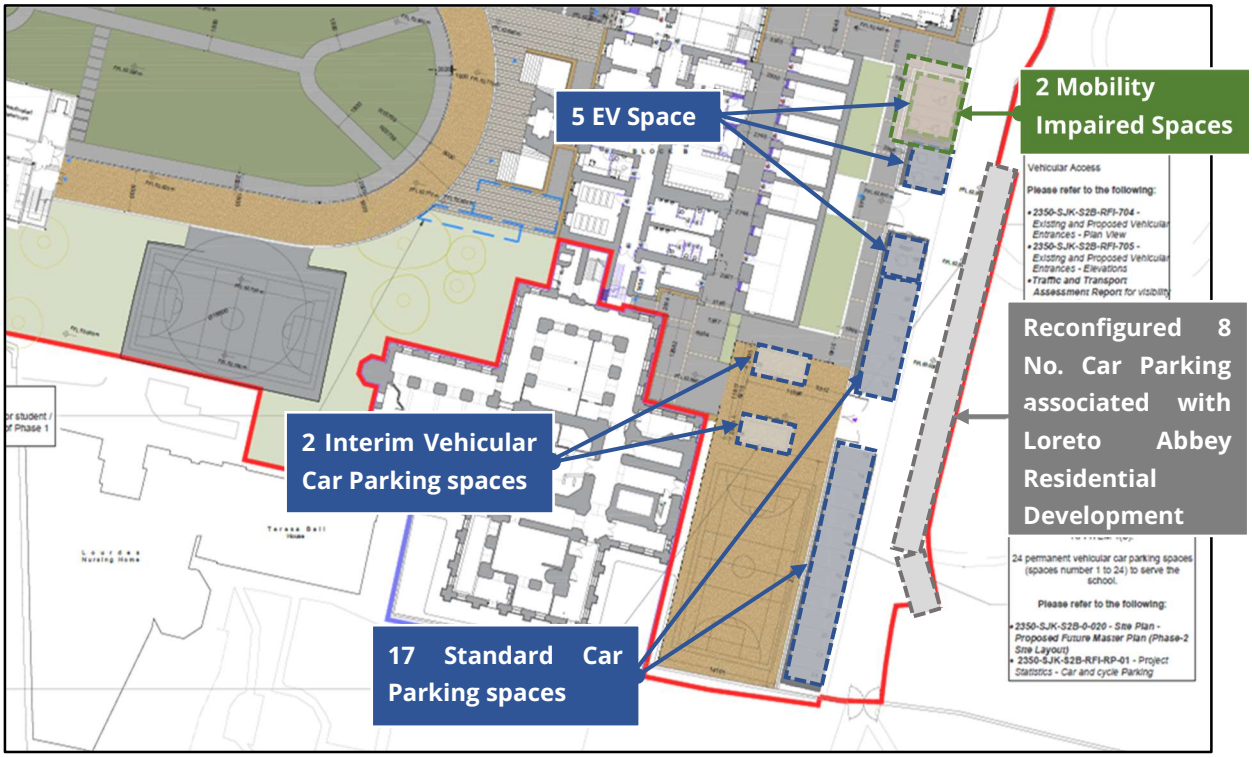


Figure 4.5:Car Parking layout of Proposed Development -Phase1

4.3.2 Mobility Impaired Car Parking

The Development Plan requires the provision of mobility impaired car parking at a rate of 5% of the total car parking spaces which equates to 2 no. space. The subject proposals include for a total of 2 no. mobility impaired car parking spaces and is therefore considered compliant with the Development Plan standards as per section 1.1.5 of the Building Regulations 2010 Part M. These on-site Mobility Impaired Car parking spaces are located within an accessible location as illustrated in **Figure 4.5** and the architects site layout.

4.3.3 Electric Vehicle Parking

In line with best practice, the subject proposals include for a total of 5 no. electric vehicle parking spaces which equates to 20% of all onsite car parking spaces of the proposed development (Reference **Figure 4.5**).

4.3.4 Bicycle parking

Reference has been made to Table 12.23 of the South Dublin County Council Development Plan (2022-2028) which outlines the minimum cycle parking provision sought for new developments within the county. For post primary schools, a minimum of 1 bicycle parking space per 5 staff and 1 per 5 students must be provided.

The cycle parking provision proposed as part of the Phase 1 are outlined in **Table 4.2**. A total of 107 no. cycle parking spaces are proposed in the northwest corner of the site as illustrated in **Figure 4.9**. This complies fully with the cycle parking requirement of SDCC 2022-2028 standard which require a minimum of 107 no. cycle parking spaces.

Staff	Students	Proposed Cycle Parking		SDCC Requirements	
		Long Stay	Short Stay	Long Stay	Short Stay
33	500	107		107	

Table 4.2: Proposed Cycle Parking Provision for Phase 1

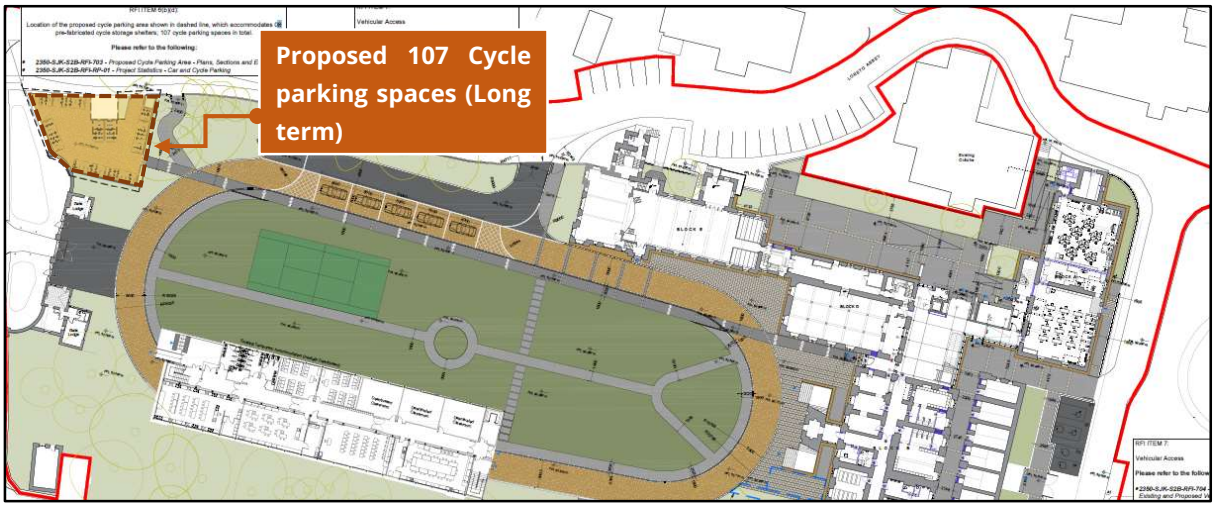


Figure 4.6: Proposed Cycle Parking Location for the Proposed Development

5 TRIP GENERATION AND DISTRIBUTION

5.1 INTRODUCTION

The following paragraphs present the process by which the potential level of person trips and associated vehicle trips, generated by the subject development have been quantified and subsequently assigned across the local road network.

In order to assess the operation of the proposed road network and its future capacity, a traffic model of the existing local road network has been created.

5.2 TRAFFIC SURVEYS

5.2.1 Junction Surveys

With the objective of quantifying the existing baseline traffic movements travelling across the local road network, junction turning counts were undertaken at key local junctions in close proximity to the school development as illustrated in **Figure 5.1.**

1. R822 Grange Road(N)/ Dispensary Lane /R822 Grange Road(S)
2. Dispensary lane (NNE), Loreto Abbey, Access Road, Dispensary Lane(W)
3. R822 Grange Road(N), Gaelcholiste an Phiarsaigh Access, R822 Grange Road(S), Loreto Beaufort School Access

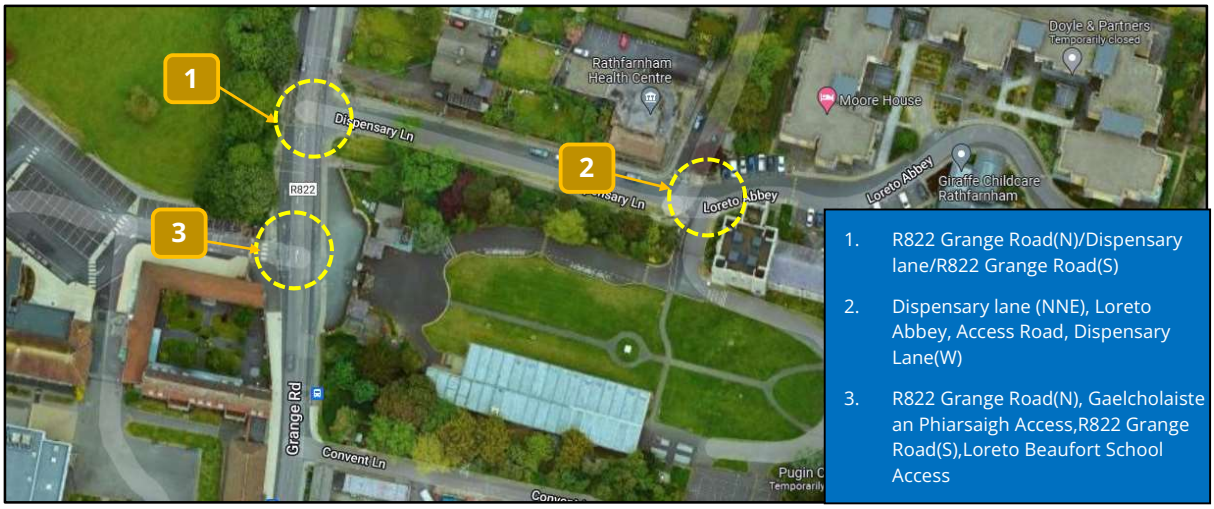


Figure 5.1: Traffic Survey Locations for junction counts

Surveys were undertaken on Tuesday 22nd March 2022. The recorded peak hour traffic flows are illustrated in **Figure 5.2** below. Originally, traffic surveys were undertaken in November 2020 at these junction locations. The recorded 2020 peak hour traffic flows are summarised in **Figure 5.3**.

A comparison between the 2022 and 2020 peak hour traffic surveys reveal that the surveys undertaken in 2020 captured higher traffic volumes on the road network. Accordingly, in the interest of providing a robust assessment of the local traffic network, the 2020 traffic volumes were incorporated into the subject assessment.

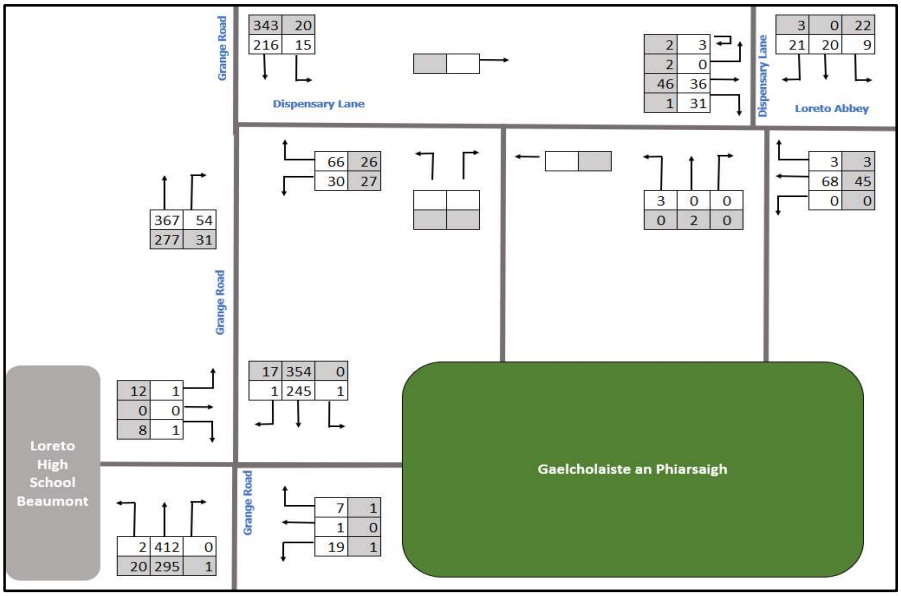


Figure 5.2: AM and PM peak Traffic Flows for the junction as in March 2022

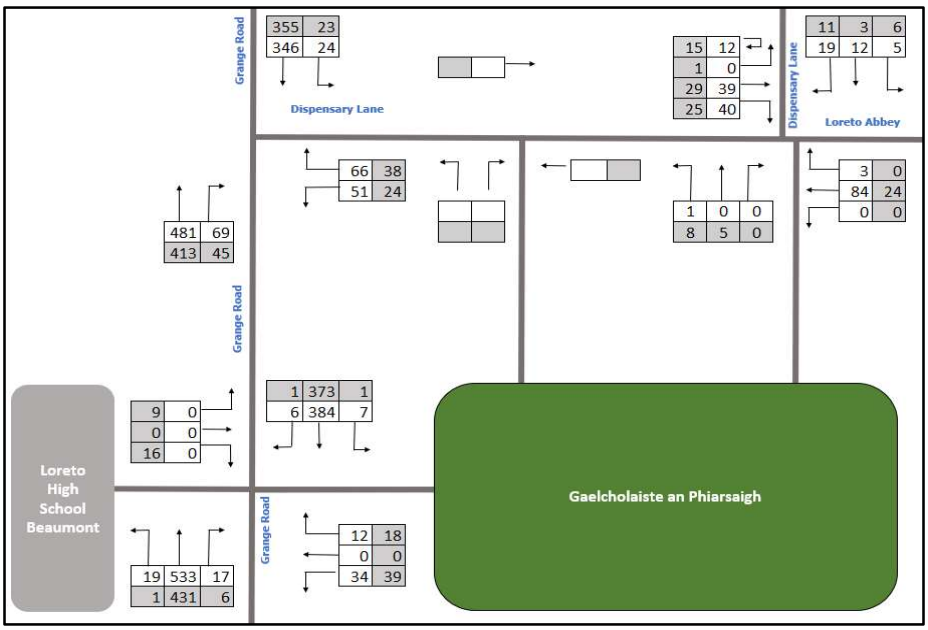


Figure 5.3: AM and PM peak Traffic Flows for the junction as in November 2020

5.2.2 Additional Junction Survey

An additional Traffic survey was undertaken on 16th November 2022 at the R821/R822 junction by IDASO Ltd. in response to an additional information requested under Planning Reference: SD22A/0153.The traffic survey location and peak hour traffic flows are presented in **Figure 5.4**.

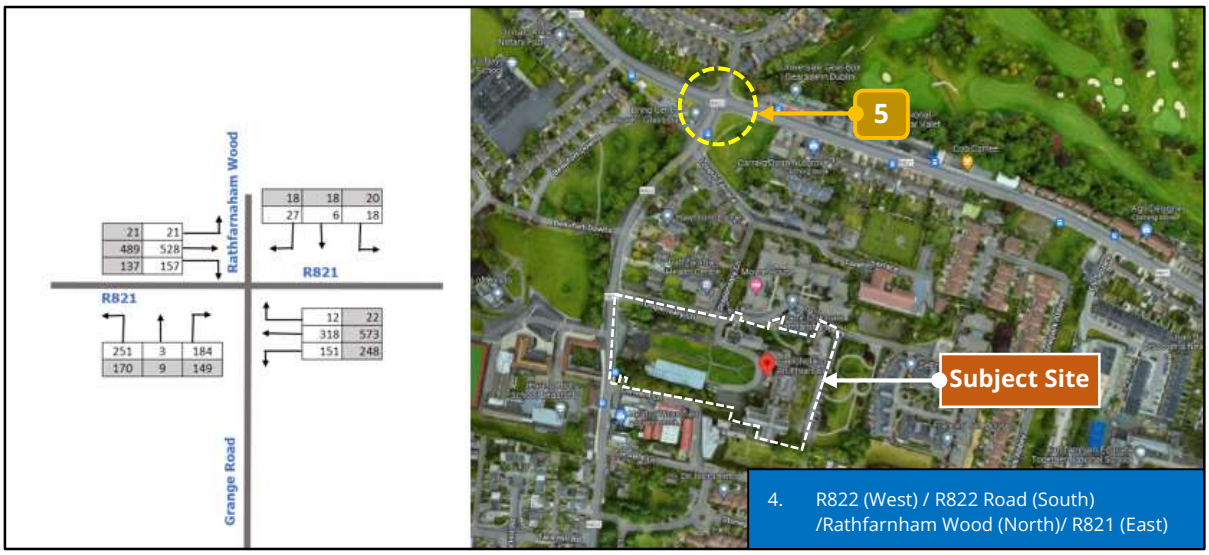


Figure 5.4: Additional Traffic Survey location (right) and Traffic flow during peak hours (left)

5.3 TRIP GENERATION AND MODE SPLIT

The following paragraphs present the process by which the potential level of person trips and subsequently vehicle trips, associated with the proposed development have been generated.

5.3.1 Modal Split

The assessment of travel patterns for pupils and staff is essential for a school development scheme. Modal choice including travel by private car, public transport, cycling or walking, is key to understanding the level of sustainable travel to and from the school as well as the potential traffic volumes that will be generated on the road network as a result of the school development.

As part of a previous planning application (reference no. SD19A/0368) for a proposed extension to the existing temporary school, a School Mobility Plan was prepared by Conroy Crowe Kelly. This mobility plan addressed items including existing and projected staff and pupil numbers as well as modal choice and measures to minimise the impact of the school on local traffic patterns.

At the time that the School Mobility Plan was prepared, a travel survey was carried out for all pupils (261) in the school with the following modal split determined, as outlined in **Table 5.1**:

Mode of Travel	Percentage of Pupils
Bus	68%
Private Car	23%
Cycle	6%
Walk	3%

Table 5.1: Modal Split for Pupils of Gaelcholáiste an Phiarsaigh

The survey determined that the majority of pupils (77%) are travelling to and from the existing school using more sustainable forms of travel compared to the car, including public bus, cycling and walking. The remaining pupils, 23% travel to / from school as car passengers. This TTA focuses on providing an assessment for the Opening Year (assumed to be 2024 for this assessment), as well as future years 2029 and 2039. The projected enrolment figures for staff and pupils for the years 2022 – 2024 are outlined as follows:

Enrolment Year	Staff No.	Pupil No.
2023/2024	24	300
2024/2025	33	500

Table 5.2: Existing and Future Staff and Pupil Capacity

For the assessment years of 2024-2039, it is assumed and noted that the pupil and staff numbers achieve full capacity by 2024/2025 at 500 pupils and 33 staff.

5.3.2 Trip Generation

For the purposes of the vehicle trip generation for the proposed school development, it is assumed that the modal split, as discussed above, would provide for an accurate profile of staff and pupil travel patterns for the projected enrolment numbers between 2024 – 2039. Therefore, it is assumed that 23% of the 500 pupils and 33 staff will be travelling to and from the school by private car for the school enrolment years of 2024 to 2039. Assuming a car occupancy rate of 1 pupil per car (i.e. worst case) and 1 staff per car, a total of 115 pupils and 33 staff are assumed to travel by car in the subject assessment. This amounts to 38 no. additional car trips by pupils and 9 no. car trips by staff compared to existing vehicle trips. **Table 5.3** below outlines the level of vehicular trips (cars) generated by the scheme proposal for the opening year of **2024** and future design years of **2029** (opening year + 5 years) and **2039** (opening year +15 years).

Enrolment Year	Pupils	Staff	TOTAL
2024	38	9	47
2029	38	9	47
2039	38	9	47

Table 5.3: Predicted Uplift in Car Trips for assessment years

The AM and PM peak hour vehicle trips generated as part of the proposed development is as illustrated in **Table 5.4**.

Trip Generation	AM Peak Hour (08:00-09:00)			PM Peak Hour (14:45-15:45)		
	Arr	Dep	Two-way	Arr	Dep	Two-way
Pupil	38	38	76	38	38	76
Staff	9	0	9	0	9	9
Total	**47**	**38**	**85**	**38**	**47**	**85**

Table 5.4: Vehicle Trip Generation for the proposed Development

5.4 TRAFFIC GROWTH

The TII Project Appraisal Guidelines for National Roads (PAG) have been utilised to determine the traffic growth forecast rates. The traffic growth forecast rates within the PAG ensures local and regional variations and demographic patterns are accounted for. Table 6.1 within Unit 5.3 of the PAG provides Annual National Traffic Growth Factors for the different regions within Ireland. The subject site lies within the 'Metropolitan Area of Dublin' with the growth factors as outlined within Table 5.4 below. The assessment adopts an Opening Design Year of 2024. In accordance with TII (NRA) Guidance, Future Design Years of 2029 (Opening Year +5 years) and 2039 (Opening Year +15 years) have therefore been adopted.

Low Sensitivity Growth				Central Growth				High Sensitivity Growth			
2016-2030		2030-2050		2016-2030		2030-2050		2016-2030		2030-2050	
LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
1.0146	1.0280	1.0034	1.0116	1.0162	1.0295	1.0051	1.0136	1.0191	1.0328	1.0087	1.0172

Table 5.5: National Traffic Growth Forecasts: Annual Growth Factors (Extract from Table 6.1 of Unit 5.3 PAG) for Dublin Metropolitan Area

Applying the annual factors (Dublin Metropolitan Area) as outlined in **Table 5.5** above for the adopted Opening Year of 2024 and the Future Design Years of 2029 (+5years) and 2039 (+15 years), the following growth rates have been adopted to establish the corresponding 2024, 2029 and 2039 baseline network flows for traffic surveys conducted: -

- 2022 to 2024 – 1.03266 (or 3.27%);
- 2022 to 2029 – 1.11906 (or 11.91%) and
- 2022 to 2039 – 1.19047 (or 19.05%).

The 'baseline' Do-Nothing traffic movements for the periods 2024, 2029 and 2039 are presented in **Appendix A**.

6 NETWORK IMPACT

6.1 ASSESSMENT SCOPE

6.1.1 Assessment Scenarios

Two different traffic scenarios have been assessed, namely (a) the 'Base' (Do- Nothing) traffic characteristics and (b) the 'Post Development' (Do-Something) traffic characteristics.

The 'Base' traffic scenario takes into account the existing flows travelling across the network. The proposed development traffic flows were added to the network's 'Base' traffic flows to establish the 'Post Development' traffic flows. In summary the following scenarios are considered: -

Do Nothing:

- A1 – 2024 Base Traffic Flows
- A2 – 2029 Base Traffic Flows
- A3 – 2039 Base Traffic Flows

Do Something:

- B1 – 2024 Do Nothing (A1) + Proposed Development Flows;
- B2 – 2029 Do Nothing (A2) + Proposed Development Flows; and
- B3 – 2039 Do Nothing (A3) + Proposed Development Flows.

6.1.2 Assessment Periods

The junction turning count surveys identified the AM and PM peak hour flows as occurring between 08:00-09:00 and 14:45-15:45 respectively. These peak hour periods form the basis of the 2024, 2029 and 2039 network assessments.

For the additional traffic survey undertaken at R821/R822 junction, the AM and PM peak hour flow is established to occur between 07:45-08:45 and 14:00-15:00 respectively.

6.1.3 Network Vehicle Flows

The following Figures as included in **Appendix A** present the vehicle flows across the local road network for each of the adopted development scenarios: -

- **Figure 2** – 2024 Do Nothing (Scenario A1);
- **Figure 3** – 2029 Do Nothing (Scenario A2);

- **Figure 4** – 2039 Do Nothing (Scenario A3);
- **Figure 7** – 2024 Do Something; (Scenario B1);
- **Figure 8** – 2029 Do Something (Scenario B2); and
- **Figure 9** – 2039 Something (Scenario B3).

6.2 NETWORK IMPACT

The TII document entitled 'Traffic and Transport Assessment Guidelines' (2014) states that the impact of a proposed development upon the local road network is considered material when the level of traffic it generates surpasses 10% and 5% on normal and congested networks respectively. When such levels of impact are generated a more detailed assessment should be undertaken to ascertain the specific impact upon the network's operational performance.

In order to analyse and assess the impact of the proposed development on the surrounding road network, a traffic model of the junctions was analysed for the schemes following Opening and Future Design Years:

- 2024 Opening Year
- 2029 Future Design Year (Opening Year +5 years)
- 2039 Future Design Year (Opening Year +15 years)

As part of the network impact process, the following key junctions have been incorporated: -

i) **Junction 1 -** R822 Grange Road / Dispensary Lane signal controlled junction

ii) **Junction 2 -** Dispensary Lane / Loreto Abbey priority controlled junction

iii) **Junction 3 -** R822 Grange Road / existing Gaelcholiste an Phairsaigh Egress / Loreto Beaufort School Access priority controlled junction

iv) **Junction 4 -** Dispensary Lane / Access Road priority controlled junction

v) **Junction 5 –** R821 / R822 / Rathfarnham Wood signal controlled junction

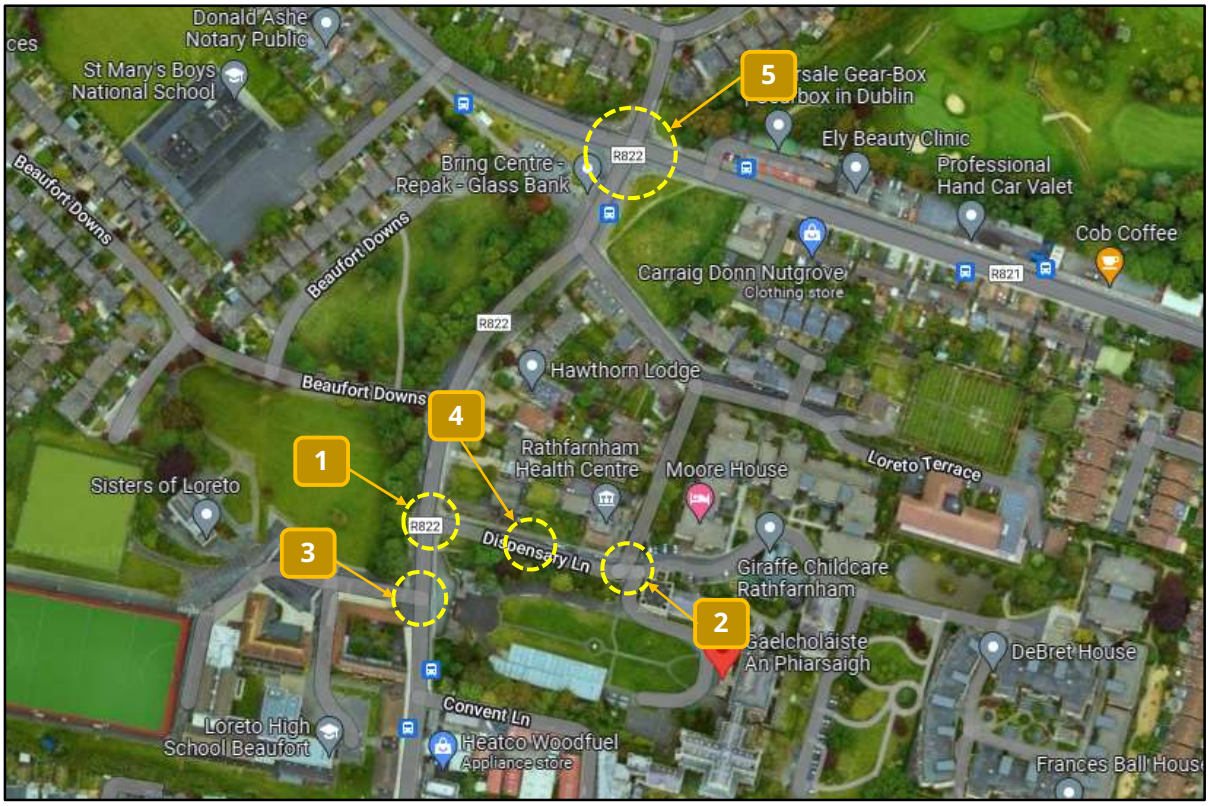


Figure 6.1: Key junction locations used for network analysis

Table 6.1 below details the specific scale of network impact predicted at each of the key local off-site junctions during the 2024, 2029 and 2039 Design Years.

This table reveals that the impacts at Junction 2 and Junction 4 (site access junctions) are relatively higher than the impacts on the main road network. The higher impact at newly added Junction 4 and existing Junction 2 is due in part to the rerouting of vehicular traffic from the vehicular entrance on Grange Road which is proposed to be closed to vehicular traffic as part of the subject enhancements (Note: At the time of the 2020 traffic surveys this access operated as a two-way vehicular access however at the time of writing, this access is operating as egress only. Accordingly, a re-routing exercise was undertaken to take account of the previous two-way operation of this access). The relatively high impact percentage at these two junctions is also due to the existing low traffic volume present along Dispensary Lane. An increase in development traffic on Dispensary Lane will ultimately result in a higher impact level at these two access junctions. The detailed assessment of Junction 2 and Junction 4 has been undertaken using PICADY software which is discussed in Chapter 7.

The impact on external Junction 1 is predicted to exceed the 10% threshold in all the design year scenarios. Sub-threshold impacts are predicted at off-site junctions 3 and 5 with percentage

impact values of less than 5% predicted.

Jnc ID	Location	Design Year	AM PEAK (08:00-09:00)			PM PEAK (14:45-15:45)		
			DN	DS	% Impact	DN	DS	% Impact
1	**Junction 1** – R822 Grange Road (N) / Dispensary Lane / R822 Grange Road (S)	2024	1069	1209	**13.09%**	925	1061	**14.68%**
		2029	1153	1292	**12.14%**	998	1134	**13.61%**
		2039	1222	1362	**11.45%**	1058	1194	**12.84%**
2	**Junction 2 -** Dispensary Lane (NNE), Loreto Abbey, Access Road, Dispensary Lane(W)	2024	220	290	**31.78%**	130	176	**35.45%**
		2029	234	304	**29.95%**	137	182	**33.66%**
		2039	245	315	**28.58%**	142	188	**32.31%**
3	**Junction 3** -R822 Grange Road(N), Gaelcholiste an Phairsaigh Access,R822 Grange Road(S),Loreto Beaufort School Access	2024	1042	1065	**2.23%**	921	934	**1.38%**
		2029	1120	1143	**2.07%**	991	1004	**1.29%**
		2039	1185	1208	**1.96%**	1049	1062	**1.21%**
4	**Junction 4- Dispensary** Lane (W), Access Road, Dispensary Lane (E)	2024	212	367	**72.99%**	131	285	**117.56%**
		2029	226	381	**68.52%**	139	292	**111.04%**
		2039	237	392	**65.23%**	145	299	**106.17%**
5	**Junction 5 -** R822 (W) /R822 Road (S) / Rathfarnham Wood (N) / R821 (E)	2024	1730	1795	**3.79%**	1934	2012	**4.01%**
		2029	1872	1937	**3.50%**	2093	2171	**3.71%**
		2039	1989	2055	**3.29%**	2224	2302	**3.49%**

Table 6.1: Recorded Network Impact at Key Local Junctions

During the AM peak hour (**Table 6.2**) the predicted impacts range from **Not Significant** to **Slight** at key off-site junctions (Junction 1, Junction 3 and Junction 5) and from **Moderate** to **Significant** at the proposed site access junctions (Junction 2 and Junction 4).

During the PM peak hour (**Table 6.3**) the predicted impacts again range from **Not Significant** to **Slight** at key off-site junctions (Junction 1, Junction 3 and Junction 5) and from **Moderate** to **Significant** at the proposed site access junctions (Junction 2 and Junction 4).

It is noted that Junction 1, Junction 2 and Junction 4 all exceed the impact threshold of 10% and therefore require further analysis to be undertaken. **Chapter 7** below includes detailed analysis of these junctions with Junction 2 and Junction 4 (priority junctions) being analysed using PICADY software and Junction 1 (signal controlled junction) being analysed using TRANSYT software.

Junction ID	Location	Impact Scale	Impact Level
1	**Junction 1** – R822 Grange Road (N) / Dispensary Lane / R822 Grange Road (S)	**11.45%**	**Slight**
2	**Junction 2 -** Dispensary Lane (NNE), Loreto Abbey, Access Road, Dispensary Lane(W)	**28.58%**	**Moderate**
3	**Junction 3** -R822 Grange Road(N), Gaelcholiste an Phairsaigh Access, R822 Grange Road(S),Loreto Beaufort School Access	**1.96%**	**Not Significant**
4	**Junction 4-** Dispensary Lane (W), Access Road, Dispensary Lane (E)	**65.23%**	**Significant**
5	**Junction 5 -** R822 (W) /R822 Road (S) / Rathfarnham Wood (N) / R821 (E)	**3.29%**	**Not Significant**

Table 6.2: Network Impact Categorisation 2039 AM Peak Hour

Junction ID	Location	Impact Scale	Impact Level
1	**Junction 1** – R822 Grange Road (N) / Dispensary Lane / R822 Grange Road (S)	**12.84%**	**Slight**
2	**Junction 2 -** Dispensary Lane (NNE), Loreto Abbey, Access Road, Dispensary Lane(W)	**32.31%**	**Moderate**
3	**Junction 3** -R822 Grange Road(N), Gaelcholiste an Phairsaigh Access,R822 Grange Road(S),Loreto Beaufort School Access	**1.21%**	**Not Significant**
4	**Junction 4- Dispensary** Lane (W), Access Road, Dispensary Lane (E)	**106.2%**	**Significant**
5	**Junction 5 -** R822 (W) /R822 Road (S) / Rathfarnham Wood (N) / R821 (E)	**3.49%**	**Not Significant**

Table 6.3: Network Impact Categorisation 2039 PM Peak Hour

Figure 6.2: Increase in Vehicle Trips Generated Through Key Junctions (2039 Future Design Year)

7 NETWORK ANALYSIS

7.1 INTRODUCTION

The operational assessment of the local road network has been undertaken using the Transport Research Laboratory (TRL) computer software package Junctions 9 PICADY for priority-controlled junctions, and TRANSYT for signal-controlled junctions.

When considering priority-controlled junctions a Ratio of Flow to Capacity (RFC) greater than 0.85 would indicate a junction to be approaching capacity, as operation above this RFC value is poor and deteriorates quickly.

Similarly for signalised junctions a Degree of Saturation (DoS) greater than 90% would indicate a junction to be approaching capacity, as operation above this DoS value is poor and deteriorates quickly.

For the PICADY analysis, a 90-minute AM and PM period has been simulated, from 07:45 to 09:15 and 14:30 to 16:00. For the TRANSYT analysis a one-hour AM and PM period has been simulated from 08:00 to 09:00 and 14:45 to 15:45. For both the PICADY and TRANSYT analyses traffic flows were entered using an Origin-Destination table format for the peak hours.

For the junction analysis, in particular, the TRANSYT assessment for Junction 1 along Grange Road, the analysis was undertaken with regard to an isolated junction and the analysis does not take into consideration traffic impacts or delays as a result of upstream or downstream junctions along Grange Road. The assessment focuses on impact on the junction as a result of the proposed development.

7.2 SITE ACCESS JUNCTION– JUNCTION 2 (PICADY ANALYSIS)

The results of the operational assessment of this proposed priority-controlled site access junction during the weekday morning and evening peaks are summarised in **Table 7.1**. The arms were labelled as follows within the PICADY model:

- Arm A: Loreto Abbey
- Arm B: Site Access
- Arm C: Dispensary Lane (West)
- Arm D: Dispensary Lane (North)

Figure 7.1: Junction 2- Site entry (access)

The results reveal that, in all design year scenarios assessed, this junction is predicted to operate within capacity. The worst case 2039 Future Design Year scenario assessment predicts a maximum RFC of 0.21 and associated queue length of 0.3 PCU which is significantly below the RFC value of 0.85 signifies that a priority controlled is approaching operational capacity.

Scenario	Stream	Do-Nothing		Do-Something	
		Queue (PCU)	RFC	Queue (PCU)	RFC
2024	B-ACD	0.0	0.00	0.0	0.00
	A-BCD	0.0	0.01	0.0	0.01
	D-ABC	0.1	0.08	0.1	0.08
	C-ABD	0.1	0.08	0.3	0.21
2029	B-ACD	0.0	0.00	0.0	0.00
	A-BCD	0.0	0.01	0.0	0.01
	D-ABC	0.1	0.08	0.1	0.09
	C-ABD	0.1	0.08	0.3	0.21
2039	B-ACD	0.0	0.00	0.0	0.00
	A-BCD	0.0	0.01	0.0	0.01
	D-ABC	0.1	0.09	0.1	0.09
	C-ABD	0.1	0.08	0.3	0.21

Table 7.1: AM Peak Hour Site Access Modelling Results (Junction 2)

Scenario	Stream	Do-Nothing		Do-Something	
		Queue (PCU)	RFC	Queue (PCU)	RFC
2024	B-ACD	0.0	0.02	0.0	0.00
	A-BCD	0.0	0.00	0.0	0.00
	D-ABC	0.0	0.04	0.0	0.04
	C-ABD	0.1	0.05	0.2	0.14
2029	B-ACD	0.0	0.02	0.0	0.00
	A-BCD	0.0	0.00	0.0	0.00
	D-ABC	0.0	0.04	0.0	0.04
	C-ABD	0.1	0.05	0.2	0.14
2039	B-ACD	0.0	0.02	0.0	0.00
	A-BCD	0.0	0.00	0.0	0.00
	D-ABC	0.0	0.05	0.0	0.05
	C-ABD	0.1	0.05	0.2	0.14

Table 7.2:PM Peak Hour Site Access Modelling Results (Junction 2)

7.3 SITE EGRESS JUNCTION– JUNCTION 4 (PICADY ANALYSIS)

The results of the operational assessment of this proposed priority-controlled junction during the weekday morning and evening peaks are summarised in **Table 7.2**.

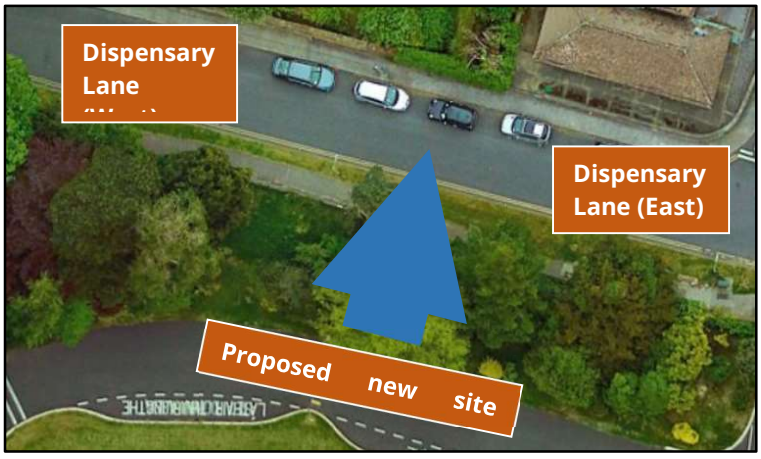


Figure 7.2: Junction 4 – Proposed Site Egress

The arms were labelled as follows within the PICADY model:

- Arm A: Dispensary Lane (East);
- Arm B: Site Access;
- Arm C: Dispensary Lane (West)

The results reveal that, in all design year scenarios assessed, this junction is predicted to operate within capacity with the 2039 Future Design Year Do-Something scenario operating with a maximum RFC of 0.16 and associated queue length of 0.2 PCU which is significantly below the RFC value of 0.85 that signifies that a priority controlled is approaching operational capacity.

Scenario	Stream	Do-Nothing		Do-Something	
		Queue (PCU)	RFC	Queue (PCU)	RFC
2024	B-AC	0.0	0.00	0.1	0.13
	C-B	0.0	0.00	0.0	0.00
2029	B-AC	0.0	0.00	0.1	0.13
	C-B	0.0	0.00	0.0	0.00
2039	B-AC	0.0	0.00	0.1	0.13
	C-B	0.0	0.00	0.0	0.00

Table 7.3: AM Peak Hour Site Access Modelling Results (Junction 4)

Scenario	Stream	Do-Nothing		Do-Something	
		Queue (PCU)	RFC	Queue (PCU)	RFC
2024	B-AC	0.0	0.00	0.2	0.16
	C-B	0.0	0.00	0.0	0.00
2029	B-AC	0.0	0.00	0.2	0.16
	C-B	0.0	0.00	0.0	0.00
2039	B-AC	0.0	0.00	0.2	0.16
	C-B	0.0	0.00	0.0	0.00

Table 7.4: PM Peak Hour Site Access Modelling Results (Junction 4)

7.4 JUNCTION 1: R822 GRANGE ROAD (N) / DISPENSARY LANE / R822 GRANGE ROAD (S)

The principal results of the operational assessment of Junction 1 (R822 Grange Road (N) / Dispensary Lane / R822 Grange Road (S)) signalised junction in TRANSYST software during the weekday morning and evening peaks are summarised from **Table 7.3 to 7.5** inclusive below. The three arms within the junction were labelled as follows:

- Arm 1: Grange Road (South)
- Arm 2: Grange Road (North)
- Arm 3: Dispensary Lane (East)

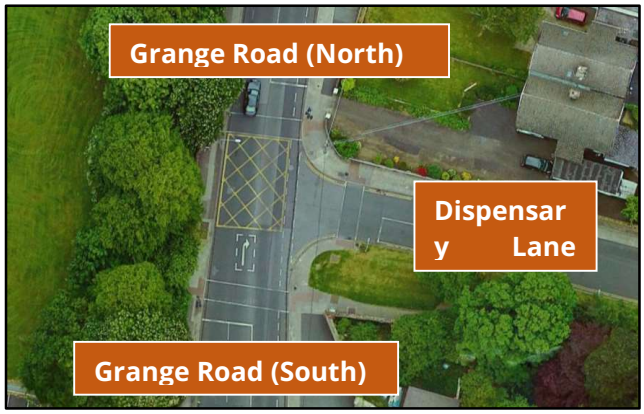


Figure 7.3: Junction 1 (External Junction)

The results of the TRANSYT analysis indicates that Junction 1 will be operating within capacity for the design years 2024,2029 and 2039. (note: signalised junction capacity is measured in Degree of Saturation and represented as a percentage as per industry standard). With the inclusion of the proposed development, the 2039 'Do Something' AM peak hour has a maximum DoS value of 67% and a maximum mean max queue of 9.65 PCUs being recorded. The 2039 "Do Something" PM peak hour analysis reveals that the junction will continue to operate within capacity with a maximum DoS of 64% and a mean max queue of 8.04 PCUs being recorded. This represents an increase in DoS of 6% compared to the "Do nothing AM peak hour and 16% increase compared to the "Do Nothing PM peak hour". A copy of the TRANSYT output file can be found in **Appendix C**.

Scenario	Arm	Stream	Do-Nothing		Do-Something	
			Degree of Saturation (%)	Mean max Queue (PCU)	Degree of Saturation (%)	Mean max Queue (PCU)
2024	1 - Dispensary Lane	LR	58	3.35	65	5.70
	2 – Grange Road (N)	SL	37	5.51	48	7.41
	3 – Grange Road (S)	S	44	6.78	47	7.74
		R	41	1.87	48	3.20
2029	1 - Dispensary Lane	LR	58	3.62	68	6.06
	2 – Grange Road (N)	SL	41	6.31	52	8.13
	3 – Grange Road (S)	S	48	7.83	51	8.58
		R	43	1.97	50	3.29
2039	1 - Dispensary Lane	LR	61	3.91	67	6.20
	2 – Grange Road (N)	SL	44	6.84	55	8.92
	3 – Grange Road (S)	S	51	8.50	56	9.65
		R	45	2.06	55	3.48

Table 7.5: TRANSYT AM Peak hour results

Scenario	Arm	Stream	Do-Nothing		Do-Something	
			Degree of Saturation (%)	Mean max Queue (PCU)	Degree of Saturation (%)	Mean max Queue (PCU)
2024	1 - Dispensary Lane	LR	42	1.75	57	4.55
	2 – Grange Road (N)	SL	34	4.87	44	6.89
	3 – Grange Road (S)	S	36	4.95	39	5.91
		R	38	0.87	43	2.08
2029	1 - Dispensary Lane	LR	44	1.85	59	4.71
	2 – Grange Road (N)	SL	37	5.38	48	7.57
	3 – Grange Road (S)	S	39	5.49	42	6.66
		R	40	0.94	44	2.15
2039	1 - Dispensary Lane	LR	48	2.01	64	4.97
	2 – Grange Road (N)	SL	39	5.85	50	8.04
	3 – Grange Road (S)	S	41	5.97	44	6.96
		R	42	1.02	45	2.20

Table 7.6: TRANSYT PM *Peak hour results*

8 RESPONSE TO ADDITIONAL INFORMATION REQUEST

8.1 OVERVIEW

This TTA has been updated in response to RFI items 9 and 10 as requested by SDCC as part of planning ref: SD22A/0153. The following sections provide a direct response to each of these items.

8.2 ADDITIONAL INFORMATION ITEM 9

The conclusions of the traffic and transport assessment should be consistent, and the results of the junction analysis be stated in RFC and the maximum PCU be reported for all junctions. The applicant is requested to submit a response to this.

Response:

Results have been summarised for all modelled junctions in the summary. As per industry standard, capacity results for priority junctions are measured in Passenger Car Units (PCU's) whilst capacity results for signal controlled junctions are measured in Degree of Saturation (DoS) and reported as a percentage.

8.3 ADDITIONAL INFORMATION ITEM 10

The traffic analysis shall include the next major junction along the network i.e. the R822 and R821. As this junction is close to the proposed development and may have a significant impact considering the other junctions are more than the 10% saturation threshold.

Response:

An additional junction turning count survey was undertaken on 16th November 2022 at the R821/R822 junction by IDASO Ltd. in response to this additional information request. Accordingly, this junction was included in the network impact assessment undertaken in **Section 6** of this TTA. The projected impact of the subject proposals at this junction are less than the 5% threshold and therefore the impact is considered "Not Significant".

9 SUMMARY AND CONCLUSION

9.1 SUMMARY

DBFL Consulting Engineers (DBFL) has been commissioned by Department of Education and Skills (DoES) to compile the Traffic and Transport Assessment (TTA) for proposed alteration and extension works at Gaelcoláiste an Phiarsaigh, Rathfarnham, Dublin 14. The project involves the refurbishment of the existing buildings, the construction of a new link building and site works on the grounds of Gaelcholáiste an Phiarsaigh.

The proposed development consists of following key elements:

i. Reconfiguration of Existing Dispensary Lane vehicle access route to accommodate one way vehicle route with set down area and new egress route onto dispensary lane with pedestrian path and new gates.

ii. Removal of existing temporary on-site car parking (SD19A/0368) and reinstate historic landscaping.

iii. Construction of new all-weather ball court in artificial grass.

iv. Construction of new palisade fence to boundary and new painted steel railings to boundary plinth wall.

v. Removal of shed belonging to crèche.

vi. Construction of concrete paving slabs brushed concrete ramps and soft landscaping maintaining some existing trees to crèche elevation.

vii. Addition of new fenced ball area with coloured tarmac finish

viii. Renovating of existing granite steps - salvaged, cleaned/repaired, and re-laid

ix. New brushed concrete ramp, New covered canopy, Granite/concrete paving sets

x. Existing podium surface replaced with new paved area Waterproofing to vaults below.

xi. New 1100 x 1800 x 5100 mm high heat pump to M&E detail with a timber panel fence enclosure.

xii. Existing trees to west of chapel to be maintained.

xiii. New grassed area between chapel and ball court (south).

xiv. New fence and gates to new bike enclosure (178 spaces). New car parking with 24 no. car parking spaces in total with 2 no. accessible and 5no. electric spaces.

xv. Maintain existing ball court to facilitate fire tender turning and replace a section of the existing fence with gated access (pending future Phase 2 development to replace prefab. building, bicycle parking, and ball court with historical hard and soft landscaping)

xvi. Reconfiguration of Loreto Abbey apartment roadside parking

The TTA presents the findings of a traffic analysis undertaken to determine the potential level of influence generated by the proposed development upon the local road network and subsequently ascertain the existing and future operational performance of the local transport system. Our methodology incorporated a number of key inter-related stages, including: -

- Site Audit;
- Planning File Review;
- Policy Review;
- Traffic Surveys;
- Trip Generation, Distribution and Assignment;
- Network Impact; and
- Network Assessment

The subject site is zoned "Objective RES – To protect and/or improve residential amenity" in the South Dublin County Council Development Plan (2022-2028).

Pedestrians/cyclists can benefit around the vicinity of the subject site with the provision of dedicated footpath/cycle lane on the Grange Road.

The subject site benefits from the access to public transport facilities with Dublin Bus and Go-Ahead Ireland operating a total of Seven bus routes, providing connections to Dublin Airport, Ballinteer, Blackrock, Rialto, Dundrum, Eden Quay, Tallaght, Sandyford and Dun Laoghaire. Details of these routes, including the number of services per day per direction. The proposed development site lies in proximity to the Luas Green Line, which provides access to Dublin City Centre to the north and Bridges Glen to the southeast.

The subject site already benefits from excellent accessibility levels including active modes such as walking and cycling, whilst with a comprehensive range of high frequency bus-based public transport services already calling at interchanges located within a short walking distance of the proposed school development. These services have been found to offer access to a significant catchment area across the Dublin urban environment including the city centre.

With the objective of ascertaining the road safety record of the immediate routes leading to/from the subject site, the collision statistics as detailed on the Road Safety Authority (RSA) website (www.rsa.ie) have been examined. With regard to safe access to the site, there is no record of any serious incidents occurring along either Grange Road or Dispensary Lane at the site access junction locations.

As part of the subject development proposals, the existing vehicular entry/exit arrangement on Dispensary Lane is proposed to be altered to form a segregated vehicular entry and exit arrangement. This allows for the implementation of an internal one-way system accommodating a convenient set down / collection arrangement during school start / finish times.

The cycle access leads directly to a dedicated cycle parking facility located in the northwest corner of the subject site. From this dedicated cycle parking facility, direct access to internal pedestrian routes are proposed. The main dedicated pedestrian access is proposed adjacent to the aforementioned cycle access and leads directly to the internal pedestrian routes.

The proposed phase 1 development incorporates a total of 26 (24 permanent and 2 Interim) car parking spaces with 5 EV spaces and 2 Mobility Impaired Car parking spaces.2 interim car parking spaces are provided adjacent to Block C until phase 2 of the development is completed.

As part of the Phase 1 development, 107 no. cycle parking spaces are proposed to the northwest of the site and complies with the cycle parking requirement of SDCC 2022-2028 standard.

A total of 115 pupils and 33 staff are assumed to be travelling by car for the years 2024-2039. This amounts to 38 no. additional car trips by pupils and 9 no. car trips by staff.

An additional Traffic survey was undertaken on 16th November 2022 at the R821/R822 junction by IDASO as part of additional information requested under Register Reference: SD22A/0153. The impact at this junction is predicted to be below the 5% threshold and is therefore considered not significant.

The resulting percentage increase in traffic flows as a result of the traffic generated by the proposed development is established as being above the 10% threshold (5% for congested networks) at three of the adjacent local key off site junctions.

The PICADY analysis of the proposed two priority controlled junctions (including the proposed new site egress junction) on Dispensary Lane demonstrates that both junctions will operate well within capacity in each of the adopted future year scenarios with max RFC values recorded in the 2039 Future Design Year of 0.21 and 0.16.

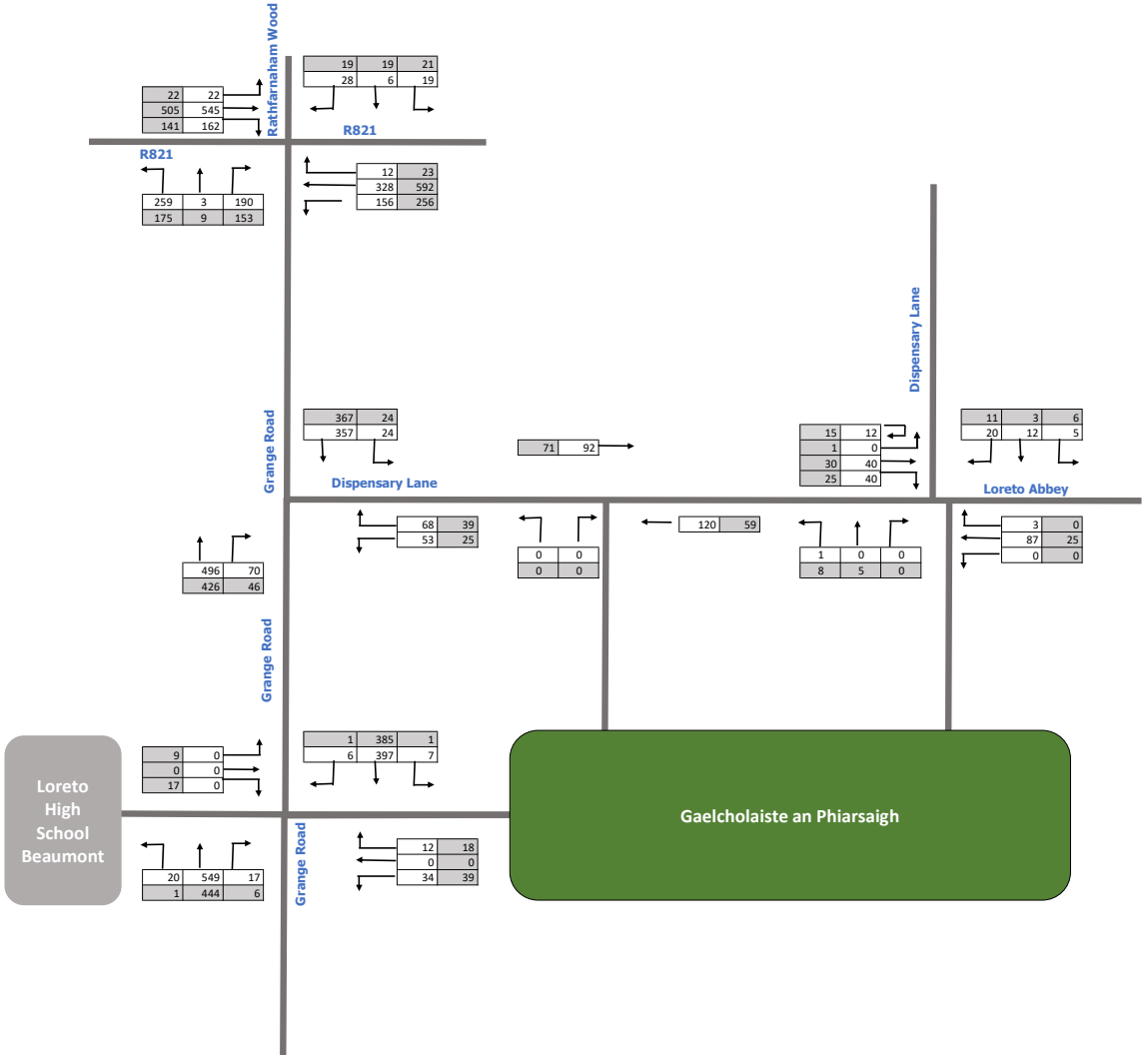
The results of the TRANSYT analysis at the Grange Road / Dispensary Lane junction is also predicted to operate within capacity in the adopted design years of 2024,2029 and 2039 with a max Degree of Saturation of 67% and maximum mean max queue of 6.2 PCUs recorded in the 2039 AM peak hour scenario.

9.2 CONCLUSION

The analysis of the network's operational performance in each of the adopted design years 'post development' scenarios has established that the proposals will not result in a material deterioration of the network's operational performance . This is based on the anticipated levels of traffic generated by the proposed development, the existing and future road infrastructure and the information and analysis summarised in the above report.

It is concluded that the proposals represent a sustainable and practical approach to development on the subject site with no material traffic or road safety related reasons that should prevent the granting of planning permission for the proposed school application.

Appendix A: Traffic Flow Diagrams



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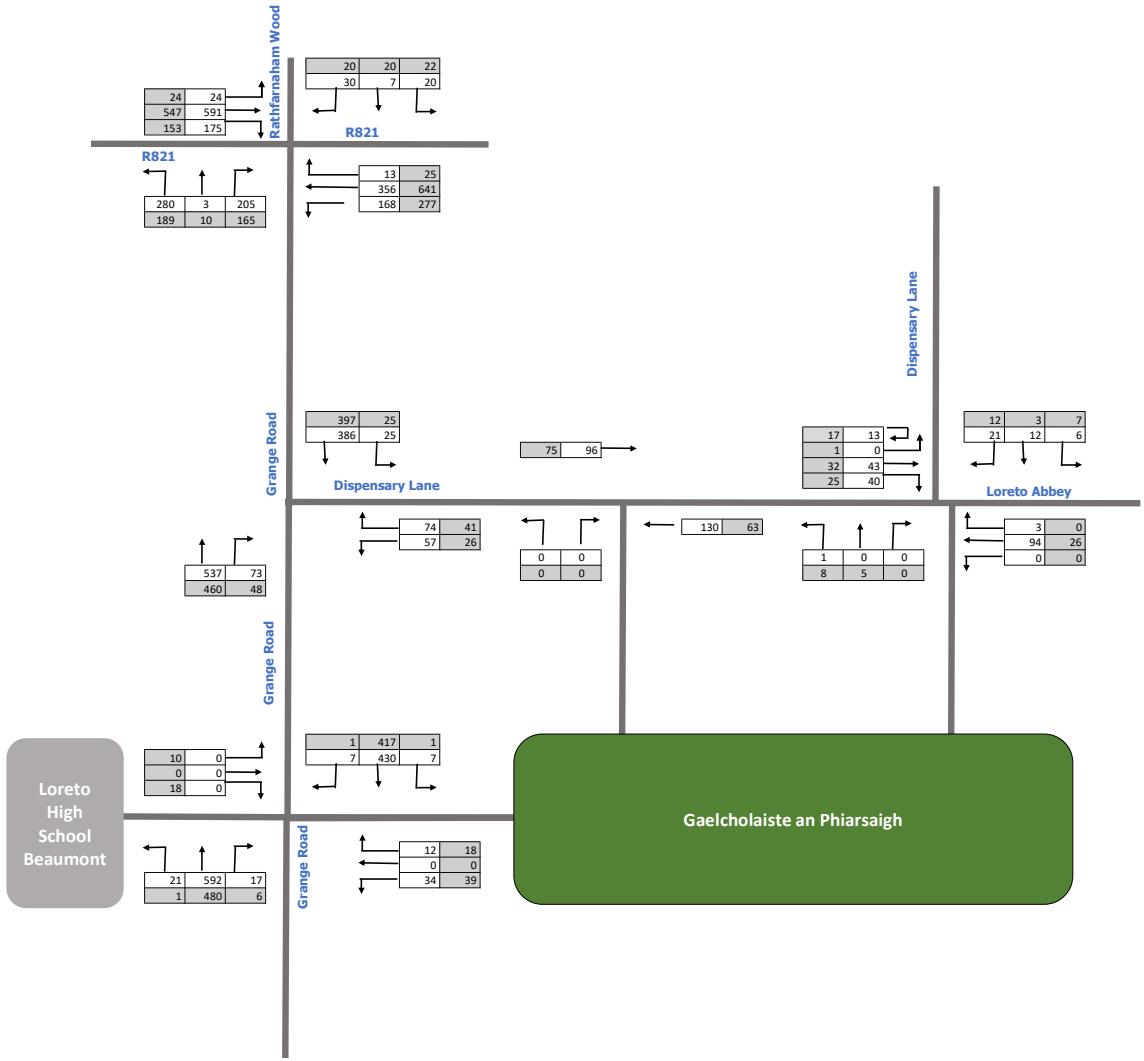
Project :	p190187
DRG. Title :	2024 Do Nothing
Key:	AM Peak Hour (08:00 to 09:00) PM Peak Hour (14:45 to 15:45)
Dwn:	VJ
Ckd:	MMK
Date:	16/03/2023
Ref:	p190187
Figure:	1
Rev:	4



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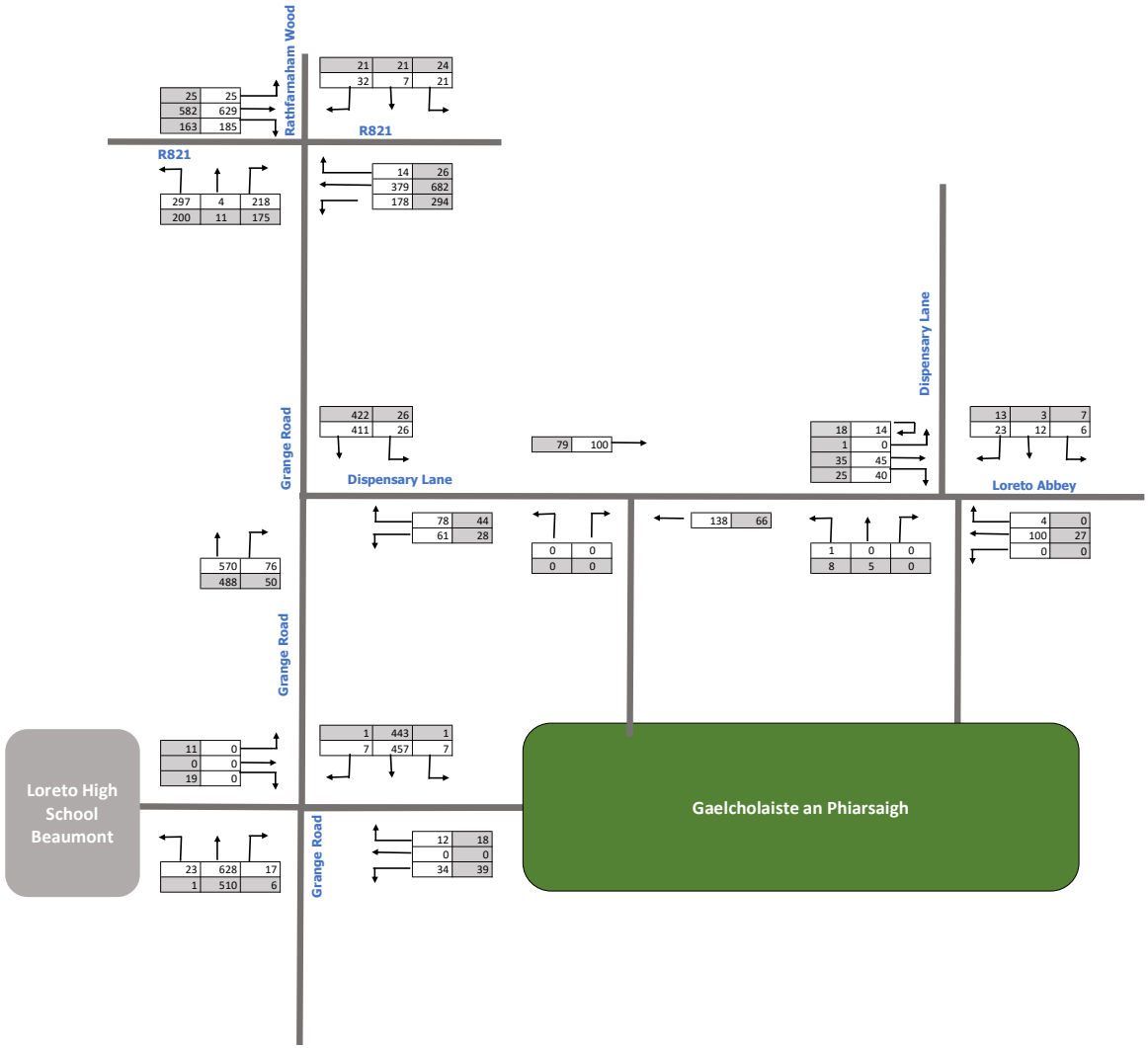
		DRG. Title : 2029 Do Nothing		**Figure:** 2	**Rev:** 4



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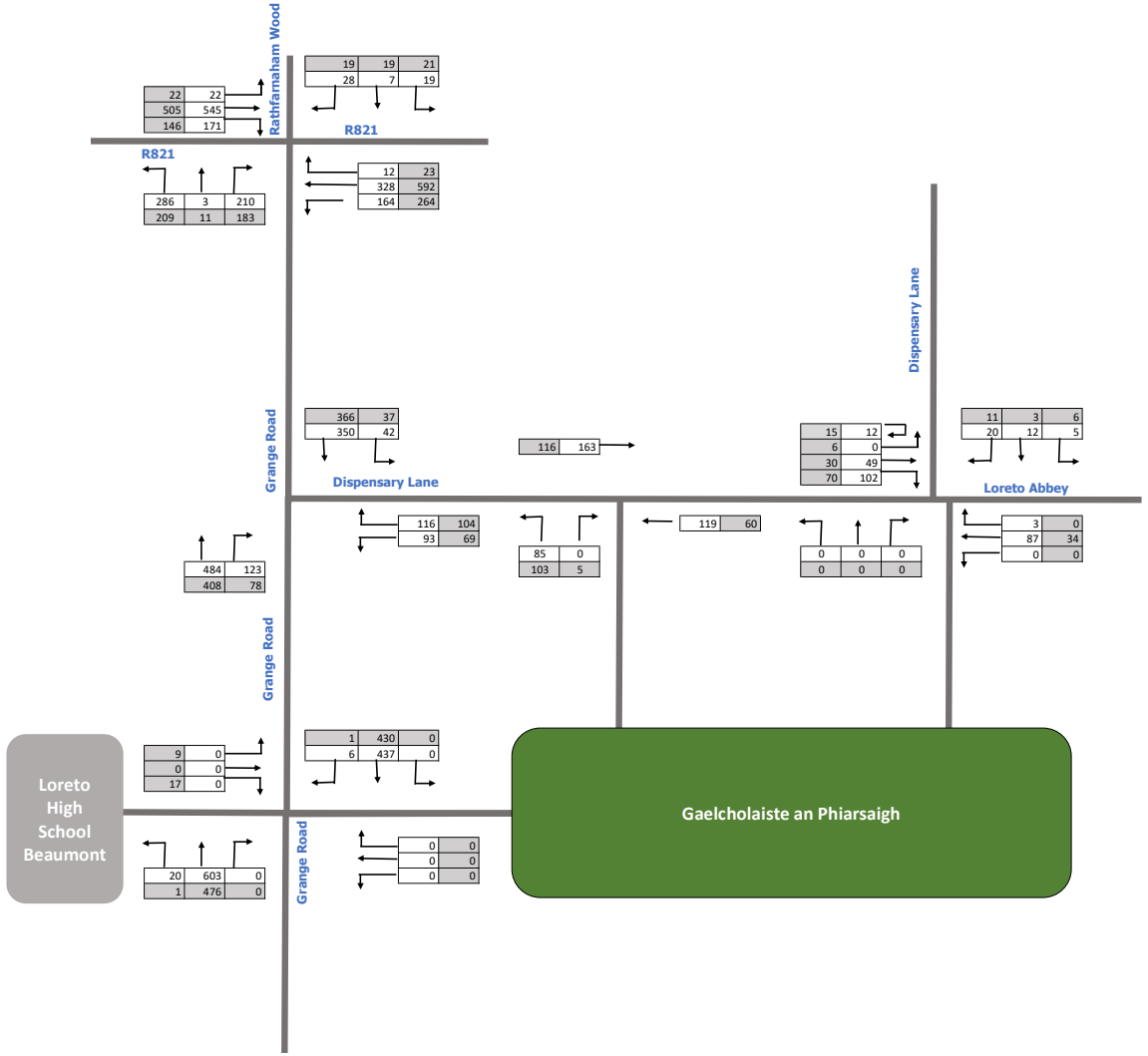
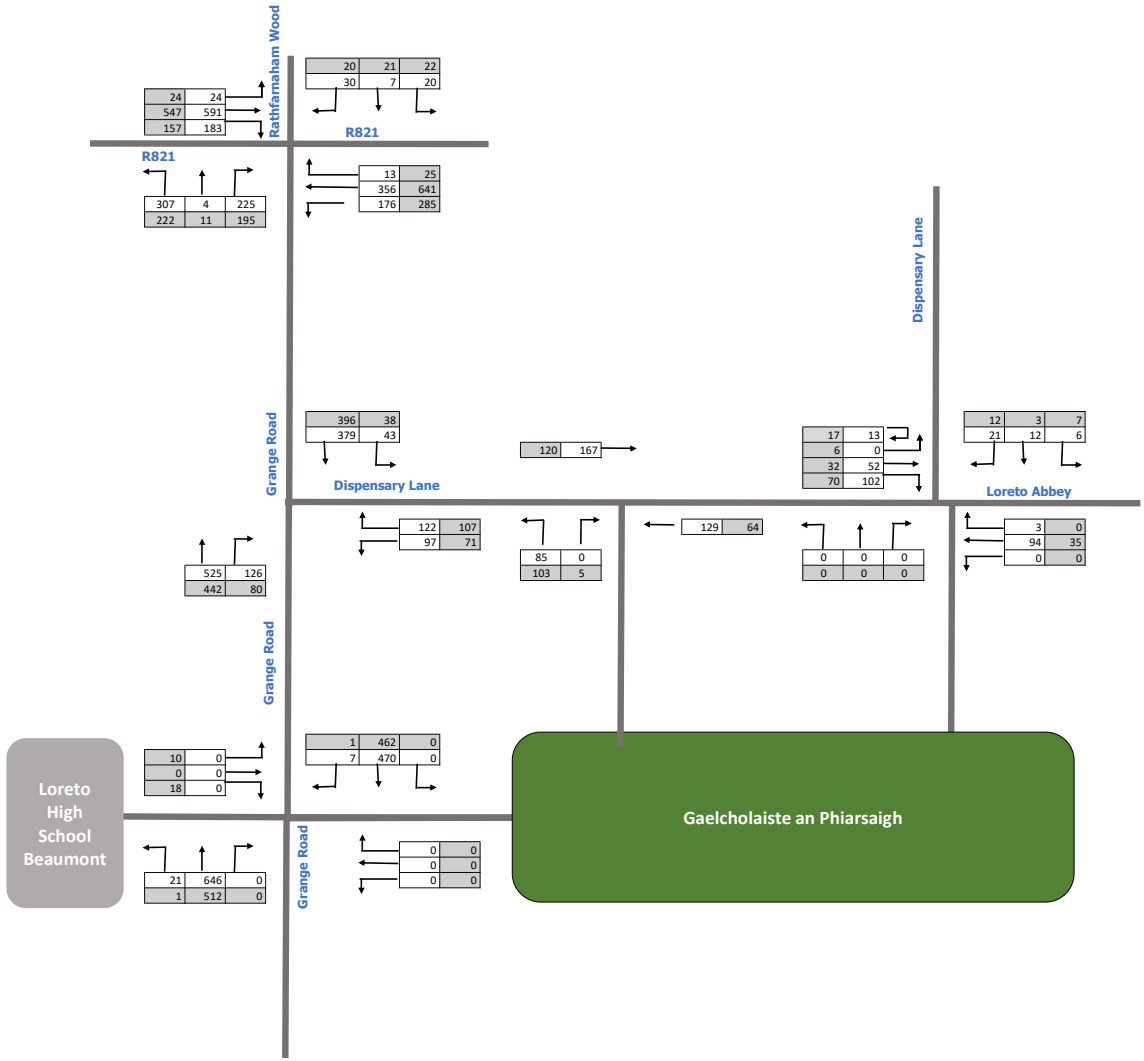
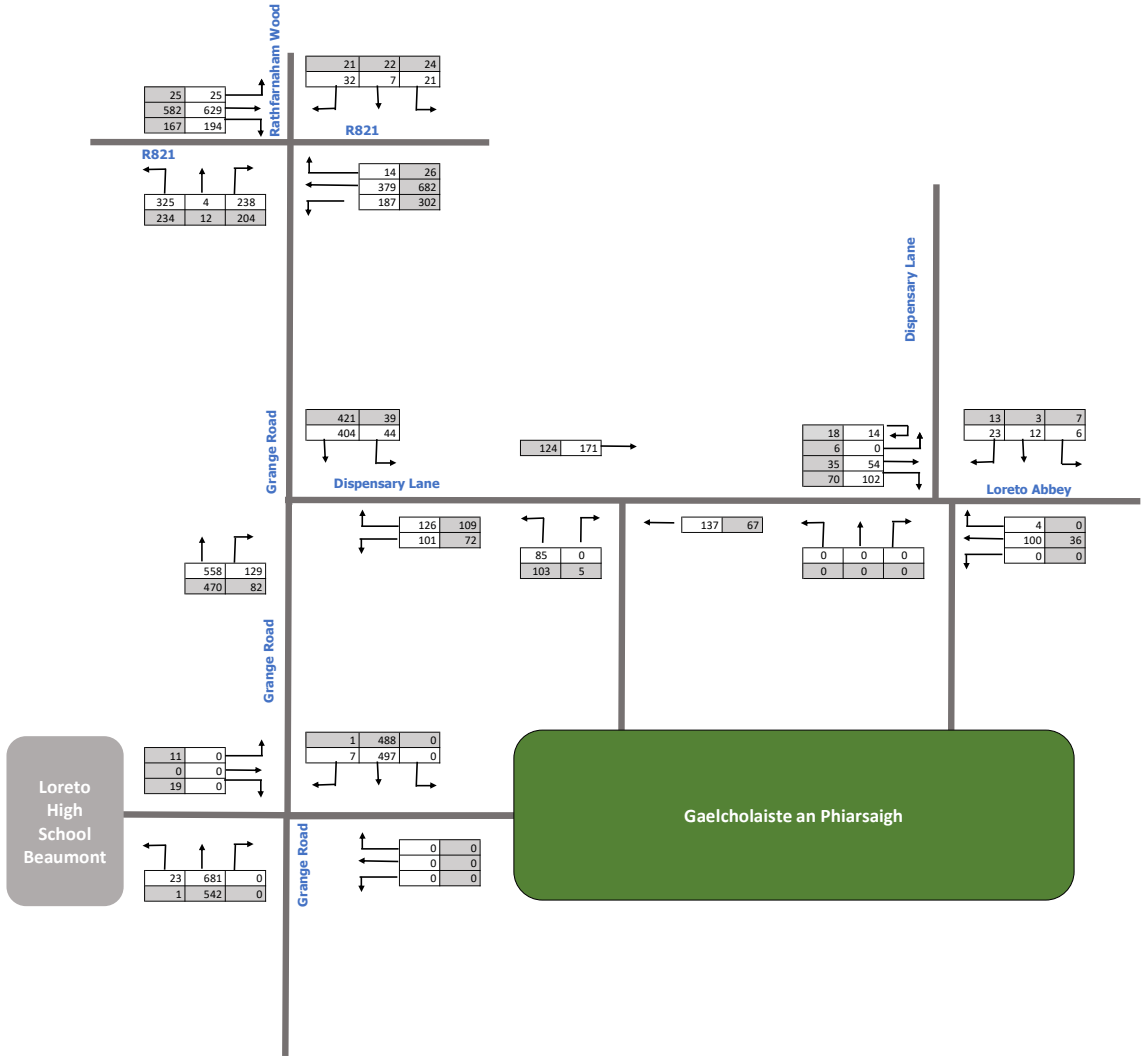
Project :	p190187
DRG. Title :	2039 Do Nothing
Key:	AM Peak Hour (08:00 to 09:00) PM Peak Hour (14:45 to 15:45)
Dwn:	VJ
Ckd:	MMK
Date:	16/03/2023
Ref:	p190187
Figure:	3
Rev:	4



DBFL Consulting Engineers	**Dublin Office:** Dublin Office: Ormond House, Upper Ormond Quay, Dublin 7 **phone:** +353 1 400 4000 **Waterford Office:** Suite 8b The Atrium, Maritana Gate, Canada Street, Waterford **phone:** +353 51 309 500 **email:** info@dbfl.ie **website:** www.dbfl.ie	**Project :** p190187 **DRG. Title :** 2024 Do Something	**Key:** AM Peak Hour (08:00 to 09:00); PM Peak Hour (14:45 to 15:45)	**Dwn:** VJ **Ckd:** MMK **Date:** 16/03/2023 **Ref:** p190187 **Figure:** 4 **Rev:** 4	



DBFL Consulting Engineers	**Dublin Office:** Dublin Office: Ormond House, Upper Ormond Quay, Dublin 7 **phone:** +353 1 400 4000 **Waterford Office:** Suite 8b The Atrium, Maritana Gate, Canada Street, Waterford **phone:** +353 51 309 500 **email:** info@dbfl.ie **website:** www.dbfl.ie	**Project :** p190187	**Key:** AM Peak Hour (08:00 to 09:00) PM Peak Hour (14:45 to 15:45)	**Dwn:** VJ / **Ckd:** MMK / **Date:** 16/03/2023	**Ref:** p190187
		DRG. Title : 2029 Do Something		**Figure:** 5	**Rev:** 4



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Project :	p190187
DRG. Title :	2039 Do Something
Key:	AM Peak Hour (08:00 to 09:00) PM Peak Hour (14:45 to 15:45)
Dwn:	VJ
Ckd:	MMK
Date:	16/03/2023
Ref:	p190187
Figure:	6
Rev:	4

Appendix B: TRANSYT Output Files

TRANSYT 15

Version: 15.5.3.7

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

Filename: Dispensary Lane_Grange Road.t15
Path: G:\2019\p190187\Calcs\TRANSYT
Report generation date: 16/03/2023 13:56:46

File summary

File description

File title	190187
Location	
Site number	
UTCRegion	
Driving side	Left
Date	16/03/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	190187
Enumerator	HEADOFFICE\joyv
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

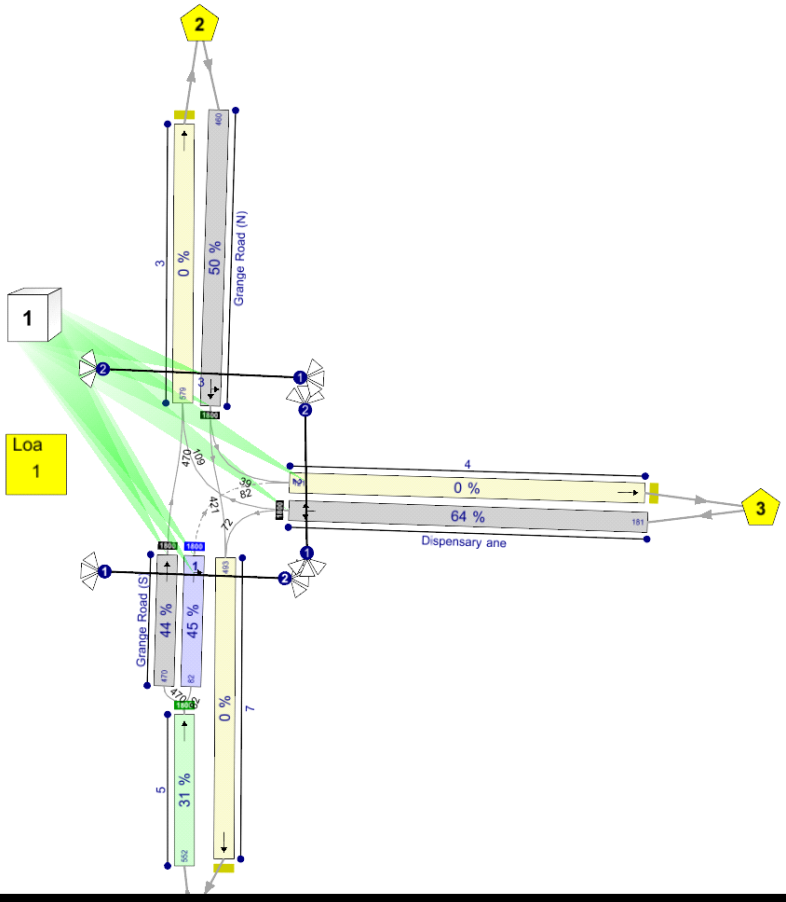
Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	Veh	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

Network Diagrams



A1 - 2020 Base AM
D1 - 2020 Base AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC
1	16/03/2023 13:56:22	16/03/2023 13:56:23	08:00	90	75.95	4.80	56.14	Dispensary Lane/1	0	0	Dispensary Lane/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2020 Base AM		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2020 Base AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
Dispensary Lane	1			✓	267.16	✓	Sum of lanes	1800	✓		Normal	
Grange Road (N)	1			✓	220.28	✓	Sum of lanes	1800	✓		Normal	
Grange Road (S)	1				30.00	✓	Sum of lanes	1800	✓		Normal	
	2				30.00	✓	Sum of lanes	1800	✓	✓	Normal	
3	1			✓	329.23						Normal	
4	1			✓	364.00						Normal	
5	1			✓	112.63	✓	Sum of lanes	1800			Normal	
7	1			✓	315.13						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
Dispensary Lane	1	1	(untitled)			1800
Grange Road (N)	1	1	(untitled)			1800
Grange Road (S)	1	1	(untitled)			1800
	2	2	(untitled)			1800
3	1	1	(untitled)			
4	1	1	(untitled)			
5	1	1	(untitled)			1800
7	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	95

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
Dispensary Lane	1	117	117
Grange Road (N)	1	370	370
Grange Road (S)	1	481	481
	2	69	69
3	1	547	547
4	1	93	93
5	1	550	550
7	1	397	397

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
Dispensary Lane	1	1	C	
Grange Road (N)	1	1	D	
Grange Road (S)	1	1	A	
	2	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
Dispensary Lane	1	32.06	30.00
Grange Road (N)	1	26.43	30.00
5	1	13.52	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
Grange Road (S)	1	1	5/1	Grange Road (S)/1	3.60	30.00	✓	Straight	Straight Movement
	2	1	5/1	Grange Road (S)/2	3.60	30.00	✓	Straight	Straight Movement
3	1	1	Dispensary Lane/1	3/1	39.51	30.00	✓	Offside	79.36
4	1	1	Grange Road (N)/1	4/1	43.68	30.00	✓	Nearside	55.43
7	1	1	Dispensary Lane/1	7/1	37.82	30.00	✓	Nearside	35.48
3	1	2	Grange Road (S)/1	3/1	39.51	30.00	✓	Straight	Straight Movement
4	1	2	Grange Road (S)/2	4/1	43.68	30.00	✓	Offside	55.98
7	1	2	Grange Road (N)/1	7/1	37.82	30.00	✓	Straight	Straight Movement

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
Grange Road (S)	2	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
2		TrafficStream	Grange Road (N)/1	100	0.00		0	0

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
1	(untitled)				Farside	10.50	7.00	5.40
2	(untitled)				Farside	7.00	4.67	5.40
3	(untitled)				Farside	9.00	6.00	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
(ALL)	1	E	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (Veh/hr)

		To		
		1	2	3
From	1	0	481	69
	2	346	0	24
	3	51	66	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	5/1	7/1	#0000FF
	2	(untitled)	Grange Road (N)/1	3/1	#FF0000
	3	(untitled)	Dispensary Lane/1	4/1	#00FF00

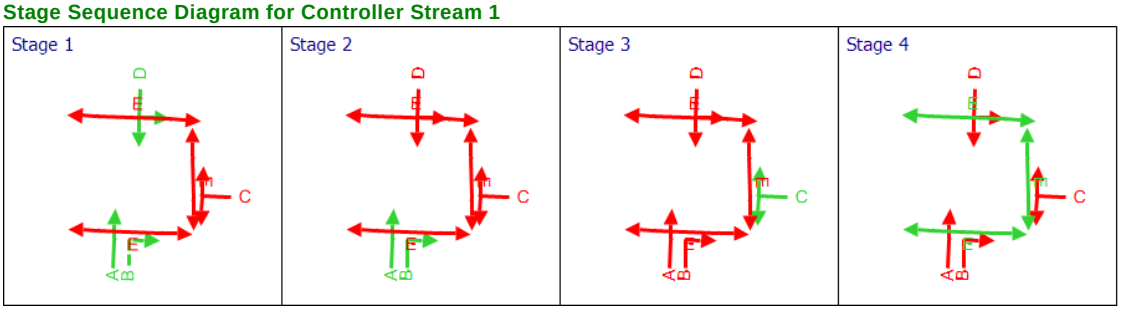
Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		3	1	Dispensary Lane/1, 7/1	Normal	51
	2		3	2	Dispensary Lane/1, 3/1	Normal	66
	3		2	3	Grange Road (N)/1, 4/1	Normal	24
	4		2	1	Grange Road (N)/1, 7/1	Normal	346
	5		1	2	5/1, Grange Road (S)/1, 3/1	Normal	481
	6		1	3	5/1, Grange Road (S)/2, 4/1	Normal	69

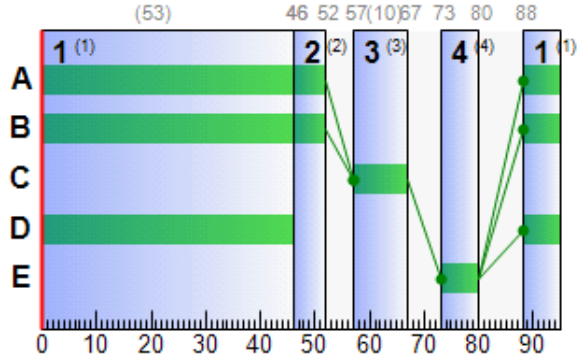
Signal Timings

Network Default: 90s cycle time; 90 steps

Stage Sequence Diagram for Controller Stream 1



Phase Timings Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	Dispensary Lane	1	56	60	117	1800	10	50.57	3.24	6.98	23.34	1.52	24.85
	Grange Road (N)	1	36	149	370	1800	53	12.14	5.34	13.95	17.71	2.47	20.18
	Grange Road (S)	1	42	113	481	1800	59	9.96	6.43	123.33	18.90	2.96	21.86
		2	40	122	69	270	59	26.60	1.84	35.30	7.24	0.86	8.10
	3	1	0	Unrestricted	547	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	93	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	31	195	550	1800	95	0.44	0.07	0.34	0.95	0.00	0.95
	7	1	0	Unrestricted	397	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actua green (s (pe cycle)
08:00-09:00	Dispensary Lane	1	117	117	0		1800	208	56		60	0.00	10
	Grange Road (N)	1	370	370	0		1800	1023	36		149	0.00	53
	Grange Road (S)	1	481	481	0		1800	1137	42		113	0.00	59
		2	69	69	0		270	171	40		122	0.00	59
	3	1	547	547	0		Unrestricted	Unrestricted	0		Unrestricted	0.37	95
	4	1	93	93	0		Unrestricted	Unrestricted	0		Unrestricted	0.44	95
	5	1	550	550	0		1800	1800	31		195	0.00	95
	7	1	397	397	0		Unrestricted	Unrestricted	0		Unrestricted	0.46	95

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	Dispensary Lane	1	0.00	3.24	46.46	6.98	0.00	0.00	
	Grange Road (N)	1	0.00	5.34	38.31	13.95	0.00	0.00	
	Grange Road (S)	1	0.00	6.43	5.22	123.33	0.00	0.00	
		2	0.00	1.84	5.22	35.30	0.00	0.00	
	3	1	0.00	0.00	57.26	0.00	0.00	0.00	
	4	1	0.00	0.00	63.30	0.00	0.00	28.00	
	5	1	0.00	0.07	19.59	0.34	0.00	10.00	
	7	1	0.00	0.00	54.81	0.00	0.00	4.00	

A2 - 2020 Base PM
D2 - 2020 Base PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC
2	16/03/2023 13:56:23	16/03/2023 13:56:23	14:45	90	47.57	2.96	40.90	Dispensary Lane/1	0	0	Dispensary Lane/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2020 Base PM		D2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2020 Base PM				14:45	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
Dispensary Lane	1			✓	267.16	✓	Sum of lanes	1800	✓		Normal	
Grange Road (N)	1			✓	220.28	✓	Sum of lanes	1800	✓		Normal	
Grange Road (S)	1				30.00	✓	Sum of lanes	1800	✓		Normal	
	2				30.00	✓	Sum of lanes	1800	✓	✓	Normal	
3	1			✓	329.23						Normal	
4	1			✓	364.00						Normal	
5	1			✓	112.63	✓	Sum of lanes	1800			Normal	
7	1			✓	315.13						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
Dispensary Lane	1	1	(untitled)			1800
Grange Road (N)	1	1	(untitled)			1800
Grange Road (S)	1	1	(untitled)			1800
	2	2	(untitled)			1800
3	1	1	(untitled)			
4	1	1	(untitled)			
5	1	1	(untitled)			1800
7	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	95

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
Dispensary Lane	1	62	62
Grange Road (N)	1	378	378
Grange Road (S)	1	413	413
	2	45	45
3	1	451	451
4	1	68	68
5	1	458	458
7	1	379	379

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
Dispensary Lane	1	1	C	
Grange Road (N)	1	1	D	
Grange Road (S)	1	1	A	
	2	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
Dispensary Lane	1	32.06	30.00
Grange Road (N)	1	26.43	30.00
5	1	13.52	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
Grange Road (S)	1	1	5/1	Grange Road (S)/1	3.60	30.00	✓	Straight	Straight Movement
	2	1	5/1	Grange Road (S)/2	3.60	30.00	✓	Straight	Straight Movement
3	1	1	Dispensary Lane/1	3/1	39.51	30.00	✓	Offside	79.36
4	1	1	Grange Road (N)/1	4/1	43.68	30.00	✓	Nearside	55.43
7	1	1	Dispensary Lane/1	7/1	37.82	30.00	✓	Nearside	35.48
3	1	2	Grange Road (S)/1	3/1	39.51	30.00	✓	Straight	Straight Movement
4	1	2	Grange Road (S)/2	4/1	43.68	30.00	✓	Offside	55.98
7	1	2	Grange Road (N)/1	7/1	37.82	30.00	✓	Straight	Straight Movement

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
Grange Road (S)	2	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
2		TrafficStream	Grange Road (N)/1	100	0.00		0	0

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
1	(untitled)				Farside	10.50	7.00	5.40
2	(untitled)				Farside	7.00	4.67	5.40
3	(untitled)				Farside	9.00	6.00	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
(ALL)	1	E	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (Veh/hr)

		To		
		1	2	3
From	1	0	413	45
	2	355	0	23
	3	24	38	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	5/1	7/1	#0000FF
	2	(untitled)	Grange Road (N)/1	3/1	#FF0000
	3	(untitled)	Dispensary Lane/1	4/1	#00FF00

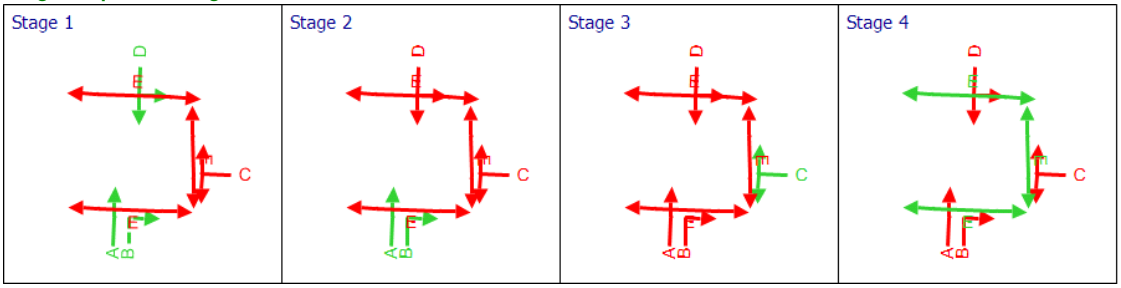
Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		3	1	Dispensary Lane/1, 7/1	Normal	24
	2		3	2	Dispensary Lane/1, 3/1	Normal	38
	3		2	3	Grange Road (N)/1, 4/1	Normal	23
	4		2	1	Grange Road (N)/1, 7/1	Normal	355
	5		1	2	5/1, Grange Road (S)/1, 3/1	Normal	413
	6		1	3	5/1, Grange Road (S)/2, 4/1	Normal	45

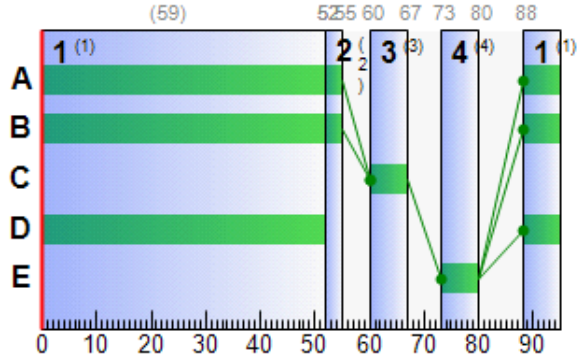
Signal Timings

Network Default: 90s cycle time; 90 steps

Stage Sequence Diagram for Controller Stream 1



Phase Timings Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
14:45-15:45	Dispensary Lane	1	41	120	62	1800	7	49.39	1.69	3.64	12.08	0.79	12.87
	Grange Road (N)	1	33	171	378	1800	59	8.95	4.70	12.28	13.35	2.15	15.50
	Grange Road (S)	1	35	160	413	1800	62	7.80	4.80	91.90	12.70	2.19	14.89
		2	38	140	45	181	62	18.69	0.84	16.02	3.32	0.38	3.70
	3	1	0	Unrestricted	451	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	68	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	25	254	458	1800	95	0.34	0.04	0.22	0.62	0.00	0.62
	7	1	0	Unrestricted	379	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actua green (s (pe cycle)
14:45-15:45	Dispensary Lane	1	62	62	0		1800	152	41		120	0.00	7
	Grange Road (N)	1	378	378	0		1800	1137	33		171	0.00	59
	Grange Road (S)	1	413	413	0		1800	1194	35		160	0.00	62
		2	45	45	0		181	120	38		140	0.00	62
	3	1	451	451	0		Unrestricted	Unrestricted	0		Unrestricted	0.36	95
	4	1	68	68	0		Unrestricted	Unrestricted	0		Unrestricted	0.48	95
	5	1	458	458	0		1800	1800	25		254	0.00	95
	7	1	379	379	0		Unrestricted	Unrestricted	0		Unrestricted	0.44	95

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
14:45-15:45	Dispensary Lane	1	0.00	1.69	46.46	3.64	0.00	0.00	
	Grange Road (N)	1	0.00	4.70	38.31	12.28	0.00	0.00	
	Grange Road (S)	1	0.00	4.80	5.22	91.90	0.00	0.00	
		2	0.00	0.84	5.22	16.02	0.00	37.00	
	3	1	0.00	0.00	57.26	0.00	0.00	1.00	
	4	1	0.00	0.00	63.30	0.00	0.00	34.00	
	5	1	0.00	0.04	19.59	0.22	0.00	0.00	
	7	1	0.00	0.00	54.81	0.00	0.00	7.00	

A3 - 2024 DN AM
D3 - 2024 DN AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC
3	16/03/2023 13:56:23	16/03/2023 13:56:24	08:00	90	79.10	5.00	57.58	Dispensary Lane/1	0	0	Dispensary Lane/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2024 DN AM		D3	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2024 DN AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
Dispensary Lane	1			✓	267.16	✓	Sum of lanes	1800	✓		Normal	
Grange Road (N)	1			✓	220.28	✓	Sum of lanes	1800	✓		Normal	
Grange Road (S)	1				30.00	✓	Sum of lanes	1800	✓		Normal	
	2				30.00	✓	Sum of lanes	1800	✓	✓	Normal	
3	1			✓	329.23						Normal	
4	1			✓	364.00						Normal	
5	1			✓	112.63	✓	Sum of lanes	1800			Normal	
7	1			✓	315.13						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
Dispensary Lane	1	1	(untitled)			1800
Grange Road (N)	1	1	(untitled)			1800
Grange Road (S)	1	1	(untitled)			1800
	2	2	(untitled)			1800
3	1	1	(untitled)			
4	1	1	(untitled)			
5	1	1	(untitled)			1800
7	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	95

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
Dispensary Lane	1	120	120
Grange Road (N)	1	381	381
Grange Road (S)	1	496	496
	2	70	70
3	1	563	563
4	1	94	94
5	1	566	566
7	1	410	410

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
Dispensary Lane	1	1	C	
Grange Road (N)	1	1	D	
Grange Road (S)	1	1	A	
	2	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
Dispensary Lane	1	32.06	30.00
Grange Road (N)	1	26.43	30.00
5	1	13.52	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
Grange Road (S)	1	1	5/1	Grange Road (S)/1	3.60	30.00	✓	Straight	Straight Movement
	2	1	5/1	Grange Road (S)/2	3.60	30.00	✓	Straight	Straight Movement
3	1	1	Dispensary Lane/1	3/1	39.51	30.00	✓	Offside	79.36
4	1	1	Grange Road (N)/1	4/1	43.68	30.00	✓	Nearside	55.43
7	1	1	Dispensary Lane/1	7/1	37.82	30.00	✓	Nearside	35.48
3	1	2	Grange Road (S)/1	3/1	39.51	30.00	✓	Straight	Straight Movement
4	1	2	Grange Road (S)/2	4/1	43.68	30.00	✓	Offside	55.98
7	1	2	Grange Road (N)/1	7/1	37.82	30.00	✓	Straight	Straight Movement

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
Grange Road (S)	2	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
2		TrafficStream	Grange Road (N)/1	100	0.00		0	0

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
1	(untitled)				Farside	10.50	7.00	5.40
2	(untitled)				Farside	7.00	4.67	5.40
3	(untitled)				Farside	9.00	6.00	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
(ALL)	1	E	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (Veh/hr)

		To		
		1	2	3
From	1	0	496	70
	2	357	0	24
	3	53	67	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	5/1	7/1	#0000FF
	2	(untitled)	Grange Road (N)/1	3/1	#FF0000
	3	(untitled)	Dispensary Lane/1	4/1	#00FF00

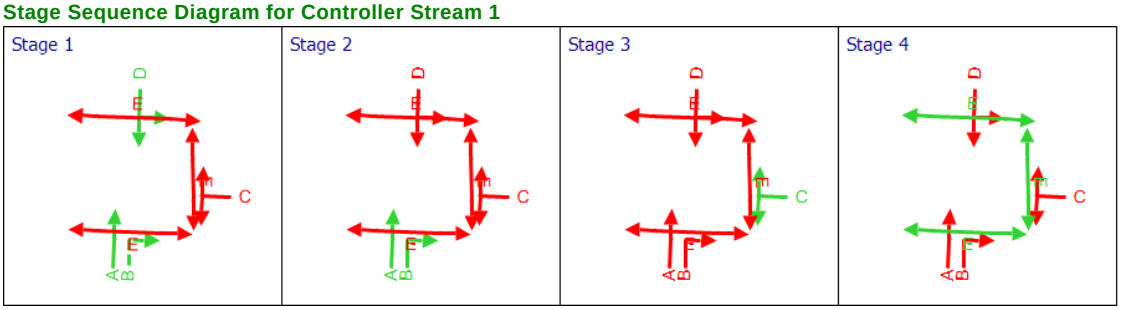
Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		3	1	Dispensary Lane/1, 7/1	Normal	53
	2		3	2	Dispensary Lane/1, 3/1	Normal	67
	3		2	3	Grange Road (N)/1, 4/1	Normal	24
	4		2	1	Grange Road (N)/1, 7/1	Normal	357
	5		1	2	5/1, Grange Road (S)/1, 3/1	Normal	496
	6		1	3	5/1, Grange Road (S)/2, 4/1	Normal	70

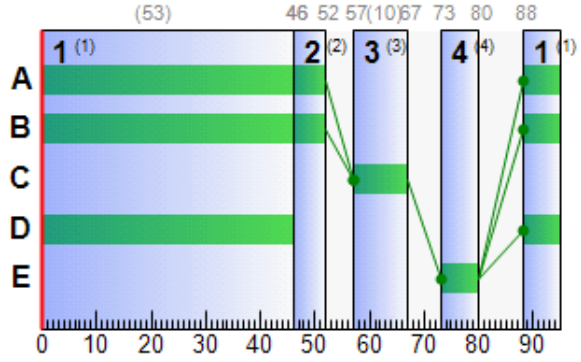
Signal Timings

Network Default: 90s cycle time; 90 steps

Stage Sequence Diagram for Controller Stream 1



Phase Timings Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	Dispensary Lane	1	58	56	120	1800	10	51.26	3.35	7.21	24.26	1.57	25.83
	Grange Road (N)	1	37	142	381	1800	53	12.27	5.51	14.38	18.43	2.55	20.98
	Grange Road (S)	1	44	106	496	1800	59	10.13	6.78	129.99	19.81	3.10	22.91
		2	41	119	70	270	59	27.10	1.87	35.88	7.48	0.88	8.36
	3	1	0	Unrestricted	563	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	94	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	31	186	566	1800	95	0.46	0.07	0.37	1.02	0.00	1.02
	7	1	0	Unrestricted	410	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actua green (s (pe cycle)
08:00-09:00	Dispensary Lane	1	120	120	0		1800	208	58		56	0.00	10
	Grange Road (N)	1	381	381	0		1800	1023	37		142	0.00	53
	Grange Road (S)	1	496	496	0		1800	1137	44		106	0.00	59
		2	70	70	0		270	171	41		119	0.00	59
	3	1	563	563	0		Unrestricted	Unrestricted	0		Unrestricted	0.37	95
	4	1	94	94	0		Unrestricted	Unrestricted	0		Unrestricted	0.44	95
	5	1	566	566	0		1800	1800	31		186	0.00	95
	7	1	410	410	0		Unrestricted	Unrestricted	0		Unrestricted	0.46	95

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	Dispensary Lane	1	0.00	3.35	46.46	7.21	0.00	0.00	
	Grange Road (N)	1	0.00	5.51	38.31	14.38	0.00	0.00	
	Grange Road (S)	1	0.00	6.78	5.22	129.99	0.00	0.00	
		2	0.00	1.87	5.22	35.88	0.00	0.00	
	3	1	0.00	0.00	57.26	0.00	0.00	0.00	
	4	1	0.00	0.00	63.30	0.00	0.00	27.00	
	5	1	0.00	0.07	19.59	0.37	0.00	12.00	
	7	1	0.00	0.00	54.81	0.00	0.00	3.00	

A4 - 2024 DN PM
D4 - 2024 DN PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC
4	16/03/2023 13:56:24	16/03/2023 13:56:24	14:45	90	49.72	3.10	42.22	Dispensary Lane/1	0	0	Dispensary Lane/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2024 DN PM		D4	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2024 DN PM				14:45	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
Dispensary Lane	1			✓	267.16	✓	Sum of lanes	1800	✓		Normal	
Grange Road (N)	1			✓	220.28	✓	Sum of lanes	1800	✓		Normal	
Grange Road (S)	1				30.00	✓	Sum of lanes	1800	✓		Normal	
	2				30.00	✓	Sum of lanes	1800	✓	✓	Normal	
3	1			✓	329.23						Normal	
4	1			✓	364.00						Normal	
5	1			✓	112.63	✓	Sum of lanes	1800			Normal	
7	1			✓	315.13						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
Dispensary Lane	1	1	(untitled)			1800
Grange Road (N)	1	1	(untitled)			1800
Grange Road (S)	1	1	(untitled)			1800
	2	2	(untitled)			1800
3	1	1	(untitled)			
4	1	1	(untitled)			
5	1	1	(untitled)			1800
7	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	95

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
Dispensary Lane	1	64	64
Grange Road (N)	1	391	391
Grange Road (S)	1	426	426
	2	46	46
3	1	465	465
4	1	70	70
5	1	472	472
7	1	392	392

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
Dispensary Lane	1	1	C	
Grange Road (N)	1	1	D	
Grange Road (S)	1	1	A	
	2	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
Dispensary Lane	1	32.06	30.00
Grange Road (N)	1	26.43	30.00
5	1	13.52	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
Grange Road (S)	1	1	5/1	Grange Road (S)/1	3.60	30.00	✓	Straight	Straight Movement
	2	1	5/1	Grange Road (S)/2	3.60	30.00	✓	Straight	Straight Movement
3	1	1	Dispensary Lane/1	3/1	39.51	30.00	✓	Offside	79.36
4	1	1	Grange Road (N)/1	4/1	43.68	30.00	✓	Nearside	55.43
7	1	1	Dispensary Lane/1	7/1	37.82	30.00	✓	Nearside	35.48
3	1	2	Grange Road (S)/1	3/1	39.51	30.00	✓	Straight	Straight Movement
4	1	2	Grange Road (S)/2	4/1	43.68	30.00	✓	Offside	55.98
7	1	2	Grange Road (N)/1	7/1	37.82	30.00	✓	Straight	Straight Movement

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
Grange Road (S)	2	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
2		TrafficStream	Grange Road (N)/1	100	0.00		0	0

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
1	(untitled)				Farside	10.50	7.00	5.40
2	(untitled)				Farside	7.00	4.67	5.40
3	(untitled)				Farside	9.00	6.00	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
(ALL)	1	E	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (Veh/hr)

		To		
		1	2	3
From	1	0	426	46
	2	367	0	24
	3	25	39	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	5/1	7/1	#0000FF
	2	(untitled)	Grange Road (N)/1	3/1	#FF0000
	3	(untitled)	Dispensary Lane/1	4/1	#00FF00

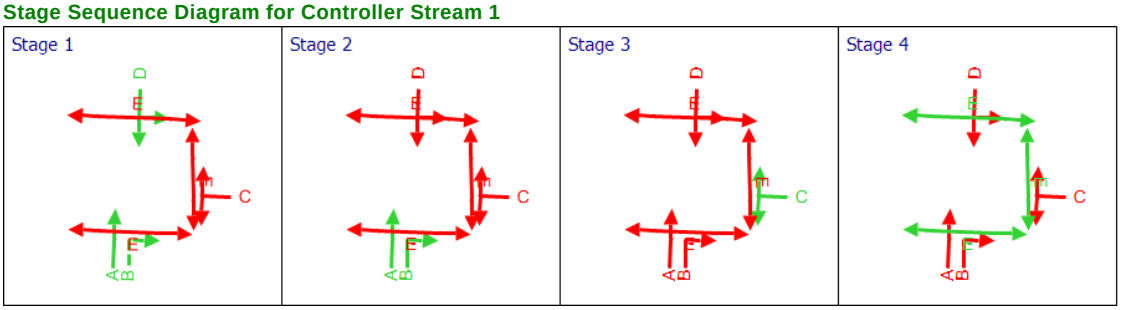
Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		3	1	Dispensary Lane/1, 7/1	Normal	25
	2		3	2	Dispensary Lane/1, 3/1	Normal	39
	3		2	3	Grange Road (N)/1, 4/1	Normal	24
	4		2	1	Grange Road (N)/1, 7/1	Normal	367
	5		1	2	5/1, Grange Road (S)/1, 3/1	Normal	426
	6		1	3	5/1, Grange Road (S)/2, 4/1	Normal	46

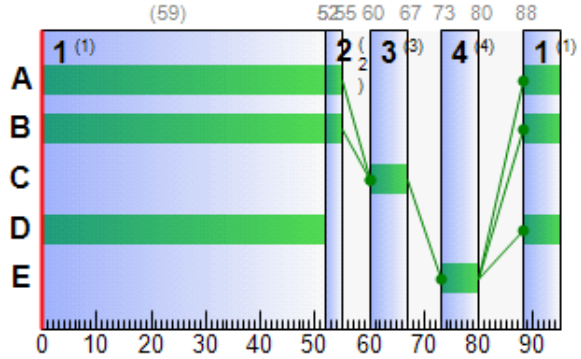
Signal Timings

Network Default: 90s cycle time; 90 steps

Stage Sequence Diagram for Controller Stream 1



Phase Timings Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
14:45-15:45	Dispensary Lane	1	42	113	64	1800	7	49.89	1.75	3.77	12.60	0.82	13.42
	Grange Road (N)	1	34	162	391	1800	59	9.07	4.87	12.71	13.99	2.24	16.23
	Grange Road (S)	1	36	152	426	1800	62	7.90	4.95	94.89	13.27	2.27	15.54
		2	38	135	46	181	62	19.18	0.87	16.70	3.48	0.40	3.88
	3	1	0	Unrestricted	465	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	70	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	26	243	472	1800	95	0.36	0.05	0.24	0.66	0.00	0.66
	7	1	0	Unrestricted	392	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actua green (s (pe cycle)
14:45-15:45	Dispensary Lane	1	64	64	0		1800	152	42		113	0.00	7
	Grange Road (N)	1	391	391	0		1800	1137	34		162	0.00	59
	Grange Road (S)	1	426	426	0		1800	1194	36		152	0.00	62
		2	46	46	0		181	120	38		135	0.00	62
	3	1	465	465	0		Unrestricted	Unrestricted	0		Unrestricted	0.36	95
	4	1	70	70	0		Unrestricted	Unrestricted	0		Unrestricted	0.48	95
	5	1	472	472	0		1800	1800	26		243	0.00	95
	7	1	392	392	0		Unrestricted	Unrestricted	0		Unrestricted	0.44	95

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
14:45-15:45	Dispensary Lane	1	0.00	1.75	46.46	3.77	0.00	0.00	
	Grange Road (N)	1	0.00	4.87	38.31	12.71	0.00	0.00	
	Grange Road (S)	1	0.00	4.95	5.22	94.89	0.00	0.00	
		2	0.00	0.87	5.22	16.70	0.00	36.00	
	3	1	0.00	0.00	57.26	0.00	0.00	0.00	
	4	1	0.00	0.00	63.30	0.00	0.00	34.00	
	5	1	0.00	0.05	19.59	0.24	0.00	0.00	
	7	1	0.00	0.00	54.81	0.00	0.00	6.00	

A5 - 2029 DN AM
D5 - 2029 DN AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC
5	16/03/2023 13:56:24	16/03/2023 13:56:25	08:00	90	89.74	5.68	57.62	Dispensary Lane/1	0	0	Dispensary Lane/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2029 DN AM		D5	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2029 DN AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
Dispensary Lane	1			✓	267.16	✓	Sum of lanes	1800	✓		Normal	
Grange Road (N)	1			✓	220.28	✓	Sum of lanes	1800	✓		Normal	
Grange Road (S)	1				30.00	✓	Sum of lanes	1800	✓		Normal	
	2				30.00	✓	Sum of lanes	1800	✓	✓	Normal	
3	1			✓	329.23						Normal	
4	1			✓	364.00						Normal	
5	1			✓	112.63	✓	Sum of lanes	1800			Normal	
7	1			✓	315.13						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
Dispensary Lane	1	1	(untitled)			1800
Grange Road (N)	1	1	(untitled)			1800
Grange Road (S)	1	1	(untitled)			1800
	2	2	(untitled)			1800
3	1	1	(untitled)			
4	1	1	(untitled)			
5	1	1	(untitled)			1800
7	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	95

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
Dispensary Lane	1	131	131
Grange Road (N)	1	411	411
Grange Road (S)	1	537	537
	2	73	73
3	1	611	611
4	1	98	98
5	1	610	610
7	1	443	443

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
Dispensary Lane	1	1	C	
Grange Road (N)	1	1	D	
Grange Road (S)	1	1	A	
	2	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
Dispensary Lane	1	32.06	30.00
Grange Road (N)	1	26.43	30.00
5	1	13.52	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
Grange Road (S)	1	1	5/1	Grange Road (S)/1	3.60	30.00	✓	Straight	Straight Movement
	2	1	5/1	Grange Road (S)/2	3.60	30.00	✓	Straight	Straight Movement
3	1	1	Dispensary Lane/1	3/1	39.51	30.00	✓	Offside	79.36
4	1	1	Grange Road (N)/1	4/1	43.68	30.00	✓	Nearside	55.43
7	1	1	Dispensary Lane/1	7/1	37.82	30.00	✓	Nearside	35.48
3	1	2	Grange Road (S)/1	3/1	39.51	30.00	✓	Straight	Straight Movement
4	1	2	Grange Road (S)/2	4/1	43.68	30.00	✓	Offside	55.98
7	1	2	Grange Road (N)/1	7/1	37.82	30.00	✓	Straight	Straight Movement

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
Grange Road (S)	2	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
2		TrafficStream	Grange Road (N)/1	100	0.00		0	0

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
1	(untitled)				Farside	10.50	7.00	5.40
2	(untitled)				Farside	7.00	4.67	5.40
3	(untitled)				Farside	9.00	6.00	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
(ALL)	1	E	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (Veh/hr)

		To		
		1	2	3
From	1	0	537	73
	2	386	0	25
	3	57	74	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	5/1	7/1	#0000FF
	2	(untitled)	Grange Road (N)/1	3/1	#FF0000
	3	(untitled)	Dispensary Lane/1	4/1	#00FF00

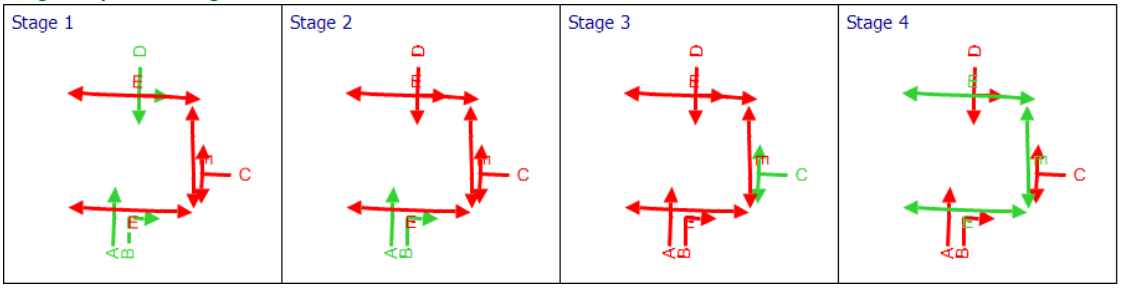
Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		3	1	Dispensary Lane/1, 7/1	Normal	57
	2		3	2	Dispensary Lane/1, 3/1	Normal	74
	3		2	3	Grange Road (N)/1, 4/1	Normal	25
	4		2	1	Grange Road (N)/1, 7/1	Normal	386
	5		1	2	5/1, Grange Road (S)/1, 3/1	Normal	537
	6		1	3	5/1, Grange Road (S)/2, 4/1	Normal	73

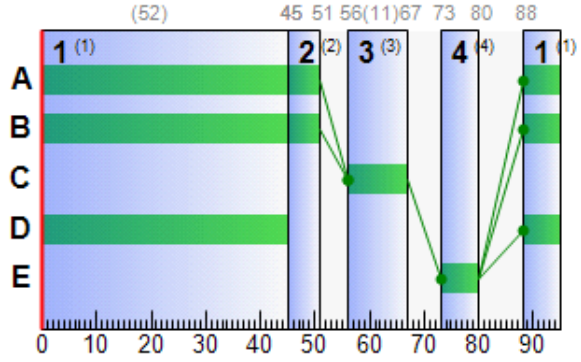
Signal Timings

Network Default: 90s cycle time; 90 steps

Stage Sequence Diagram for Controller Stream 1



Phase Timings Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	Dispensary Lane	1	58	56	131	1800	11	49.67	3.62	7.80	25.67	1.70	27.36
	Grange Road (N)	1	41	120	411	1800	52	13.28	6.31	16.46	21.52	2.91	24.43
	Grange Road (S)	1	48	87	537	1800	58	11.21	7.83	150.06	23.74	3.58	27.32
		2	43	109	73	273	58	29.46	1.97	37.68	8.48	0.92	9.40
	3	1	0	Unrestricted	611	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	98	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	34	166	610	1800	95	0.51	0.09	0.44	1.23	0.00	1.23
	7	1	0	Unrestricted	443	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actua green (s (pe cycle)
08:00-09:00	Dispensary Lane	1	131	131	0		1800	227	58		56	0.00	11
	Grange Road (N)	1	411	411	0		1800	1004	41		120	0.00	52
	Grange Road (S)	1	537	537	0		1800	1118	48		87	0.00	58
		2	73	73	0		273	169	43		109	0.00	58
	3	1	611	611	0		Unrestricted	Unrestricted	0		Unrestricted	0.38	95
	4	1	98	98	0		Unrestricted	Unrestricted	0		Unrestricted	0.44	95
	5	1	610	610	0		1800	1800	34		166	0.00	95
	7	1	443	443	0		Unrestricted	Unrestricted	0		Unrestricted	0.48	95

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	Dispensary Lane	1	0.00	3.62	46.46	7.80	0.00	0.00	
	Grange Road (N)	1	0.00	6.31	38.31	16.46	0.00	0.00	
	Grange Road (S)	1	0.00	7.83	5.22	150.06	0.00	0.00	
		2	0.00	1.97	5.22	37.68	0.00	0.00	
	3	1	0.00	0.00	57.26	0.00	0.00	0.00	
	4	1	0.00	0.00	63.30	0.00	0.00	26.00	
	5	1	0.00	0.09	19.59	0.44	0.00	18.00	
	7	1	0.00	0.00	54.81	0.00	0.00	3.00	

A6 - 2029 DN PM
D6 - 2029 DN PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC
6	16/03/2023 13:56:25	16/03/2023 13:56:25	14:45	90	54.73	3.41	44.20	Dispensary Lane/1	0	0	Dispensary Lane/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2029 DN PM		D6	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2029 DN PM				14:45	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
Dispensary Lane	1			✓	267.16	✓	Sum of lanes	1800	✓		Normal	
Grange Road (N)	1			✓	220.28	✓	Sum of lanes	1800	✓		Normal	
Grange Road (S)	1				30.00	✓	Sum of lanes	1800	✓		Normal	
	2				30.00	✓	Sum of lanes	1800	✓	✓	Normal	
3	1			✓	329.23						Normal	
4	1			✓	364.00						Normal	
5	1			✓	112.63	✓	Sum of lanes	1800			Normal	
7	1			✓	315.13						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
Dispensary Lane	1	1	(untitled)			1800
Grange Road (N)	1	1	(untitled)			1800
Grange Road (S)	1	1	(untitled)			1800
	2	2	(untitled)			1800
3	1	1	(untitled)			
4	1	1	(untitled)			
5	1	1	(untitled)			1800
7	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	95

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
Dispensary Lane	1	67	67
Grange Road (N)	1	422	422
Grange Road (S)	1	460	460
	2	48	48
3	1	501	501
4	1	73	73
5	1	508	508
7	1	423	423

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
Grange Road (N)	1	1	D	
Grange Road (S)	1	1	A	
	2	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
Dispensary Lane	1	32.06	30.00
Grange Road (N)	1	26.43	30.00
5	1	13.52	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
Grange Road (S)	1	1	5/1	Grange Road (S)/1	3.60	30.00	✓	Straight	Straight Movement
	2	1	5/1	Grange Road (S)/2	3.60	30.00	✓	Straight	Straight Movement
3	1	1	Dispensary Lane/1	3/1	39.51	30.00	✓	Offside	79.36
4	1	1	Grange Road (N)/1	4/1	43.68	30.00	✓	Nearside	55.43
7	1	1	Dispensary Lane/1	7/1	37.82	30.00	✓	Nearside	35.48
3	1	2	Grange Road (S)/1	3/1	39.51	30.00	✓	Straight	Straight Movement
4	1	2	Grange Road (S)/2	4/1	43.68	30.00	✓	Offside	55.98
7	1	2	Grange Road (N)/1	7/1	37.82	30.00	✓	Straight	Straight Movement

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
Grange Road (S)	2	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
2		TrafficStream	Grange Road (N)/1	100	0.00		0	0

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
1	(untitled)				Farside	10.50	7.00	5.40
2	(untitled)				Farside	7.00	4.67	5.40
3	(untitled)				Farside	9.00	6.00	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
(ALL)	1	E	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (Veh/hr)

		To		
		1	2	3
From	1	0	460	48
	2	397	0	25
	3	26	41	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	5/1	7/1	#0000FF
	2	(untitled)	Grange Road (N)/1	3/1	#FF0000
	3	(untitled)	Dispensary Lane/1	4/1	#00FF00

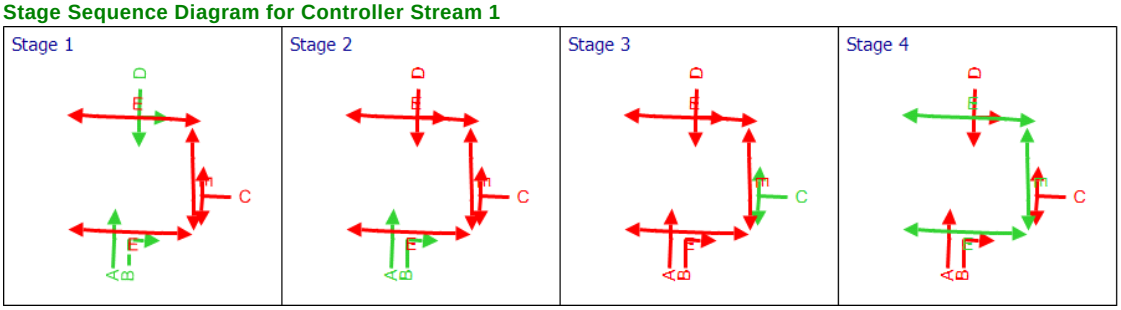
Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		3	1	Dispensary Lane/1, 7/1	Normal	26
	2		3	2	Dispensary Lane/1, 3/1	Normal	41
	3		2	3	Grange Road (N)/1, 4/1	Normal	25
	4		2	1	Grange Road (N)/1, 7/1	Normal	397
	5		1	2	5/1, Grange Road (S)/1, 3/1	Normal	460
	6		1	3	5/1, Grange Road (S)/2, 4/1	Normal	48

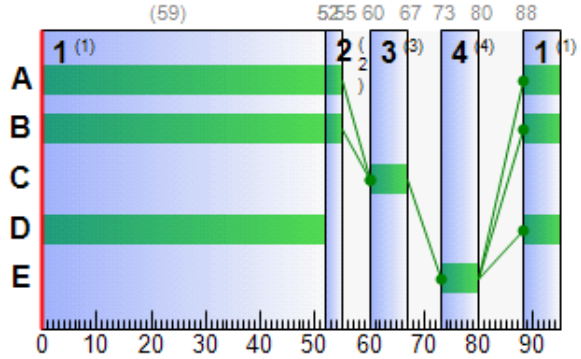
Signal Timings

Network Default: 90s cycle time; 90 steps

Stage Sequence Diagram for Controller Stream 1



Phase Timings Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
14:45-15:45	Dispensary Lane	1	44	104	67	1800	7	50.68	1.85	3.98	13.39	0.87	14.26
	Grange Road (N)	1	37	142	422	1800	59	9.36	5.38	14.05	15.58	2.48	18.05
	Grange Road (S)	1	39	134	460	1800	62	8.18	5.49	105.17	14.85	2.52	17.37
		2	40	125	48	181	62	20.22	0.94	18.11	3.83	0.43	4.26
	3	1	0	Unrestricted	501	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	73	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	28	219	508	1800	95	0.39	0.06	0.28	0.79	0.00	0.79
	7	1	0	Unrestricted	423	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actua green (s (pe cycle)
14:45-15:45	Dispensary Lane	1	67	67	0		1800	152	44		104	0.00	7
	Grange Road (N)	1	422	422	0		1800	1137	37		142	0.00	59
	Grange Road (S)	1	460	460	0		1800	1194	39		134	0.00	62
		2	48	48	0		181	120	40		125	0.00	62
	3	1	501	501	0		Unrestricted	Unrestricted	0		Unrestricted	0.36	95
	4	1	73	73	0		Unrestricted	Unrestricted	0		Unrestricted	0.48	95
	5	1	508	508	0		1800	1800	28		219	0.00	95
	7	1	423	423	0		Unrestricted	Unrestricted	0		Unrestricted	0.45	95

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
14:45-15:45	Dispensary Lane	1	0.00	1.85	46.46	3.98	0.00	0.00	
	Grange Road (N)	1	0.00	5.38	38.31	14.05	0.00	0.00	
	Grange Road (S)	1	0.00	5.49	5.22	105.17	0.00	0.00	
		2	0.00	0.94	5.22	18.11	0.00	33.00	
	3	1	0.00	0.00	57.26	0.00	0.00	0.00	
	4	1	0.00	0.00	63.30	0.00	0.00	34.00	
	5	1	0.00	0.06	19.59	0.28	0.00	3.00	
	7	1	0.00	0.00	54.81	0.00	0.00	5.00	

A7 - 2039 DN AM
D7 - 2039 DN AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC
7	16/03/2023 13:56:25	16/03/2023 13:56:26	08:00	90	98.46	6.24	61.13	Dispensary Lane/1	0	0	Dispensary Lane/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2039 DN AM		D7	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2039 DN AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
Dispensary Lane	1			✓	267.16	✓	Sum of lanes	1800	✓		Normal	
Grange Road (N)	1			✓	220.28	✓	Sum of lanes	1800	✓		Normal	
Grange Road (S)	1				30.00	✓	Sum of lanes	1800	✓		Normal	
	2				30.00	✓	Sum of lanes	1800	✓	✓	Normal	
3	1			✓	329.23						Normal	
4	1			✓	364.00						Normal	
5	1			✓	112.63	✓	Sum of lanes	1800			Normal	
7	1			✓	315.13						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
Dispensary Lane	1	1	(untitled)			1800
Grange Road (N)	1	1	(untitled)			1800
Grange Road (S)	1	1	(untitled)			1800
	2	2	(untitled)			1800
3	1	1	(untitled)			
4	1	1	(untitled)			
5	1	1	(untitled)			1800
7	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	95

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
Dispensary Lane	1	139	139
Grange Road (N)	1	437	437
Grange Road (S)	1	570	570
	2	76	76
3	1	648	648
4	1	102	102
5	1	646	646
7	1	472	472

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
Dispensary Lane	1	1	C	
Grange Road (N)	1	1	D	
Grange Road (S)	1	1	A	
	2	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
Dispensary Lane	1	32.06	30.00
Grange Road (N)	1	26.43	30.00
5	1	13.52	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
Grange Road (S)	1	1	5/1	Grange Road (S)/1	3.60	30.00	✓	Straight	Straight Movement
	2	1	5/1	Grange Road (S)/2	3.60	30.00	✓	Straight	Straight Movement
3	1	1	Dispensary Lane/1	3/1	39.51	30.00	✓	Offside	79.36
4	1	1	Grange Road (N)/1	4/1	43.68	30.00	✓	Nearside	55.43
7	1	1	Dispensary Lane/1	7/1	37.82	30.00	✓	Nearside	35.48
3	1	2	Grange Road (S)/1	3/1	39.51	30.00	✓	Straight	Straight Movement
4	1	2	Grange Road (S)/2	4/1	43.68	30.00	✓	Offside	55.98
7	1	2	Grange Road (N)/1	7/1	37.82	30.00	✓	Straight	Straight Movement

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
Grange Road (S)	2	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
2		TrafficStream	Grange Road (N)/1	100	0.00		0	0

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
1	(untitled)				Farside	10.50	7.00	5.40
2	(untitled)				Farside	7.00	4.67	5.40
3	(untitled)				Farside	9.00	6.00	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
(ALL)	1	E	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (Veh/hr)

		To		
		1	2	3
From	1	0	570	76
	2	411	0	26
	3	61	78	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	5/1	7/1	#0000FF
	2	(untitled)	Grange Road (N)/1	3/1	#FF0000
	3	(untitled)	Dispensary Lane/1	4/1	#00FF00

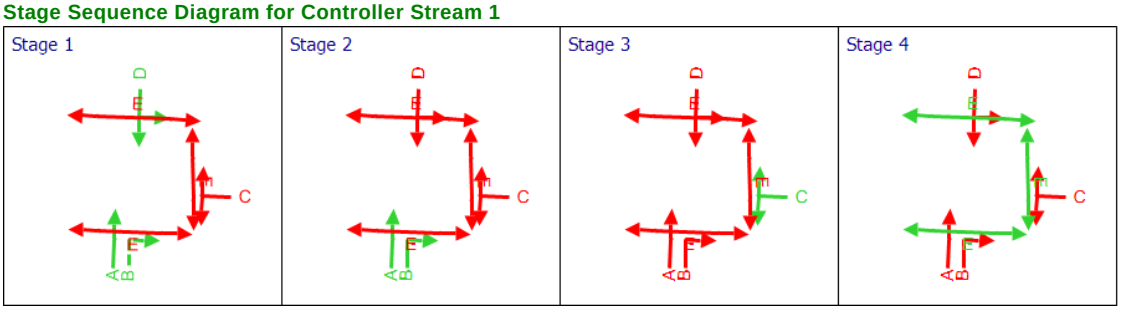
Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		3	1	Dispensary Lane/1, 7/1	Normal	61
	2		3	2	Dispensary Lane/1, 3/1	Normal	78
	3		2	3	Grange Road (N)/1, 4/1	Normal	26
	4		2	1	Grange Road (N)/1, 7/1	Normal	411
	5		1	2	5/1, Grange Road (S)/1, 3/1	Normal	570
	6		1	3	5/1, Grange Road (S)/2, 4/1	Normal	76

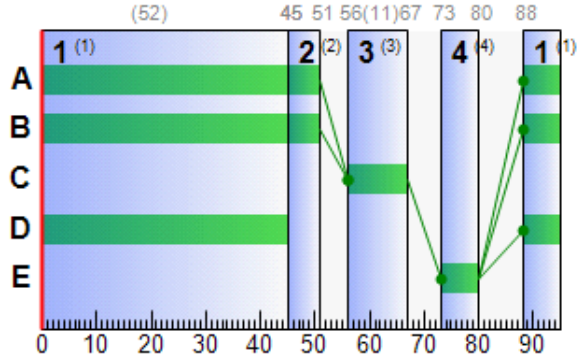
Signal Timings

Network Default: 90s cycle time; 90 steps

Stage Sequence Diagram for Controller Stream 1



Phase Timings Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	Dispensary Lane	1	61	47	139	1800	11	51.45	3.91	8.41	28.21	1.83	30.04
	Grange Road (N)	1	44	107	437	1800	52	13.64	6.84	17.86	23.52	3.16	26.67
	Grange Road (S)	1	51	77	570	1800	58	11.65	8.50	162.87	26.20	3.91	30.11
		2	45	101	76	273	58	30.86	2.06	39.46	9.25	0.96	10.22
	3	1	0	Unrestricted	648	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	102	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	36	151	646	1800	95	0.56	0.10	0.51	1.43	0.00	1.43
	7	1	0	Unrestricted	472	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actua green (s (pe cycle)
08:00-09:00	Dispensary Lane	1	139	139	0		1800	227	61		47	0.00	11
	Grange Road (N)	1	437	437	0		1800	1004	44		107	0.00	52
	Grange Road (S)	1	570	570	0		1800	1118	51		77	0.00	58
		2	76	76	0		273	169	45		101	0.00	58
	3	1	648	648	0		Unrestricted	Unrestricted	0		Unrestricted	0.38	95
	4	1	102	102	0		Unrestricted	Unrestricted	0		Unrestricted	0.43	95
	5	1	646	646	0		1800	1800	36		151	0.00	95
	7	1	472	472	0		Unrestricted	Unrestricted	0		Unrestricted	0.48	95

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	Dispensary Lane	1	0.00	3.91	46.46	8.41	0.00	0.00	
	Grange Road (N)	1	0.00	6.84	38.31	17.86	0.00	0.00	
	Grange Road (S)	1	0.00	8.50	5.22	162.87	0.00	0.00	
		2	0.00	2.06	5.22	39.46	0.00	0.00	
	3	1	0.00	0.00	57.26	0.00	0.00	0.00	
	4	1	0.00	0.00	63.30	0.00	0.00	25.00	
	5	1	0.00	0.10	19.59	0.51	0.00	21.00	
	7	1	0.00	0.00	54.81	0.00	0.00	2.00	

A8 - 2039 DN PM
D8 - 2039 DN PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC
8	16/03/2023 13:56:26	16/03/2023 13:56:26	14:45	90	59.97	3.74	47.50	Dispensary Lane/1	0	0	Dispensary Lane/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2039 DN PM		D8	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2039 DN PM				14:45	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
Dispensary Lane	1			✓	267.16	✓	Sum of lanes	1800	✓		Normal	
Grange Road (N)	1			✓	220.28	✓	Sum of lanes	1800	✓		Normal	
Grange Road (S)	1				30.00	✓	Sum of lanes	1800	✓		Normal	
	2				30.00	✓	Sum of lanes	1800	✓	✓	Normal	
3	1			✓	329.23						Normal	
4	1			✓	364.00						Normal	
5	1			✓	112.63	✓	Sum of lanes	1800			Normal	
7	1			✓	315.13						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
Dispensary Lane	1	1	(untitled)			1800
Grange Road (N)	1	1	(untitled)			1800
Grange Road (S)	1	1	(untitled)			1800
	2	2	(untitled)			1800
3	1	1	(untitled)			
4	1	1	(untitled)			
5	1	1	(untitled)			1800
7	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	95

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
Dispensary Lane	1	72	72
Grange Road (N)	1	448	448
Grange Road (S)	1	488	488
	2	50	50
3	1	532	532
4	1	76	76
5	1	538	538
7	1	450	450

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
Dispensary Lane	1	1	C	
Grange Road (N)	1	1	D	
Grange Road (S)	1	1	A	
	2	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
Dispensary Lane	1	32.06	30.00
Grange Road (N)	1	26.43	30.00
5	1	13.52	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
Grange Road (S)	1	1	5/1	Grange Road (S)/1	3.60	30.00	✓	Straight	Straight Movement
	2	1	5/1	Grange Road (S)/2	3.60	30.00	✓	Straight	Straight Movement
3	1	1	Dispensary Lane/1	3/1	39.51	30.00	✓	Offside	79.36
4	1	1	Grange Road (N)/1	4/1	43.68	30.00	✓	Nearside	55.43
7	1	1	Dispensary Lane/1	7/1	37.82	30.00	✓	Nearside	35.48
3	1	2	Grange Road (S)/1	3/1	39.51	30.00	✓	Straight	Straight Movement
4	1	2	Grange Road (S)/2	4/1	43.68	30.00	✓	Offside	55.98
7	1	2	Grange Road (N)/1	7/1	37.82	30.00	✓	Straight	Straight Movement

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
Grange Road (S)	2	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
2		TrafficStream	Grange Road (N)/1	100	0.00		0	0

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
1	(untitled)				Farside	10.50	7.00	5.40
2	(untitled)				Farside	7.00	4.67	5.40
3	(untitled)				Farside	9.00	6.00	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
(ALL)	1	E	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (Veh/hr)

		To		
		1	2	3
From	1	0	488	50
	2	422	0	26
	3	28	44	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	5/1	7/1	#0000FF
	2	(untitled)	Grange Road (N)/1	3/1	#FF0000
	3	(untitled)	Dispensary Lane/1	4/1	#00FF00

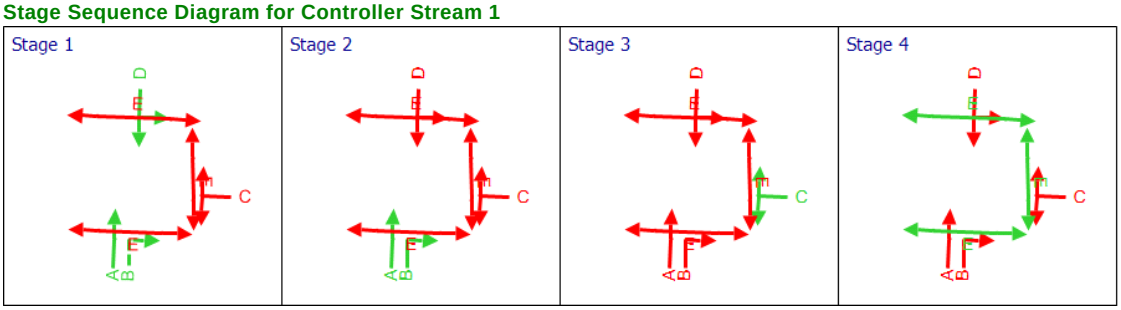
Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		3	1	Dispensary Lane/1, 7/1	Normal	28
	2		3	2	Dispensary Lane/1, 3/1	Normal	44
	3		2	3	Grange Road (N)/1, 4/1	Normal	26
	4		2	1	Grange Road (N)/1, 7/1	Normal	422
	5		1	2	5/1, Grange Road (S)/1, 3/1	Normal	488
	6		1	3	5/1, Grange Road (S)/2, 4/1	Normal	50

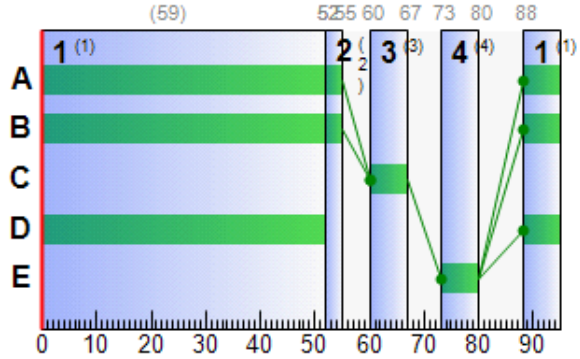
Signal Timings

Network Default: 90s cycle time; 90 steps

Stage Sequence Diagram for Controller Stream 1



Phase Timings Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
14:45-15:45	Dispensary Lane	1	48	89	72	1800	7	52.09	2.01	4.33	14.79	0.94	15.73
	Grange Road (N)	1	39	128	448	1800	59	9.62	5.85	15.28	16.99	2.69	19.68
	Grange Road (S)	1	41	120	488	1800	62	8.44	5.97	114.43	16.24	2.74	18.98
		2	42	116	50	181	62	21.32	1.02	19.58	4.21	0.47	4.67
	3	1	0	Unrestricted	532	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	76	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	30	201	538	1800	95	0.43	0.06	0.33	0.90	0.00	0.90
	7	1	0	Unrestricted	450	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actua green (s (pe cycle)
14:45-15:45	Dispensary Lane	1	72	72	0		1800	152	48		89	0.00	7
	Grange Road (N)	1	448	448	0		1800	1137	39		128	0.00	59
	Grange Road (S)	1	488	488	0		1800	1194	41		120	0.00	62
		2	50	50	0		181	120	42		116	0.00	62
	3	1	532	532	0		Unrestricted	Unrestricted	0		Unrestricted	0.36	95
	4	1	76	76	0		Unrestricted	Unrestricted	0		Unrestricted	0.48	95
	5	1	538	538	0		1800	1800	30		201	0.00	95
	7	1	450	450	0		Unrestricted	Unrestricted	0		Unrestricted	0.45	95

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
14:45-15:45	Dispensary Lane	1	0.00	2.01	46.46	4.33	0.00	0.00	
	Grange Road (N)	1	0.00	5.85	38.31	15.28	0.00	0.00	
	Grange Road (S)	1	0.00	5.97	5.22	114.43	0.00	0.00	
		2	0.00	1.02	5.22	19.58	0.00	31.00	
	3	1	0.00	0.00	57.26	0.00	0.00	0.00	
	4	1	0.00	0.00	63.30	0.00	0.00	34.00	
	5	1	0.00	0.06	19.59	0.33	0.00	6.00	
	7	1	0.00	0.00	54.81	0.00	0.00	5.00	

A9 - 2024 DS AM
D9 - 2024 DS AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC
9	16/03/2023 13:56:27	16/03/2023 13:56:27	08:00	90	125.80	8.08	64.89	Dispensary Lane/1	0	0	Dispensary Lane/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2024 DS AM		D9	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2024 DS AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
Dispensary Lane	1			✓	267.16	✓	Sum of lanes	1800	✓		Normal	
Grange Road (N)	1			✓	220.28	✓	Sum of lanes	1800	✓		Normal	
Grange Road (S)	1				30.00	✓	Sum of lanes	1800	✓		Normal	
	2				30.00	✓	Sum of lanes	1800	✓	✓	Normal	
3	1			✓	329.23						Normal	
4	1			✓	364.00						Normal	
5	1			✓	112.63	✓	Sum of lanes	1800			Normal	
7	1			✓	315.13						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
Dispensary Lane	1	1	(untitled)			1800
Grange Road (N)	1	1	(untitled)			1800
Grange Road (S)	1	1	(untitled)			1800
	2	2	(untitled)			1800
3	1	1	(untitled)			
4	1	1	(untitled)			
5	1	1	(untitled)			1800
7	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	95

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
Dispensary Lane	1	209	209
Grange Road (N)	1	392	392
Grange Road (S)	1	484	484
	2	123	123
3	1	600	600
4	1	165	165
5	1	607	607
7	1	443	443

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
Dispensary Lane	1	1	C	
Grange Road (N)	1	1	D	
Grange Road (S)	1	1	A	
	2	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
Dispensary Lane	1	32.06	30.00
Grange Road (N)	1	26.43	30.00
5	1	13.52	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
Grange Road (S)	1	1	5/1	Grange Road (S)/1	3.60	30.00	✓	Straight	Straight Movement
	2	1	5/1	Grange Road (S)/2	3.60	30.00	✓	Straight	Straight Movement
3	1	1	Dispensary Lane/1	3/1	39.51	30.00	✓	Offside	79.36
4	1	1	Grange Road (N)/1	4/1	43.68	30.00	✓	Nearside	55.43
7	1	1	Dispensary Lane/1	7/1	37.82	30.00	✓	Nearside	35.48
3	1	2	Grange Road (S)/1	3/1	39.51	30.00	✓	Straight	Straight Movement
4	1	2	Grange Road (S)/2	4/1	43.68	30.00	✓	Offside	55.98
7	1	2	Grange Road (N)/1	7/1	37.82	30.00	✓	Straight	Straight Movement

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
Grange Road (S)	2	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
2		TrafficStream	Grange Road (N)/1	100	0.00		0	0

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
1	(untitled)				Farside	10.50	7.00	5.40
2	(untitled)				Farside	7.00	4.67	5.40
3	(untitled)				Farside	9.00	6.00	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
(ALL)	1	E	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (Veh/hr)

		To		
		1	2	3
From	1	0	484	123
	2	350	0	42
	3	93	116	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	5/1	7/1	#0000FF
	2	(untitled)	Grange Road (N)/1	3/1	#FF0000
	3	(untitled)	Dispensary Lane/1	4/1	#00FF00

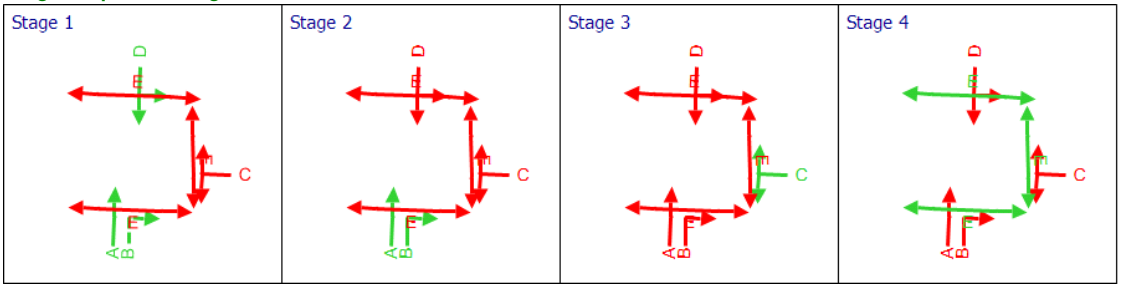
Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		3	1	Dispensary Lane/1, 7/1	Normal	93
	2		3	2	Dispensary Lane/1, 3/1	Normal	116
	3		2	3	Grange Road (N)/1, 4/1	Normal	42
	4		2	1	Grange Road (N)/1, 7/1	Normal	350
	5		1	2	5/1, Grange Road (S)/1, 3/1	Normal	484
	6		1	3	5/1, Grange Road (S)/2, 4/1	Normal	123

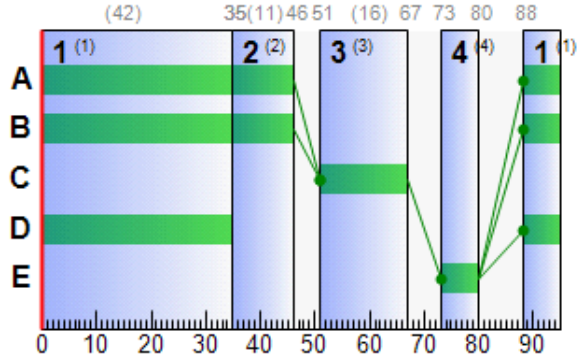
Signal Timings

Network Default: 90s cycle time; 90 steps

Stage Sequence Diagram for Controller Stream 1



Phase Timings Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	Dispensary Lane	1	65	39	209	1800	16	46.34	5.70	12.26	38.20	2.66	40.86
	Grange Road (N)	1	48	87	392	1800	42	20.24	7.41	19.34	31.30	3.44	34.73
	Grange Road (S)	1	47	90	484	1800	53	13.68	7.74	148.36	26.11	3.53	29.64
		2	48	86	123	446	53	36.78	3.20	61.30	17.84	1.50	19.34
	3	1	0	Unrestricted	600	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	165	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	34	167	607	1800	95	0.51	0.09	0.44	1.22	0.00	1.22
	7	1	0	Unrestricted	443	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actua green (s (pe cycle)
08:00-09:00	Dispensary Lane	1	209	209	0		1800	322	65		39	0.00	16
	Grange Road (N)	1	392	392	0		1800	815	48		87	0.00	42
	Grange Road (S)	1	484	484	0		1800	1023	47		90	0.00	53
		2	123	123	0		446	254	48		86	0.00	53
	3	1	600	600	0		Unrestricted	Unrestricted	0		Unrestricted	0.39	95
	4	1	165	165	0		Unrestricted	Unrestricted	0		Unrestricted	0.51	95
	5	1	607	607	0		1800	1800	34		167	0.00	95
	7	1	443	443	0		Unrestricted	Unrestricted	0		Unrestricted	0.53	95

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	Dispensary Lane	1	0.00	5.70	46.46	12.26	0.00	0.00	
	Grange Road (N)	1	0.00	7.41	38.31	19.34	0.00	0.00	
	Grange Road (S)	1	0.00	7.74	5.22	148.36	0.00	0.00	
		2	0.00	3.20	5.22	61.30	0.00	0.00	
	3	1	0.00	0.00	57.26	0.00	0.00	0.00	
	4	1	0.00	0.00	63.30	0.00	0.00	21.00	
	5	1	0.00	0.09	19.59	0.44	0.00	19.00	
	7	1	0.00	0.00	54.81	0.00	0.00	2.00	

A10 - 2024 DS PM
D10 - 2024 DS PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC
10	16/03/2023 13:56:27	16/03/2023 13:56:27	14:45	90	95.51	6.09	57.07	Dispensary Lane/1	0	0	Dispensary Lane/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2024 DS PM		D10	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2024 DS PM				14:45	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
Dispensary Lane	1			✓	267.16	✓	Sum of lanes	1800	✓		Normal	
Grange Road (N)	1			✓	220.28	✓	Sum of lanes	1800	✓		Normal	
Grange Road (S)	1				30.00	✓	Sum of lanes	1800	✓		Normal	
	2				30.00	✓	Sum of lanes	1800	✓	✓	Normal	
3	1			✓	329.23						Normal	
4	1			✓	364.00						Normal	
5	1			✓	112.63	✓	Sum of lanes	1800			Normal	
7	1			✓	315.13						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
Dispensary Lane	1	1	(untitled)			1800
Grange Road (N)	1	1	(untitled)			1800
Grange Road (S)	1	1	(untitled)			1800
	2	2	(untitled)			1800
3	1	1	(untitled)			
4	1	1	(untitled)			
5	1	1	(untitled)			1800
7	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	95

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
Dispensary Lane	1	173	173
Grange Road (N)	1	403	403
Grange Road (S)	1	408	408
	2	78	78
3	1	512	512
4	1	115	115
5	1	486	486
7	1	435	435

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
Dispensary Lane	1	1	C	
Grange Road (N)	1	1	D	
Grange Road (S)	1	1	A	
	2	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
Dispensary Lane	1	32.06	30.00
Grange Road (N)	1	26.43	30.00
5	1	13.52	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
Grange Road (S)	1	1	5/1	Grange Road (S)/1	3.60	30.00	✓	Straight	Straight Movement
	2	1	5/1	Grange Road (S)/2	3.60	30.00	✓	Straight	Straight Movement
3	1	1	Dispensary Lane/1	3/1	39.51	30.00	✓	Offside	79.36
4	1	1	Grange Road (N)/1	4/1	43.68	30.00	✓	Nearside	55.43
7	1	1	Dispensary Lane/1	7/1	37.82	30.00	✓	Nearside	35.48
3	1	2	Grange Road (S)/1	3/1	39.51	30.00	✓	Straight	Straight Movement
4	1	2	Grange Road (S)/2	4/1	43.68	30.00	✓	Offside	55.98
7	1	2	Grange Road (N)/1	7/1	37.82	30.00	✓	Straight	Straight Movement

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
Grange Road (S)	2	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
2		TrafficStream	Grange Road (N)/1	100	0.00		0	0

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
1	(untitled)				Farside	10.50	7.00	5.40
2	(untitled)				Farside	7.00	4.67	5.40
3	(untitled)				Farside	9.00	6.00	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
(ALL)	1	E	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (Veh/hr)

		To		
		1	2	3
From	1	0	408	78
	2	366	0	37
	3	69	104	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	5/1	7/1	#0000FF
	2	(untitled)	Grange Road (N)/1	3/1	#FF0000
	3	(untitled)	Dispensary Lane/1	4/1	#00FF00

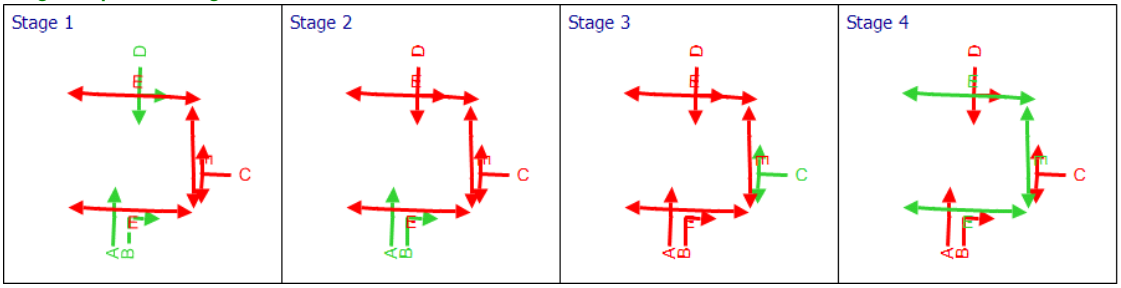
Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		3	1	Dispensary Lane/1, 7/1	Normal	69
	2		3	2	Dispensary Lane/1, 3/1	Normal	104
	3		2	3	Grange Road (N)/1, 4/1	Normal	37
	4		2	1	Grange Road (N)/1, 7/1	Normal	366
	5		1	2	5/1, Grange Road (S)/1, 3/1	Normal	408
	6		1	3	5/1, Grange Road (S)/2, 4/1	Normal	78

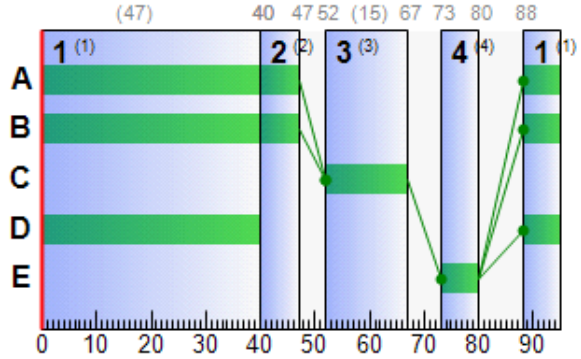
Signal Timings

Network Default: 90s cycle time; 90 steps

Stage Sequence Diagram for Controller Stream 1



Phase Timings Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
14:45-15:45	Dispensary Lane	1	57	58	173	1800	15	44.13	4.55	9.80	30.11	2.13	32.24
	Grange Road (N)	1	44	103	403	1800	47	16.56	6.89	17.99	26.32	3.19	29.51
	Grange Road (S)	1	39	130	408	1800	54	12.00	5.91	113.19	19.32	2.73	22.04
		2	43	111	78	316	54	32.61	2.08	39.95	10.03	0.98	11.01
	3	1	0	Unrestricted	512	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	115	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	27	233	486	1800	95	0.37	0.05	0.25	0.71	0.00	0.71
	7	1	0	Unrestricted	435	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actua green (s (pe cycle)
14:45-15:45	Dispensary Lane	1	173	173	0		1800	303	57		58	0.00	15
	Grange Road (N)	1	403	403	0		1800	909	44		103	0.00	47
	Grange Road (S)	1	408	408	0		1800	1042	39		130	0.00	54
		2	78	78	0		316	183	43		111	0.00	54
	3	1	512	512	0		Unrestricted	Unrestricted	0		Unrestricted	0.38	95
	4	1	115	115	0		Unrestricted	Unrestricted	0		Unrestricted	0.49	95
	5	1	486	486	0		1800	1800	27		233	0.00	95
	7	1	435	435	0		Unrestricted	Unrestricted	0		Unrestricted	0.52	95

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
14:45-15:45	Dispensary Lane	1	0.00	4.55	46.46	9.80	0.00	0.00	
	Grange Road (N)	1	0.00	6.89	38.31	17.99	0.00	0.00	
	Grange Road (S)	1	0.00	5.91	5.22	113.19	0.00	0.00	
		2	0.00	2.08	5.22	39.95	0.00	0.00	
	3	1	0.00	0.00	57.26	0.00	0.00	0.00	
	4	1	0.00	0.00	63.30	0.00	0.00	26.00	
	5	1	0.00	0.05	19.59	0.25	0.00	7.00	
	7	1	0.00	0.00	54.81	0.00	0.00	4.00	

A11 - 2029 DS AM
D11 - 2029 DS AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC
11	16/03/2023 13:56:28	16/03/2023 13:56:28	08:00	90	138.19	8.88	67.99	Dispensary Lane/1	0	0	Dispensary Lane/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2029 DS AM		D11	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2029 DS AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
Dispensary Lane	1			✓	267.16	✓	Sum of lanes	1800	✓		Normal	
Grange Road (N)	1			✓	220.28	✓	Sum of lanes	1800	✓		Normal	
Grange Road (S)	1				30.00	✓	Sum of lanes	1800	✓		Normal	
	2				30.00	✓	Sum of lanes	1800	✓	✓	Normal	
3	1			✓	329.23						Normal	
4	1			✓	364.00						Normal	
5	1			✓	112.63	✓	Sum of lanes	1800			Normal	
7	1			✓	315.13						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
Dispensary Lane	1	1	(untitled)			1800
Grange Road (N)	1	1	(untitled)			1800
Grange Road (S)	1	1	(untitled)			1800
	2	2	(untitled)			1800
3	1	1	(untitled)			
4	1	1	(untitled)			
5	1	1	(untitled)			1800
7	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	95

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
Dispensary Lane	1	219	219
Grange Road (N)	1	422	422
Grange Road (S)	1	525	525
	2	126	126
3	1	647	647
4	1	169	169
5	1	651	651
7	1	476	476

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
Dispensary Lane	1	1	C	
Grange Road (N)	1	1	D	
Grange Road (S)	1	1	A	
	2	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
Dispensary Lane	1	32.06	30.00
Grange Road (N)	1	26.43	30.00
5	1	13.52	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
Grange Road (S)	1	1	5/1	Grange Road (S)/1	3.60	30.00	✓	Straight	Straight Movement
	2	1	5/1	Grange Road (S)/2	3.60	30.00	✓	Straight	Straight Movement
3	1	1	Dispensary Lane/1	3/1	39.51	30.00	✓	Offside	79.36
4	1	1	Grange Road (N)/1	4/1	43.68	30.00	✓	Nearside	55.43
7	1	1	Dispensary Lane/1	7/1	37.82	30.00	✓	Nearside	35.48
3	1	2	Grange Road (S)/1	3/1	39.51	30.00	✓	Straight	Straight Movement
4	1	2	Grange Road (S)/2	4/1	43.68	30.00	✓	Offside	55.98
7	1	2	Grange Road (N)/1	7/1	37.82	30.00	✓	Straight	Straight Movement

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
Grange Road (S)	2	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
2		TrafficStream	Grange Road (N)/1	100	0.00		0	0

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
1	(untitled)				Farside	10.50	7.00	5.40
2	(untitled)				Farside	7.00	4.67	5.40
3	(untitled)				Farside	9.00	6.00	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
(ALL)	1	E	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (Veh/hr)

		To		
		1	2	3
From	1	0	525	126
	2	379	0	43
	3	97	122	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	5/1	7/1	#0000FF
	2	(untitled)	Grange Road (N)/1	3/1	#FF0000
	3	(untitled)	Dispensary Lane/1	4/1	#00FF00

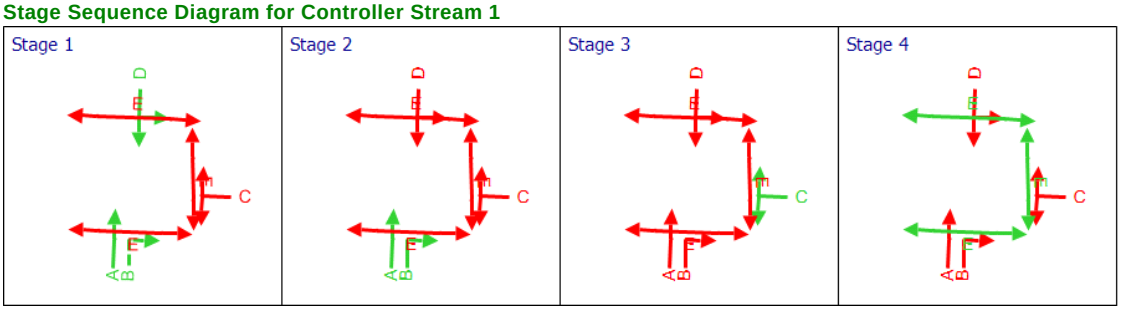
Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		3	1	Dispensary Lane/1, 7/1	Normal	97
	2		3	2	Dispensary Lane/1, 3/1	Normal	122
	3		2	3	Grange Road (N)/1, 4/1	Normal	43
	4		2	1	Grange Road (N)/1, 7/1	Normal	379
	5		1	2	5/1, Grange Road (S)/1, 3/1	Normal	525
	6		1	3	5/1, Grange Road (S)/2, 4/1	Normal	126

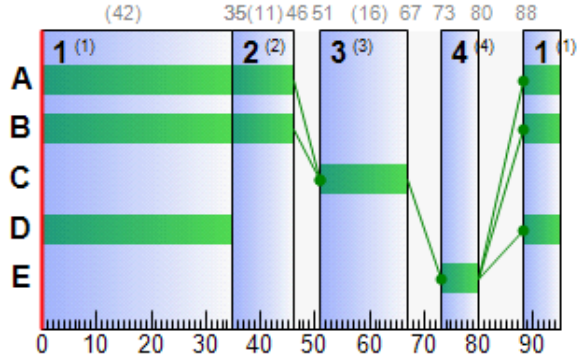
Signal Timings

Network Default: 90s cycle time; 90 steps

Stage Sequence Diagram for Controller Stream 1



Phase Timings Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	Dispensary Lane	1	68	32	219	1800	16	48.02	6.06	13.04	41.48	2.83	44.32
	Grange Road (N)	1	52	74	422	1800	42	20.96	8.13	21.22	34.88	3.78	38.67
	Grange Road (S)	1	51	75	525	1800	53	14.34	8.58	164.49	29.70	3.97	33.66
		2	50	81	126	446	53	37.33	3.29	63.01	18.55	1.54	20.09
	3	1	0	Unrestricted	647	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	169	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	36	149	651	1800	95	0.57	0.10	0.52	1.45	0.00	1.45
	7	1	0	Unrestricted	476	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actua green (s (pe cycle)
08:00-09:00	Dispensary Lane	1	219	219	0		1800	322	68		32	0.00	16
	Grange Road (N)	1	422	422	0		1800	815	52		74	0.00	42
	Grange Road (S)	1	525	525	0		1800	1023	51		75	0.00	53
		2	126	126	0		446	254	50		81	0.00	53
	3	1	647	647	0		Unrestricted	Unrestricted	0		Unrestricted	0.39	95
	4	1	169	169	0		Unrestricted	Unrestricted	0		Unrestricted	0.52	95
	5	1	651	651	0		1800	1800	36		149	0.00	95
	7	1	476	476	0		Unrestricted	Unrestricted	0		Unrestricted	0.53	95

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	Dispensary Lane	1	0.00	6.06	46.46	13.04	0.00	0.00	
	Grange Road (N)	1	0.00	8.13	38.31	21.22	0.00	0.00	
	Grange Road (S)	1	0.00	8.58	5.22	164.49	0.00	0.00	
		2	0.00	3.29	5.22	63.01	0.00	0.00	
	3	1	0.00	0.00	57.26	0.00	0.00	0.00	
	4	1	0.00	0.00	63.30	0.00	0.00	20.00	
	5	1	0.00	0.10	19.59	0.52	0.00	24.00	
	7	1	0.00	0.00	54.81	0.00	0.00	1.00	

A12 - 2029 DS PM
D12 - 2029 DS PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC
12	16/03/2023 13:56:28	16/03/2023 13:56:28	14:45	90	103.54	6.60	58.72	Dispensary Lane/1	0	0	Dispensary Lane/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2029 DS PM		D12	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2029 DS PM				14:45	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb	15, 40, -1, 15,	50, 50, 5, 5, 0.5,		✓	1			

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
Dispensary Lane	1			✓	267.16	✓	Sum of lanes	1800	✓		Normal	
Grange Road (N)	1			✓	220.28	✓	Sum of lanes	1800	✓		Normal	
Grange Road (S)	1				30.00	✓	Sum of lanes	1800	✓		Normal	
	2				30.00	✓	Sum of lanes	1800	✓	✓	Normal	
3	1			✓	329.23						Normal	
4	1			✓	364.00						Normal	
5	1			✓	112.63	✓	Sum of lanes	1800			Normal	
7	1			✓	315.13						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
Dispensary Lane	1	1	(untitled)			1800
Grange Road (N)	1	1	(untitled)			1800
Grange Road (S)	1	1	(untitled)			1800
	2	2	(untitled)			1800
3	1	1	(untitled)			
4	1	1	(untitled)			
5	1	1	(untitled)			1800
7	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	95

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
Dispensary Lane	1	178	178
Grange Road (N)	1	434	434
Grange Road (S)	1	442	442
	2	80	80
3	1	549	549
4	1	118	118
5	1	522	522
7	1	467	467

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
Dispensary Lane	1	1	C	
Grange Road (N)	1	1	D	
Grange Road (S)	1	1	A	
	2	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
Dispensary Lane	1	32.06	30.00
Grange Road (N)	1	26.43	30.00
5	1	13.52	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
Grange Road (S)	1	1	5/1	Grange Road (S)/1	3.60	30.00	✓	Straight	Straight Movement
	2	1	5/1	Grange Road (S)/2	3.60	30.00	✓	Straight	Straight Movement
3	1	1	Dispensary Lane/1	3/1	39.51	30.00	✓	Offside	79.36
4	1	1	Grange Road (N)/1	4/1	43.68	30.00	✓	Nearside	55.43
7	1	1	Dispensary Lane/1	7/1	37.82	30.00	✓	Nearside	35.48
3	1	2	Grange Road (S)/1	3/1	39.51	30.00	✓	Straight	Straight Movement
4	1	2	Grange Road (S)/2	4/1	43.68	30.00	✓	Offside	55.98
7	1	2	Grange Road (N)/1	7/1	37.82	30.00	✓	Straight	Straight Movement

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
Grange Road (S)	2	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
2		TrafficStream	Grange Road (N)/1	100	0.00		0	0

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
1	(untitled)				Farside	10.50	7.00	5.40
2	(untitled)				Farside	7.00	4.67	5.40
3	(untitled)				Farside	9.00	6.00	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
(ALL)	1	E	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (Veh/hr)

		To		
		1	2	3
From	1	0	442	80
	2	396	0	38
	3	71	107	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	5/1	7/1	#0000FF
	2	(untitled)	Grange Road (N)/1	3/1	#FF0000
	3	(untitled)	Dispensary Lane/1	4/1	#00FF00

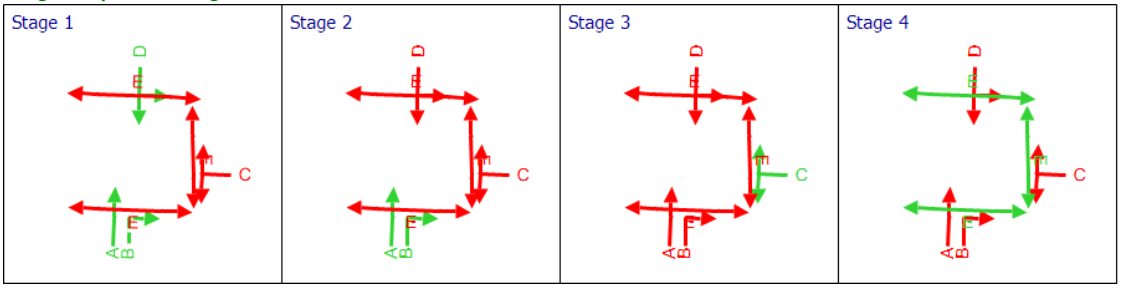
Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		3	1	Dispensary Lane/1, 7/1	Normal	71
	2		3	2	Dispensary Lane/1, 3/1	Normal	107
	3		2	3	Grange Road (N)/1, 4/1	Normal	38
	4		2	1	Grange Road (N)/1, 7/1	Normal	396
	5		1	2	5/1, Grange Road (S)/1, 3/1	Normal	442
	6		1	3	5/1, Grange Road (S)/2, 4/1	Normal	80

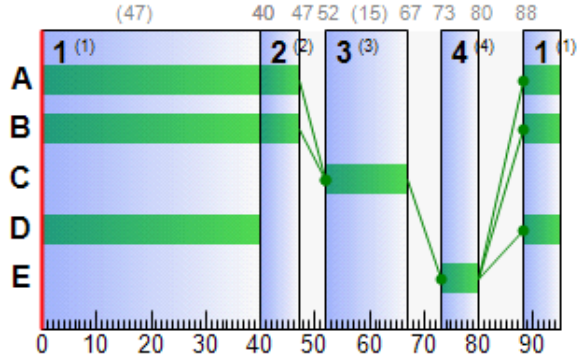
Signal Timings

Network Default: 90s cycle time; 90 steps

Stage Sequence Diagram for Controller Stream 1



Phase Timings Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
14:45-15:45	Dispensary Lane	1	59	53	178	1800	15	44.77	4.71	10.14	31.44	2.21	33.64
	Grange Road (N)	1	48	89	434	1800	47	17.12	7.57	19.76	29.31	3.52	32.83
	Grange Road (S)	1	42	112	442	1800	54	12.43	6.66	127.71	21.67	3.03	24.70
		2	44	106	80	316	54	33.35	2.15	41.12	10.52	1.00	11.53
	3	1	0	Unrestricted	549	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	118	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	29	210	522	1800	95	0.41	0.06	0.30	0.84	0.00	0.84
	7	1	0	Unrestricted	467	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actua green (s (pe cycle)
14:45-15:45	Dispensary Lane	1	178	178	0		1800	303	59		53	0.00	15
	Grange Road (N)	1	434	434	0		1800	909	48		89	0.00	47
	Grange Road (S)	1	442	442	0		1800	1042	42		112	0.00	54
		2	80	80	0		316	183	44		106	0.00	54
	3	1	549	549	0		Unrestricted	Unrestricted	0		Unrestricted	0.38	95
	4	1	118	118	0		Unrestricted	Unrestricted	0		Unrestricted	0.49	95
	5	1	522	522	0		1800	1800	29		210	0.00	95
	7	1	467	467	0		Unrestricted	Unrestricted	0		Unrestricted	0.52	95

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
14:45-15:45	Dispensary Lane	1	0.00	4.71	46.46	10.14	0.00	0.00	
	Grange Road (N)	1	0.00	7.57	38.31	19.76	0.00	0.00	
	Grange Road (S)	1	0.00	6.66	5.22	127.71	0.00	0.00	
		2	0.00	2.15	5.22	41.12	0.00	0.00	
	3	1	0.00	0.00	57.26	0.00	0.00	0.00	
	4	1	0.00	0.00	63.30	0.00	0.00	26.00	
	5	1	0.00	0.06	19.59	0.30	0.00	12.00	
	7	1	0.00	0.00	54.81	0.00	0.00	4.00	

A13 - 2039 DS AM
D13 - 2039 DS AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC
13	16/03/2023 13:56:29	16/03/2023 13:56:29	08:00	90	149.45	9.60	66.56	Dispensary Lane/1	0	0	Dispensary Lane/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2039 DS AM		D13	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2039 DS AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
Dispensary Lane	1			✓	267.16	✓	Sum of lanes	1800	✓		Normal	
Grange Road (N)	1			✓	220.28	✓	Sum of lanes	1800	✓		Normal	
Grange Road (S)	1				30.00	✓	Sum of lanes	1800	✓		Normal	
	2				30.00	✓	Sum of lanes	1800	✓	✓	Normal	
3	1			✓	329.23						Normal	
4	1			✓	364.00						Normal	
5	1			✓	112.63	✓	Sum of lanes	1800			Normal	
7	1			✓	315.13						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
Dispensary Lane	1	1	(untitled)			1800
Grange Road (N)	1	1	(untitled)			1800
Grange Road (S)	1	1	(untitled)			1800
	2	2	(untitled)			1800
3	1	1	(untitled)			
4	1	1	(untitled)			
5	1	1	(untitled)			1800
7	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	95

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
Dispensary Lane	1	227	227
Grange Road (N)	1	448	448
Grange Road (S)	1	558	558
	2	129	129
3	1	684	684
4	1	173	173
5	1	687	687
7	1	505	505

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
Dispensary Lane	1	1	C	
Grange Road (N)	1	1	D	
Grange Road (S)	1	1	A	
	2	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
Dispensary Lane	1	32.06	30.00
Grange Road (N)	1	26.43	30.00
5	1	13.52	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
Grange Road (S)	1	1	5/1	Grange Road (S)/1	3.60	30.00	✓	Straight	Straight Movement
	2	1	5/1	Grange Road (S)/2	3.60	30.00	✓	Straight	Straight Movement
3	1	1	Dispensary Lane/1	3/1	39.51	30.00	✓	Offside	79.36
4	1	1	Grange Road (N)/1	4/1	43.68	30.00	✓	Nearside	55.43
7	1	1	Dispensary Lane/1	7/1	37.82	30.00	✓	Nearside	35.48
3	1	2	Grange Road (S)/1	3/1	39.51	30.00	✓	Straight	Straight Movement
4	1	2	Grange Road (S)/2	4/1	43.68	30.00	✓	Offside	55.98
7	1	2	Grange Road (N)/1	7/1	37.82	30.00	✓	Straight	Straight Movement

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
Grange Road (S)	2	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
2		TrafficStream	Grange Road (N)/1	100	0.00		0	0

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
1	(untitled)				Farside	10.50	7.00	5.40
2	(untitled)				Farside	7.00	4.67	5.40
3	(untitled)				Farside	9.00	6.00	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
(ALL)	1	E	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (Veh/hr)

		To		
		1	2	3
From	1	0	558	129
	2	404	0	44
	3	101	126	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	5/1	7/1	#0000FF
	2	(untitled)	Grange Road (N)/1	3/1	#FF0000
	3	(untitled)	Dispensary Lane/1	4/1	#00FF00

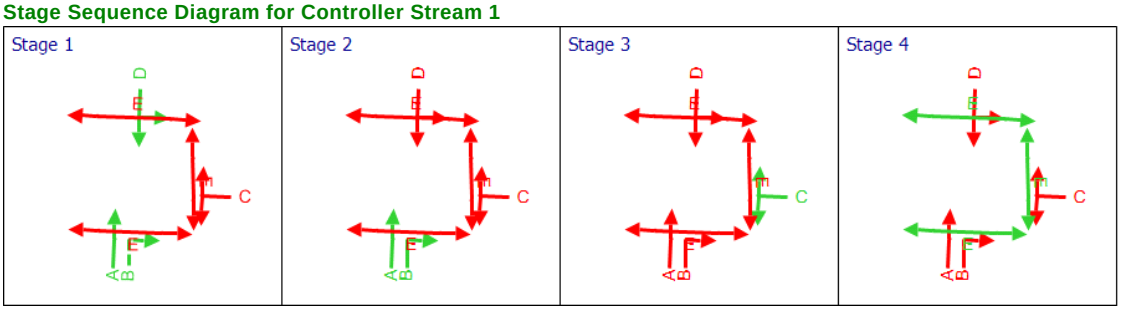
Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		3	1	Dispensary Lane/1, 7/1	Normal	101
	2		3	2	Dispensary Lane/1, 3/1	Normal	126
	3		2	3	Grange Road (N)/1, 4/1	Normal	44
	4		2	1	Grange Road (N)/1, 7/1	Normal	404
	5		1	2	5/1, Grange Road (S)/1, 3/1	Normal	558
	6		1	3	5/1, Grange Road (S)/2, 4/1	Normal	129

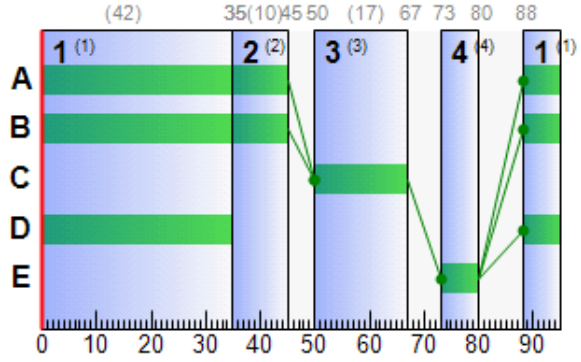
Signal Timings

Network Default: 90s cycle time; 90 steps

Stage Sequence Diagram for Controller Stream 1



Phase Timings Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	Dispensary Lane	1	67	35	227	1800	17	45.98	6.20	13.34	41.17	2.88	44.05
	Grange Road (N)	1	55	64	448	1800	42	21.64	8.92	23.29	38.23	4.12	42.35
	Grange Road (S)	1	56	62	558	1800	52	15.69	9.65	184.88	34.53	4.46	38.99
		2	55	64	129	421	52	40.77	3.48	66.76	20.75	1.63	22.38
	3	1	0	Unrestricted	684	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	173	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	38	136	687	1800	95	0.62	0.12	0.60	1.67	0.00	1.67
	7	1	0	Unrestricted	505	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actua green (s (pe cycle)
08:00-09:00	Dispensary Lane	1	227	227	0		1800	341	67		35	0.00	17
	Grange Road (N)	1	448	448	0		1800	815	55		64	0.00	42
	Grange Road (S)	1	558	558	0		1800	1004	56		62	0.00	52
		2	129	129	0		421	235	55		64	0.00	52
	3	1	684	684	0		Unrestricted	Unrestricted	0		Unrestricted	0.40	95
	4	1	173	173	0		Unrestricted	Unrestricted	0		Unrestricted	0.52	95
	5	1	687	687	0		1800	1800	38		136	0.00	95
	7	1	505	505	0		Unrestricted	Unrestricted	0		Unrestricted	0.53	95

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	Dispensary Lane	1	0.00	6.20	46.46	13.34	0.00	0.00	
	Grange Road (N)	1	0.00	8.92	38.31	23.29	0.00	0.00	
	Grange Road (S)	1	0.00	9.65	5.22	184.88	0.00	0.00	
		2	0.00	3.48	5.22	66.76	0.00	0.00	
	3	1	0.00	0.00	57.26	0.00	0.00	0.00	
	4	1	0.00	0.00	63.30	0.00	0.00	20.00	
	5	1	0.00	0.12	19.59	0.60	0.00	29.00	
	7	1	0.00	0.00	54.81	0.00	0.00	1.00	

A14 - 2039 DS PM
D14 - 2039 DS PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC
14	16/03/2023 13:56:29	16/03/2023 13:56:29	14:45	90	109.71	7.00	63.69	Dispensary Lane/1	0	0	Dispensary Lane/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2039 DS PM		D14	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2039 DS PM				14:45	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
Dispensary Lane	1			✓	267.16	✓	Sum of lanes	1800	✓		Normal	
Grange Road (N)	1			✓	220.28	✓	Sum of lanes	1800	✓		Normal	
Grange Road (S)	1				30.00	✓	Sum of lanes	1800	✓		Normal	
	2				30.00	✓	Sum of lanes	1800	✓	✓	Normal	
3	1			✓	329.23						Normal	
4	1			✓	364.00						Normal	
5	1			✓	112.63	✓	Sum of lanes	1800			Normal	
7	1			✓	315.13						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
Dispensary Lane	1	1	(untitled)			1800
Grange Road (N)	1	1	(untitled)			1800
Grange Road (S)	1	1	(untitled)			1800
	2	2	(untitled)			1800
3	1	1	(untitled)			
4	1	1	(untitled)			
5	1	1	(untitled)			1800
7	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	95

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
Dispensary Lane	1	181	181
Grange Road (N)	1	460	460
Grange Road (S)	1	470	470
	2	82	82
3	1	579	579
4	1	121	121
5	1	552	552
7	1	493	493

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
Dispensary Lane	1	1	C	
Grange Road (N)	1	1	D	
Grange Road (S)	1	1	A	
	2	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
Dispensary Lane	1	32.06	30.00
Grange Road (N)	1	26.43	30.00
5	1	13.52	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
Grange Road (S)	1	1	5/1	Grange Road (S)/1	3.60	30.00	✓	Straight	Straight Movement
	2	1	5/1	Grange Road (S)/2	3.60	30.00	✓	Straight	Straight Movement
3	1	1	Dispensary Lane/1	3/1	39.51	30.00	✓	Offside	79.36
4	1	1	Grange Road (N)/1	4/1	43.68	30.00	✓	Nearside	55.43
7	1	1	Dispensary Lane/1	7/1	37.82	30.00	✓	Nearside	35.48
3	1	2	Grange Road (S)/1	3/1	39.51	30.00	✓	Straight	Straight Movement
4	1	2	Grange Road (S)/2	4/1	43.68	30.00	✓	Offside	55.98
7	1	2	Grange Road (N)/1	7/1	37.82	30.00	✓	Straight	Straight Movement

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
Grange Road (S)	2	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
2		TrafficStream	Grange Road (N)/1	100	0.00		0	0

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (kph)
1	(untitled)				Farside	10.50	7.00	5.40
2	(untitled)				Farside	7.00	4.67	5.40
3	(untitled)				Farside	9.00	6.00	5.40

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
(ALL)	1	E	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (Veh/hr)

		To		
		1	2	3
From	1	0	470	82
	2	421	0	39
	3	72	109	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	5/1	7/1	#0000FF
	2	(untitled)	Grange Road (N)/1	3/1	#FF0000
	3	(untitled)	Dispensary Lane/1	4/1	#00FF00

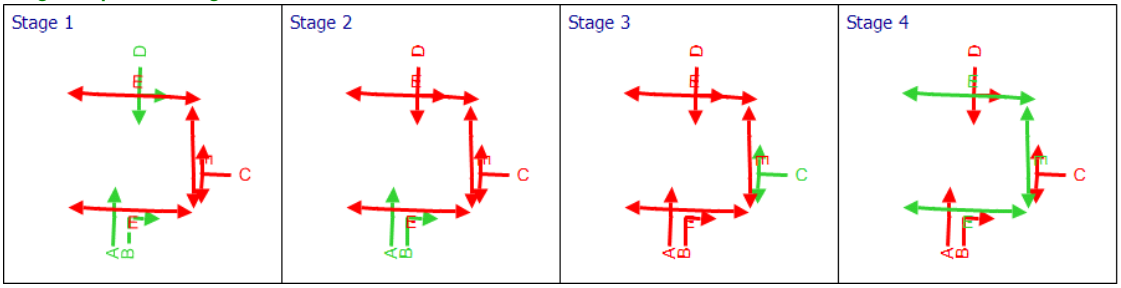
Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		3	1	Dispensary Lane/1, 7/1	Normal	72
	2		3	2	Dispensary Lane/1, 3/1	Normal	109
	3		2	3	Grange Road (N)/1, 4/1	Normal	39
	4		2	1	Grange Road (N)/1, 7/1	Normal	421
	5		1	2	5/1, Grange Road (S)/1, 3/1	Normal	470
	6		1	3	5/1, Grange Road (S)/2, 4/1	Normal	82

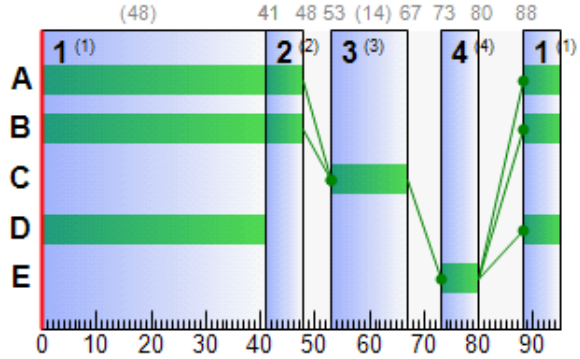
Signal Timings

Network Default: 90s cycle time; 90 steps

Stage Sequence Diagram for Controller Stream 1



Phase Timings Diagram for Controller Stream 1



Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
14:45-15:45	Dispensary Lane	1	64	41	181	1800	14	48.31	4.97	10.70	34.49	2.33	36.82
	Grange Road (N)	1	50	82	460	1800	48	16.86	8.04	20.98	30.59	3.73	34.32
	Grange Road (S)	1	44	103	470	1800	55	12.18	6.96	133.49	22.59	3.21	25.80
		2	45	102	82	313	55	33.32	2.20	42.24	10.78	1.03	11.81
	3	1	0	Unrestricted	579	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	121	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	31	193	552	1800	95	0.44	0.07	0.35	0.96	0.00	0.96
	7	1	0	Unrestricted	493	Unrestricted	95	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actua green (s (pe cycle)
14:45-15:45	Dispensary Lane	1	181	181	0		1800	284	64		41	0.00	14
	Grange Road (N)	1	460	460	0		1800	928	50		82	0.00	48
	Grange Road (S)	1	470	470	0		1800	1061	44		103	0.00	55
		2	82	82	0		313	184	45		102	0.00	55
	3	1	579	579	0		Unrestricted	Unrestricted	0		Unrestricted	0.37	95
	4	1	121	121	0		Unrestricted	Unrestricted	0		Unrestricted	0.47	95
	5	1	552	552	0		1800	1800	31		193	0.00	95
	7	1	493	493	0		Unrestricted	Unrestricted	0		Unrestricted	0.52	95

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
14:45-15:45	Dispensary Lane	1	0.00	4.97	46.46	10.70	0.00	0.00	
	Grange Road (N)	1	0.00	8.04	38.31	20.98	0.00	0.00	
	Grange Road (S)	1	0.00	6.96	5.22	133.49	0.00	0.00	
		2	0.00	2.20	5.22	42.24	0.00	0.00	
	3	1	0.00	0.00	57.26	0.00	0.00	0.00	
	4	1	0.00	0.00	63.30	0.00	0.00	24.00	
	5	1	0.00	0.07	19.59	0.35	0.00	14.00	
	7	1	0.00	0.00	54.81	0.00	0.00	3.00	

Appendix C: PICADY Output Files

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.2.1013

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

Filename: Junction 4.j9
Path: G:\2019\p190187\Calcs\PICADY
Report generation date: 16/03/2023 14:42:10

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	DO NOTHING - 2024 DN									
Stream B-AC	A2 D3	0.0	0.00	0.00	A	A2 D6	0.0	0.00	0.00	A
Stream C-B		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	DO NOTHING - 2029 DN									
Stream B-AC	A2 D4	0.0	0.00	0.00	A	A2 D7	0.0	0.00	0.00	A
Stream C-B		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	DO NOTHING - 2039 DN									
Stream B-AC	A2 D5	0.0	0.00	0.00	A	A2 D8	0.0	0.00	0.00	A
Stream C-B		0.0	0.00	0.00	A		0.0	0.00	0.00	A

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	DO SOMETHING - 2024 DS									
Stream B-AC	A3 D9	0.1	5.67	0.13	A	A3 D12	0.2	5.83	0.16	A
Stream C-B		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	DO SOMETHING - 2029 DS									
Stream B-AC	A3 D10	0.1	5.70	0.13	A	A3 D13	0.2	5.85	0.16	A
Stream C-B		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	DO SOMETHING - 2039 DS									
Stream B-AC	A3 D11	0.1	5.72	0.13	A	A3 D14	0.2	5.86	0.16	A
Stream C-B		0.0	0.00	0.00	A		0.0	0.00	0.00	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	26/04/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	HEADOFFICE\joyv
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 DN	AM	ONE HOUR	07:45	09:15	15	✓
D4	2029 DN	AM	ONE HOUR	07:45	09:15	15	✓
D5	2039 DN	AM	ONE HOUR	07:45	09:15	15	✓
D6	2024 DN	PM	ONE HOUR	14:30	16:00	15	✓
D7	2029 DN	PM	ONE HOUR	14:30	16:00	15	✓
D8	2039 DN	PM	ONE HOUR	14:30	16:00	15	✓
D9	2024 DS	AM	ONE HOUR	07:45	09:15	15	✓
D10	2029 DS	AM	ONE HOUR	07:45	09:15	15	✓
D11	2039 DS	AM	ONE HOUR	07:45	09:15	15	✓
D12	2024 DS	PM	ONE HOUR	14:30	16:00	15	✓
D13	2029 DS	PM	ONE HOUR	14:30	16:00	15	✓
D14	2039 DS	PM	ONE HOUR	14:30	16:00	15	✓

DO NOTHING - 2024 DN, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	DO NOTHING	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Dispensary Lane (East)		Major
B	Site Access		Minor
C	Dispensary Lane (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Dispensary Lane (West)	6.20			0.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	24	24

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	597	0.108	0.272	0.171	0.389
B-C	767	0.117	0.295	-	-
C-B	574	0.220	0.220	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 DN	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Dispensary Lane (East)		ONE HOUR	✓	120	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Dispensary Lane (West)		ONE HOUR	✓	92	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	120
	B - Site Access	0	0	0
	C - Dispensary Lane (West)	92	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	0
	B - Site Access	0	0	0
	C - Dispensary Lane (West)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-A					84	127
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					110	165

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	638	0.000	0	0.0	0.0	0.000	A
C-A	69	17			69				
C-B	0	0	554	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	90	23			90				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	631	0.000	0	0.0	0.0	0.000	A
C-A	83	21			83				
C-B	0	0	550	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	108	27			108				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	622	0.000	0	0.0	0.0	0.000	A
C-A	101	25			101				
C-B	0	0	545	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	132	33			132				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	622	0.000	0	0.0	0.0	0.000	A
C-A	101	25			101				
C-B	0	0	545	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	132	33			132				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	631	0.000	0	0.0	0.0	0.000	A
C-A	83	21			83				
C-B	0	0	550	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	108	27			108				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	638	0.000	0	0.0	0.0	0.000	A
C-A	69	17			69				
C-B	0	0	554	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	90	23			90				

DO NOTHING - 2029 DN, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	DO NOTHING	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Dispensary Lane (East)		Major
B	Site Access		Minor
C	Dispensary Lane (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Dispensary Lane (West)	6.20			0.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	24	24

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	597	0.108	0.272	0.171	0.389
B-C	767	0.117	0.295	-	-
C-B	574	0.220	0.220	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2029 DN	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Dispensary Lane (East)		ONE HOUR	✓	130	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Dispensary Lane (West)		ONE HOUR	✓	96	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	130
	B - Site Access	0	0	0
	C - Dispensary Lane (West)	96	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	0
	B - Site Access	0	0	0
	C - Dispensary Lane (West)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-A					88	132
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					119	179

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	635	0.000	0	0.0	0.0	0.000	A
C-A	72	18			72				
C-B	0	0	552	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	98	24			98				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	628	0.000	0	0.0	0.0	0.000	A
C-A	86	22			86				
C-B	0	0	548	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	117	29			117				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	619	0.000	0	0.0	0.0	0.000	A
C-A	106	26			106				
C-B	0	0	542	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	143	36			143				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	619	0.000	0	0.0	0.0	0.000	A
C-A	106	26			106				
C-B	0	0	542	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	143	36			143				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	628	0.000	0	0.0	0.0	0.000	A
C-A	86	22			86				
C-B	0	0	548	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	117	29			117				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	635	0.000	0	0.0	0.0	0.000	A
C-A	72	18			72				
C-B	0	0	552	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	98	24			98				

DO NOTHING - 2039 DN, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	DO NOTHING	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Dispensary Lane (East)		Major
B	Site Access		Minor
C	Dispensary Lane (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Dispensary Lane (West)	6.20			0.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	24	24

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	597	0.108	0.272	0.171	0.389
B-C	767	0.117	0.295	-	-
C-B	574	0.220	0.220	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2039 DN	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Dispensary Lane (East)		ONE HOUR	✓	138	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Dispensary Lane (West)		ONE HOUR	✓	100	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	138
	B - Site Access	0	0	0
	C - Dispensary Lane (West)	100	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	0
	B - Site Access	0	0	0
	C - Dispensary Lane (West)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-A					92	138
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					127	190

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	633	0.000	0	0.0	0.0	0.000	A
C-A	75	19			75				
C-B	0	0	551	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	104	26			104				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	626	0.000	0	0.0	0.0	0.000	A
C-A	90	22			90				
C-B	0	0	547	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	124	31			124				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	616	0.000	0	0.0	0.0	0.000	A
C-A	110	28			110				
C-B	0	0	540	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	152	38			152				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	616	0.000	0	0.0	0.0	0.000	A
C-A	110	28			110				
C-B	0	0	540	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	152	38			152				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	626	0.000	0	0.0	0.0	0.000	A
C-A	90	22			90				
C-B	0	0	547	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	124	31			124				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	633	0.000	0	0.0	0.0	0.000	A
C-A	75	19			75				
C-B	0	0	551	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	104	26			104				

DO NOTHING - 2024 DN, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	DO NOTHING	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Dispensary Lane (East)		Major
B	Site Access		Minor
C	Dispensary Lane (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Dispensary Lane (West)	6.20			0.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	24	24

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	597	0.108	0.272	0.171	0.389
B-C	767	0.117	0.295	-	-
C-B	574	0.220	0.220	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2024 DN	PM	ONE HOUR	14:30	16:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Dispensary Lane (East)		ONE HOUR	✓	59	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Dispensary Lane (West)		ONE HOUR	✓	71	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	59
	B - Site Access	0	0	0
	C - Dispensary Lane (West)	71	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	0
	B - Site Access	0	0	0
	C - Dispensary Lane (West)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-A					65	98
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					54	81

Main Results for each time segment

14:30 - 14:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	653	0.000	0	0.0	0.0	0.000	A
C-A	53	13			53				
C-B	0	0	564	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	44	11			44				

14:45 - 15:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	649	0.000	0	0.0	0.0	0.000	A
C-A	64	16			64				
C-B	0	0	562	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	53	13			53				

15:00 - 15:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	644	0.000	0	0.0	0.0	0.000	A
C-A	78	20			78				
C-B	0	0	560	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	65	16			65				

15:15 - 15:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	644	0.000	0	0.0	0.0	0.000	A
C-A	78	20			78				
C-B	0	0	560	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	65	16			65				

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	649	0.000	0	0.0	0.0	0.000	A
C-A	64	16			64				
C-B	0	0	562	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	53	13			53				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	653	0.000	0	0.0	0.0	0.000	A
C-A	53	13			53				
C-B	0	0	564	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	44	11			44				

DO NOTHING - 2029 DN, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	DO NOTHING	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Dispensary Lane (East)		Major
B	Site Access		Minor
C	Dispensary Lane (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Dispensary Lane (West)	6.20			0.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	24	24

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	597	0.108	0.272	0.171	0.389
B-C	767	0.117	0.295	-	-
C-B	574	0.220	0.220	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2029 DN	PM	ONE HOUR	14:30	16:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Dispensary Lane (East)		ONE HOUR	✓	63	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Dispensary Lane (West)		ONE HOUR	✓	75	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	63
	B - Site Access	0	0	0
	C - Dispensary Lane (West)	75	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	0
	B - Site Access	0	0	0
	C - Dispensary Lane (West)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-A					69	103
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					58	87

Main Results for each time segment

14:30 - 14:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	652	0.000	0	0.0	0.0	0.000	A
C-A	56	14			56				
C-B	0	0	564	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	47	12			47				

14:45 - 15:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	648	0.000	0	0.0	0.0	0.000	A
C-A	67	17			67				
C-B	0	0	561	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	57	14			57				

15:00 - 15:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	642	0.000	0	0.0	0.0	0.000	A
C-A	83	21			83				
C-B	0	0	559	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	69	17			69				

15:15 - 15:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	642	0.000	0	0.0	0.0	0.000	A
C-A	83	21			83				
C-B	0	0	559	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	69	17			69				

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	648	0.000	0	0.0	0.0	0.000	A
C-A	67	17			67				
C-B	0	0	561	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	57	14			57				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	652	0.000	0	0.0	0.0	0.000	A
C-A	56	14			56				
C-B	0	0	564	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	47	12			47				

DO NOTHING - 2039 DN, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	DO NOTHING	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Dispensary Lane (East)		Major
B	Site Access		Minor
C	Dispensary Lane (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Dispensary Lane (West)	6.20			0.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	24	24

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	597	0.108	0.272	0.171	0.389
B-C	767	0.117	0.295	-	-
C-B	574	0.220	0.220	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2039 DN	PM	ONE HOUR	14:30	16:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Dispensary Lane (East)		ONE HOUR	✓	66	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Dispensary Lane (West)		ONE HOUR	✓	79	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	66
	B - Site Access	0	0	0
	C - Dispensary Lane (West)	79	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	0
	B - Site Access	0	0	0
	C - Dispensary Lane (West)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-A					72	109
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					61	91

Main Results for each time segment

14:30 - 14:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	651	0.000	0	0.0	0.0	0.000	A
C-A	59	15			59				
C-B	0	0	563	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	50	12			50				

14:45 - 15:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	647	0.000	0	0.0	0.0	0.000	A
C-A	71	18			71				
C-B	0	0	561	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	59	15			59				

15:00 - 15:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	641	0.000	0	0.0	0.0	0.000	A
C-A	87	22			87				
C-B	0	0	558	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	73	18			73				

15:15 - 15:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	641	0.000	0	0.0	0.0	0.000	A
C-A	87	22			87				
C-B	0	0	558	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	73	18			73				

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	647	0.000	0	0.0	0.0	0.000	A
C-A	71	18			71				
C-B	0	0	561	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	59	15			59				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	651	0.000	0	0.0	0.0	0.000	A
C-A	59	15			59				
C-B	0	0	563	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	50	12			50				

DO SOMETHING - 2024 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	DO SOMETHING	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Dispensary Lane (East)		Major
B	Site Access		Minor
C	Dispensary Lane (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Dispensary Lane (West)	6.20			0.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	24	24

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	597	0.108	0.272	0.171	0.389
B-C	767	0.117	0.295	-	-
C-B	574	0.220	0.220	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2024 DS	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Dispensary Lane (East)		ONE HOUR	✓	119	100.000
B - Site Access		ONE HOUR	✓	85	100.000
C - Dispensary Lane (West)		ONE HOUR	✓	163	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	119
	B - Site Access	0	0	85
	C - Dispensary Lane (West)	163	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	0
	B - Site Access	0	0	0
	C - Dispensary Lane (West)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.13	5.67	0.1	A	78	117
C-A					150	224
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					109	164

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	64	16	741	0.086	64	0.0	0.1	5.315	A
C-A	123	31			123				
C-B	0	0	554	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	90	22			90				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	76	19	735	0.104	76	0.1	0.1	5.461	A
C-A	147	37			147				
C-B	0	0	550	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	107	27			107				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	94	23	728	0.128	93	0.1	0.1	5.668	A
C-A	179	45			179				
C-B	0	0	545	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	131	33			131				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	94	23	728	0.128	94	0.1	0.1	5.670	A
C-A	179	45			179				
C-B	0	0	545	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	131	33			131				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	76	19	735	0.104	77	0.1	0.1	5.465	A
C-A	147	37			147				
C-B	0	0	550	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	107	27			107				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	64	16	741	0.086	64	0.1	0.1	5.321	A
C-A	123	31			123				
C-B	0	0	554	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	90	22			90				

DO SOMETHING - 2029 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	DO SOMETHING	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Dispensary Lane (East)		Major
B	Site Access		Minor
C	Dispensary Lane (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Dispensary Lane (West)	6.20			0.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	24	24

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	597	0.108	0.272	0.171	0.389
B-C	767	0.117	0.295	-	-
C-B	574	0.220	0.220	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2029 DS	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Dispensary Lane (East)		ONE HOUR	✓	129	100.000
B - Site Access		ONE HOUR	✓	85	100.000
C - Dispensary Lane (West)		ONE HOUR	✓	167	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	129
	B - Site Access	0	0	85
	C - Dispensary Lane (West)	167	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	0
	B - Site Access	0	0	0
	C - Dispensary Lane (West)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.13	5.70	0.1	A	78	117
C-A					153	230
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					118	178

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	64	16	738	0.087	64	0.0	0.1	5.333	A
C-A	126	31			126				
C-B	0	0	553	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	97	24			97				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	76	19	733	0.104	76	0.1	0.1	5.483	A
C-A	150	38			150				
C-B	0	0	548	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	116	29			116				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	94	23	725	0.129	93	0.1	0.1	5.697	A
C-A	184	46			184				
C-B	0	0	543	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	142	36			142				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	94	23	725	0.129	94	0.1	0.1	5.699	A
C-A	184	46			184				
C-B	0	0	543	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	142	36			142				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	76	19	733	0.104	77	0.1	0.1	5.487	A
C-A	150	38			150				
C-B	0	0	548	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	116	29			116				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	64	16	738	0.087	64	0.1	0.1	5.338	A
C-A	126	31			126				
C-B	0	0	553	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	97	24			97				

DO SOMETHING - 2039 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	DO SOMETHING	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Dispensary Lane (East)		Major
B	Site Access		Minor
C	Dispensary Lane (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Dispensary Lane (West)	6.20			0.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	24	24

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	597	0.108	0.272	0.171	0.389
B-C	767	0.117	0.295	-	-
C-B	574	0.220	0.220	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2039 DS	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Dispensary Lane (East)		ONE HOUR	✓	137	100.000
B - Site Access		ONE HOUR	✓	85	100.000
C - Dispensary Lane (West)		ONE HOUR	✓	171	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	137
	B - Site Access	0	0	85
	C - Dispensary Lane (West)	171	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	0
	B - Site Access	0	0	0
	C - Dispensary Lane (West)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.13	5.72	0.1	A	78	117
C-A					157	235
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					126	189

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	64	16	737	0.087	64	0.0	0.1	5.347	A
C-A	129	32			129				
C-B	0	0	551	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	103	26			103				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	76	19	731	0.105	76	0.1	0.1	5.501	A
C-A	154	38			154				
C-B	0	0	547	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	123	31			123				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	94	23	723	0.130	93	0.1	0.1	5.720	A
C-A	188	47			188				
C-B	0	0	541	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	151	38			151				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	94	23	723	0.130	94	0.1	0.1	5.722	A
C-A	188	47			188				
C-B	0	0	541	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	151	38			151				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	76	19	731	0.105	77	0.1	0.1	5.503	A
C-A	154	38			154				
C-B	0	0	547	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	123	31			123				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	64	16	737	0.087	64	0.1	0.1	5.355	A
C-A	129	32			129				
C-B	0	0	551	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	103	26			103				

DO SOMETHING - 2024 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	DO SOMETHING	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Dispensary Lane (East)		Major
B	Site Access		Minor
C	Dispensary Lane (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Dispensary Lane (West)	6.20			0.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	24	24

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	597	0.108	0.272	0.171	0.389
B-C	767	0.117	0.295	-	-
C-B	574	0.220	0.220	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2024 DS	PM	ONE HOUR	14:30	16:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Dispensary Lane (East)		ONE HOUR	✓	60	100.000
B - Site Access		ONE HOUR	✓	108	100.000
C - Dispensary Lane (West)		ONE HOUR	✓	116	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	60
	B - Site Access	5	0	103
	C - Dispensary Lane (West)	116	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	0
	B - Site Access	0	0	0
	C - Dispensary Lane (West)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.16	5.83	0.2	A	99	149
C-A					106	160
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					55	83

Main Results for each time segment

14:30 - 14:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	81	20	743	0.109	81	0.0	0.1	5.437	A
C-A	87	22			87				
C-B	0	0	564	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	45	11			45				

14:45 - 15:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	97	24	740	0.131	97	0.1	0.2	5.600	A
C-A	104	26			104				
C-B	0	0	562	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	54	13			54				

15:00 - 15:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	119	30	736	0.162	119	0.2	0.2	5.832	A
C-A	128	32			128				
C-B	0	0	559	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	66	17			66				

15:15 - 15:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	119	30	736	0.162	119	0.2	0.2	5.834	A
C-A	128	32			128				
C-B	0	0	559	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	66	17			66				

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	97	24	740	0.131	97	0.2	0.2	5.603	A
C-A	104	26			104				
C-B	0	0	562	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	54	13			54				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	81	20	743	0.109	81	0.2	0.1	5.447	A
C-A	87	22			87				
C-B	0	0	564	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	45	11			45				

DO SOMETHING - 2029 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	DO SOMETHING	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Dispensary Lane (East)		Major
B	Site Access		Minor
C	Dispensary Lane (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Dispensary Lane (West)	6.20			0.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	24	24

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	597	0.108	0.272	0.171	0.389
B-C	767	0.117	0.295	-	-
C-B	574	0.220	0.220	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2029 DS	PM	ONE HOUR	14:30	16:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Dispensary Lane (East)		ONE HOUR	✓	64	100.000
B - Site Access		ONE HOUR	✓	108	100.000
C - Dispensary Lane (West)		ONE HOUR	✓	120	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	64
	B - Site Access	5	0	103
	C - Dispensary Lane (West)	120	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	0
	B - Site Access	0	0	0
	C - Dispensary Lane (West)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.16	5.85	0.2	A	99	149
C-A					110	165
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					59	88

Main Results for each time segment

14:30 - 14:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	81	20	742	0.110	81	0.0	0.1	5.444	A
C-A	90	23			90				
C-B	0	0	563	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	48	12			48				

14:45 - 15:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	97	24	739	0.131	97	0.1	0.2	5.610	A
C-A	108	27			108				
C-B	0	0	561	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	58	14			58				

15:00 - 15:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	119	30	735	0.162	119	0.2	0.2	5.844	A
C-A	132	33			132				
C-B	0	0	558	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	70	18			70				

15:15 - 15:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	119	30	735	0.162	119	0.2	0.2	5.847	A
C-A	132	33			132				
C-B	0	0	558	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	70	18			70				

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	97	24	739	0.131	97	0.2	0.2	5.613	A
C-A	108	27			108				
C-B	0	0	561	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	58	14			58				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	81	20	742	0.110	81	0.2	0.1	5.453	A
C-A	90	23			90				
C-B	0	0	563	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	48	12			48				

DO SOMETHING - 2039 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	DO SOMETHING	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Dispensary Lane (East)		Major
B	Site Access		Minor
C	Dispensary Lane (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Dispensary Lane (West)	6.20			0.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	24	24

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	597	0.108	0.272	0.171	0.389
B-C	767	0.117	0.295	-	-
C-B	574	0.220	0.220	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2039 DS	PM	ONE HOUR	14:30	16:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Dispensary Lane (East)		ONE HOUR	✓	67	100.000
B - Site Access		ONE HOUR	✓	108	100.000
C - Dispensary Lane (West)		ONE HOUR	✓	124	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	67
	B - Site Access	5	0	103
	C - Dispensary Lane (West)	124	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Dispensary Lane (East)	B - Site Access	C - Dispensary Lane (West)
From	A - Dispensary Lane (East)	0	0	0
	B - Site Access	0	0	0
	C - Dispensary Lane (West)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.16	5.86	0.2	A	99	149
C-A					114	171
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					61	92

Main Results for each time segment

14:30 - 14:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	81	20	741	0.110	81	0.0	0.1	5.450	A
C-A	93	23			93				
C-B	0	0	563	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	50	13			50				

14:45 - 15:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	97	24	738	0.132	97	0.1	0.2	5.618	A
C-A	111	28			111				
C-B	0	0	561	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	60	15			60				

15:00 - 15:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	119	30	733	0.162	119	0.2	0.2	5.854	A
C-A	137	34			137				
C-B	0	0	558	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	74	18			74				

15:15 - 15:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	119	30	733	0.162	119	0.2	0.2	5.857	A
C-A	137	34			137				
C-B	0	0	558	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	74	18			74				

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	97	24	738	0.132	97	0.2	0.2	5.623	A
C-A	111	28			111				
C-B	0	0	561	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	60	15			60				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	81	20	741	0.110	81	0.2	0.1	5.461	A
C-A	93	23			93				
C-B	0	0	563	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	50	13			50				

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.2.1013

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

Filename: Junction 2.j9
Path: G:\2019\p190187\Calcs\PICADY
Report generation date: 16/03/2023 14:29:55

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	DO NOTHING - 2024 DN									
Stream B-ACD	A2 D3	0.0	0.00	0.00	A	A2 D6	0.0	5.63	0.02	A
Stream A-BCD		0.0	5.99	0.01	A		0.0	0.00	0.00	A
Stream D-ABC		0.1	7.71	0.08	A		0.0	6.87	0.04	A
Stream C-ABD		0.1	6.73	0.08	A		0.1	6.40	0.05	A
	DO NOTHING - 2029 DN									
Stream B-ACD	A2 D4	0.0	0.00	0.00	A	A2 D7	0.0	5.63	0.02	A
Stream A-BCD		0.0	5.97	0.01	A		0.0	0.00	0.00	A
Stream D-ABC		0.1	7.73	0.08	A		0.0	6.87	0.04	A
Stream C-ABD		0.1	6.73	0.08	A		0.1	6.39	0.05	A
	DO NOTHING - 2039 DN									
Stream B-ACD	A2 D5	0.0	0.00	0.00	A	A2 D8	0.0	5.64	0.02	A
Stream A-BCD		0.0	5.95	0.01	A		0.0	0.00	0.00	A
Stream D-ABC		0.1	7.82	0.09	A		0.0	6.93	0.05	A
Stream C-ABD		0.1	6.74	0.08	A		0.1	6.37	0.05	A

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	DO SOMETHING - 2024 DS									
Stream B-ACD	A3 D9	0.0	0.00	0.00	A	A3 D12	0.0	0.00	0.00	A
Stream A-BCD		0.0	6.16	0.01	A		0.0	0.00	0.00	A
Stream D-ABC		0.1	8.02	0.08	A		0.0	6.99	0.04	A
Stream C-ABD		0.3	7.73	0.21	A		0.2	7.06	0.14	A
	DO SOMETHING - 2029 DS									
Stream B-ACD	A3 D10	0.0	0.00	0.00	A	A3 D13	0.0	0.00	0.00	A
Stream A-BCD		0.0	6.12	0.01	A		0.0	0.00	0.00	A
Stream D-ABC		0.1	8.04	0.09	A		0.0	6.99	0.04	A
Stream C-ABD		0.3	7.74	0.21	A		0.2	7.04	0.14	A
	DO SOMETHING - 2039 DS									
Stream B-ACD	A3 D11	0.0	0.00	0.00	A	A3 D14	0.0	0.00	0.00	A
Stream A-BCD		0.0	6.10	0.01	A		0.0	0.00	0.00	A
Stream D-ABC		0.1	8.13	0.09	A		0.0	7.05	0.05	A
Stream C-ABD		0.3	7.75	0.21	A		0.2	7.02	0.14	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	25/04/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	HEADOFFICE\joyv
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 DN	AM	ONE HOUR	07:45	09:15	15	✓
D4	2029 DN	AM	ONE HOUR	07:45	09:15	15	✓
D5	2039 DN	AM	ONE HOUR	07:45	09:15	15	✓
D6	2024 DN	PM	ONE HOUR	14:30	16:00	15	✓
D7	2029 DN	PM	ONE HOUR	14:30	16:00	15	✓
D8	2039 DN	PM	ONE HOUR	14:30	16:00	15	✓
D9	2024 DS	AM	ONE HOUR	07:45	09:15	15	✓
D10	2029 DS	AM	ONE HOUR	07:45	09:15	15	✓
D11	2039 DS	AM	ONE HOUR	07:45	09:15	15	✓
D12	2024 DS	PM	ONE HOUR	14:30	16:00	15	✓
D13	2029 DS	PM	ONE HOUR	14:30	16:00	15	✓
D14	2039 DS	PM	ONE HOUR	14:30	16:00	15	✓

DO NOTHING - 2024 DN, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	DO NOTHING	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		2.87	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Loreto Abbey		Major
B	Site Access		Minor
C	Dispensary lane (West)		Major
D	Dispensary Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Loreto Abbey	6.20			0.0	✓	0.00
C - Dispensary lane (West)	6.20			0.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	0	0
D - Dispensary Lane (North)	One lane	4.00	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	574	-	-	-	-	-	-	0.220	0.315	0.220	-	-	-
B-A	574	0.104	0.262	0.262	-	-	-	0.165	0.374	-	0.262	0.262	0.131
B-C	749	0.114	0.288	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
B-D, offside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
C-B	574	0.220	0.220	0.315	-	-	-	-	-	-	-	-	-
D-A	686	-	-	-	-	-	-	0.264	-	0.104	-	-	-
D-B, nearside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-B, offside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-C	526	-	0.151	0.343	0.120	0.240	0.240	0.240	0.240	0.095	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 DN	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Loreto Abbey		ONE HOUR	✓	90	100.000
B - Site Access		ONE HOUR	✓	1	100.000
C - Dispensary lane (West)		ONE HOUR	✓	80	100.000
D - Dispensary Lane (North)		ONE HOUR	✓	37	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	87	3
	B - Site Access	0	0	1	0
	C - Dispensary lane (West)	40	40	0	0
	D - Dispensary Lane (North)	5	12	20	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	0	0
	B - Site Access	0	0	0	0
	C - Dispensary lane (West)	0	0	0	0
	D - Dispensary Lane (North)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.00	0.00	0.0	A	0	0
A-BCD	0.01	5.99	0.0	A	3	5
A-B					0	0
A-C					79	119
D-ABC	0.08	7.71	0.1	A	34	51
C-ABD	0.08	6.73	0.1	A	39	59
C-D					0	0
C-A					34	51

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	576	0.000	0	0.0	0.0	0.000	A
A-BCD	3	0.63	603	0.004	3	0.0	0.0	5.994	A
A-B	0	0			0				
A-C	65	16			65				
D-ABC	28	7	519	0.054	28	0.0	0.1	7.323	A
C-ABD	32	8	580	0.055	32	0.0	0.1	6.565	A
C-D	0	0			0				
C-A	28	7			28				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	569	0.000	0	0.0	0.0	0.000	A
A-BCD	3	0.77	609	0.005	3	0.0	0.0	5.943	A
A-B	0	0			0				
A-C	78	19			78				
D-ABC	33	8	514	0.065	33	0.1	0.1	7.483	A
C-ABD	38	10	581	0.066	38	0.1	0.1	6.636	A
C-D	0	0			0				
C-A	34	8			34				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	560	0.000	0	0.0	0.0	0.000	A
A-BCD	4	0.98	617	0.006	4	0.0	0.0	5.873	A
A-B	0	0			0				
A-C	95	24			95				
D-ABC	41	10	508	0.080	41	0.1	0.1	7.706	A
C-ABD	48	12	582	0.082	48	0.1	0.1	6.732	A
C-D	0	0			0				
C-A	40	10			40				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	560	0.000	0	0.0	0.0	0.000	A
A-BCD	4	0.98	617	0.006	4	0.0	0.0	5.873	A
A-B	0	0			0				
A-C	95	24			95				
D-ABC	41	10	508	0.080	41	0.1	0.1	7.707	A
C-ABD	48	12	582	0.082	48	0.1	0.1	6.732	A
C-D	0	0			0				
C-A	40	10			40				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	569	0.000	0	0.0	0.0	0.000	A
A-BCD	3	0.77	609	0.005	3	0.0	0.0	5.946	A
A-B	0	0			0				
A-C	78	19			78				
D-ABC	33	8	514	0.065	33	0.1	0.1	7.486	A
C-ABD	38	10	581	0.066	38	0.1	0.1	6.639	A
C-D	0	0			0				
C-A	34	8			34				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	576	0.000	0	0.0	0.0	0.000	A
A-BCD	3	0.63	603	0.004	3	0.0	0.0	5.995	A
A-B	0	0			0				
A-C	65	16			65				
D-ABC	28	7	519	0.054	28	0.1	0.1	7.331	A
C-ABD	32	8	580	0.055	32	0.1	0.1	6.575	A
C-D	0	0			0				
C-A	28	7			28				

DO NOTHING - 2029 DN, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	DO NOTHING	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		2.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Loreto Abbey		Major
B	Site Access		Minor
C	Dispensary lane (West)		Major
D	Dispensary Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Loreto Abbey	6.20			0.0	✓	0.00
C - Dispensary lane (West)	6.20			0.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	0	0
D - Dispensary Lane (North)	One lane	4.00	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	574	-	-	-	-	-	-	0.220	0.315	0.220	-	-	-
B-A	574	0.104	0.262	0.262	-	-	-	0.165	0.374	-	0.262	0.262	0.131
B-C	749	0.114	0.288	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
B-D, offside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
C-B	574	0.220	0.220	0.315	-	-	-	-	-	-	-	-	-
D-A	686	-	-	-	-	-	-	0.264	-	0.104	-	-	-
D-B, nearside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-B, offside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-C	526	-	0.151	0.343	0.120	0.240	0.240	0.240	0.240	0.095	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2029 DN	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Loreto Abbey		ONE HOUR	✓	97	100.000
B - Site Access		ONE HOUR	✓	1	100.000
C - Dispensary lane (West)		ONE HOUR	✓	83	100.000
D - Dispensary Lane (North)		ONE HOUR	✓	39	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	94	3
	B - Site Access	0	0	1	0
	C - Dispensary lane (West)	43	40	0	0
	D - Dispensary Lane (North)	6	12	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	0	0
	B - Site Access	0	0	0	0
	C - Dispensary lane (West)	0	0	0	0
	D - Dispensary Lane (North)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.00	0.00	0.0	A	0	0
A-BCD	0.01	5.97	0.0	A	3	5
A-B					0	0
A-C					86	129
D-ABC	0.08	7.73	0.1	A	36	54
C-ABD	0.08	6.73	0.1	A	39	59
C-D					0	0
C-A					37	55

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	574	0.000	0	0.0	0.0	0.000	A
A-BCD	3	0.64	606	0.004	3	0.0	0.0	5.963	A
A-B	0	0			0				
A-C	70	18			70				
D-ABC	29	7	520	0.056	29	0.0	0.1	7.325	A
C-ABD	32	8	580	0.055	32	0.0	0.1	6.562	A
C-D	0	0			0				
C-A	31	8			31				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	567	0.000	0	0.0	0.0	0.000	A
A-BCD	3	0.78	613	0.005	3	0.0	0.0	5.906	A
A-B	0	0			0				
A-C	84	21			84				
D-ABC	35	9	515	0.068	35	0.1	0.1	7.493	A
C-ABD	39	10	581	0.066	38	0.1	0.1	6.632	A
C-D	0	0			0				
C-A	36	9			36				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	557	0.000	0	0.0	0.0	0.000	A
A-BCD	4	0.99	621	0.006	4	0.0	0.0	5.829	A
A-B	0	0			0				
A-C	103	26			103				
D-ABC	43	11	509	0.084	43	0.1	0.1	7.728	A
C-ABD	48	12	583	0.082	48	0.1	0.1	6.727	A
C-D	0	0			0				
C-A	43	11			43				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	557	0.000	0	0.0	0.0	0.000	A
A-BCD	4	0.99	621	0.006	4	0.0	0.0	5.829	A
A-B	0	0			0				
A-C	103	26			103				
D-ABC	43	11	509	0.084	43	0.1	0.1	7.730	A
C-ABD	48	12	583	0.082	48	0.1	0.1	6.728	A
C-D	0	0			0				
C-A	43	11			43				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	567	0.000	0	0.0	0.0	0.000	A
A-BCD	3	0.78	612	0.005	3	0.0	0.0	5.907	A
A-B	0	0			0				
A-C	84	21			84				
D-ABC	35	9	515	0.068	35	0.1	0.1	7.499	A
C-ABD	39	10	581	0.066	39	0.1	0.1	6.637	A
C-D	0	0			0				
C-A	36	9			36				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	574	0.000	0	0.0	0.0	0.000	A
A-BCD	3	0.64	606	0.004	3	0.0	0.0	5.966	A
A-B	0	0			0				
A-C	70	18			70				
D-ABC	29	7	520	0.056	29	0.1	0.1	7.334	A
C-ABD	32	8	580	0.055	32	0.1	0.1	6.571	A
C-D	0	0			0				
C-A	31	8			31				

DO NOTHING - 2039 DN, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	DO NOTHING	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		2.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Loreto Abbey		Major
B	Site Access		Minor
C	Dispensary lane (West)		Major
D	Dispensary Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Loreto Abbey	6.20			0.0	✓	0.00
C - Dispensary lane (West)	6.20			0.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	0	0
D - Dispensary Lane (North)	One lane	4.00	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	574	-	-	-	-	-	-	0.220	0.315	0.220	-	-	-
B-A	574	0.104	0.262	0.262	-	-	-	0.165	0.374	-	0.262	0.262	0.131
B-C	749	0.114	0.288	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
B-D, offside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
C-B	574	0.220	0.220	0.315	-	-	-	-	-	-	-	-	-
D-A	686	-	-	-	-	-	-	0.264	-	0.104	-	-	-
D-B, nearside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-B, offside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-C	526	-	0.151	0.343	0.120	0.240	0.240	0.240	0.240	0.095	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2039 DN	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Loreto Abbey		ONE HOUR	✓	104	100.000
B - Site Access		ONE HOUR	✓	1	100.000
C - Dispensary lane (West)		ONE HOUR	✓	85	100.000
D - Dispensary Lane (North)		ONE HOUR	✓	41	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	100	4
	B - Site Access	0	0	1	0
	C - Dispensary lane (West)	45	40	0	0
	D - Dispensary Lane (North)	6	12	23	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	0	0
	B - Site Access	0	0	0	0
	C - Dispensary lane (West)	0	0	0	0
	D - Dispensary Lane (North)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.00	0.00	0.0	A	0	0
A-BCD	0.01	5.95	0.0	A	4	7
A-B					0	0
A-C					91	137
D-ABC	0.09	7.82	0.1	A	38	56
C-ABD	0.08	6.74	0.1	A	40	59
C-D					0	0
C-A					38	58

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	572	0.000	0	0.0	0.0	0.000	A
A-BCD	3	0.86	609	0.006	3	0.0	0.0	5.944	A
A-B	0	0			0				
A-C	75	19			75				
D-ABC	31	8	518	0.060	31	0.0	0.1	7.382	A
C-ABD	32	8	580	0.055	32	0.0	0.1	6.565	A
C-D	0	0			0				
C-A	32	8			32				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	565	0.000	0	0.0	0.0	0.000	A
A-BCD	4	1	616	0.007	4	0.0	0.0	5.884	A
A-B	0	0			0				
A-C	89	22			89				
D-ABC	37	9	513	0.072	37	0.1	0.1	7.562	A
C-ABD	39	10	581	0.067	39	0.1	0.1	6.636	A
C-D	0	0			0				
C-A	38	9			38				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	555	0.000	0	0.0	0.0	0.000	A
A-BCD	5	1	626	0.009	5	0.0	0.0	5.803	A
A-B	0	0			0				
A-C	109	27			109				
D-ABC	45	11	506	0.089	45	0.1	0.1	7.814	A
C-ABD	48	12	583	0.083	48	0.1	0.1	6.733	A
C-D	0	0			0				
C-A	45	11			45				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	555	0.000	0	0.0	0.0	0.000	A
A-BCD	5	1	626	0.009	5	0.0	0.0	5.803	A
A-B	0	0			0				
A-C	109	27			109				
D-ABC	45	11	506	0.089	45	0.1	0.1	7.816	A
C-ABD	48	12	583	0.083	48	0.1	0.1	6.736	A
C-D	0	0			0				
C-A	45	11			45				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	565	0.000	0	0.0	0.0	0.000	A
A-BCD	4	1	616	0.007	4	0.0	0.0	5.887	A
A-B	0	0			0				
A-C	89	22			89				
D-ABC	37	9	513	0.072	37	0.1	0.1	7.568	A
C-ABD	39	10	581	0.067	39	0.1	0.1	6.642	A
C-D	0	0			0				
C-A	38	9			38				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	572	0.000	0	0.0	0.0	0.000	A
A-BCD	3	0.86	609	0.006	3	0.0	0.0	5.947	A
A-B	0	0			0				
A-C	75	19			75				
D-ABC	31	8	518	0.060	31	0.1	0.1	7.394	A
C-ABD	32	8	580	0.055	32	0.1	0.1	6.572	A
C-D	0	0			0				
C-A	32	8			32				

DO NOTHING - 2024 DN, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	DO NOTHING	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		3.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Loreto Abbey		Major
B	Site Access		Minor
C	Dispensary lane (West)		Major
D	Dispensary Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Loreto Abbey	6.20			0.0	✓	0.00
C - Dispensary lane (West)	6.20			0.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	0	0
D - Dispensary Lane (North)	One lane	4.00	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	574	-	-	-	-	-	-	0.220	0.315	0.220	-	-	-
B-A	574	0.104	0.262	0.262	-	-	-	0.165	0.374	-	0.262	0.262	0.131
B-C	749	0.114	0.288	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
B-D, offside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
C-B	574	0.220	0.220	0.315	-	-	-	-	-	-	-	-	-
D-A	686	-	-	-	-	-	-	0.264	-	0.104	-	-	-
D-B, nearside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-B, offside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-C	526	-	0.151	0.343	0.120	0.240	0.240	0.240	0.240	0.095	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2024 DN	PM	ONE HOUR	14:30	16:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Loreto Abbey		ONE HOUR	✓	25	100.000
B - Site Access		ONE HOUR	✓	13	100.000
C - Dispensary lane (West)		ONE HOUR	✓	56	100.000
D - Dispensary Lane (North)		ONE HOUR	✓	20	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	25	0
	B - Site Access	0	0	8	5
	C - Dispensary lane (West)	30	25	0	1
	D - Dispensary Lane (North)	6	3	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	0	0
	B - Site Access	0	0	0	0
	C - Dispensary lane (West)	0	0	0	0
	D - Dispensary Lane (North)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.02	5.63	0.0	A	12	18
A-BCD	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					23	34
D-ABC	0.04	6.87	0.0	A	18	28
C-ABD	0.05	6.40	0.1	A	24	36
C-D					0.88	1
C-A					26	40

Main Results for each time segment

14:30 - 14:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	10	2	659	0.015	10	0.0	0.0	5.544	A
A-BCD	0	0	563	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	19	5			19				
D-ABC	15	4	552	0.027	15	0.0	0.0	6.698	A
C-ABD	20	5	586	0.033	19	0.0	0.0	6.355	A
C-D	0.73	0.18			0.73				
C-A	22	5			22				

14:45 - 15:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	12	3	657	0.018	12	0.0	0.0	5.579	A
A-BCD	0	0	561	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	22	6			22				
D-ABC	18	4	550	0.033	18	0.0	0.0	6.770	A
C-ABD	24	6	588	0.040	24	0.0	0.0	6.376	A
C-D	0.86	0.22			0.86				
C-A	26	6			26				

15:00 - 15:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	4	654	0.022	14	0.0	0.0	5.628	A
A-BCD	0	0	558	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	28	7			28				
D-ABC	22	6	546	0.040	22	0.0	0.0	6.868	A
C-ABD	29	7	591	0.049	29	0.0	0.1	6.404	A
C-D	1	0.26			1				
C-A	31	8			31				

15:15 - 15:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	4	654	0.022	14	0.0	0.0	5.628	A
A-BCD	0	0	558	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	28	7			28				
D-ABC	22	6	546	0.040	22	0.0	0.0	6.868	A
C-ABD	29	7	591	0.049	29	0.1	0.1	6.404	A
C-D	1	0.26			1				
C-A	31	8			31				

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	12	3	657	0.018	12	0.0	0.0	5.581	A
A-BCD	0	0	561	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	22	6			22				
D-ABC	18	4	550	0.033	18	0.0	0.0	6.771	A
C-ABD	24	6	588	0.040	24	0.1	0.0	6.378	A
C-D	0.86	0.22			0.86				
C-A	26	6			26				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	10	2	659	0.015	10	0.0	0.0	5.544	A
A-BCD	0	0	563	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	19	5			19				
D-ABC	15	4	552	0.027	15	0.0	0.0	6.704	A
C-ABD	20	5	586	0.033	20	0.0	0.0	6.361	A
C-D	0.73	0.18			0.73				
C-A	22	5			22				

DO NOTHING - 2029 DN, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	DO NOTHING	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		3.30	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Loreto Abbey		Major
B	Site Access		Minor
C	Dispensary lane (West)		Major
D	Dispensary Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Loreto Abbey	6.20			0.0	✓	0.00
C - Dispensary lane (West)	6.20			0.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	0	0
D - Dispensary Lane (North)	One lane	4.00	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	574	-	-	-	-	-	-	0.220	0.315	0.220	-	-	-
B-A	574	0.104	0.262	0.262	-	-	-	0.165	0.374	-	0.262	0.262	0.131
B-C	749	0.114	0.288	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
B-D, offside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
C-B	574	0.220	0.220	0.315	-	-	-	-	-	-	-	-	-
D-A	686	-	-	-	-	-	-	0.264	-	0.104	-	-	-
D-B, nearside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-B, offside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-C	526	-	0.151	0.343	0.120	0.240	0.240	0.240	0.240	0.095	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2029 DN	PM	ONE HOUR	14:30	16:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Loreto Abbey		ONE HOUR	✓	26	100.000
B - Site Access		ONE HOUR	✓	13	100.000
C - Dispensary lane (West)		ONE HOUR	✓	58	100.000
D - Dispensary Lane (North)		ONE HOUR	✓	22	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	26	0
	B - Site Access	0	0	8	5
	C - Dispensary lane (West)	32	25	0	1
	D - Dispensary Lane (North)	7	3	12	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	0	0
	B - Site Access	0	0	0	0
	C - Dispensary lane (West)	0	0	0	0
	D - Dispensary Lane (North)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.02	5.63	0.0	A	12	18
A-BCD	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					24	36
D-ABC	0.04	6.87	0.0	A	20	30
C-ABD	0.05	6.39	0.1	A	24	36
C-D					0.88	1
C-A					28	42

Main Results for each time segment

14:30 - 14:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	10	2	659	0.015	10	0.0	0.0	5.547	A
A-BCD	0	0	563	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	20	5			20				
D-ABC	17	4	554	0.030	16	0.0	0.0	6.689	A
C-ABD	20	5	587	0.034	20	0.0	0.0	6.346	A
C-D	0.73	0.18			0.73				
C-A	23	6			23				

14:45 - 15:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	12	3	656	0.018	12	0.0	0.0	5.582	A
A-BCD	0	0	560	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	23	6			23				
D-ABC	20	5	552	0.036	20	0.0	0.0	6.765	A
C-ABD	24	6	589	0.040	24	0.0	0.0	6.366	A
C-D	0.86	0.22			0.86				
C-A	28	7			28				

15:00 - 15:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	4	653	0.022	14	0.0	0.0	5.632	A
A-BCD	0	0	557	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	29	7			29				
D-ABC	24	6	548	0.044	24	0.0	0.0	6.870	A
C-ABD	29	7	593	0.050	29	0.0	0.1	6.391	A
C-D	1	0.26			1				
C-A	33	8			33				

15:15 - 15:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	4	653	0.022	14	0.0	0.0	5.632	A
A-BCD	0	0	557	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	29	7			29				
D-ABC	24	6	548	0.044	24	0.0	0.0	6.870	A
C-ABD	29	7	593	0.050	29	0.1	0.1	6.394	A
C-D	1	0.26			1				
C-A	33	8			33				

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	12	3	656	0.018	12	0.0	0.0	5.585	A
A-BCD	0	0	560	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	23	6			23				
D-ABC	20	5	552	0.036	20	0.0	0.0	6.767	A
C-ABD	24	6	589	0.040	24	0.1	0.0	6.369	A
C-D	0.86	0.22			0.86				
C-A	28	7			28				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	10	2	659	0.015	10	0.0	0.0	5.549	A
A-BCD	0	0	563	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	20	5			20				
D-ABC	17	4	554	0.030	17	0.0	0.0	6.693	A
C-ABD	20	5	587	0.034	20	0.0	0.0	6.349	A
C-D	0.73	0.18			0.73				
C-A	23	6			23				

DO NOTHING - 2039 DN, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	DO NOTHING	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		3.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Loreto Abbey		Major
B	Site Access		Minor
C	Dispensary lane (West)		Major
D	Dispensary Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Loreto Abbey	6.20			0.0	✓	0.00
C - Dispensary lane (West)	6.20			0.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	0	0
D - Dispensary Lane (North)	One lane	4.00	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	574	-	-	-	-	-	-	0.220	0.315	0.220	-	-	-
B-A	574	0.104	0.262	0.262	-	-	-	0.165	0.374	-	0.262	0.262	0.131
B-C	749	0.114	0.288	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
B-D, offside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
C-B	574	0.220	0.220	0.315	-	-	-	-	-	-	-	-	-
D-A	686	-	-	-	-	-	-	0.264	-	0.104	-	-	-
D-B, nearside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-B, offside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-C	526	-	0.151	0.343	0.120	0.240	0.240	0.240	0.240	0.095	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2039 DN	PM	ONE HOUR	14:30	16:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Loreto Abbey		ONE HOUR	✓	27	100.000
B - Site Access		ONE HOUR	✓	13	100.000
C - Dispensary lane (West)		ONE HOUR	✓	61	100.000
D - Dispensary Lane (North)		ONE HOUR	✓	23	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	27	0
	B - Site Access	0	0	8	5
	C - Dispensary lane (West)	35	25	0	1
	D - Dispensary Lane (North)	7	3	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	0	0
	B - Site Access	0	0	0	0
	C - Dispensary lane (West)	0	0	0	0
	D - Dispensary Lane (North)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.02	5.64	0.0	A	12	18
A-BCD	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					25	37
D-ABC	0.05	6.93	0.0	A	21	32
C-ABD	0.05	6.37	0.1	A	24	37
C-D					0.88	1
C-A					31	46

Main Results for each time segment

14:30 - 14:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	10	2	658	0.015	10	0.0	0.0	5.550	A
A-BCD	0	0	562	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	20	5			20				
D-ABC	17	4	552	0.031	17	0.0	0.0	6.733	A
C-ABD	20	5	588	0.034	20	0.0	0.0	6.331	A
C-D	0.73	0.18			0.73				
C-A	25	6			25				

14:45 - 15:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	12	3	656	0.018	12	0.0	0.0	5.587	A
A-BCD	0	0	560	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	24	6			24				
D-ABC	21	5	549	0.038	21	0.0	0.0	6.814	A
C-ABD	24	6	591	0.040	24	0.0	0.0	6.348	A
C-D	0.86	0.22			0.86				
C-A	30	8			30				

15:00 - 15:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	4	653	0.022	14	0.0	0.0	5.638	A
A-BCD	0	0	557	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	30	7			30				
D-ABC	25	6	545	0.046	25	0.0	0.0	6.926	A
C-ABD	30	7	595	0.050	29	0.0	0.1	6.370	A
C-D	1	0.26			1				
C-A	37	9			37				

15:15 - 15:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	4	653	0.022	14	0.0	0.0	5.638	A
A-BCD	0	0	556	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	30	7			30				
D-ABC	25	6	545	0.046	25	0.0	0.0	6.926	A
C-ABD	30	7	595	0.050	30	0.1	0.1	6.373	A
C-D	1	0.26			1				
C-A	37	9			37				

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	12	3	656	0.018	12	0.0	0.0	5.589	A
A-BCD	0	0	560	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	24	6			24				
D-ABC	21	5	549	0.038	21	0.0	0.0	6.815	A
C-ABD	24	6	591	0.040	24	0.1	0.0	6.350	A
C-D	0.86	0.22			0.86				
C-A	30	8			30				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	10	2	658	0.015	10	0.0	0.0	5.553	A
A-BCD	0	0	562	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	20	5			20				
D-ABC	17	4	552	0.031	17	0.0	0.0	6.736	A
C-ABD	20	5	588	0.034	20	0.0	0.0	6.337	A
C-D	0.73	0.18			0.73				
C-A	25	6			25				

DO SOMETHING - 2024 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	DO SOMETHING	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		4.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Loreto Abbey		Major
B	Site Access		Minor
C	Dispensary lane (West)		Major
D	Dispensary Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Loreto Abbey	6.20			0.0	✓	0.00
C - Dispensary lane (West)	6.20			0.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	0	0
D - Dispensary Lane (North)	One lane	4.00	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	574	-	-	-	-	-	-	0.220	0.315	0.220	-	-	-
B-A	574	0.104	0.262	0.262	-	-	-	0.165	0.374	-	0.262	0.262	0.131
B-C	749	0.114	0.288	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
B-D, offside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
C-B	574	0.220	0.220	0.315	-	-	-	-	-	-	-	-	-
D-A	686	-	-	-	-	-	-	0.264	-	0.104	-	-	-
D-B, nearside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-B, offside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-C	526	-	0.151	0.343	0.120	0.240	0.240	0.240	0.240	0.095	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2024 DS	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Loreto Abbey		ONE HOUR	✓	90	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Dispensary lane (West)		ONE HOUR	✓	151	100.000
D - Dispensary Lane (North)		ONE HOUR	✓	37	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	87	3
	B - Site Access	0	0	0	0
	C - Dispensary lane (West)	49	102	0	0
	D - Dispensary Lane (North)	5	12	20	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	0	0
	B - Site Access	0	0	0	0
	C - Dispensary lane (West)	0	0	0	0
	D - Dispensary Lane (North)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.00	0.00	0.0	A	0	0
A-BCD	0.01	6.16	0.0	A	3	5
A-B					0	0
A-C					79	119
D-ABC	0.08	8.02	0.1	A	34	51
C-ABD	0.21	7.73	0.3	A	102	152
C-D					0	0
C-A					37	55

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	560	0.000	0	0.0	0.0	0.000	A
A-BCD	3	0.64	587	0.004	3	0.0	0.0	6.154	A
A-B	0	0			0				
A-C	65	16			65				
D-ABC	28	7	507	0.055	28	0.0	0.1	7.508	A
C-ABD	82	20	584	0.140	81	0.0	0.2	7.149	A
C-D	0	0			0				
C-A	32	8			32				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	550	0.000	0	0.0	0.0	0.000	A
A-BCD	3	0.78	590	0.005	3	0.0	0.0	6.132	A
A-B	0	0			0				
A-C	78	19			78				
D-ABC	33	8	500	0.067	33	0.1	0.1	7.716	A
C-ABD	99	25	586	0.169	99	0.2	0.2	7.386	A
C-D	0	0			0				
C-A	37	9			37				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	536	0.000	0	0.0	0.0	0.000	A
A-BCD	4	0.99	594	0.007	4	0.0	0.0	6.098	A
A-B	0	0			0				
A-C	95	24			95				
D-ABC	41	10	490	0.083	41	0.1	0.1	8.012	A
C-ABD	124	31	589	0.210	123	0.2	0.3	7.726	A
C-D	0	0			0				
C-A	43	11			43				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	536	0.000	0	0.0	0.0	0.000	A
A-BCD	4	0.99	594	0.007	4	0.0	0.0	6.101	A
A-B	0	0			0				
A-C	95	24			95				
D-ABC	41	10	490	0.083	41	0.1	0.1	8.015	A
C-ABD	124	31	589	0.210	124	0.3	0.3	7.734	A
C-D	0	0			0				
C-A	43	11			43				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	549	0.000	0	0.0	0.0	0.000	A
A-BCD	3	0.78	590	0.005	3	0.0	0.0	6.135	A
A-B	0	0			0				
A-C	78	19			78				
D-ABC	33	8	500	0.067	33	0.1	0.1	7.723	A
C-ABD	99	25	586	0.169	99	0.3	0.2	7.398	A
C-D	0	0			0				
C-A	37	9			37				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	559	0.000	0	0.0	0.0	0.000	A
A-BCD	3	0.64	587	0.004	3	0.0	0.0	6.159	A
A-B	0	0			0				
A-C	65	16			65				
D-ABC	28	7	507	0.055	28	0.1	0.1	7.522	A
C-ABD	82	21	584	0.140	82	0.2	0.2	7.173	A
C-D	0	0			0				
C-A	32	8			32				

DO SOMETHING - 2029 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	DO SOMETHING	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		4.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Loreto Abbey		Major
B	Site Access		Minor
C	Dispensary lane (West)		Major
D	Dispensary Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Loreto Abbey	6.20			0.0	✓	0.00
C - Dispensary lane (West)	6.20			0.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	0	0
D - Dispensary Lane (North)	One lane	4.00	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	574	-	-	-	-	-	-	0.220	0.315	0.220	-	-	-
B-A	574	0.104	0.262	0.262	-	-	-	0.165	0.374	-	0.262	0.262	0.131
B-C	749	0.114	0.288	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
B-D, offside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
C-B	574	0.220	0.220	0.315	-	-	-	-	-	-	-	-	-
D-A	686	-	-	-	-	-	-	0.264	-	0.104	-	-	-
D-B, nearside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-B, offside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-C	526	-	0.151	0.343	0.120	0.240	0.240	0.240	0.240	0.095	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2029 DS	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Loreto Abbey		ONE HOUR	✓	97	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Dispensary lane (West)		ONE HOUR	✓	154	100.000
D - Dispensary Lane (North)		ONE HOUR	✓	39	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	94	3
	B - Site Access	0	0	0	0
	C - Dispensary lane (West)	52	102	0	0
	D - Dispensary Lane (North)	6	12	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	0	0
	B - Site Access	0	0	0	0
	C - Dispensary lane (West)	0	0	0	0
	D - Dispensary Lane (North)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.00	0.00	0.0	A	0	0
A-BCD	0.01	6.12	0.0	A	3	5
A-B					0	0
A-C					86	129
D-ABC	0.09	8.04	0.1	A	36	54
C-ABD	0.21	7.74	0.3	A	102	153
C-D					0	0
C-A					39	59

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	558	0.000	0	0.0	0.0	0.000	A
A-BCD	3	0.64	591	0.004	3	0.0	0.0	6.120	A
A-B	0	0			0				
A-C	70	18			70				
D-ABC	29	7	508	0.058	29	0.0	0.1	7.508	A
C-ABD	82	21	585	0.141	82	0.0	0.2	7.148	A
C-D	0	0			0				
C-A	34	8			34				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	547	0.000	0	0.0	0.0	0.000	A
A-BCD	3	0.79	594	0.005	3	0.0	0.0	6.092	A
A-B	0	0			0				
A-C	84	21			84				
D-ABC	35	9	501	0.070	35	0.1	0.1	7.724	A
C-ABD	100	25	587	0.170	100	0.2	0.2	7.385	A
C-D	0	0			0				
C-A	39	10			39				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	533	0.000	0	0.0	0.0	0.000	A
A-BCD	4	1.00	599	0.007	4	0.0	0.0	6.049	A
A-B	0	0			0				
A-C	103	26			103				
D-ABC	43	11	491	0.087	43	0.1	0.1	8.035	A
C-ABD	124	31	590	0.211	124	0.2	0.3	7.728	A
C-D	0	0			0				
C-A	45	11			45				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	533	0.000	0	0.0	0.0	0.000	A
A-BCD	4	1.00	599	0.007	4	0.0	0.0	6.053	A
A-B	0	0			0				
A-C	103	26			103				
D-ABC	43	11	491	0.087	43	0.1	0.1	8.037	A
C-ABD	124	31	590	0.211	124	0.3	0.3	7.738	A
C-D	0	0			0				
C-A	45	11			45				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	547	0.000	0	0.0	0.0	0.000	A
A-BCD	3	0.79	594	0.005	3	0.0	0.0	6.096	A
A-B	0	0			0				
A-C	84	21			84				
D-ABC	35	9	501	0.070	35	0.1	0.1	7.732	A
C-ABD	100	25	587	0.170	100	0.3	0.2	7.398	A
C-D	0	0			0				
C-A	39	10			39				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	557	0.000	0	0.0	0.0	0.000	A
A-BCD	3	0.64	590	0.004	3	0.0	0.0	6.123	A
A-B	0	0			0				
A-C	70	18			70				
D-ABC	29	7	508	0.058	29	0.1	0.1	7.522	A
C-ABD	82	21	585	0.141	83	0.2	0.2	7.172	A
C-D	0	0			0				
C-A	34	8			34				

DO SOMETHING - 2039 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	DO SOMETHING	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		4.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Loreto Abbey		Major
B	Site Access		Minor
C	Dispensary lane (West)		Major
D	Dispensary Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Loreto Abbey	6.20			0.0	✓	0.00
C - Dispensary lane (West)	6.20			0.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	0	0
D - Dispensary Lane (North)	One lane	4.00	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	574	-	-	-	-	-	-	0.220	0.315	0.220	-	-	-
B-A	574	0.104	0.262	0.262	-	-	-	0.165	0.374	-	0.262	0.262	0.131
B-C	749	0.114	0.288	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
B-D, offside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
C-B	574	0.220	0.220	0.315	-	-	-	-	-	-	-	-	-
D-A	686	-	-	-	-	-	-	0.264	-	0.104	-	-	-
D-B, nearside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-B, offside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-C	526	-	0.151	0.343	0.120	0.240	0.240	0.240	0.240	0.095	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2039 DS	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Loreto Abbey		ONE HOUR	✓	104	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Dispensary lane (West)		ONE HOUR	✓	156	100.000
D - Dispensary Lane (North)		ONE HOUR	✓	41	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	100	4
	B - Site Access	0	0	0	0
	C - Dispensary lane (West)	54	102	0	0
	D - Dispensary Lane (North)	6	12	23	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	0	0
	B - Site Access	0	0	0	0
	C - Dispensary lane (West)	0	0	0	0
	D - Dispensary Lane (North)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.00	0.00	0.0	A	0	0
A-BCD	0.01	6.10	0.0	A	4	7
A-B					0	0
A-C					91	137
D-ABC	0.09	8.13	0.1	A	38	56
C-ABD	0.21	7.75	0.3	A	103	154
C-D					0	0
C-A					41	61

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	556	0.000	0	0.0	0.0	0.000	A
A-BCD	3	0.86	593	0.006	3	0.0	0.0	6.100	A
A-B	0	0			0				
A-C	75	19			75				
D-ABC	31	8	506	0.061	31	0.0	0.1	7.569	A
C-ABD	83	21	585	0.141	82	0.0	0.2	7.153	A
C-D	0	0			0				
C-A	35	9			35				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	545	0.000	0	0.0	0.0	0.000	A
A-BCD	4	1	597	0.007	4	0.0	0.0	6.068	A
A-B	0	0			0				
A-C	89	22			89				
D-ABC	37	9	498	0.074	37	0.1	0.1	7.799	A
C-ABD	100	25	587	0.171	100	0.2	0.2	7.393	A
C-D	0	0			0				
C-A	40	10			40				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	531	0.000	0	0.0	0.0	0.000	A
A-BCD	5	1	603	0.009	5	0.0	0.0	6.021	A
A-B	0	0			0				
A-C	109	27			109				
D-ABC	45	11	488	0.093	45	0.1	0.1	8.126	A
C-ABD	125	31	590	0.212	125	0.2	0.3	7.740	A
C-D	0	0			0				
C-A	47	12			47				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	531	0.000	0	0.0	0.0	0.000	A
A-BCD	5	1	603	0.009	5	0.0	0.0	6.022	A
A-B	0	0			0				
A-C	109	27			109				
D-ABC	45	11	488	0.093	45	0.1	0.1	8.131	A
C-ABD	125	31	590	0.212	125	0.3	0.3	7.749	A
C-D	0	0			0				
C-A	47	12			47				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	545	0.000	0	0.0	0.0	0.000	A
A-BCD	4	1	597	0.007	4	0.0	0.0	6.070	A
A-B	0	0			0				
A-C	89	22			89				
D-ABC	37	9	498	0.074	37	0.1	0.1	7.806	A
C-ABD	100	25	587	0.171	100	0.3	0.2	7.406	A
C-D	0	0			0				
C-A	40	10			40				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	556	0.000	0	0.0	0.0	0.000	A
A-BCD	3	0.86	593	0.006	3	0.0	0.0	6.103	A
A-B	0	0			0				
A-C	75	19			75				
D-ABC	31	8	506	0.061	31	0.1	0.1	7.581	A
C-ABD	83	21	585	0.141	83	0.2	0.2	7.180	A
C-D	0	0			0				
C-A	35	9			35				

DO SOMETHING - 2024 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	DO SOMETHING	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		4.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Loreto Abbey		Major
B	Site Access		Minor
C	Dispensary lane (West)		Major
D	Dispensary Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Loreto Abbey	6.20			0.0	✓	0.00
C - Dispensary lane (West)	6.20			0.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	0	0
D - Dispensary Lane (North)	One lane	4.00	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	574	-	-	-	-	-	-	0.220	0.315	0.220	-	-	-
B-A	574	0.104	0.262	0.262	-	-	-	0.165	0.374	-	0.262	0.262	0.131
B-C	749	0.114	0.288	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
B-D, offside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
C-B	574	0.220	0.220	0.315	-	-	-	-	-	-	-	-	-
D-A	686	-	-	-	-	-	-	0.264	-	0.104	-	-	-
D-B, nearside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-B, offside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-C	526	-	0.151	0.343	0.120	0.240	0.240	0.240	0.240	0.095	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2024 DS	PM	ONE HOUR	14:30	16:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Loreto Abbey		ONE HOUR	✓	34	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Dispensary lane (West)		ONE HOUR	✓	106	100.000
D - Dispensary Lane (North)		ONE HOUR	✓	20	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	34	0
	B - Site Access	0	0	0	0
	C - Dispensary lane (West)	30	70	0	6
	D - Dispensary Lane (North)	6	3	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	0	0
	B - Site Access	0	0	0	0
	C - Dispensary lane (West)	0	0	0	0
	D - Dispensary Lane (North)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.00	0.00	0.0	A	0	0
A-BCD	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					31	47
D-ABC	0.04	6.99	0.0	A	18	28
C-ABD	0.14	7.06	0.2	A	68	102
C-D					5	7
C-A					24	36

Main Results for each time segment

14:30 - 14:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	581	0.000	0	0.0	0.0	0.000	A
A-BCD	0	0	551	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	26	6			26				
D-ABC	15	4	546	0.028	15	0.0	0.0	6.778	A
C-ABD	55	14	587	0.094	55	0.0	0.1	6.763	A
C-D	4	1			4				
C-A	20	5			20				

14:45 - 15:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	575	0.000	0	0.0	0.0	0.000	A
A-BCD	0	0	547	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	31	8			31				
D-ABC	18	4	542	0.033	18	0.0	0.0	6.869	A
C-ABD	67	17	589	0.113	67	0.1	0.1	6.885	A
C-D	5	1			5				
C-A	24	6			24				

15:00 - 15:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	568	0.000	0	0.0	0.0	0.000	A
A-BCD	0	0	541	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	37	9			37				
D-ABC	22	6	537	0.041	22	0.0	0.0	6.994	A
C-ABD	83	21	593	0.139	82	0.1	0.2	7.051	A
C-D	6	1			6				
C-A	28	7			28				

15:15 - 15:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	568	0.000	0	0.0	0.0	0.000	A
A-BCD	0	0	541	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	37	9			37				
D-ABC	22	6	537	0.041	22	0.0	0.0	6.994	A
C-ABD	83	21	593	0.139	83	0.2	0.2	7.057	A
C-D	6	1			6				
C-A	28	7			28				

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	575	0.000	0	0.0	0.0	0.000	A
A-BCD	0	0	547	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	31	8			31				
D-ABC	18	4	542	0.033	18	0.0	0.0	6.873	A
C-ABD	67	17	589	0.113	67	0.2	0.1	6.892	A
C-D	5	1			5				
C-A	24	6			24				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	581	0.000	0	0.0	0.0	0.000	A
A-BCD	0	0	551	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	26	6			26				
D-ABC	15	4	546	0.028	15	0.0	0.0	6.785	A
C-ABD	55	14	587	0.094	55	0.1	0.1	6.776	A
C-D	4	1			4				
C-A	20	5			20				

DO SOMETHING - 2029 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	DO SOMETHING	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		4.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Loreto Abbey		Major
B	Site Access		Minor
C	Dispensary lane (West)		Major
D	Dispensary Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Loreto Abbey	6.20			0.0	✓	0.00
C - Dispensary lane (West)	6.20			0.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	0	0
D - Dispensary Lane (North)	One lane	4.00	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	574	-	-	-	-	-	-	0.220	0.315	0.220	-	-	-
B-A	574	0.104	0.262	0.262	-	-	-	0.165	0.374	-	0.262	0.262	0.131
B-C	749	0.114	0.288	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
B-D, offside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
C-B	574	0.220	0.220	0.315	-	-	-	-	-	-	-	-	-
D-A	686	-	-	-	-	-	-	0.264	-	0.104	-	-	-
D-B, nearside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-B, offside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-C	526	-	0.151	0.343	0.120	0.240	0.240	0.240	0.240	0.095	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2029 DS	PM	ONE HOUR	14:30	16:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Loreto Abbey		ONE HOUR	✓	35	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Dispensary lane (West)		ONE HOUR	✓	108	100.000
D - Dispensary Lane (North)		ONE HOUR	✓	22	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	35	0
	B - Site Access	0	0	0	0
	C - Dispensary lane (West)	32	70	0	6
	D - Dispensary Lane (North)	7	3	12	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	0	0
	B - Site Access	0	0	0	0
	C - Dispensary lane (West)	0	0	0	0
	D - Dispensary Lane (North)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.00	0.00	0.0	A	0	0
A-BCD	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					32	48
D-ABC	0.04	6.99	0.0	A	20	30
C-ABD	0.14	7.04	0.2	A	68	103
C-D					5	7
C-A					26	39

Main Results for each time segment

14:30 - 14:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	581	0.000	0	0.0	0.0	0.000	A
A-BCD	0	0	551	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	26	7			26				
D-ABC	17	4	548	0.030	16	0.0	0.0	6.767	A
C-ABD	55	14	588	0.094	55	0.0	0.1	6.753	A
C-D	4	1			4				
C-A	22	5			22				

14:45 - 15:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	575	0.000	0	0.0	0.0	0.000	A
A-BCD	0	0	546	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	31	8			31				
D-ABC	20	5	544	0.036	20	0.0	0.0	6.862	A
C-ABD	67	17	590	0.113	67	0.1	0.1	6.874	A
C-D	5	1			5				
C-A	25	6			25				

15:00 - 15:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	567	0.000	0	0.0	0.0	0.000	A
A-BCD	0	0	540	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	39	10			39				
D-ABC	24	6	539	0.045	24	0.0	0.0	6.994	A
C-ABD	83	21	594	0.140	83	0.1	0.2	7.038	A
C-D	6	1			6				
C-A	30	8			30				

15:15 - 15:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	567	0.000	0	0.0	0.0	0.000	A
A-BCD	0	0	540	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	39	10			39				
D-ABC	24	6	539	0.045	24	0.0	0.0	6.994	A
C-ABD	83	21	594	0.140	83	0.2	0.2	7.041	A
C-D	6	1			6				
C-A	30	8			30				

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	575	0.000	0	0.0	0.0	0.000	A
A-BCD	0	0	546	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	31	8			31				
D-ABC	20	5	544	0.036	20	0.0	0.0	6.864	A
C-ABD	67	17	590	0.113	67	0.2	0.1	6.881	A
C-D	5	1			5				
C-A	25	6			25				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	580	0.000	0	0.0	0.0	0.000	A
A-BCD	0	0	551	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	26	7			26				
D-ABC	17	4	548	0.030	17	0.0	0.0	6.772	A
C-ABD	55	14	588	0.094	56	0.1	0.1	6.765	A
C-D	4	1			4				
C-A	22	5			22				

DO SOMETHING - 2039 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	DO SOMETHING	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		4.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Loreto Abbey		Major
B	Site Access		Minor
C	Dispensary lane (West)		Major
D	Dispensary Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Loreto Abbey	6.20			0.0	✓	0.00
C - Dispensary lane (West)	6.20			0.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	0	0
D - Dispensary Lane (North)	One lane	4.00	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	574	-	-	-	-	-	-	0.220	0.315	0.220	-	-	-
B-A	574	0.104	0.262	0.262	-	-	-	0.165	0.374	-	0.262	0.262	0.131
B-C	749	0.114	0.288	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
B-D, offside lane	574	0.104	0.262	0.262	-	-	-	0.165	0.374	0.165	-	-	-
C-B	574	0.220	0.220	0.315	-	-	-	-	-	-	-	-	-
D-A	686	-	-	-	-	-	-	0.264	-	0.104	-	-	-
D-B, nearside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-B, offside lane	526	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-C	526	-	0.151	0.343	0.120	0.240	0.240	0.240	0.240	0.095	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2039 DS	PM	ONE HOUR	14:30	16:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Loreto Abbey		ONE HOUR	✓	36	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Dispensary lane (West)		ONE HOUR	✓	111	100.000
D - Dispensary Lane (North)		ONE HOUR	✓	23	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	36	0
	B - Site Access	0	0	0	0
	C - Dispensary lane (West)	35	70	0	6
	D - Dispensary Lane (North)	7	3	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Loreto Abbey	B - Site Access	C - Dispensary lane (West)	D - Dispensary Lane (North)
From	A - Loreto Abbey	0	0	0	0
	B - Site Access	0	0	0	0
	C - Dispensary lane (West)	0	0	0	0
	D - Dispensary Lane (North)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.00	0.00	0.0	A	0	0
A-BCD	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					33	50
D-ABC	0.05	7.05	0.0	A	21	32
C-ABD	0.14	7.02	0.2	A	69	103
C-D					5	7
C-A					28	42

Main Results for each time segment

14:30 - 14:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	580	0.000	0	0.0	0.0	0.000	A
A-BCD	0	0	551	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	27	7			27				
D-ABC	17	4	545	0.032	17	0.0	0.0	6.813	A
C-ABD	56	14	589	0.094	55	0.0	0.1	6.739	A
C-D	4	1			4				
C-A	24	6			24				

14:45 - 15:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	574	0.000	0	0.0	0.0	0.000	A
A-BCD	0	0	546	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	32	8			32				
D-ABC	21	5	541	0.038	21	0.0	0.0	6.913	A
C-ABD	67	17	592	0.113	67	0.1	0.1	6.856	A
C-D	5	1			5				
C-A	28	7			28				

15:00 - 15:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	566	0.000	0	0.0	0.0	0.000	A
A-BCD	0	0	540	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	40	10			40				
D-ABC	25	6	536	0.047	25	0.0	0.0	7.052	A
C-ABD	83	21	596	0.140	83	0.1	0.2	7.016	A
C-D	6	1			6				
C-A	33	8			33				

15:15 - 15:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	566	0.000	0	0.0	0.0	0.000	A
A-BCD	0	0	540	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	40	10			40				
D-ABC	25	6	536	0.047	25	0.0	0.0	7.053	A
C-ABD	83	21	596	0.140	83	0.2	0.2	7.020	A
C-D	6	1			6				
C-A	33	8			33				

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	574	0.000	0	0.0	0.0	0.000	A
A-BCD	0	0	546	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	32	8			32				
D-ABC	21	5	541	0.038	21	0.0	0.0	6.918	A
C-ABD	67	17	592	0.113	67	0.2	0.1	6.864	A
C-D	5	1			5				
C-A	28	7			28				

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	580	0.000	0	0.0	0.0	0.000	A
A-BCD	0	0	550	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	27	7			27				
D-ABC	17	4	545	0.032	17	0.0	0.0	6.820	A
C-ABD	56	14	589	0.094	56	0.1	0.1	6.750	A
C-D	4	1			4				
C-A	24	6			24				

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