

AtkinsRéalis



Traffic and Transport Assessment

Castlethorn Old Conna ULC

September 2026

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OLD CONNAUGHT PHASE A1 LRD

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1. Introduction

AtkinsRéalis were commissioned by Castlethorn Ltd (the Client) to provide Traffic, Transport, and Engineering Consultancy Services in support of the proposed development of their lands within the Old Connaught Local Area Plan (LAP) area. This report outlines the transport, engineering, and infrastructure proposals developed to facilitate a **residential-led scheme** on the **Phase A1 lands within Phase A** of the Old Connaught development lands, as set out in the Old Connaught LAP.

The proposed residential development site forms the first phase provided for under the Old Connaught Local Area Plan. The site is generally bounded by agricultural lands to the north, the M11 to the east, Old Connaught Avenue to the south and Festina Lente equestrian centre to the west. The proposed development is referred to as **Old Connaught Phase A1**.

The proposed development comprises **271no. dwellings**, in a mix of houses, duplex units and apartments, **1no. creche** (c.574 sq m), and all associated and ancillary site development, landscape and boundary treatment works.

The proposed housing mix comprises:

103no. houses (22no. 4-bed, 68no. 3-bed and 13no. 2-bed) ranging from 2 to 3 storeys.

162no. apartments and 6no. duplexes accommodated in a terrace and 4no apartment blocks, including: -

- **Block 1:** 54no. apartments total (19no. 1-bed, 4no. 2-bed (3-person), 25no. 2-bed (4-person)) in 1no. 1 to 5-storey building and 6no. 3-bed duplex units in a 3-storey terrace.
- **Block 2:** 41no. apartments total (9no. 1-bed, 9no. 2-bed (3-person), 23no. 2-bed (4-person)) in 1no. 1 to 5-storey building.
- **Block 3:** 38no. apartments total (13no. 1-bed, 11no. 2-bed (3-person), 14no. 2-bed (4-person)) and the ground floor creche (574 sqm) with associated outdoor play area (c.225.4 sq m), in 1no. 1 to 5-storey building.
- **Block 4:** 35no. apartments total (8no. 1-bed, 11no. 2-bed (3-person), 16no. 2-bed (4-person)) in 1no. 1 to 4-storey building.

Associated and ancillary site development and infrastructure work, include:

On-site attenuation; hard and soft landscaping and boundary treatment works including **public open space (totalling c. 4,519 sq m)** in 2 areas identified as POS1 (1,232 sq m) and POS2 (3,287 sq m) incorporating the existing veteran Oak tree to be retained; **communal open space (totalling c. 1,154 sq m)** in 3 areas identified as COS1 (253 sq m), COS2 (723 sqm) and COS3 (178 sq m); components of the regional attenuation pond to the north east of the site; 5no. ESB substations. Vehicular site access from Old Connaught Avenue, via a proposed new primary North-South street that includes active travel infrastructure and a 7m wide LUAS reservation corridor running parallel to the east of the primary North-South street. A section of the East-West link road, including active travel, will also be provided for along the northern boundary of the site. A total of **289no. car parking spaces** comprising 241no. surface spaces (inclusive of 11no. visitor spaces, 2no. ESB spaces, 2no. Go-Car (shared) spaces, and 9no. disabled spaces) and 48no. undercroft spaces (inclusive of 2no. disabled spaces), 20% of residential car parking spaces equipped with Electric Vehicle charging points. **435no. bicycle parking spaces**, including 351no. resident spaces and 84no. visitor spaces. 12no. motorbike parking spaces., Ancillary stores serving the houses, duplex units and apartments.



The proposed development also includes the construction of a new pumping station, associated single storey building, twin rising mains extending circa 400m along Old Connaught Avenue under the M11 connecting to the existing gravity foul network on Old Connaught Avenue 125m east of the M11 bridge and associated storage, together with all ancillary site development and reinstatement works required to facilitate these elements

Further details provided in **Section 4** of this report. Figure 1-1 illustrates the location of the subject lands within the wider context of the Old Connaught LAP.

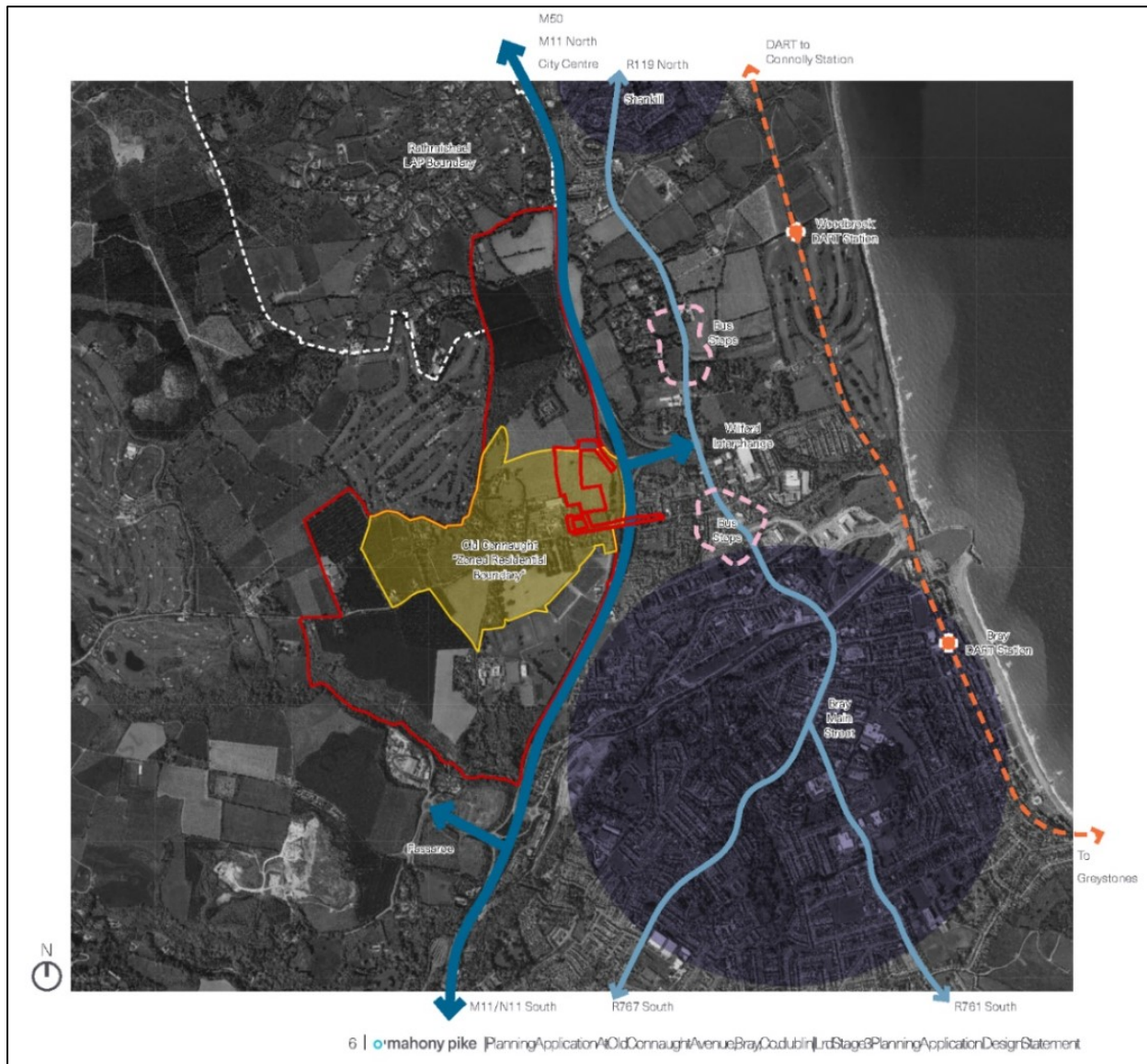


Figure 1-1 - Site Location & Context

1.1 Planning & Context

As noted above, the proposed development is located on lands zoned for residential and supporting uses under the **Old Connaught Local Area Plan**, which was adopted by Dún Laoghaire-Rathdown County Council on **9 December 2025**. The LAP outlines a strategic framework requiring that development is delivered in **phased sequence**, aligned with the timely provision of essential transport, utilities, and community infrastructure.

For **Phase A1**, the LAP identifies a number of key transport infrastructure elements that must be provided to support early development:

- **North–South (NS) Link Road**, including future-proofed connections to the north and to a future N11 bridge.
- **East–West (EW) Link Road**, with future-proofed connections towards Ferndale Road.
- **Active Travel Network**, including segregated cycling facilities along both NS and EW link roads, in addition to urban greenways and connections that integrate with the wider LAP network.
- **Luas Reservation Corridor**, safeguarding long-term public transport infrastructure in accordance with LAP objectives.

This report describes the design, function, and delivery of the above infrastructure and demonstrates how the Phase A1 transport package has been developed in accordance with all relevant national, regional, and local guidance and standards. It also outlines how the Phase A1 proposals integrate within a broader **Masterplanning framework** for the full Castlethorn landholding, ensuring consistency with the wider LAP vision and with adjoining zoned lands not in the ownership of the applicant.

The lands have been developed through a collaborative multidisciplinary team involving engineering, transport, landscape, and placemaking objectives are fully integrated into a coherent design that delivers a high-quality residential environment consistent with the aspirations of the Old Connaught LAP.

1.1.1 Engagement

Throughout the design process, AtkinsRéalis and the wider team have engaged extensively with **Dún Laoghaire-Rathdown County Council (DLRCC)**, including:

- **A Stage 1 LRD meeting** 11th December 2025
- **A Stage 2 LRD meeting** 26th March 2026
- **A site walk-over** with DLRCC officials 21st January 2026)

In addition, engagement has been sought with both **Transport Infrastructure Ireland (TII)** and the **National Transport Authority (NTA)** through DLRCC. Feedback received from these bodies has informed the evolution of the road network layout, active travel infrastructure, street hierarchy, and masterplan connections to ensure alignment with regional transportation objectives and statutory guidance.



1.1.2 Policy and Standards Considered

The design of the proposed development and associated infrastructure has been informed by a comprehensive review of relevant policy and design guidance, including:

- National Sustainable Mobility Policy Action Plan
- Moving Together – A Collaborative Approach to Systems Change in Transport 2026–2030
- Transport Strategy for the Greater Dublin Area 2022–2042
- DLRCC County Development Plan
- Old Connaught Local Area Plan
- Design Manual for Urban Roads and Streets (DMURS, 2018 Update)
- Cycle Design Manual (NTA, 2023)

These documents collectively guide the development towards a sustainable, multi-modal transport environment centred on walking, cycling, and public transport, consistent with the placemaking and climate-resilience ambitions of the LAP.

1.2 Summary

Overall, the development of the Old Connaught lands is being advanced in a **holistic, plan-led manner**, underpinned by an integrated land-use and transport strategy. The Phase A1 proposals set out in this report demonstrate how early delivery of key infrastructure—roads, active travel facilities, and future public transport corridors—will unlock the development lands while supporting the creation of a sustainable, well-connected new community in Old Connaught.



2. Transport Policy Context

Overall, the lands at Old Connaught will be developed in the context of a holistic plan led by an integrated land use and transport strategy. The following section provides an overview of National, Regional and Local transport policies, documents and guidance that are relevant to the site location and development.

2.1 National Development Plan (2021-2030)

The National Development Plan (NDP) 2021–2030 is Ireland's strategic capital investment programme and forms a core component of Project Ireland 2040, alongside the National Planning Framework. The NDP provides the financial roadmap to support sustainable mobility, regeneration, climate action, and regional development.

Key National Strategic Outcomes (NSOs) include:

- Compact Growth (NSO 1): Encourages regeneration and renewal of existing towns rather than outward expansion
- Strengthened Rural Economies and Communities (NSO 3): The NDP prioritises rural town revitalisation, community spaces, and heritage-led regeneration
- Sustainable Mobility (NSO 4): The NDP allocates major investment to walking and cycling facilities, reduced car dependence, and improved public transport.
- Enhanced Amenity and Heritage (NSO 7): Supports public realm improvements, green infrastructure, and conservation of historic assets.

2.2 National Sustainable Mobility Policy Action Plan

The National Sustainable Mobility Policy Action Plan sets out the strategic framework to 2030 for active travel, including walking and cycling, and public transport journeys. It seeks to assist Ireland meet its climate obligations to achieve a 51% reduction in greenhouse gas emissions by 2030. Transport is responsible for approximately 17.7% of Ireland's greenhouse gas emissions, therefore it is vital the infrastructure, services, and measures that enable and encourage more people to choose sustainable modes of travel are available and provided. The policy aims to deliver 50% increase in daily active travel journeys, 130% increase in daily public transport journeys, and 20% reduction in total vehicle kilometres travelled; ultimately making it more attractive and easier for people to choose walking, cycling and public transport daily instead of the use of a fossil fuelled vehicle. The policy seeks to support safe and green mobility by:

- Continuing to protect and maintain the safety of existing public transport networks and ensuring that new sustainable mobility infrastructure meets the highest safety standards;
- Rebalancing transport movement in metropolitan areas and other urban centres away from the private car and towards active travel and public transport;
- Identifying a pathway for the implementation of suitable demand management measures at national and local level to reduce reliance on the private car;
- Adopting a transport-oriented housing development approach; and,
- Identifying housing delivery areas within a 1km distance of public transport stops with the best potential to grow.



2.3 Moving Together – A Collaborative Approach to Systems Change in Transport (2026–2030)

Moving Together: A Collaborative Approach to Systems Change in Transport 2026–2030 was developed to fulfil a commitment in the Climate Action Plan 2023. CAP23 reinforced the ‘Avoid-Shift-Improve’ paradigm as Ireland’s framework for achieving the most effective and equitable pathway towards transport decarbonisation, with each component mutually re-enforcing the other. It represents the ‘Avoid’ pillar of the national Avoid-Shift-Improve framework for transport decarbonisation. While the Shift and Improve elements focus on investment in sustainable mobility and the transition to cleaner fuels and electric vehicles, *Moving Together* aims to reduce the need for unnecessary travel and support more efficient use of the transport system.

The Strategy has been developed to support, guide and enable appropriate authorities and entities, in the public and private domain, to contribute to systems change in a coherent, evidence-based manner. It encourages changes in travel behaviour with a view to reducing, where possible, unsustainable journeys and overall travel demand. In line with its development, implementation of the strategy is guided by four key principles:

- Just Transition
- Accessibility and Inclusion
- Rural Recognition
- Economic and Financial Sustainability

2.4 Transport Strategy for the Greater Dublin Area 2022-2042

The Transport Strategy for the Greater Dublin Area (GDA) 2022-2042 established the framework for transport provision for the city region. This Strategy, which is underpinned by the capital investment program set out in the National Development Plan 2021-2030, is based on the following over-riding objective:

“To contribute to the economic, social and cultural progress of the Greater Dublin Area by providing for the efficient, effective and sustainable movement of people and goods.”

In particular, the Strategy aims to achieve a work commuting modal share target of 55% for sustainable travel modes, reducing the single occupancy private car modal share to a maximum 45%, as set out in Smarter Travel Policy.

2.5 National Investment Framework for Transport in Ireland (NIFTI)

The National Investment Framework for Transport in Ireland (NIFTI)¹ defines the Department of Transport's priorities for the future investment in the transport network to support the implementation of the National Development Plan. NIFTI defines the investment priorities for transportation in Ireland as:

- Mobility of people and goods in urban areas
- Protection and renewal
- Enhanced regional and rural connectivity
- Decarbonisation

To achieve these goals, NIFTI defines the modal hierarchy and transportation investment priorities. NIFTI gives the highest modal priority to active travel followed by public transport and finally private vehicles. This means that, when possible, active transport options should be considered first when attempting to achieve the stated investment priorities.

2.6 Climate Action Plan, 2025

The Climate Action Plan² sets out a course of action over the coming years to address climate disruption, which is acknowledged as having diverse and wide-ranging impacts. The document outlines the aims for each sector of industry in Ireland. Electricity, Transport, Built Environment, Industry, Agriculture and Land Use have all been assessed in the document with a roadmap laid out to deliver a reduction of emissions in each of these sectors between 2021 and 2030, and to reach net zero nationally by no later than 2050

2.7 Sustainable Residential Development & Compact Settlement Guidelines for Planning Authorities

The guidance recommends that more compact growth occurs and that in areas with good transport access and services densities should be maximised. In particular, low-rise medium density housing models that are common in the UK and Europe offer significant potential to contribute to compact urban growth when applied at the right locations. Key design principles include reduced plot sizes and a tighter arrangement of houses, narrower streets, reduced car parking and the distribution of private open space in the form of patios and / or upper-level terraces and balconies. There is generally a strong emphasis on the creation of attractive streets and open spaces, which is important in creating a strong sense of place and community. The guidance notes that the availability of parking plays an important role in travel choice and looks for development to promote and maximise active and sustainable travel.

¹ <https://www.gov.ie/en/department-of-transport/publications/national-investment-framework-for-transport-in-ireland-nifti/>

² <https://assets.gov.ie/static/documents/climate-action-plan-2024-8ccbde73-e288-4241-8b26-6b4922389f25.pdf>

SPPR3 – Car parking provides specific planning policy guidance that categories car parking into three locations:

- City Centre and urban neighbourhoods of the five cities - car parking should be minimised, substantially reduced or wholly eliminated.
- In accessible locations - car parking should be substantially reduced. At these locations the maximum rate of car parking for residential development is set at 1.5no. spaces per dwelling.
- Intermediate and peripheral locations a maximum car parking rate of 2no. spaces per residential dwelling.

As defined by the guidance, Old Connaught is located in an accessible location where the maximum rate of car parking for residential development is set at 1.5no. spaces per dwelling.

SPPR 4- Cycle Parking and Storage of the guidance sets that all new development must include safe secure cycle storage facilities for residents and visitors. The guidance recommends that a minimum of 1 space per bedroom is applied and appropriate levels of visitors parking is provided. The guidance notes it is important to provide a range of cycle parking facilities and that the location of cycle parking is appropriate located, safe and easy to use.

2.8 Dun Laoghaire Rathdown County Council Development Plan 2022-2028

The Dún Laoghaire–Rathdown County Council (DLRCC) Development Plan (DP) guides future growth and development in the County. The current Development Plan sets out the policy objectives and the overall strategy for the proper planning and sustainable development of the County, including proposed residential development lands at Old Connaught Avenue, over the plan period from 2022 to 2028.

Section 2.4 Settlement Hierarchy, of the Development Plan states that, in accordance with the RSES Settlement Hierarchy Strategy, Old Connaught forms a component part of the future growth of the 'Key Town' of Bray (Tier 3). As per Section 2.6 of the Development Plan, it was an objective of the Council to prepare a Local Area Plan (LAP) for the Old Connaught Development. The LAP was adopted by the Elected Members, with material alterations, at a Special Council Meeting on 28 October 2025, and came into effect on 9 December 2025³.

Relevant specific transport policies within the development plan are shown in Table 2-1.

Table 2-1 - County Development Plan relevant transport Policies

Reference	Policies/Objectives	Context to Old Connaught
Policy Objective CS2 – Core Strategy	It is a Policy Objective to support the delivery of the Core Strategy in accordance with the Core Strategy Map illustrated in Figure 2.9 and the Core Strategy Table detailed at Table 2.11.	Old Connaught is identified as part of the future growth of the 'Key Town' of Bray. Table 2.11 indicates that 50.13 ha of lands in Old Connaught are zoned for residential development.

³ <https://www.dlrcoco.ie/oldconnaughtlap>



Policy Objective CS5 – Strategic Land Reserve	It is a Policy Objective: ▪ To designate and maintain as a strategic land reserve the lands marked accordingly on Land Use Zoning Map No. 14. ▪ To protect the strategic land reserve for potential future residential growth and to restrict development except for minor modifications and extensions to existing properties and the development of appropriate educational/open space/recreational facilities compatible with the underlying zoning objective and in line with any future Old Connaught LAP.	As shown on Map 14, the majority of the subject site is zoned A1 – “To provide for new residential communities and Sustainable Neighbourhood Infrastructure in accordance with approved local area plans.
Policy Objective CS10– Local Area Plans	It is a Policy Objective to implement a programme for the preparation of Local Area Plans and to prioritise areas in accordance with the overarching strategic objectives of the Core Strategy including those areas which are experiencing and/or likely to experience large scale development or regeneration.	The Local Area Plan for Old Connaught came into effect in December 2025.
Policy Objective T1: Integration of Land Use and Transport Policies	It is a Policy Objective to actively support sustainable modes of transport and ensure that land use and zoning are aligned with the provision and development of high-quality public transport systems. (Consistent with NSO 1, NPO 26 of the NPF, 64, RPO 4.40, 5.3, 8.1 and Guiding Principles on Integration of Land Use and Transport of the RSES)	▪ Extension of Green Line Luas to Bray ▪ Busway from Fassaroe to Old Connaught. ▪ Support the delivery of a bus service from Sandyford via Rathmichael and Old Connaught to Bray Dart station until Luas green line extension to Bray is suitably advanced. ▪ Upgrade of the road system in Rathmichael and Old Connaught in order to facilitate the safe, convenient and reliable movement of public transport vehicles, cyclists and pedestrians. ▪ N11/M11 upgrade
Policy Objective T9: Luas Extension and MetroLink	It is a Policy Objective to promote, facilitate and cooperate with other agencies in securing the extension of the Luas network in the County as set out in the NTA’s ‘Greater Dublin Area Transport Strategy 2016-2035’ and including any future upgrade to Metro. (Consistent with RPO 4.40 and 8.8 of the RSES)	A Luas line running North-Side through Old Connaught Central Character Area is defined in Map 14 of the DP

Policy Objective T10: Rail Stations/Luas Stops	It is a Policy Objective to co-operate with the NTA, Iarnród Éireann, TII and other relevant authorities to secure the improvement and further development of railway stations and Luas stops in the County. (Consistent with RPO 8.8 of the RSES)	No specific mention about any Luas Stop within Old Connaught Development
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2.9 Old Connaught Local Area Plan 2025

Dún Laoghaire–Rathdown County Council (DLRCC) published a Local Area Plan (LAP) in December 2025 for lands at Old Connaught in Bray. The LAP outlines the policies and objectives that will guide the development of lands within the Old Connaught LAP area.

The overall Masterplan for Old Connaught is summarised in the figure below.

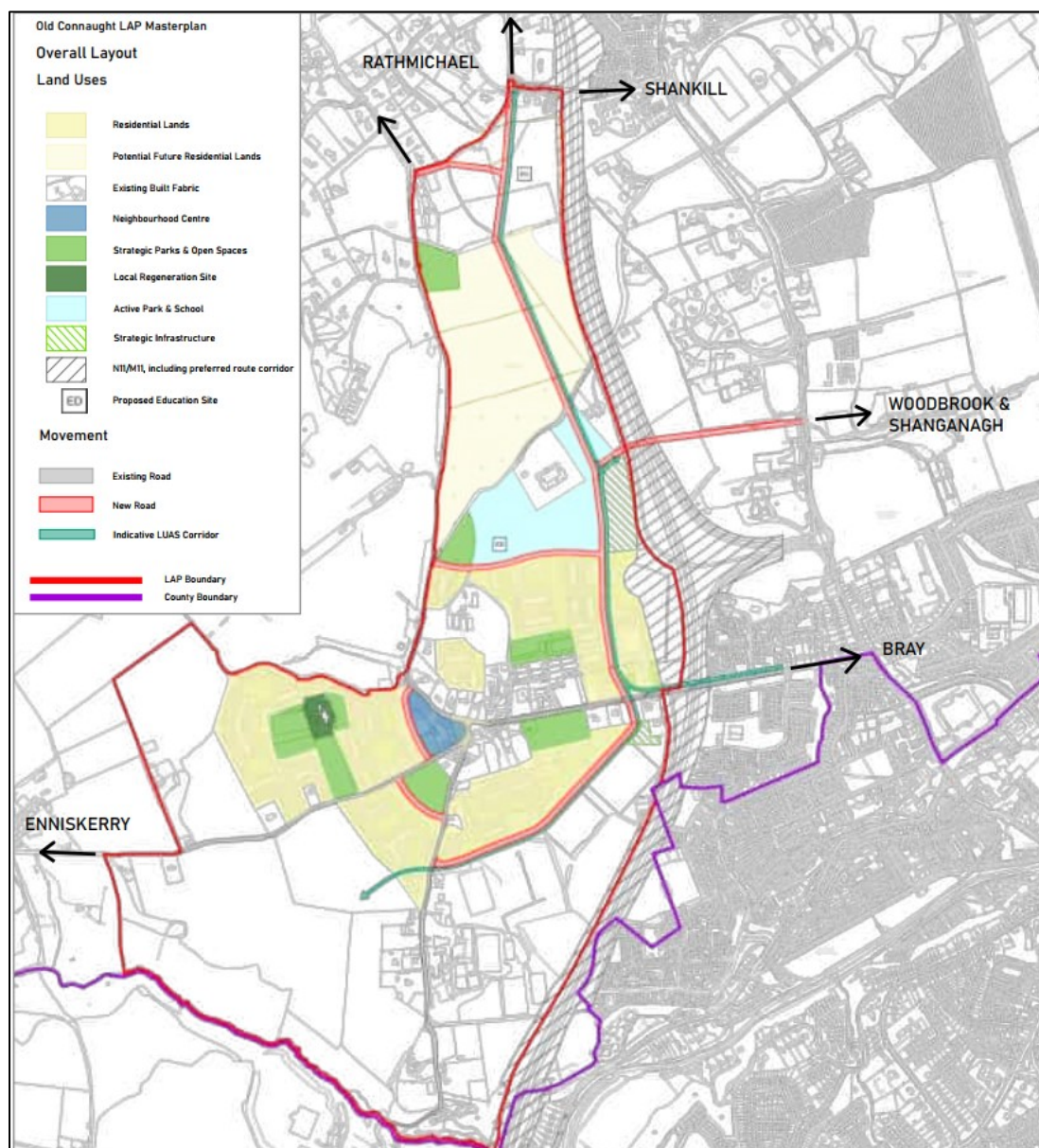


Figure 2-1 - Old Connaught LAP Masterplan (Source – Figure 4.1 of LAP)

2.9.1 LAP: Characteristic Area

The LAP divides Old Connaught into **five Character Areas**:

- Village Core
- Central Character Area
- Southern
- Western
- Northern

These form distinct neighbourhoods connected by a network of new/improved routes and active/sustainable travel infrastructure. These are illustrated in the figure below.

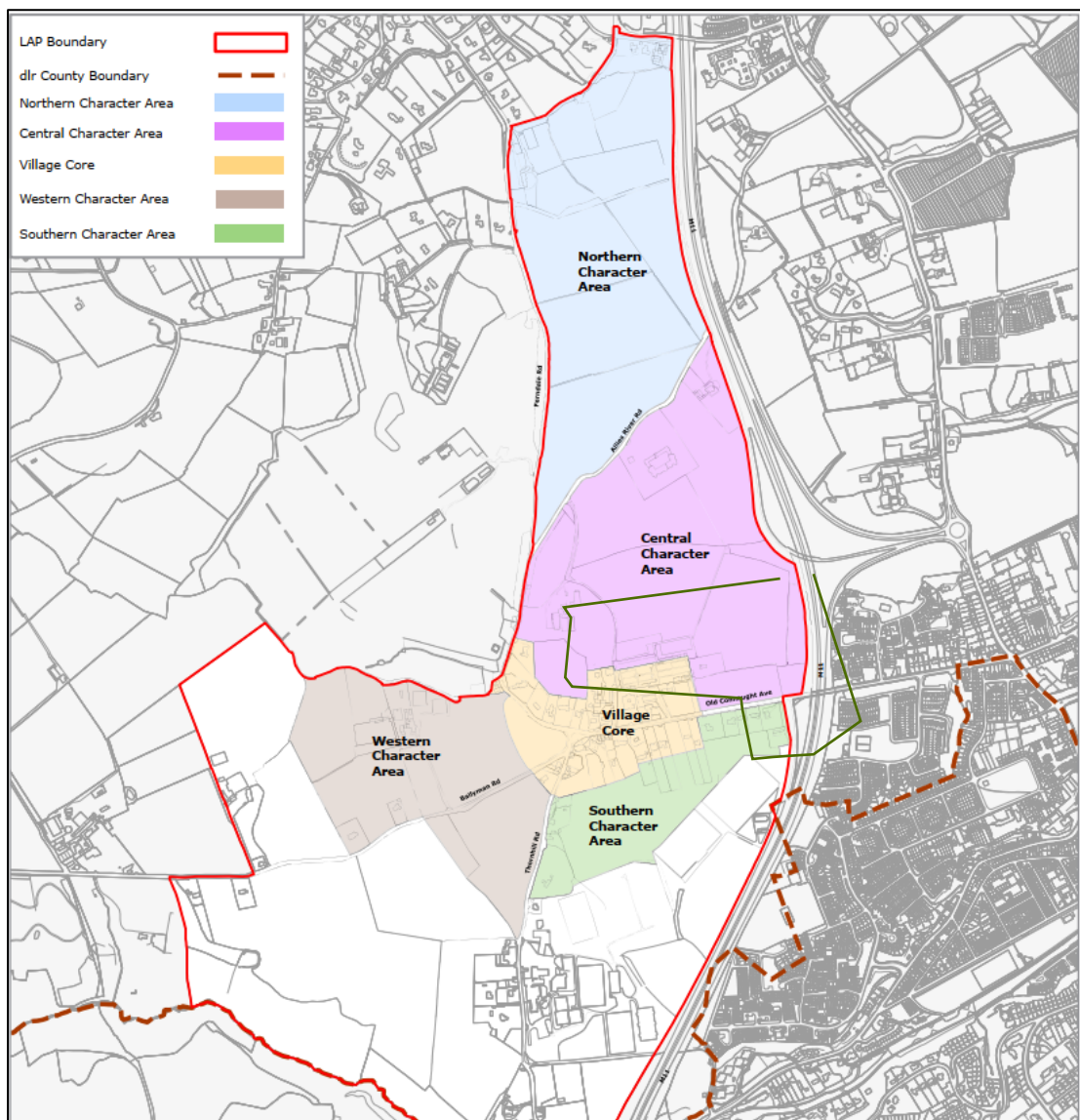


Figure 2-2 - Old Connaught Character Areas (extract based on Figure 4.4 of the LAP)

2.9.2 Central Character Area

The proposed development site sits within the **Central Character Area**, located:

- North of Old Connaught Village
- Between M11 (east), Ferndale Road (west), and Allies River Road (north)
- On rising ground from east → west

Table 4.4 of LAP details the land use zoning objectives for the central character area, shown in Figure 2-3 below.

Central Character Area – dlr County Development Plan 2022-2028	
Land Use Zoning Objectives	• A1 – To provide for new residential communities and Sustainable Neighbourhood Infrastructure in accordance with approved local area plans. • F – To preserve and provide for open space with ancillary active recreational amenities. (Open space associated with Old Connaught House). • GB – To protect and enhance the open nature of lands between urban areas.
Other Objectives	• SLR – Strategic land reserve. • ED – Proposed education site. • To protect and preserve trees and woodland. • Protected Structures – Old Connaught House, Cúilín (House) and Cúilín Gateway. • INST – To protect and provide for Institutional Uses (on Old Connaught House site). • Proposed Luas line Extension. • 6 Year Motorway Proposal – M11 upgrade. • SLO 108 - To provide pedestrian/cycle access across the M11 corridor in the vicinity of Allies River Road, the corridor and route selection process outlined in Policy Objective T24 should be followed.

Figure 2-3 - Central Character Area - Objectives (based on Table 4.4 of LAP)

2.9.3 Central Character Area: Strategic Development Framework

The strategic development framework for the Central Character Area is set out in Figures 4.11 to 4.14 of the LAP and is replicated below in Figure 2-4 below.

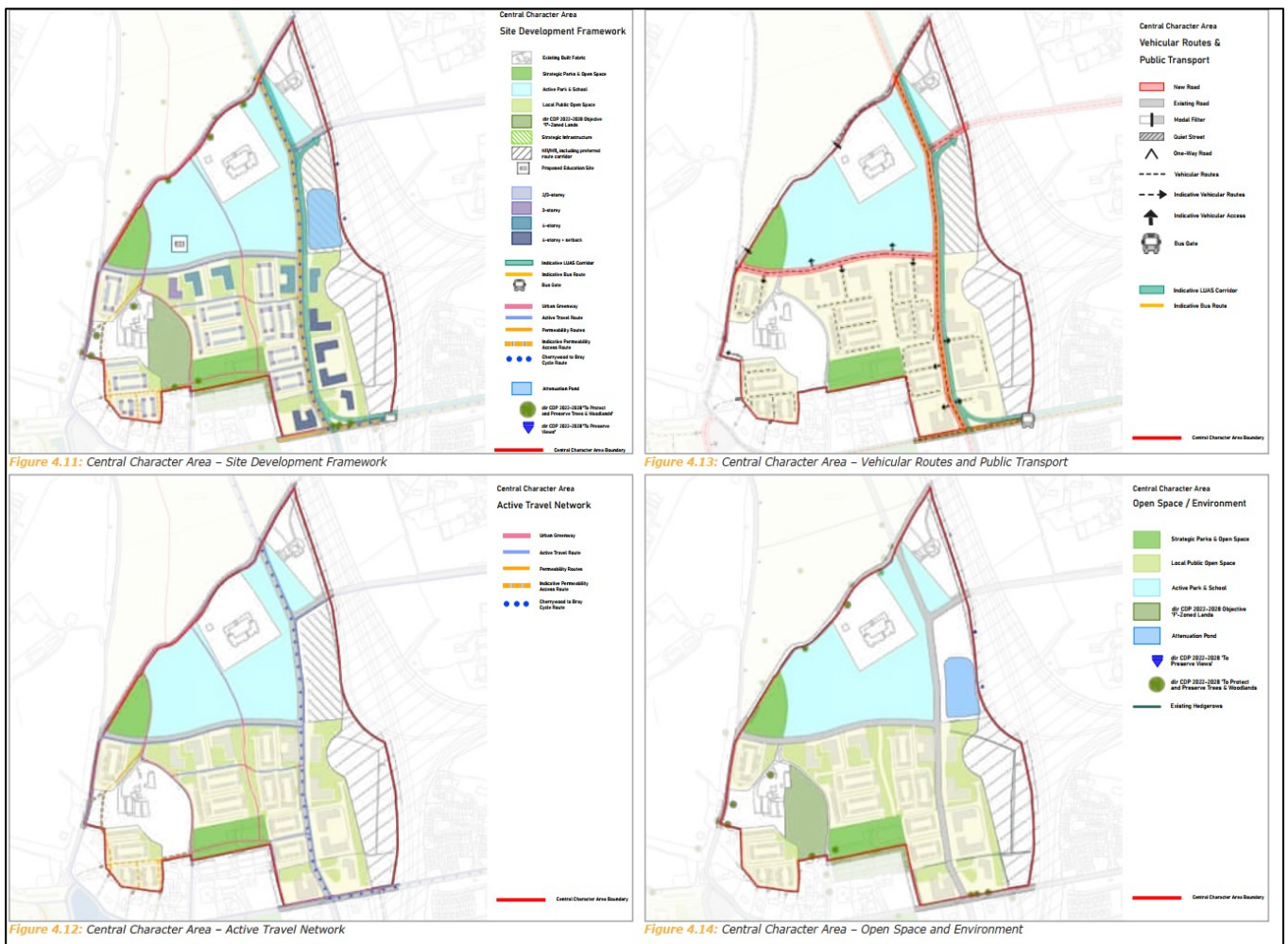


Figure 2-4 - Central Character Area - Site Development Framework

Transport and Movement Strategy

Table 4.5 of the LAP identifies the following key transport and movement strategies for the Central Character Area: They include:

- Active travel network, generally in accordance with Figure 4.12 of LAP (third figure of Figure 2-4).
- Strategic active travel routes – Cherrywood to Bray Greenway / Allies River Road Greenway and active travel bridge
- Permeability – modal filter on Allies River Road for active modes / bus gates at Old Connaught Avenue
- Safe routes to schools – creation of a school zone and safe access for active travel
- New roads – new north–south road (part) and link road between Ferndale Road and the north–south road (as illustrated in Figure 4.13)
- Vehicular movement – one-way system on part of Ferndale Road / Old Connaught Avenue quiet street; incorporation of road and traffic management measures in residential schemes
- Public transport – preservation of light rail reservation corridors

For Sub-Phase 1 (Phase A1) of Phase A of the Central Character Area. The key transport infrastructure to be delivered includes:

- A new north–south road between Old Connaught Avenue and Rathmichael

- A new link road between Ferndale Road and the proposed north–south road
- Active travel infrastructure along both roads
- Provision of a Luas corridor along the north–south route

These infrastructure elements are summarised in Figures 4.12 and 4.13 of the LAP and replicated in Figure 2-5 and Figure 2-6 below.

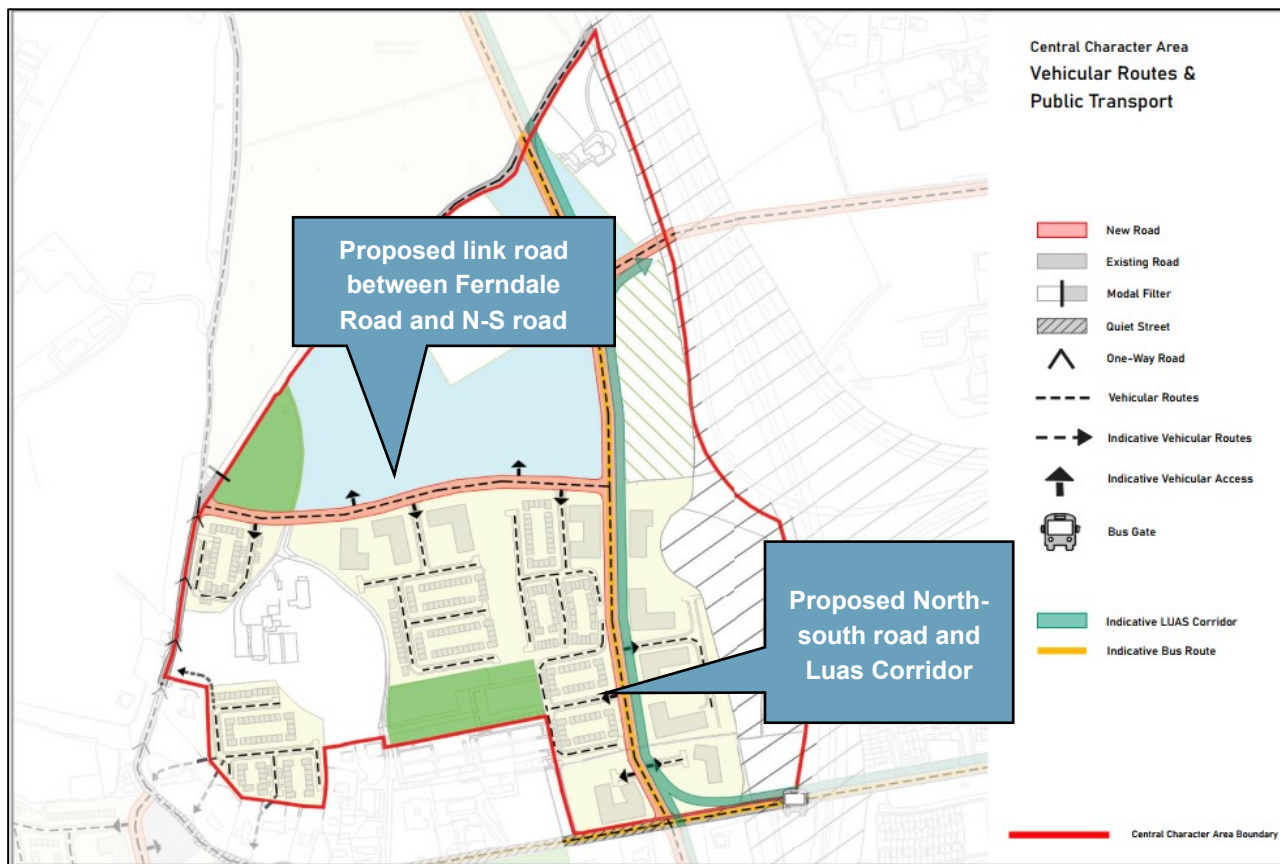


Figure 2-5 - Central Character Area – Vehicular Routes and Public Transport

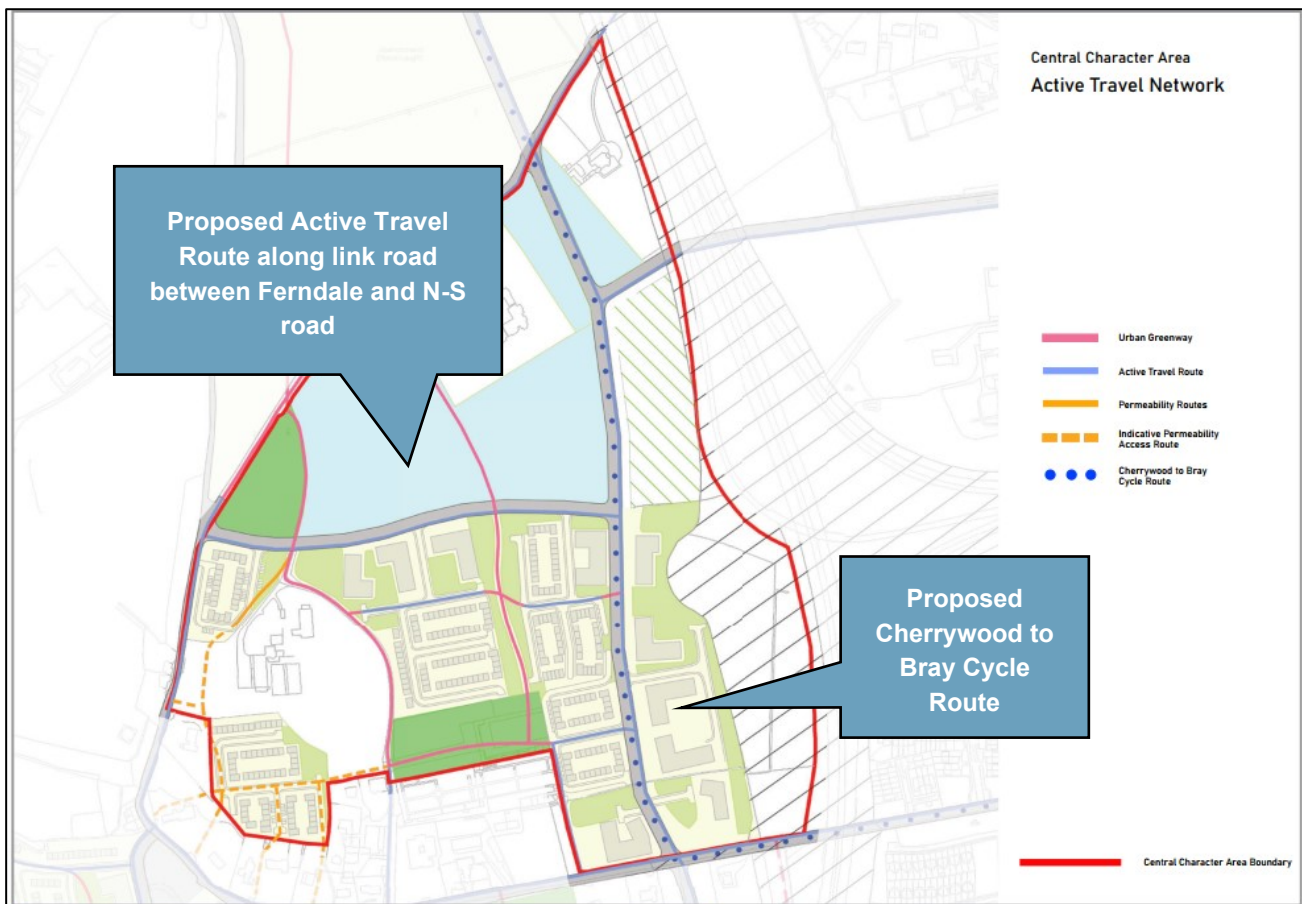


Figure 2-6 - Central Character Area - Active Travel network

2.9.4 LAP Phasing And Implementation

The LAP envisions the entire lands will be delivered in 3 phases as set out below.

- **Phase A** – These lands are considered sequentially preferable for the first phase of development at Old Connaught, with potential to deliver c.1,254 – 1,611 new homes. Phase A incorporates two sub-phases: sub-phase 1 and sub-phase 2. The lands are primarily zoned Objective ‘A1’ under the DLRCC County Development Plan 2022-2028.
- **Phase B** – These lands are considered sequentially preferable for the second phase of development at Old Connaught with potential to deliver c. 858 – 1,030 new homes. The lands are zoned Objective ‘A1’ under the DLRCC County Development Plan 2022-2028.
- **Phase C** – These lands are considered sequentially preferable for a potential third phase of residential development at Old Connaught with potential to deliver c. 1,050 new homes. These lands are zoned Objective ‘GB’ under the DLRCC County Development Plan 2022-2028 meaning they are not currently zoned for residential development at scale. The lands are, however, identified under the County Development Plan as a Strategic Land Reserve, indicating potential for residential development in the future

A summary of infrastructure for entire Phase A is :

- Progression of a new road and bridge over the N11 to the Dublin Road (including link connections) or the N11/ M11 Junction 4 to Junction 14 Improvement Scheme.
- Link road between Ferndale Road and north-south road. (Central Character Area link).
- Link road between Old Connaught Avenue and Thornhill Road.

- Active travel infrastructure, as per the requirements of the Old Connaught active travel network, to be determined and agreed with the Planning Authority and included as part of planning applications for development.

For Sub Phase 1 the following infrastructure is required

- Partial delivery of the new north-south link road (connecting Old Connaught Avenue and Crinken Lane / Ballybride Road) adjoining Phase A residential plots.
- Active travel infrastructure, as per the requirements of the Old Connaught active travel network, to be determined and agreed with the Planning Authority and included as part of planning applications for development.

2.9.5 Public Transport Infrastructure

The LAP recognises that the provision of public transport infrastructure and services within, to and from the LAP lands to wider hinterland is essential for the integration of land use and transport planning and the creation of a sustainable community.

The LAP includes multiple public transport commitments, including the following relevant policies:

- **TM12** – Engage with NTA to expand high-frequency bus services
- **TM13 / TM14** – Actively seek **Luas Green Line Extension** into Old Connaught, including stop locations
- **TM15 / TM16** – Protect and reserve **light rail alignment** corridors; interim uses may be permitted where they don't compromise future LUAS delivery
- **Objective TM25 – Speed Limits:** It is an Objective to support a low-speed environment, where appropriate, across the Plan area. The road layout of new residential, commercial, and/or mixed-use developments shall be designed in accordance with DMURS which seeks to create self-enforcing 30km/h zones.

2.9.6 Vehicular Network Infrastructure

In terms of the road network the LAP has a number of key objectives, including:

- **TM19** – Deliver a **connected, plan-led vehicular network**
- **TM20** – Improve local roads while prioritising sustainable modes
- **TM21** – All road schemes must incorporate safe walking, cycling, and PT facilities
- **TM22** – Reallocate road space where needed for active modes
- **TM23–TM24** – Junction upgrades & traffic calming to support multi-modal streetscape.

2.9.7 Active Travel Infrastructure

Key active travel objectives from the LAP include:

- **TM4** – Deliver a **connected active travel network** per LAP Figures
- **TM5** – Prioritise walking/cycling in the route hierarchy
- **TM7–TM8** – Maximise permeability, incl. filtered permeability and high-quality walking/cycling links across all new development.



2.10 Best Practice and Planning Guidance Documents

The following best practice and planning guidance documents have fundamentally informed the development of the site layout and the compilation of this TTA:

- Transport Infrastructure Ireland: Traffic and Transport Assessments Guidelines.
- Department of Transport Tourism and Sport: Design Manual for Urban Roads and Streets (DMURS).
- National Transport Authority: Cycle Design Manual (CDM).
- National Transport Authority: Permeability Best Practice Guidance.

Of particular importance is the revised Design Manual for Urban Roads and Streets (DMURS) originally published in 2013 and updated in July 2025. This document is founded on an integrated design approach that is based on safety, sustainable communities, heritage protection and creating a sense of place. DMURS recognises the higher priority of pedestrians and cyclists in the urban environment within a fundamental design objective to create self-regulating streets that are inherently convenient and safe for use by all vulnerable road users. The design of the roads for the development is consistent with DMURS.



3. Receiving Environment

This section provides a brief outline of the existing transport infrastructure in the vicinity of the Old Connaught LAP and the Phase A1 lands.

3.1 Site Location

Old Connaught is located in South County Dublin, approximately 20km south of Dublin City Centre, 2.5km southwest of Shankill Village and 2km from Bray. The site falls within the planning jurisdiction of Dun Laoghaire Rathdown County Council. Figure 3-1 shows the Old Connaught lands within the wider context and existing transport infrastructure.

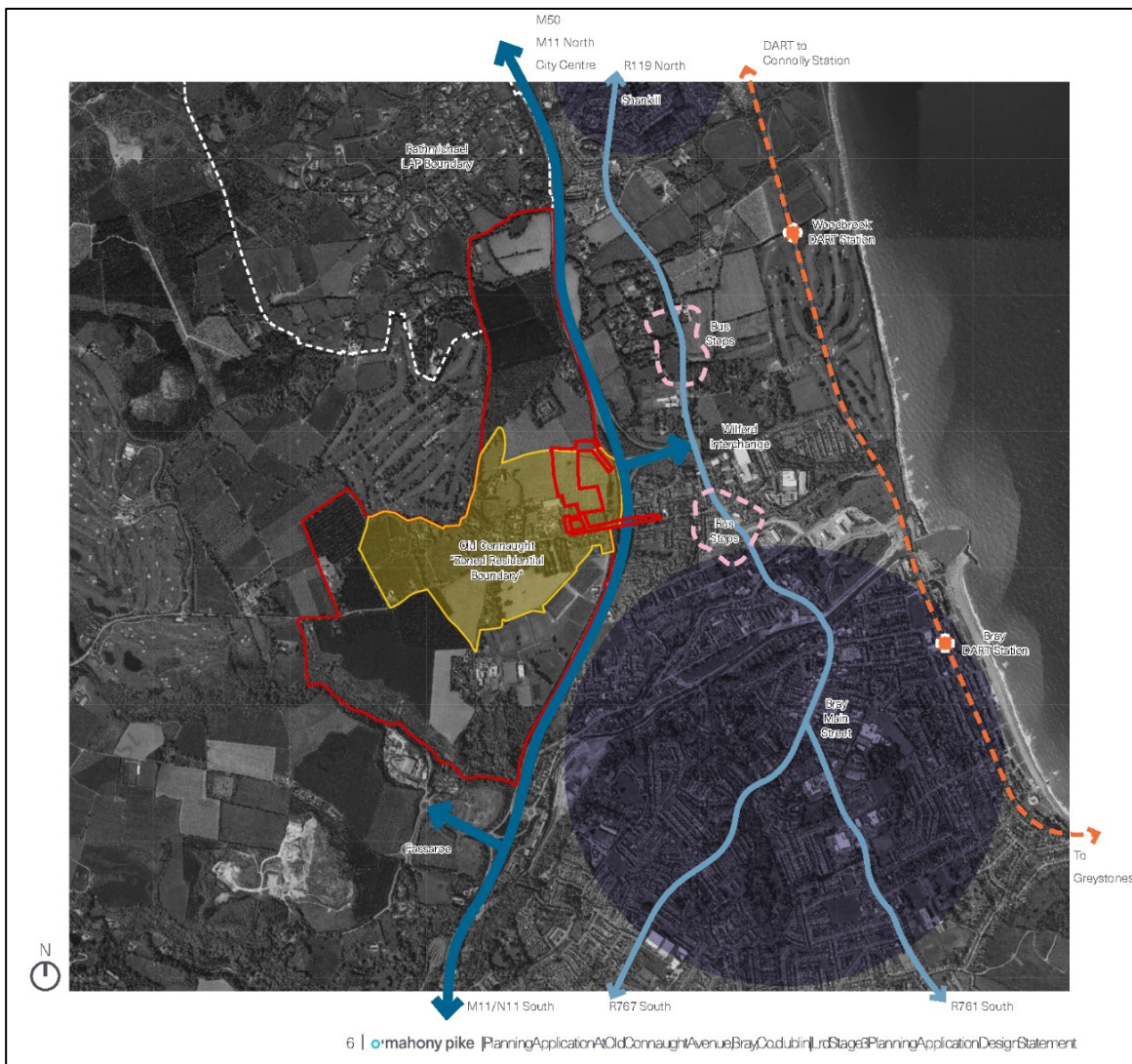


Figure 3-1 - Site location and Wider Context

It is important to note that the majority of the lands with the Old Connaught LAP including the proposed application site is located on greenfield lands. The development of the lands on a phased basis with supporting transport infrastructure will significantly improve transport infrastructure, in particular active travel provision within the Old

Connaught area. This will greatly be enhancing opportunities for walking and cycling and improving permeability within the area for both future and existing residents.

3.2 Active Travel Network

Pedestrian facilities along Old Connaught Avenue—where the proposed development will integrate with the existing network—are generally of a good standard. Footpaths of adequate width are provided on both sides of the carriageway, supporting safe and comfortable pedestrian movement. However, pedestrian infrastructure elsewhere in the vicinity is limited. Roads such as Ferndale Road, Thornhill Road, and Ballyman Road provide little or no pedestrian facilities, which is typical of more rural road environments.

Old Connaught Avenue connects eastwards to the R761 Dublin Road. The pedestrian environment along Dublin Road is well established and characteristic of a mature urban setting, offering continuous high-quality footpaths and safe crossing facilities. This corridor provides strong pedestrian connections south towards Bray and north towards Shankill village. Both Bray and Shankill urban centres contain a wide range of amenities and services that are easily accessible on foot.

There are currently no segregated cycling facilities on the local road network surrounding the site, including Old Connaught Avenue, Ferndale Road, Thornhill Road, and Ballyman Road. In contrast, the Dublin Road corridor features good-quality segregated cycle infrastructure, providing connections south to Bray and north towards Dublin City Centre via several intermediate urban centres. An overview of the existing active travel facilities surrounding the site can be seen in Figure 3-2.



Figure 3-2 – Existing Local Active Travel Network

3.3 Public Transport Network

The following sections provides an overview of public transport infrastructure and services within the existing vicinity of the Old Connaught.

3.3.1 Bus Services

Old Connaught settlement is not currently served by direct bus services. The R761, Dublin Road corridor, located approximately 700m eastward from proposed access point onto Old Connaught Avenue is a major bus corridor providing high frequency services and connections between Bray and Dublin City Centre as well as connections toward Dun Laoghaire. The location of bus stops is shown in Figure 3-3 below.

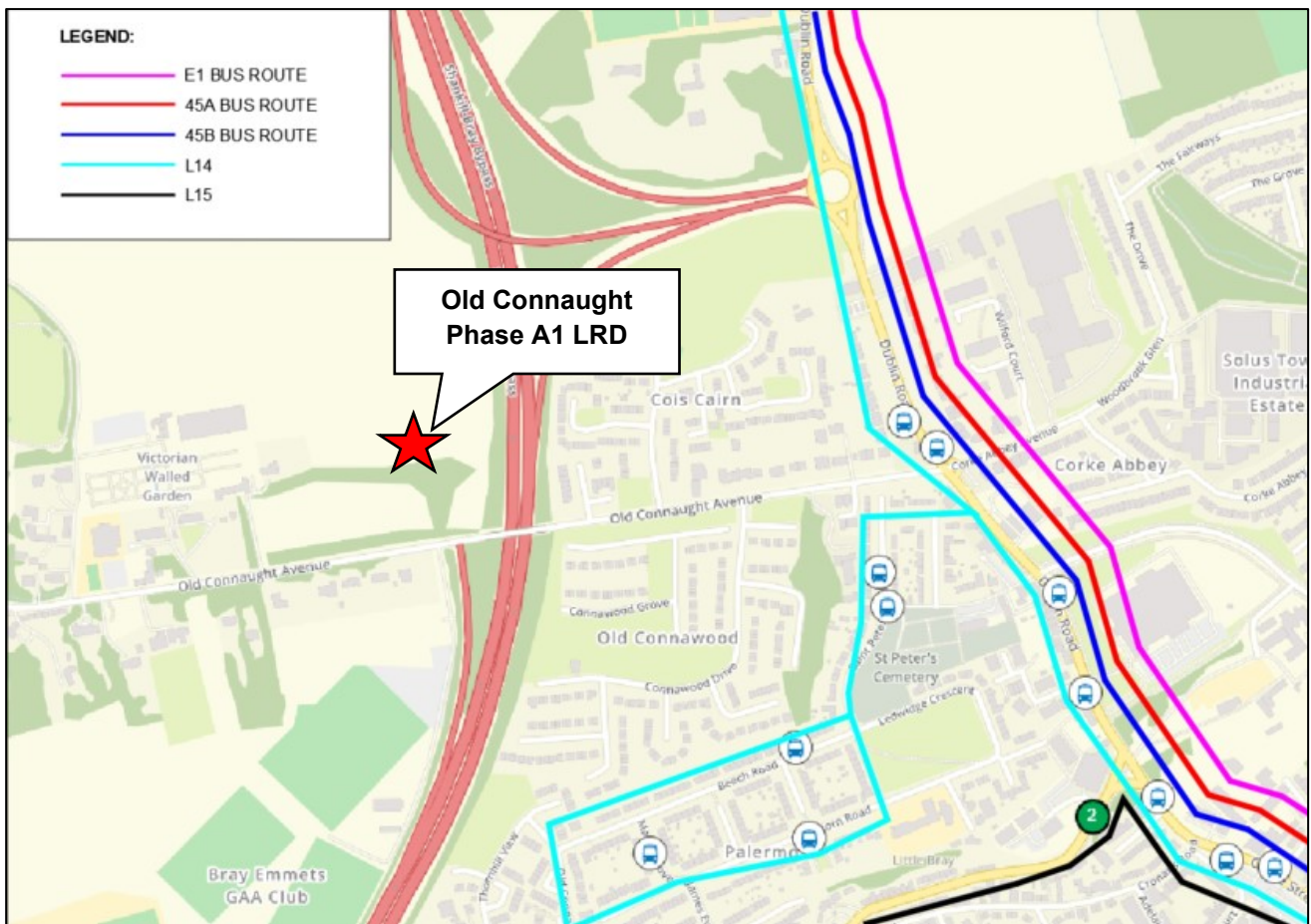


Figure 3-3 - Surrounding Bus Stops adjacent the site

Table 3-1 - Bus Routes & Frequencies

Route	Area Served	Frequency	Bus Stop Location
45A	Kilmacanogue - Dún Laoghaire	Weekday: Am Peak (7 to 10 am): Every 20 mins Off peak: Every 20 mins PM Peak (4 to 7pm): Every 20 mins Saturday: Every 20 mins Sunday: Every 30 mins	Old Connaught Avenue
45B	Kilmacanogue - Dún Laoghaire (via Shanganagh Cliffs)	Weekday: Am Peak (7 to 10 am): One Service Off peak: No service PM Peak (4 to 7pm): No service Saturday: One service Sunday: One service	Old Connaught Avenue
E1	Temple Road - Newcastle Road (Sea Road)	Weekday: Am Peak (7 to 10 am): Every 10 mins Off peak: Every 15 mins PM Peak (4 to 7pm): Every 10 mins Saturday: Every 15 mins Sunday: Every 30 mins	Old Connaught Avenue
L14	Temple Road - Bray Rail Station	Weekday: Am Peak (7 to 10 am): Every 30 mins Off peak: Every 30 mins PM Peak (4 to 7pm): Every 30 mins Saturday: Every 30 mins Sunday: Every 35 mins	Old Connaught Avenue

3.3.2 Rail Services

In terms of heavy rail, the closest stations are Shankill circa 2.5km to the north and Bray also circa 2.5km to the south. These stations are served by DART and Commuter Rail services. These stations facilitate services that allow for good connection to other onward destination both north and south, as illustrated in the Figure 3-4 below.

Woodbrook DART station, located within the Woodbrook Local Area Plan lands, provides a new rail-based transport for the new settlement. The station opened in 2025 and is approximately 2.6 km from the proposed development site. It offers direct rail connections along the coastal corridor, linking Malahide in the north with Howth, Bray, and Greystones to the south.

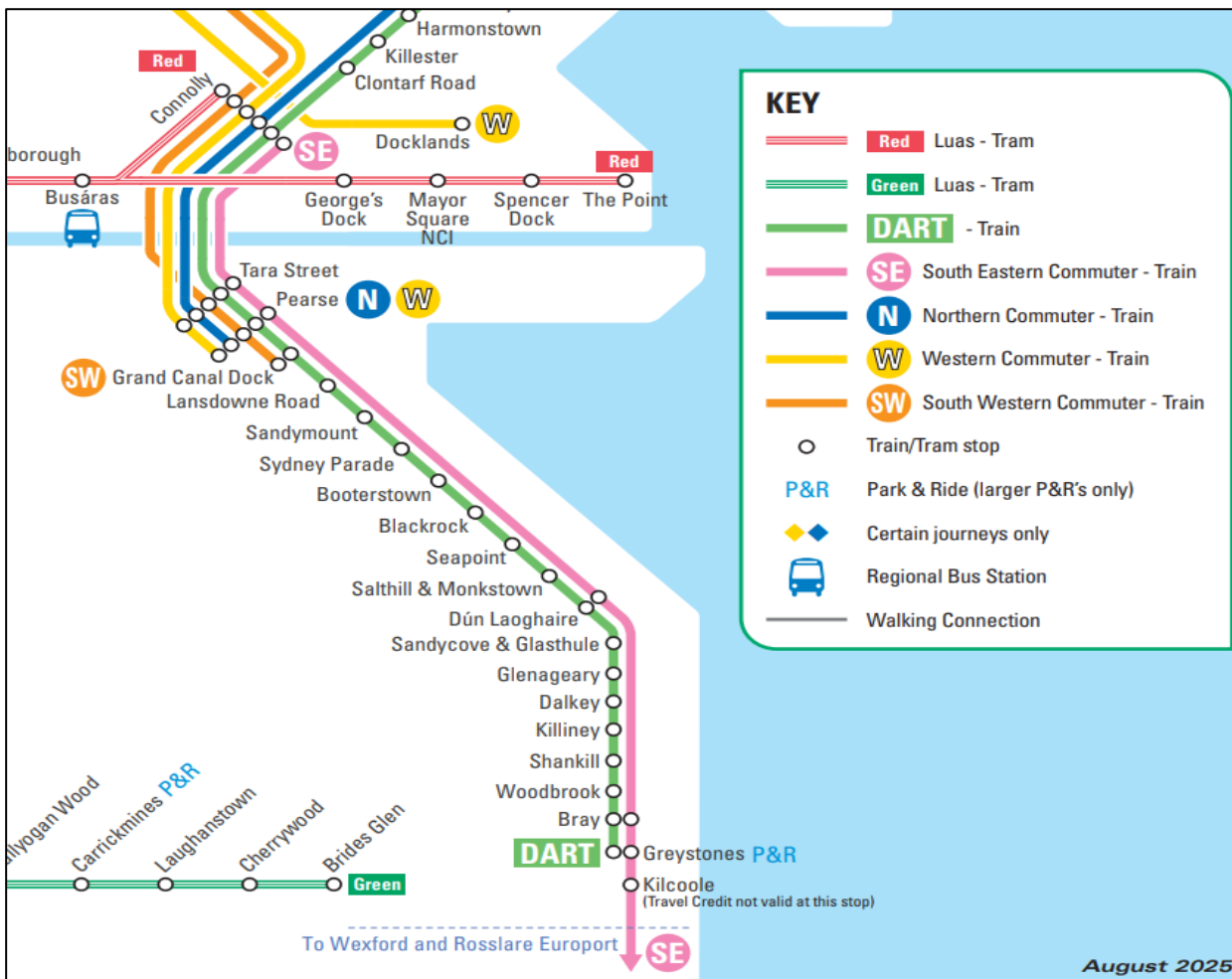


Figure 3-4 - Rail Routes

3.4 Road Network

As shown in Figure 3-5, there is a well development road network in the vicinity of the site, including National, Regional and local roads that provide connections to and from Old Connaught area both for local access and more strategic and regional road base traffic movements.

- National Road – N11/ M11
- Regional Roads – Dublin Road
- Local Roads – Old Connaught Avenue. Thornhill Road, Ferndale Road, Ballyman Road

The proposed development will obtain access from Old Connaught Avenue. To the east of the site along Old Connaught Avenue, the road connects to the Ferndale Road / Thornhill Road junction, followed further south by the Thornhill Road / Ballyman Road junction. To the east along Old Connaught Avenue, the route meets the M11 slip road junction, before reaching the major signalised junction with the R761 Dublin Road and Cork Abbey Avenue. North of this junction lies Wilford Roundabout, which provides strategic access to the M50 motorway to the north and the M11 corridor to the south, forming an important link to the wider regional road network. The roads and key junctions are shown in Figure 3-5.

Old Connaught Avenue, its junction onto Dublin Road and Dublin Road link at the junction to Old Connaught Avenue south to Bray and north to Wilford Roundabout junction experience congestion and delay during peak AM and PM hours.

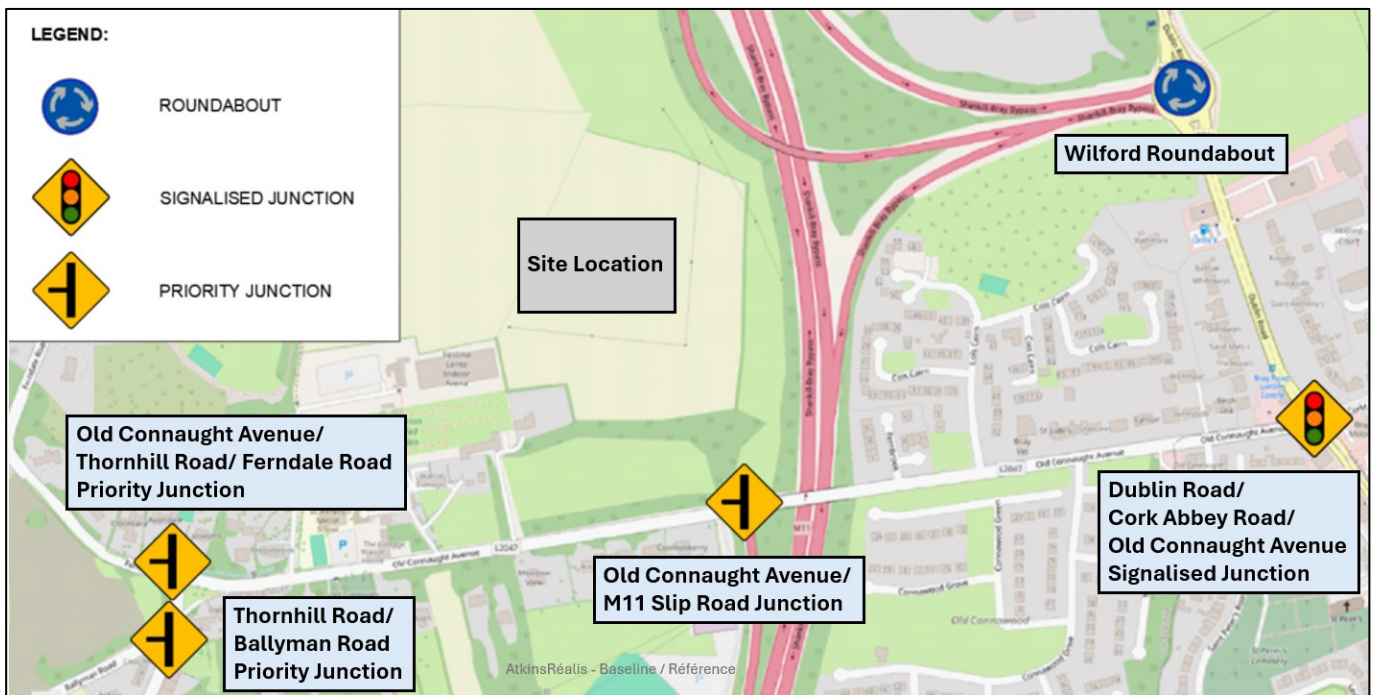


Figure 3-5 – Key Roads & Junctions Proximate to the Site

4. Future Transport Context

This section provides detail of future transport proposal, infrastructure and policies that will impact on how future residents and visitors to the development will be able to access to site by a range of multi-modal options.

4.1 Bus Connects

Bus Connects is the further development of the bus services as set out in the GDA Transport Strategy. This project is currently being progressed by the NTA to implement both network and bus corridor improvements to overhaul the current bus system in Dublin. The BusConnects network for Bray-Enniskerry-Shankhill can be seen in Figure 4-1. The proposed routes will service Old Connaught:

- Route X1 - Kilcoole – Greystones – City Centre (Hawkins Street)

This commuter route, operated by Dublin Bus, runs Kilcoole to Hawkins Street in city centre via Greystones. Key stops include Greystones Station, Bray Business Park, Southern Cross Road, Stillorgan Park, Donnybrook Depot, Hawkins Street. This route will be serviced every 20-30 minutes on weekdays, and 30-minute frequency on both Saturday and Sunday.

- Route X2 – Newcastle - Kilcoole - Greystones - Brides Glen - City Centre (Hawkins Street)

This commuter route, operated by Dublin Bus, runs Newcastle to Hawkins Street in city centre via Greystones. The route allows for a switch at Cherrywood and/or Brides Glen for access to Luas Green Line. Key stops include Greystones Station, Bray Business Park, Southern Cross Road, Brides Glen Luas, Stillorgan Park, Donnybrook Depot, Hawkins Street. It will be serviced every 45 minutes on weekdays, and 45-minute frequency on both Saturday and Sunday.

- Route E1- Northwood - City Centre - Bray Main St. – Ballywaltrim

This commuter route, operated by Dublin Bus, runs Northwood to Ballywaltrim via the city centre. Key stops include Bray Main Street, Woodbrook, Shankill, Cherrywood, Loughlinstown, Cabinteely, Mount Merrion, UCD, Donnybrook, St. Stephens Green, O'Connell Street, Broadstone, DCU, Ballymun, Ikea. This route will be serviced every 10 minutes on weekdays, with Saturday's frequency expected to be 13 minutes and Sunday's frequency expected to be 15 minutes.

- Route L11 – Kilmacanogue - Bray - Dún Laoghaire

This commuter route, operated by Dublin Bus, runs from Kilmacanogue to Dún Laoghaire via Bray. Key stops include Bray Main Street, Woodbrook, Shankill, Sallynoggin and Dun Laoghaire. The route will have a service frequency of 20-30 mins on the weekdays and 30-minute frequency on both Saturday and Sunday.



Figure 4-1 - Proposed BusConnects Network

4.2 Cycle Network

The Greater Dublin Area Cycle Network Plan proposes to expand the urban cycle network to over 1,485 kilometres in length and will provide over 1,300 kilometres of new connections between towns in the rural areas of the GDA. The network is intended to provide a quality of service sufficient to attract new cyclists, as well as catering for the increasing numbers of existing cyclists. The proposed routes of relevance to the proposed development are as follows:

- **Primary Route 12 / 12A** – Bray to City Centre. This route extends from Bray to the City Centre via Woodbrook and traverses the R119, the R837, the N11 and the R138.
- **Greenway Route 14/ W11/ N5** – Wicklow town to Dublin City Centre. This route forms part of the Southern East Coast Trail. In vicinity of the proposed development the route will extend from Bray to Dún Laoghaire onwards.

Figure 4-2 is an extract from Sheet N20 of the Cycle Network Plan highlighting the proposed cycling facilities directly adjacent the proposed development.

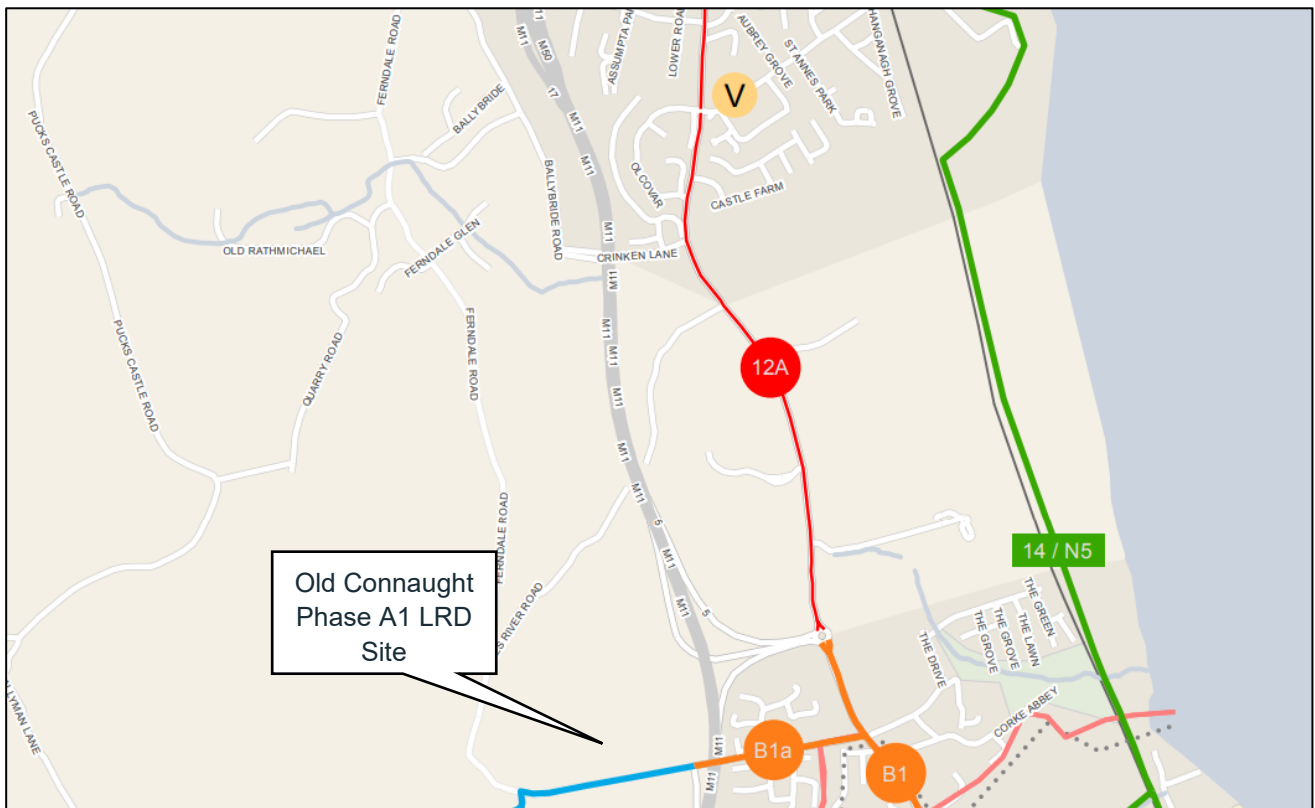


Figure 4-2 - Extract from The National Cycle Plan

Provision of the above routes along with the wider network of routes in the area will greatly assist in encouraging cycling for all trip purposes. Route 12A, upgraded from current cycling provisions along Dublin Road, is currently planned to be delivered as an integral element of Bus Connects route E1.

5. Proposed Development

The proposed development comprises 271no. dwellings in a mix of houses and duplex / apartment units, including 103no. 2 to 3-storey houses (22no. 4-bedroom, 68no. 3-bedroom and 13no. 2-bedroom), 162no. apartments (113no. 2-bedroom and 49no. 1-bedroom) across 4no. blocks ranging from 1-5 storeys in building height and 6no. 3-bedroom duplex units; 1no. creche (c. 574 sqm) at ground floor of Apartment Block 3; and all associated and ancillary site development and infrastructural works including on site attenuation, hard and soft landscaping and boundary treatment works, including: public open space; communal open space; components of the regional attenuation pond; public lighting; surface car parking spaces; bicycle parking spaces/stores for houses and duplex / apartment units; 5no. ESB substations; bin stores; vehicular access via existing Old Connaught Avenue and a proposed new primary north-south street into the eastern portion of the Central Character Area. The proposed development also includes the construction of a new pumping station, associated single storey building, twin rising mains extending circa 400m along Old Connaught Avenue under the M11 connecting to the existing gravity foul network on Old Connaught Avenue 125m east of the M11 bridge and associated storage, together with all ancillary site development and reinstatement works required to facilitate these elements. The site context is shown in Figure 5-1.



Figure 5-1 – Site Context

5.1 Old Connaught LAP Vision Realised

The proposed development has been carefully designed in accordance with the overall vision and objectives of the Old Connaught Local Area Plan (LAP). The Old Connaught LAP aims to create a vibrant new residential community supported by a wide range of local services, amenities, and sustainable transport options. The masterplan embraces the principles of the *10-minute neighbourhood*, ensuring that residents can conveniently meet most of their daily needs within a short walk or cycle from their homes.

The concept of a *10-minute neighbourhood* reflects the broader principles of a sustainable urban village. It seeks to ensure that essential neighbourhood support facilities—such as shops, schools, open spaces, public transport, and community services—are accessible within approximately ten minutes by active travel. It is acknowledged, however, that not every household will have all desired facilities located within this timeframe. In this context, the 10-minute neighbourhood model includes ready access to high-quality public transport, enabling residents to reach employment, higher-order services, and destinations located beyond the immediate community in a sustainable manner.

In line with the LAP, the mixed-use nature of the proposed development ensures a balanced distribution of facilities within easy walking distance of the wider masterplan area. The new neighbourhood centre positioned along Old Connaught Avenue, together with lands safeguarded for future schools, is designed to meet the day-to-day needs of residents. This approach reduces the requirement for private car trips and promotes active travel as the default mode for short journeys.

The masterplan also integrates key elements of future strategic transport infrastructure. Lands have been reserved to facilitate the planned LUAS extension through the Old Connaught area (subject to delivery by relevant agencies and confirmation of programme). This corridor will ultimately give future residents direct access to a high-capacity, low-carbon transport mode. In the interim, the BusConnects corridor along the Dublin Road and proposed bus services through Old Connaught will provide strong public transport connectivity, supporting the “Avoid–Shift–Improve” transport principles embedded in the LAP. Phase A1 of the development helps to deliver and safeguard these connections, ensuring long-term alignment with regional mobility objectives.

A comprehensive active travel network is incorporated throughout the development. This includes high-quality walking and cycling routes that provide safe, legible, and convenient links to key destinations both within and beyond the site. Dedicated cycle lanes, shared paths, raised crossings, horizontal deflection measures, signage, and additional traffic-calming infrastructure collectively enhance safety and prioritise active modes within the internal road hierarchy. These measures help to create a pedestrian-friendly environment that encourages everyday walking and cycling.

Soft landscaping and high-quality public realm treatments further contribute to a pleasant and inviting movement network. Well-, -designed planting, pocket parks, and green corridors create attractive and safe routes throughout the neighbourhood, supporting both functional trips and leisurely movement while enhancing the overall visual character of the community.

Figure 5-2 and Figure 5-3 below illustrate the range of internal and external facilities accessible within cycling and walking distance of the proposed development (to be supplemented with isochrone mapping).

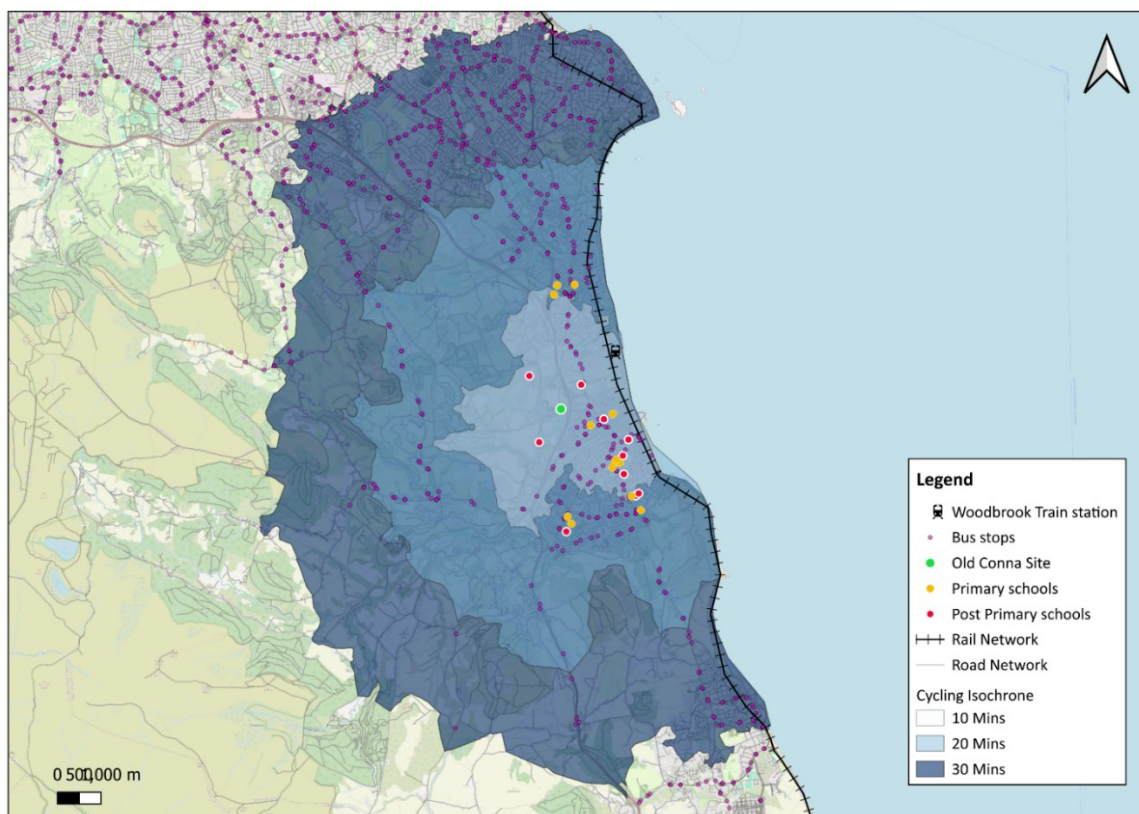


Figure 5-2 – Cycling Isochrones

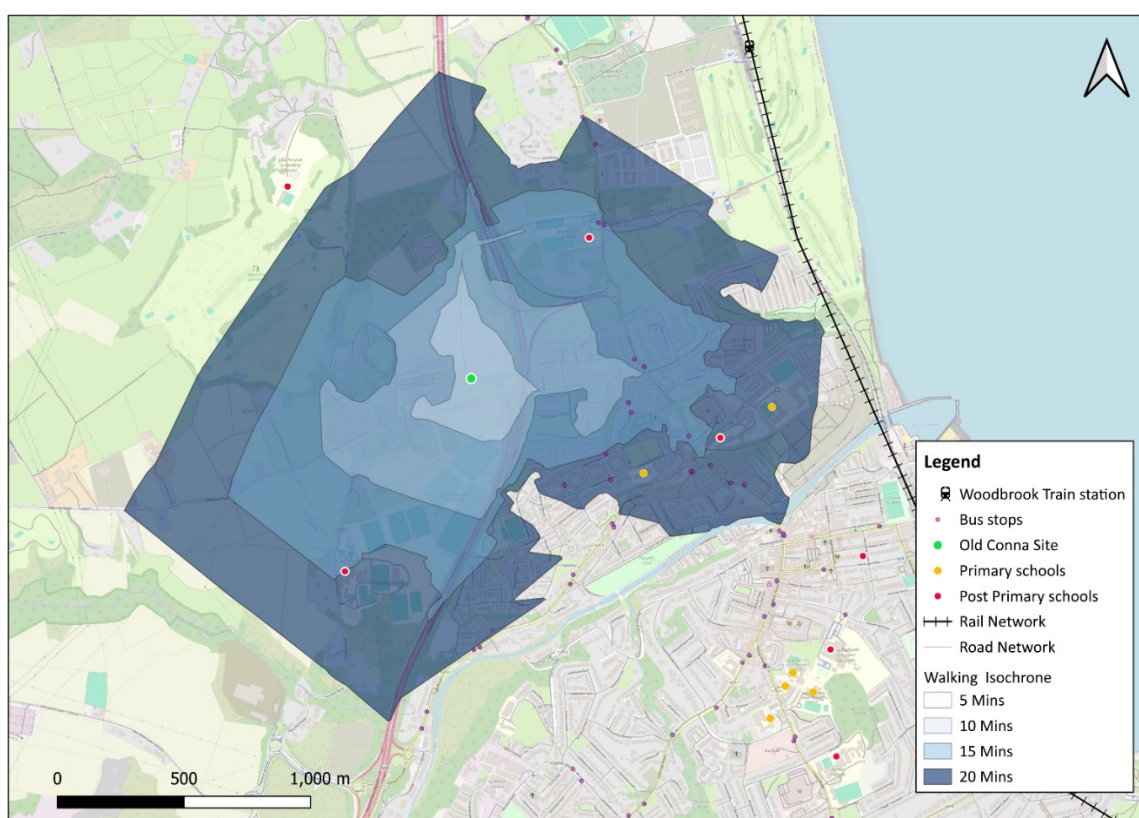


Figure 5-3 – Walking Isochrones

The proposed development of Phase A1 consist of a total of 271 residential units. A detailed breakdown of the residential units is summarised in the Table 5-1 below.

Table 5-1 - Schedule of Accommodation for Phase A1

Type	Units in Eastern Side	Units in Central Side	Total
Houses	2-Bed: 1 unit	2-Bed: 12 units	2-Bed: 13 units
	3-Bed: 18 units	3-Bed: 50 units	3-Bed: 68 units
	4-Bed: 4 units	4-Bed: 18 units	4-Bed: 22 units
	Total: 23 units	Total: 80 units	Total: 103 units
Apartments/Duplexes	1-Bed: 28 units	1-Bed: 17 units	1-Bed: 45 units
	2-Bed: 61 units	2-Bed: 56 units	2-Bed: 117 units
	2-Bed Duplex: 6 units	Duplex: None	2-BedDuplex: 6 units
	Total: 95 units	Total: 73 units	Total: 168 units
Total Units			271 units

For **Phase A1**, the LAP identifies a number of key transport infrastructure elements that must be provided to support early development. They are:

1. **North–South (NS) Link Road**, including future-proofed connections to the north and to a future N11 bridge.
2. **East–West (EW) Link Road**, with future-proofed connections towards Ferndale Road.
3. **Active Travel Network**, including segregated cycling facilities along both NS and EW link roads, in addition to urban greenways and connections that integrate with the wider LAP network.
4. **Luas Reservation Corridor**, safeguarding long-term public transport infrastructure in accordance with LAP objectives.

The above four transport infrastructure elements have been provided as part of this application. These elements and general arrangement and site layout are shown in Figure 5 -4.

The above infrastructure and other key transport and engineer aspects of the proposed development are detail in this section.



Figure 5 -4 - Site Layout and General Arrangement

5.2 Roads and Street Design Approach

The road and street design has been developed with regards to the requirements of the Old Connaught LAP and cognisant of the full future build out of the masterplan lands. Some of the information presented in this report accordingly refers to the wider 'masterplan' lands and is not only confined to the Phase A1 proposals.

As part of the planning design stage of the project, the road alignment design has been developed, in general, based on the Old Conan LAP and in accordance with DMURS guidance. Figure 5-5 shows the street and transport requirements for the central area. Key street elements include:

- **North South** Link Street
- **EastWest** link Street
- Network of local streets servicing the residential area

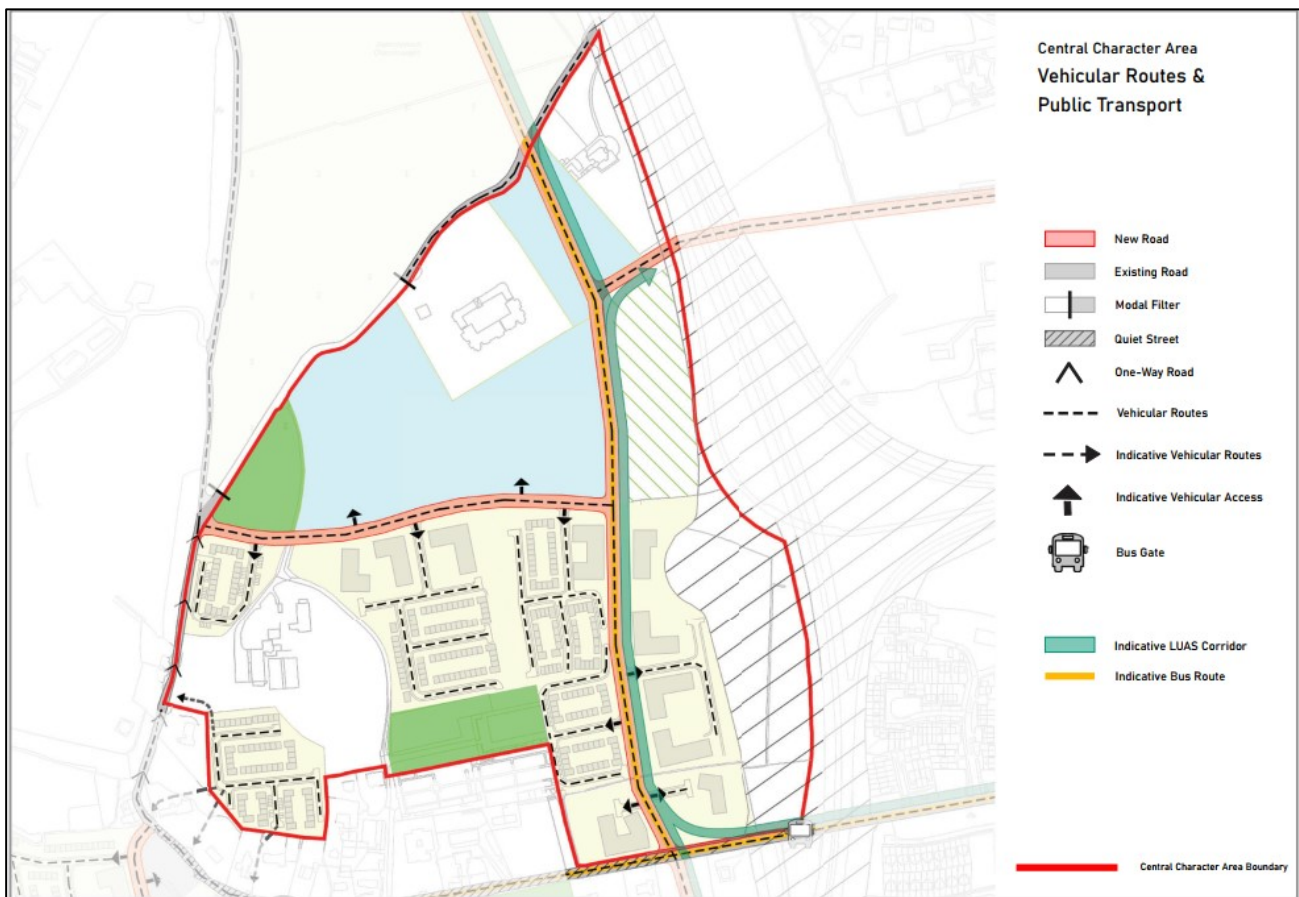


Figure 5-5 - Old Connaught LAP - Transport Requirements

Key Transport objectives in the LAP relating to roads and streets are detailed in Table 5-2 below.

Table 5-2 - LAP Road & Street Objectives

Element	LAP Provisions	Provisions in Standard Guidelines	Conclusion
Street Typology	Objective TM19 – Vehicular Transport Network: It is an Objective to provide a plan-led approach to the delivery of a connected vehicular transport network across the Plan area. Subject to detailed design, the intended routing, function and purpose of the vehicular transport network (as illustrated in Figure 6.14) shall, where practicable, be achieved and shall be subject to compliance with TII Publications where applicable. Objective TM20 – Roads and Streets: It is an Objective, in conjunction and co-operation with the relevant transport bodies and authorities to secure improvements to the local road network at Old Connaught whilst ensuring that the priority is still sustainable transport modes, subject to compliance with TII, NTA and other relevant publications where applicable. Objective TM21 – Road Schemes: It is an Objective that road schemes will be designed, as appropriate, to provide safe and appropriate arrangements to facilitate walking, cycling and public transport provision, including the delivery of on-line walking and cycling facilities and where applicable on-line facilities where this is considered to be a more attractive solution for these modes. As per Table 4.5 of Old Connaught LAP: A new North-South road is proposed which will connect Ballybride Road/Crinken Road with Old Connaught Avenue (referred as N-S road). A New link road connecting Ferndale Road and the new north-south link road is proposed (referred as E-W road) No specific Street Typology is defined for both roads in LAP.	According to the Core Strategy Map within the DLRCC Development Plan 2022–2028, the Old Connaught development is classified as a “New Residential Community”. As per Figure 3.5 (Context and Place Values of the Street), for a new residential community, the “Neighbourhood” context of street is applicable. Therefore, based on the street hierarchy defined in Figure 3.3 (Function and Importance of Movement) of DMURS, Link Street typology is applicable for connecting neighbourhoods to Arterial Streets (major routes that connect key centres/nodes).	Both the north–south and east–west roads in the development were designed in accordance with Link Street typology, which balances place functions. These streets would facilitate vehicular and public transport movement pedestrian and active travel modes through measures, high-quality public realm design at crossing points. The streets within the residential development would be developed as per the Local Street and Home Street Typology. The design of all the streets would encourage interaction among users and support a vibrant streetscape, with features such footpaths, cycle lanes, landscaping, and seating areas. This approach ensures that streets not only serve as transport corridors but also contribute meaningfully to the social and environmental quality of the urban environment.

Speed	Objective TM24 – Traffic Calming: It is an Objective to create multi-functional streets, where appropriate, that balance ‘movement’ and ‘place’ and safety for all users within a traffic calmed environment. Objective TM25 – Speed Limits of the LAP: It is an objective to support a low-speed environment, where appropriate, across the Draft Plan area. The road layout of new residential, commercial, and/or mixed-use developments shall be designed in accordance with DMURS which seeks to create self-enforcing 30km/h zones. As per Section 6.6.5.1 – Speed Limits of the LAP, the reduction of speed limits is a key traffic management measure to promote active travel movements.	As per Table 7.6 of Chapter 7 of the Guidelines for Setting and Managing Speed Limits in Ireland⁴, for Link Streets in “Neighbourhood” areas, 30 km/h is the preferred speed. As per Table 4.1 of DMURS, for Link Streets, a speed limit of 30 km/h is suitable for providing a traffic-calmed environment and prioritising the safety of active travel users.	To provide a traffic-calming environment and promote the safety of active travel users, a speed limit of 30 km/h is proposed for both the N–S Road and the E–W Road.
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⁴ <https://www.roadguidelines.ie/speed-limits/speed-limit-guidelines/>



5.3 Compliance with DMURS Principles

DMURS is the appropriate design guidance to be applied to urban environments such as cities, towns villages and urban developments such as residential estates.

“The principles, approaches and standards set out in the Manual apply to the design of all urban roads and streets (that is streets and roads with a speed limit of 60km/h or less) ...”

The development has been designed in compliance with DMURS guidance and principles. The street layouts have been developed to deliver a high place function wherein the streets and public spaces form part of the social fabric of the development. Achievement of this function will be greatly facilitated by developing a self-regulating street environment wherein vehicular movement function should be limited to, as much as is practicable and a maximum design speed of 30kph. The DMURS statement will show how key elements of the development were developed to create a safe environment that reduces vehicular impacts and encourages walking and cycling. This will include detail about:

- Horizontal and vertical alignment to achieve a 20km/h - 30km/h design speed;
- Carriageway widths in line with DMURS requirement for street type;
- Constrained junction radii in line with DMURS requirement;
- Raised table entry treatments at access junctions; and
- Provision of raised tables at internal Junctions.

The above DMURS approach together with a highly permeable network of streets will help maximise and facilitate active travel as the main mode for short to medium trips for future residents and visitors to the masterplan lands. A full DMURS Statement will be submitted as part of the LRD Stage 3 submission detailed compliance with DMURS principles.

5.4 Street Network

The proposed street network for the proposed development consists of three types, namely

- Link Street
- Local Street
- Home Street

DMURS recommends that the Street Design should be reflective of the road hierarchy and movement and functionality of the street network. One of the most successful ways of managing this is by designing self-regulating streets that balance the functional needs of different users, enhance the sense of place and manage speed in a manner that does not rely on excessive regulation controls of physically intrusive measures *for enforcement* (DMURS 4.1.2).

The street network and hierarchy are shown in Figure 5-6.





Figure 5-6 - Street Typology

5.5 Link Street Characteristics and Typical Cross Sections

There are two link streets within the central development area including North South Link Street and East West Link Street. As envisioned in the Old Connaught LAP these link streets provide the main movement route for vehicles within the site with connections to the north to Rathmichael, northeast to Shankill Woodbrook via future bridge over the N11 / M11, south to Old Connaught Avenue and west towards Ferndale Road.

5.5.1 The North South Link Street

The design parameters of the North South link street are:

- 6.5m carriageway
- Design Speed 30kph
- Pedestrian facilities fully segregated footpaths (minimum width 2m)
- Cycle facilities – fully segregated cycle track 2m width on both sides of the street
- Limited on street parking – where provided via parallel spaces (2.5 x 6m)
- Junctions – intermittent priority junctions (3 on western side and one on eastern side) with active travel provision prioritised across the junction via raised entry and CDM prioritisation

The typical north south link street cross section details in Figure 5-7 below.

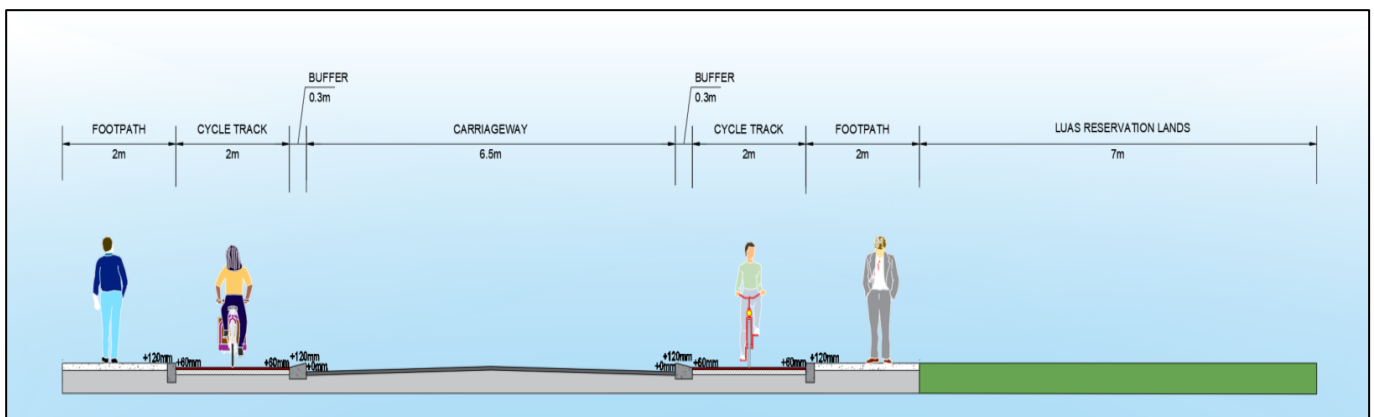


Figure 5-7 - Overall Cross-Section of N-S link Road

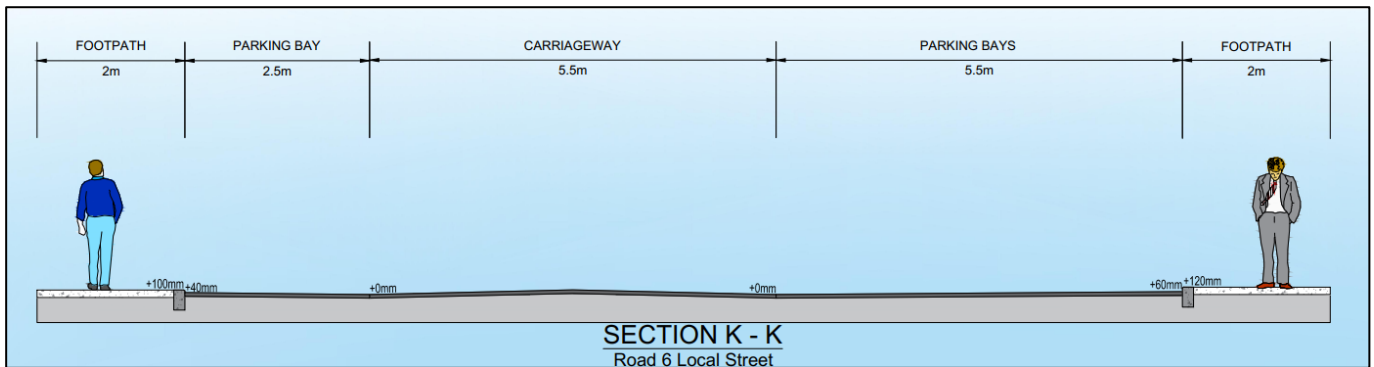


Figure 5-9 - Local Street Typical Cross Section

5.5.4 Homezones Street

The housing cells located to the western side of the north-south link street are design to be low speed low traffic environment suitable as homezones as outlined in DMURS guidance.

The design parameters for the local street area

- 4.8 m carriageway (with 1.5m pedestrian comfort strip in places)
- Design Speed 20-30kph
- Pedestrian facilities shared on street provision in low-speed low volume environment
- Cycle facilities – on street / shared street mixed traffic provision – low speed low volume environment in line with section 4.2.9.4 of CDM
- Limited on street parking – where provided via parallel spaces 2.5 x 6m (car parking predominantly in-curtilage off street)
- Junctions –priority junctions with active travel provision prioritised across the junction via raised entry treatments

The typical homezones cross section is detailed in Figure 5-10 below.

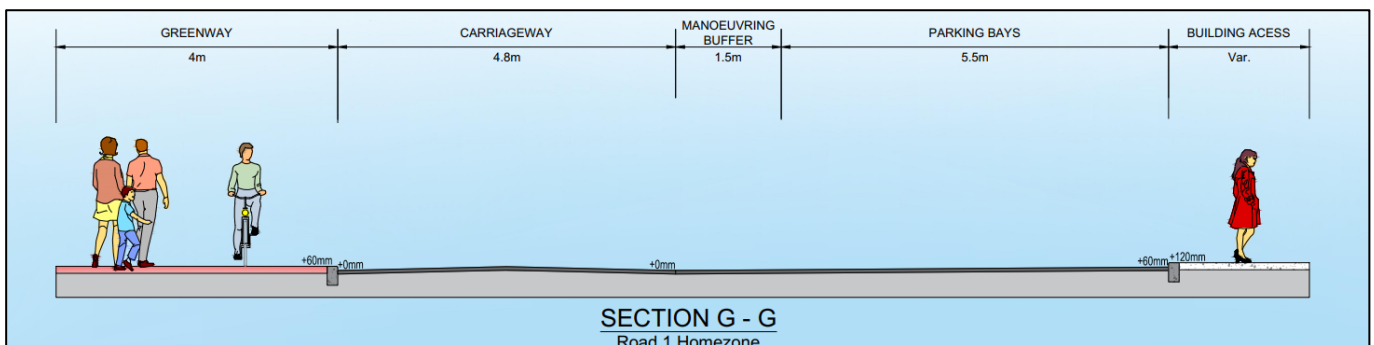


Figure 5-10 - Homezones Typical Cross Section

Figure 5-10 shows the conditions of a homezones street with varying carriageway width and landscaping bleeding into the design to create horizontal deflection as speed reduction measures.



Figure 5-11 - Homezones landscaping detail

5.6 Junction Design

There are a number of different junction types located within the phase A1 lands including signalised junction(s) and priority junctions as shown in Figure 5-12.



Figure 5-12 - Junction type and location

Further details of the junction are detailed below.

5.6.1 North South / East West Signalised Junction

At the northern end of the Phase A1 lands where north-south link street and east-west link street meet we are proposing a signalised junction. The junction general arrangement is shown in Figure 5-13. We are proposing a signal controlled junction in order to cater for future demand associated with the full buildout of the masterplan lands and future objectives to introduce alter traffic flows in the area via the introduction of a bus gate on Old Connaught Avenue and reassignment of traffic in the old Connaught area including the introduction of a new multi-modal bridge over the N11/M11 providing revised connections to Dublin Road at Woodbrook College.

The junction was designed as per TL505 of the Cycle Design Manual as a protected T junction arrangement as shown in Figure 5-14. This junction arrangement provides a safe, legible and coherent design for all users, in particular active travel users. To the north of the junction along the north-south link street cycle provision switches to two way cycle track on the western side to provide improved access to the future school site and active travel park and to tie into the provision of active travel network via the N11/M11 bridge being design by ARUP as part of the wider masterplan lands.

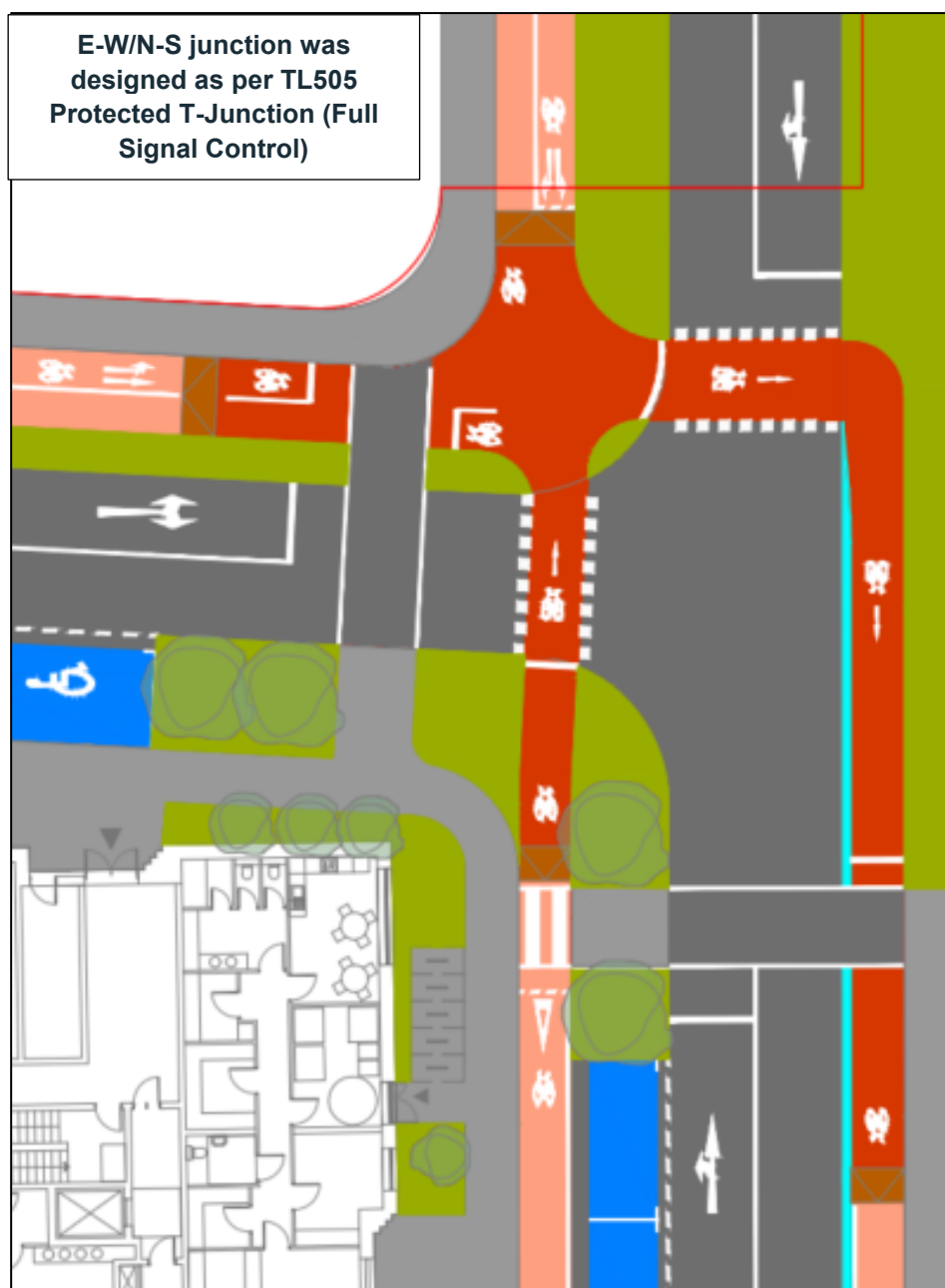


Figure 5-13 - North-south / East West junction arrangements

5.6.2 Old Connaught Avenue Priority Junction

The north south link street connects to Old Connaught Avenue via a priority-controlled junction as shown in Figure 5-14. The road and junction arrangement takes cognisance of the DLRCC lands to the east and west of the road. The design is in accordance with CDM TL302 general arrangement for transition of segregated cycle facilities to mixed traffic environment as it approached Old Connaught Avenue. Old Connaught Avenue will retain priority over the north-south link road for the phase A1 development. Future development of the Old Connaught lands and introduction of bus gate on Old Connaught avenue may require adjustments to the junction arrangement to be undertaken.

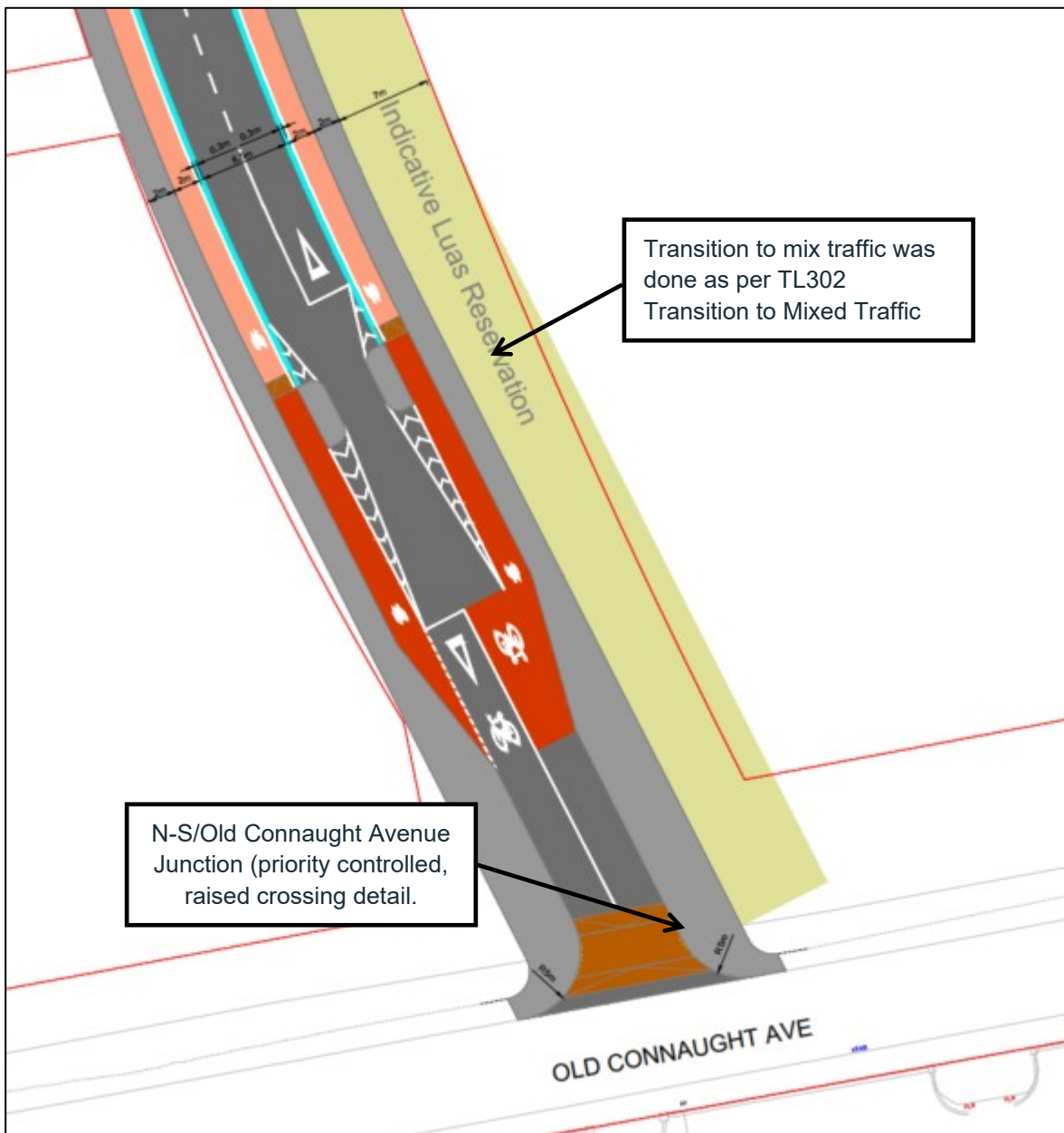


Figure 5-14 - Old Connaught Avenue priority junction layout

5.6.3 Priority Junctions

As noted above there are a number of priority junction on the north-south link street (six – 5 on the western side and one on the east) and one junction on east-west link street (southern side)

Due to proposed parking spaces on the western side of the North-south link street, all five junctions on the western side of North-South link street are designed in accordance with **CDM TL401 Standard Cycle Track Crossing Side road with full set back** while the other junctions (on eastern side of north-south link street and southern side of East-West link street) are designed in accordance with **TL403 standard cycle track crossing side road with priority no set back**. The latter design was developed to take account of potential future LUAS alignment. Both junction types are shown in Figure 5-15 below.

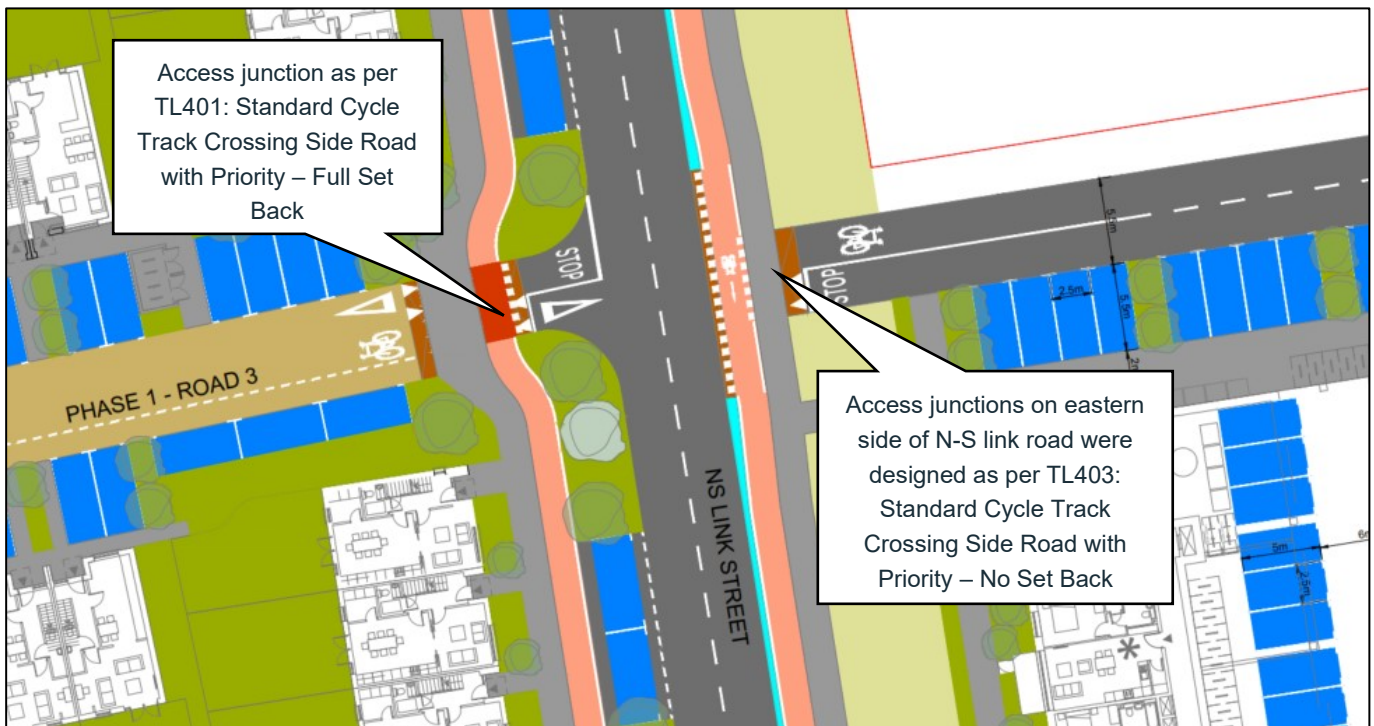


Figure 5-15 - Priority Junction Designs

5.7 Pedestrian and Cycle Facilities

The delivery of pedestrian and cycling infrastructure within the site across the masterplan and onward external connections is a central facet of this development aligning with Old Connaught LAP strategy. Figure 5-16 shows the LAP preferred central area active travel network. It includes active travel routes along link streets (as detailed in Section 4.4 above) as well as urban greenway, active travel network and permeability links.

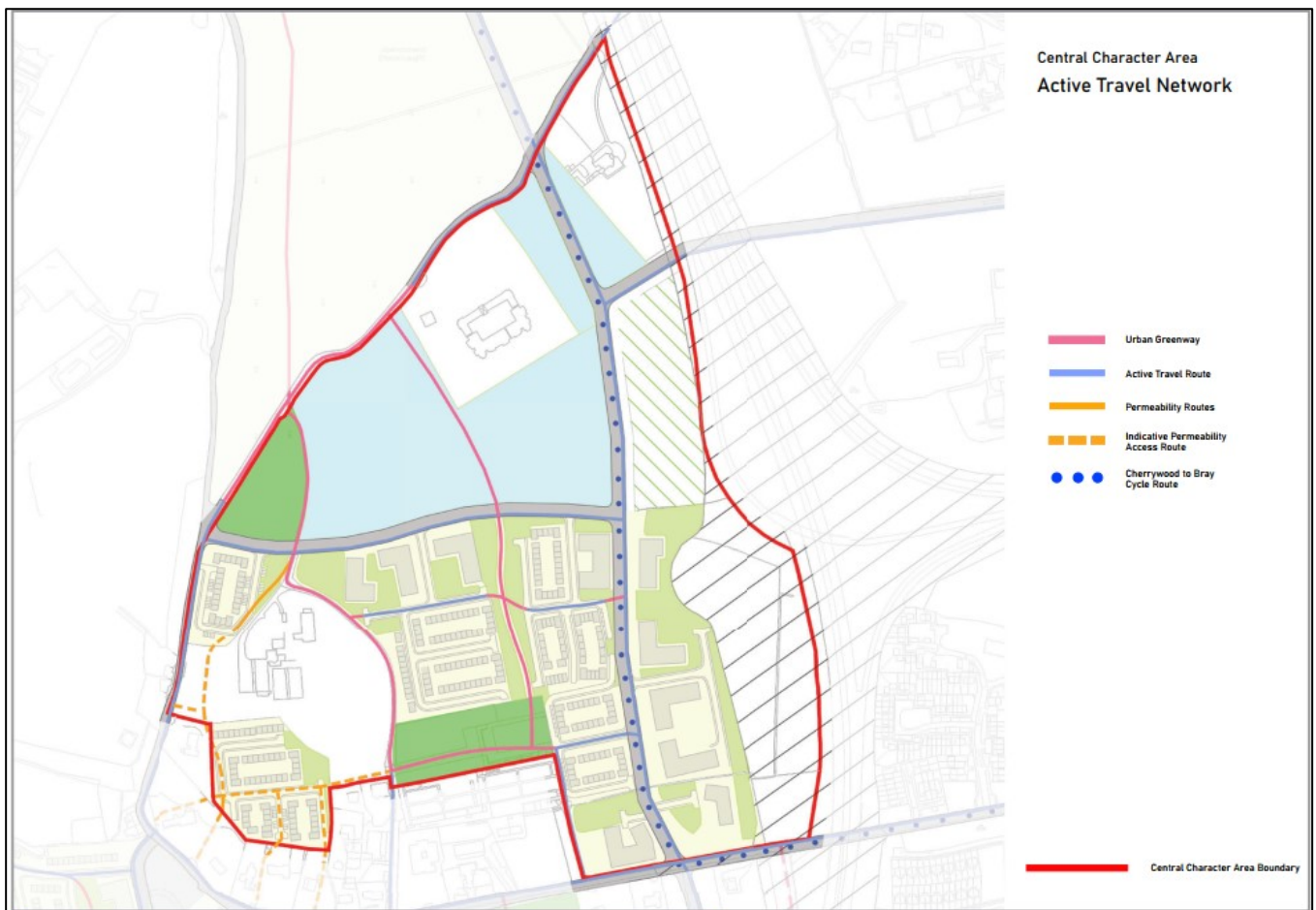


Figure 5-16 - Old Connaught LAP Active Travel Network

The masterplan for the client lands has been developed to maximise connectivity and permeability across and through the site through a network of walking and cycling paths and tracks that provide direct overlooked linkages to and from all major destinations including public transport facilities. The range of pedestrian and cyclists' facilities includes:

- Footpaths adjoining the external and internal road network;
- Internal pedestrian and cycle only routes;
- Segregated cycle tracks along North South and East West link street; and
- Shared on-road cycle provision on low traffic low speed environment such as local streets and Homezones.

The proposed pedestrian and cyclist provision for the street typologies are detailed in Section 5.5 and accords with DMURS and CDM guidance and an overview of pedestrian and cyclist facilities within the masterplan is shown in Figure 5-17.

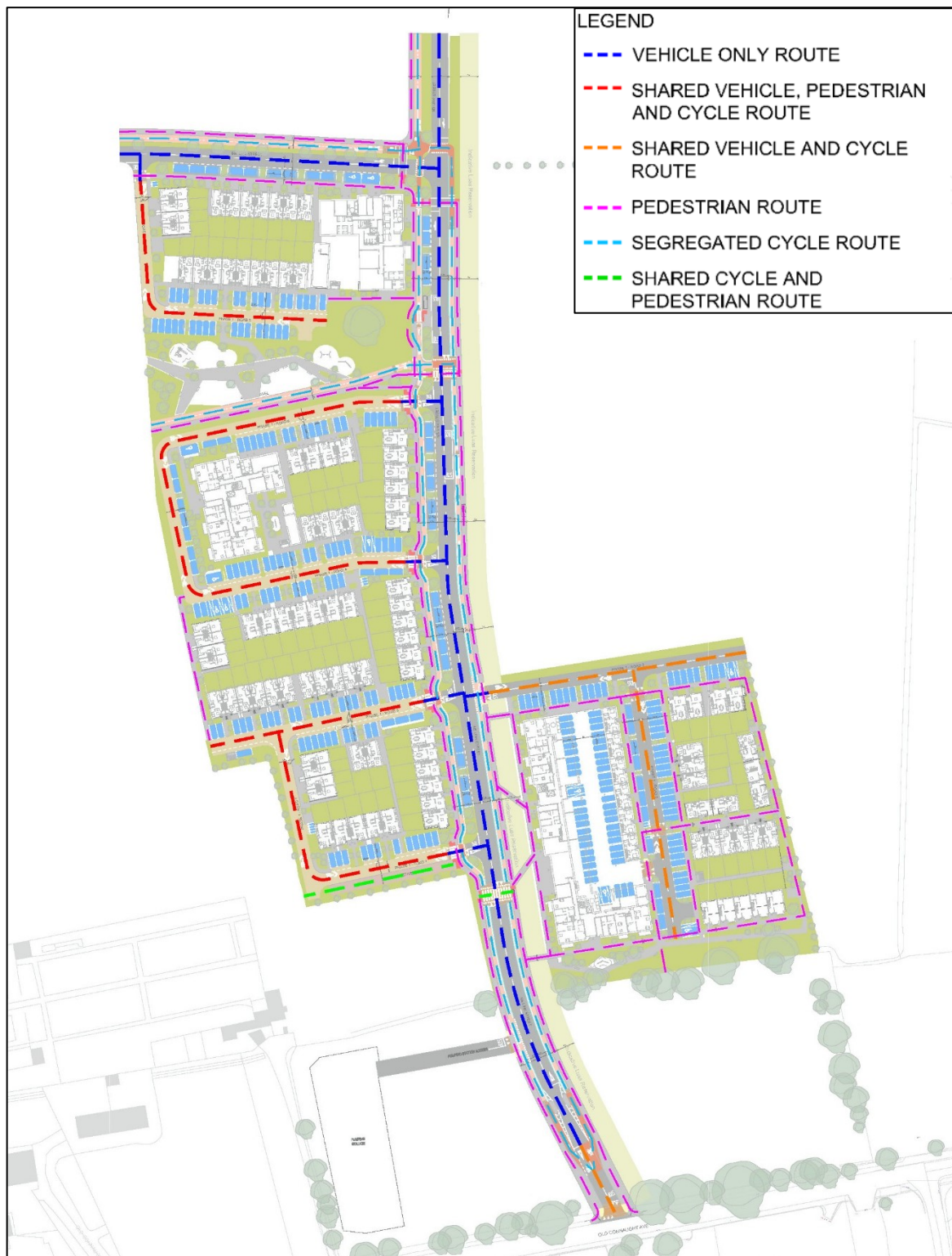


Figure 5-17 - Proposed Active Travel Network

There is a range of crossing facilities proposed within the client masterplan lands, including

- Formal / Signalised crossing – located on Fassaroe and Berryfield Avenue. Signal crossing in the development are one-stage crossings to allow pedestrians and cyclists to cross the street in one movement;

- Courtesy Crossing – generally defined by change in material and or vertical deflection – located in lower speed environments where formal controlled crossing is not required; and
- Dropped kerbs – located on local streets and areas where traffic is very light.
- Raised crossing are provided at junctions along Link Street typologies to provide priority to cyclists and pedestrians crossing these side road junctions.

In general, the design of pedestrian and cycle crossing will follow best practice guidance and the requirements of necessary guidance including the Cycle Design Manual where appropriate. The location of crossing is shown in Figure 5-18.

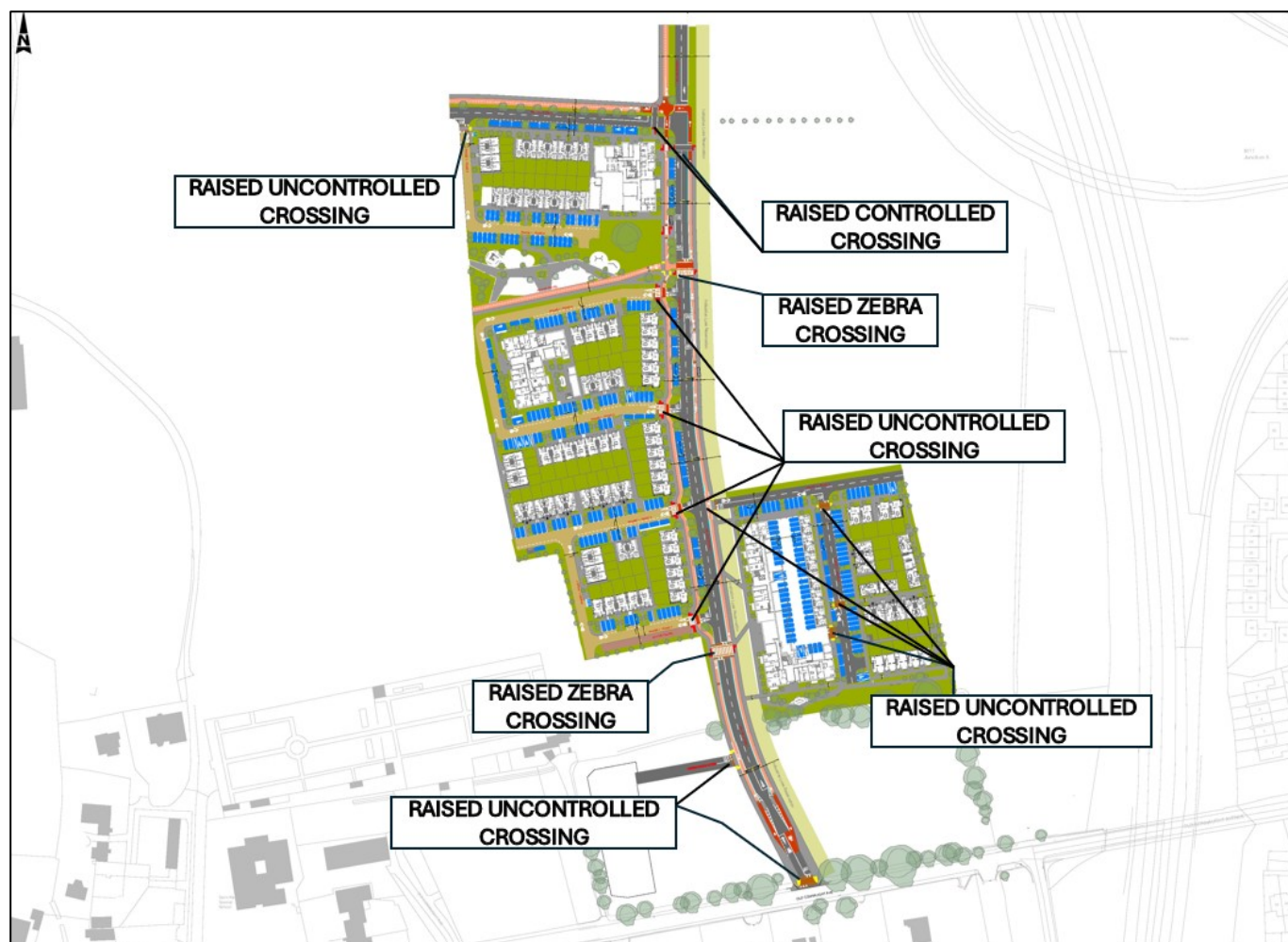


Figure 5-18 - Crossing locations and type

5.8 LUAS Corridor

The LAP (figure 5.13) envisions that the future lands could be served by an extension of Luas from its current terminus at Cherrywood south through the LAP lands via Rathmichael and or a connection over the N11/M11 and south to Bray via Old Connaught Avenue and or to Fassaroe via the southern character area as shown in Figure 5-19.

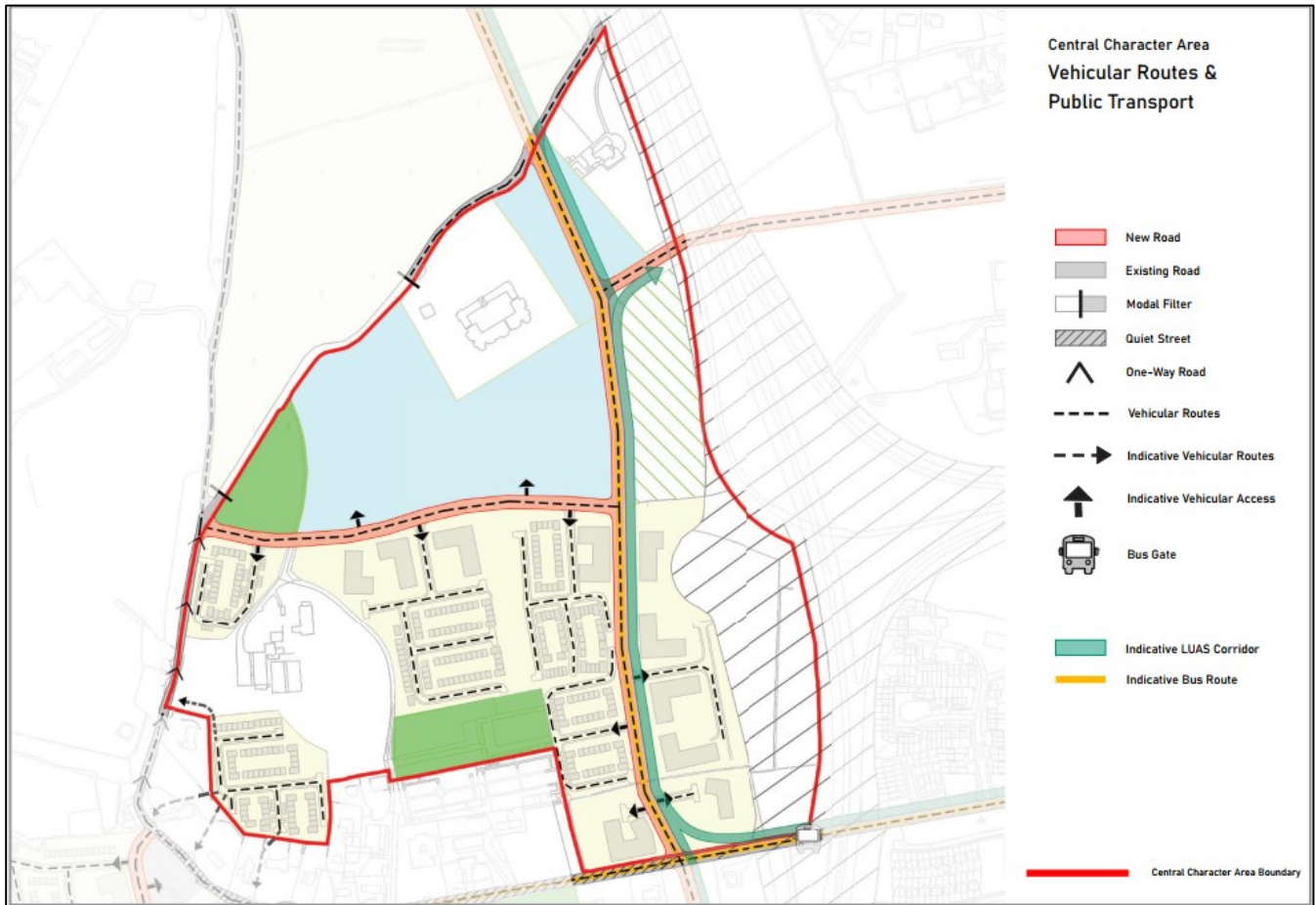


Figure 5-19 - LUAS corridor through LAP

In relation to LUS the LAP has the following specific objectives:

- **TM13 / TM14** – Actively seek **Luas Green Line Extension** into Old Connaught, including stop locations
- **TM15 / TM16** – Protect and reserve **light rail alignment** corridors; interim uses may be permitted where they don't compromise future LUAS delivery

As set out in the LRD Stage 1 submission and further detail here we are proposing to provide a LUAS reservation corridor running along the eastern side of the north-south link street.

In determining the optimum reservation corridor, we were cognisant of the following guidance documents:

- Transit Cooperative Research Program: Track Design Handbook for Light Rail Transit, 2012
- TII PE-PDV-00001: Light Rail Environment – Technical Guidance for Development, December 2020
- Documentation from the Luas Finglas Railway Order, November 2024

In addition to the above DUMRS guidance and best practice architectural principles in terms of street enclosure, sense of place, optimal active travel crossing distance we considered.

Based on this guidance, the cross-section of the N–S Road with the Luas corridor consists of 7.0 metre corridor as it runs through the built-up area, as shown in Figure 5-20.

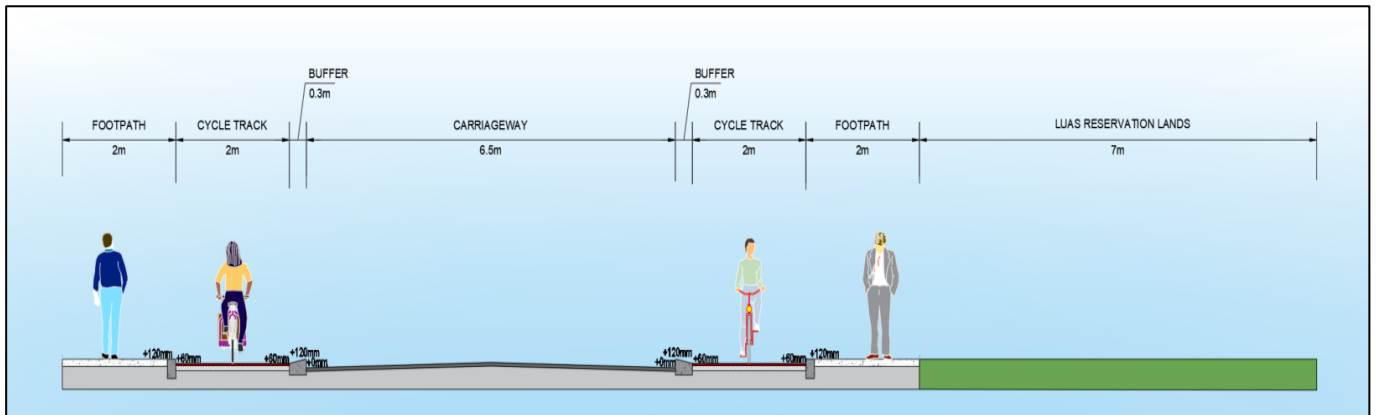


Figure 5-20 - North-South Road with Luas Corridor

5.9 M11/N11 Bridge

The overall roads strategy as set out in the LAP is to provide a future bus gates on Old Connaught Avenue that will require road traffic redistribution with the surrounding environment. As part of this proposal a new connection from the LAP lands will be provided to allow local and strategic movements over the N11/M11 between Old Connaught and Dublin Road corridor via a new bridge connection as shown in LAP (figure 6-14) and extract of which is shown in Figure 5-21.

LAP Chapter 11 – Phasing and Implementation states that for sub-phase1 the bridge is not required. However, for sub-phase 2 that:

Progression of a new road and bridge over the N11 to the Dublin Road (including link connections) or the N11/ M11 Junction 4 to Junction 14 Improvement Scheme

And that

Planning permission to be in place prior to any permission being granted in sub-phase 2 for new residential development.

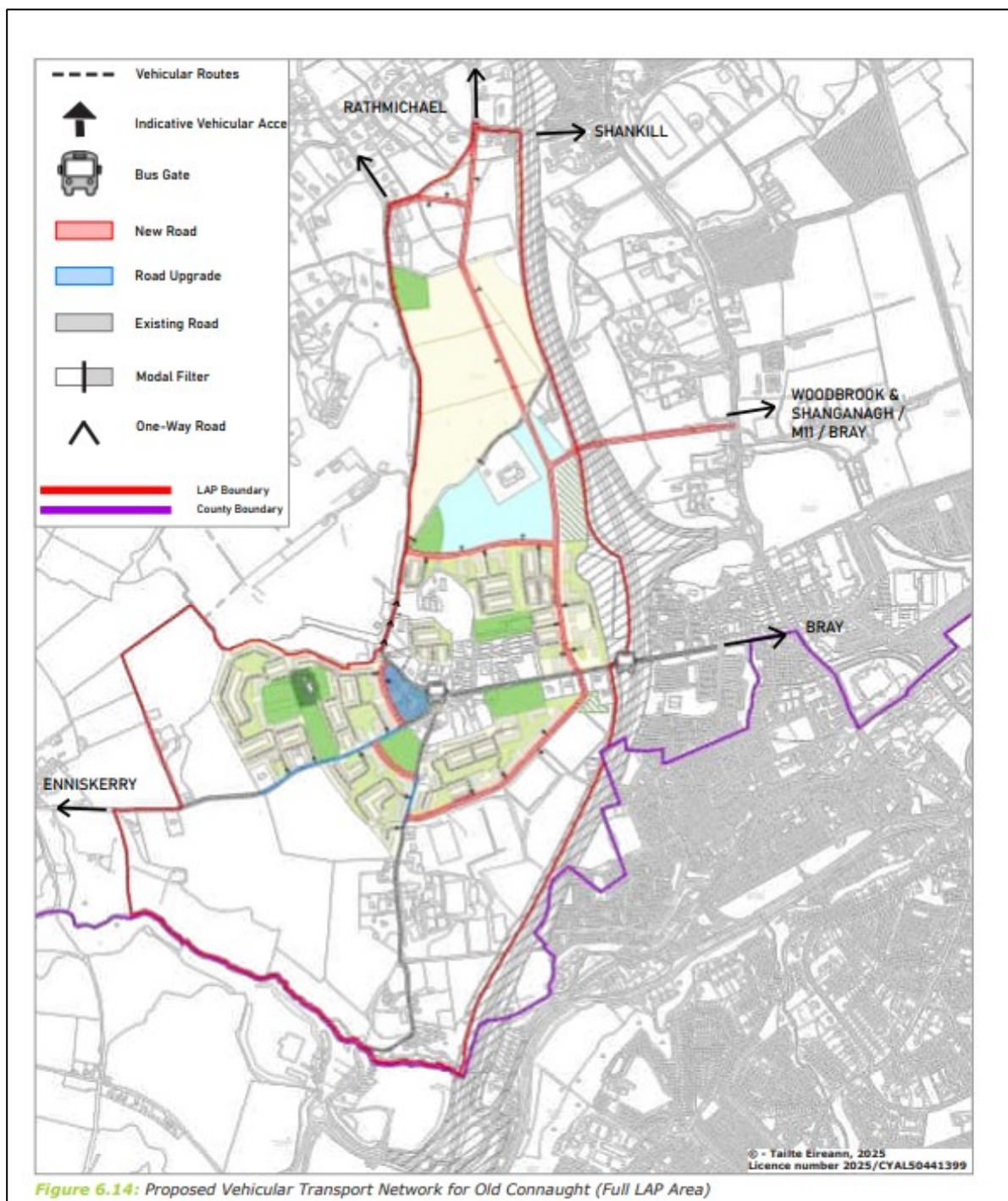


Figure 5-21 - Proposed Vehicular Transport Network for LAP

The alignment of the proposed N11/M11 bridge is within lands owned and controlled by the client. ARUP are currently progressing a design of the bridge. The design of the Phase A1 lands has been cognisant of the ARUP design. Figure 5-22 shows the alignment and layout of the proposed bridge. The bridge provides for both vehicular and active travel provision. ARUP are progressing the design to ensure alignment with all aspects of the LAP including potential futures connections and are liaising with DLRCC and TII in relation to securing relevant permission and consents required, including *DN-STR-03001 - Technical Acceptance of Road Structures on Motorways and Other National Roads*.

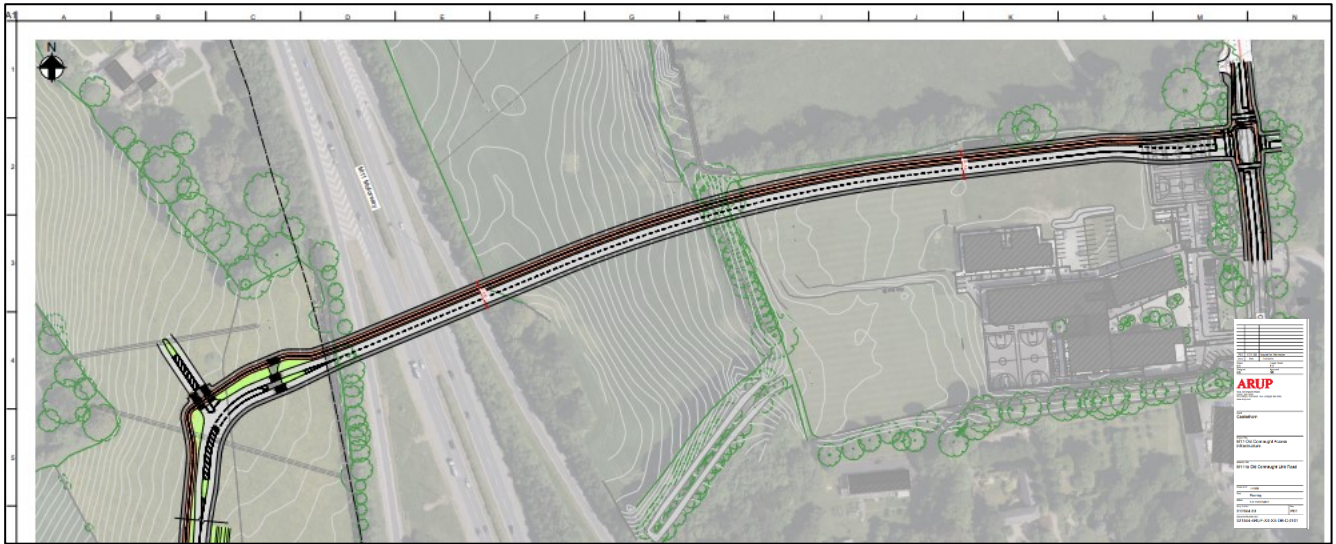


Figure 5-22 - N11/M11 Bridge Alignment

5.10 DLRCC Development

DLRCC have shared preliminary designs, presented in Figure 5-23, for the development of their lands to the south of the clients lands.

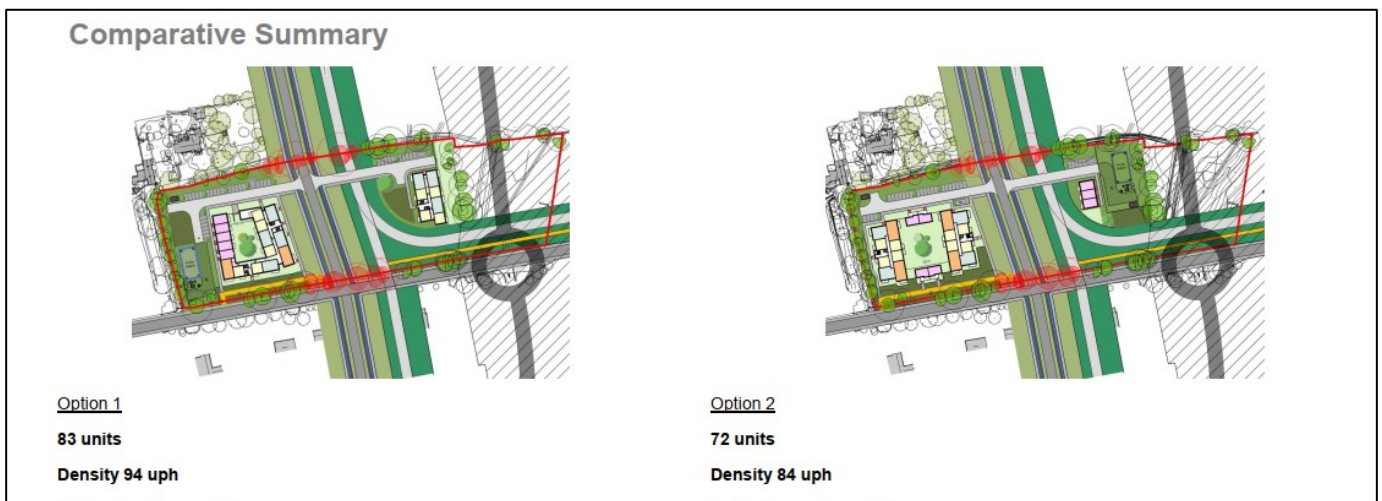


Figure 5-23 – DLRCC Development Lands

Our design approach has been cognisant of these designs. In particular we have made allowances for:

- the north-south link street through these lands and connection to Old Connaught Avenue aligning with DLRCC design proposals and
- Potential connection from eastern lands south to DLRCC lands as shown in Figure 5-24.

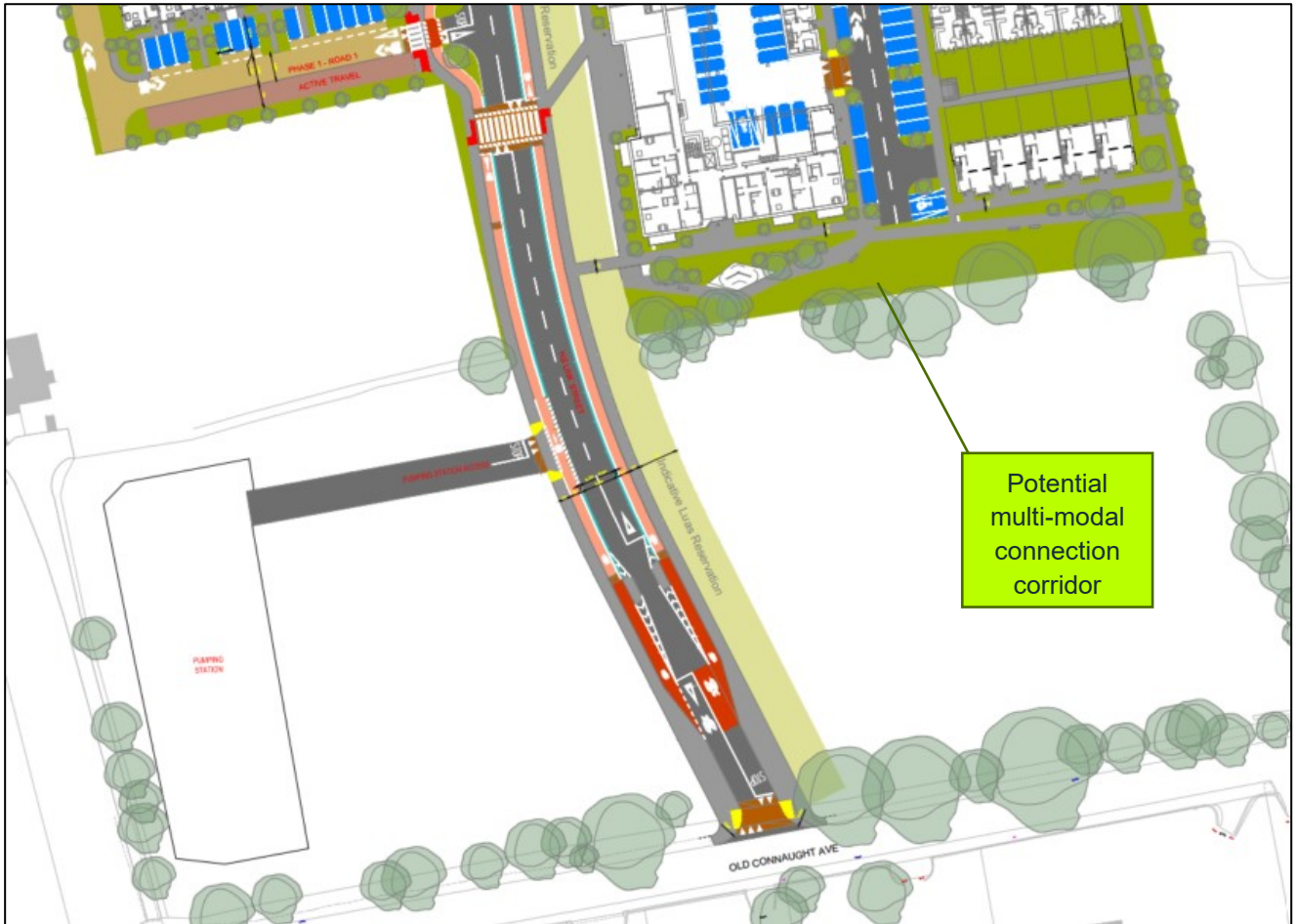


Figure 5-24 - potential connection to DLRCC Lands

5.11 Car Parking

Car parking for the proposed development has been carefully consider taking into account the site characteristics, including location and availability of alternatives in both the immediate, medium and in term situations.

The relevant car parking policy standards for the proposed development are:

- Compact Housing Guidelines SPPR3
- Dun Laoghaire Rathdown County Development Plan 2022-28 (Table 12.8)

A range of parking solutions is proposed across the development including in curtilage private parking at the houses, parking bays perpendicular to streets, undercroft car parking. As recommended by best practice guidance such as DMURS and the DLRCC County Development Plan car parking provisions have been designed so that they do not dominate the visual character of the surrounding environment.

The following principles are proposed:

- As per Table 6.1 of the Old Connaught LAP, a maximum of 1 space per unit for the 1 and 2 bed residential units (both houses and apartments/duplexes), while a maximum of 1.5 spaces per unit for 3-Bed plus residential units can be provided.
- EV Parking Spaces – Based on Section 12.4.11 of DLRCC Development Plan for Residential multi-unit developments both new buildings and buildings undergoing major renovations (with private car spaces including visitor car parking spaces) - a minimum of one car parking space per five car parking spaces (20%) should be equipped with one fully functional EV Charging Point. In addition, for future upgrade, ducting for every parking space shall also be provided.
- Accessible Parking Spaces – As per Section 12.4.5.5 of DLRCC Development Plan, minimum of 4% of the spaces should be reserved for disabled parking.
- Visitor Parking Spaces – In addition, as per Section 12.4.5 of DLRCC Development plan, for residential development visitor parking spaces at rate of maximum of 1 per 10 spaces (10%) can be provided.

The provisions are summarised in Table 5-3 below.

Table 5-3 – Car Parking Provision

Type	Size	Provision
Houses	1 bed	1 space per unit (Maximum)
	2 bed	1 space per unit (Maximum)
	3 bed plus	1.5 space per unit (Maximum)
Apartments/Duplexes	1 bed	1 space per unit (Maximum)
	2 bed	1 space per unit (Maximum)
	3 bed plus	1.5 space per unit (Maximum)
EV Spaces		Minimum of 20% of spaces
Disabled Spaces		Minimum of 4% of spaces
Visitor Spaces		Maximum of 10% of spaces

Based on the above provision, the maximum number of permissible parking spaces for the proposed development are summarised in the Table 5-4, which also summarises the number of parking spaces proposed as part of the development.



Table 5-4 – Car Parking Provided

CAR PARKING	No. of Units	Surface	Disabled (Surface)	Visitor (Surface)	Undercroft	Disabled (Undercroft)	Total	Residential Parking Ratio
Houses (East)	23	34	2				36	1.6
Apartment Block 1 (East)	54	20			23	1	44	0.8
Apartment Block 2 (East)	41	3			23	1	27	0.7
Houses (Central)	80	117	3				120	1.5
Apartment Block 3 (Central)	38	17	2				19	0.5
Apartment Block 4 (Central)	35	26	2				28	0.8
Visitor				11			11	
ESB spaces				2			2	
Go-Car				2			2	
Total	271	217	9	15	46	2	289	1.1

*20% of all residential and visitor car parking spaces are equipped with an EV Charging Point, Please refer to the Car Parking Allocation Drawing for further detail.
 **4% of all residential and visitor car parking spaces are suitable for use by disabled persons.

Based on the Table 5-4 above, it can observe that the parking spaces provided are within the standards in LAP and Development Plan.

Key Car Parking Takeaways

- The proposed car parking provision is **fully compliant with the Development Plan and Old Connaught LAP policy requirements**.
- Overall, the development provides an **average parking ratio of approximately 1.0 space per residential unit**, reflecting a balanced approach between accessibility and sustainable transport objectives.
- **Larger family dwellings** are allocated a higher parking provision (**approximately 1.6 spaces per unit**), recognising the **greater car ownership and usage typically associated with these units**.
- **Apartment units**, particularly **1-bed units**, are provided with **less than 1 space per unit**, reflecting their **lower parking demand and stronger alignment with sustainable travel patterns**.
- The inclusion of **2 dedicated car-sharing spaces** supports reduced private car ownership, while still providing **flexible access to vehicles for residents when required**.
- **4% of all car parking is design to accommodate accessible users**
- **20% of all car parking is equipped with EV charging point**

Further rationale for the proposed car parking is set out in Table 5-5 below

Table 5-5 - Car Parking Justification

Section 12.4.5.2 Reduction in car parking provision criteria	Development Context
Proximity to public transport services and level of service and interchange available.	Bus services are located on Dublin Road Bus Corridor providing future users with excellent access to public transport. Medium term local bus services may be provided on Old Connaught LAP subject to discuss with NTA Longer term the LAP envisions that the lands will be served by extension of the Luas Green Line from Cherrywood to Bray via Old Connaught.
Walking and cycling accessibility/permeability and any improvement to same.	Development is part of a wider masterplan lands that includes extensive internal walking and cycling infrastructure as well as external linkages. The various proposed walking and cycling facilities and linkages have also been discussed in the section 5.7 of this TTA report.

Section 12.4.5.2 Reduction in car parking provision criteria	Development Context
The need to safeguard investment in sustainable transport and encourage a modal shift.	Level of car parking looks to balance between provision of necessary amount while not adversely impacting on encouraging mode shift. LAP envisions that LUAS green lien extension may be provided through the lands.
Availability of car sharing and bike / e-bike sharing facilities.	2no car sharing spaces are accommodated as part of the development. High quality cycle parking is proposed as shown in section 5.12 of this TTA. Cycle parking is provided at a ratio of 1 space per bedroom and includes spaces for cargo bikes and e-bikes.
Existing availability of parking and its potential for dual use.	A mix of allocated and unallocated visitor car parking is provided including visitor spaces.
The range of services available within the area.	The masterplan lands provide creche, community and retail use which would facilitate internal trips reducing car trips and car ownership.
Impact on traffic safety and the amenities of the area.	Level of car parking is balanced so as to not adversely impact on safety. The site is located with LAP lands that includes access to significant open spaces and active amenity areas accessible by active travel network.
Capacity of the surrounding road network.	Reduced car parking versus DLRCC standard car parking rates will result in fewer trips on the network that will have a positive impact on capacity versus higher parking version.
Urban design, regeneration and civic benefits including street vibrancy.	Level of car parking is a balance to achieving an optimal urban realm that includes landscaping and amenity, play, safety and place making.
Robustness of Mobility Management Plan to support the development.	An outline MMP is provided as part of the planning application that details the approach to promoting sustainable travel

5.12 Motorcycle Parking

As per Section 12.4.7 of the **DLRCC Development Plan 2022-2028**, a minimum of 4 motorbike spaces should be provided. Based on that, for a car parking provision of **289 spaces**, a minimum of **12 motorbike spaces** should be provided. For the proposed development, **12 motorbike parking spaces** are proposed, which meets the requirements of the Development Plan.

5.13 Cycle Parking

High quality cycle parking is an integral part of the proposed development and has been designed accordingly. Cycle parking facilities have been designed and located in accordance with the Section 6.2. Design Principles of the Cycle Design Manual published in September 2023. The five core principles for designing cycle infrastructure mentioned within the Cycle Design Manual are as follows:

1. Safe – cycle parking should be secure for the cycle and users should feel safe from the risk of personal crime
2. Direct – cycle parking should be near to the cycle route and/or as close as possible to the final destination
3. Coherent – cycle parking should be well-connected to routes and buildings, and easy to find
4. Attractive – cycle parking areas should be of good quality design and well-maintained; and
5. Comfortable – cycle parking should be easy to use and accessible to all.

The design and location of both long stay and short stay cycle parking for the proposed developments are based on the following considerations which are also in accordance with the above stated design principles and the SPPR 4 – Cycle Parking and Storage section of the Sustainable residential Development and Compact Settlements Guidelines for Planning Authorities.

- All long stay cycle parking will be located in accessible safe, secure, well light and sheltered locations.
- Short stay cycle parking is located in highly visible areas with good passive surveillance, which are easy to access and well light and in close proximity to their destination entry points.
- Where required, end of trip facilities including shower and change facilities are provided.
- A range of cycle parking solutions are provided including Sheffield stand type facilities and stacked cycle solutions.
- The cycle parking layouts cater for oversized cycles including cargo bike and accessible bike formats.

The cycle parking facilities provided for the residential consists of a range of facilities in accordance with Section 6.5 (Types of Equipment and Layout) of the Cycle Design Manual published in September 2023. They include:

- Stands or hoops – where the cycle is leaned against a metal structure and locked (this may include hi/low arrangements where alternate sides are ramped to avoid handlebars clashing);
- Cycle Lockers – where individual cycles are secured in a metal box;
- Cycle hangers – where several cycles are secured in a metal box, and
- Semi-vertical or vertical racks - where cycles are lifted into a vertical position.

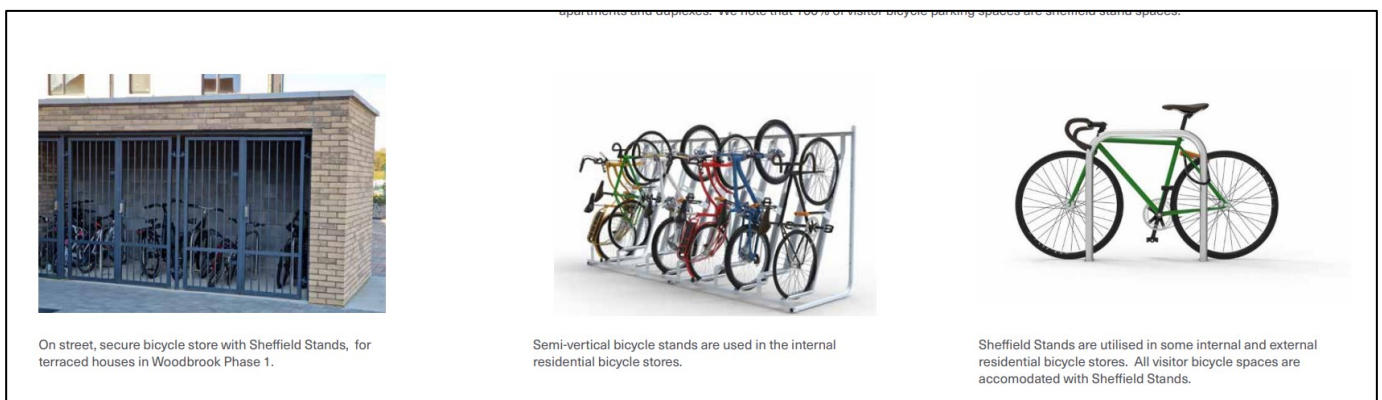


Figure 5-25 – Typical Examples of Bicycle Stands

5.13.1 Cycle Parking Principles

The following are the cycle parking and storage principles for the proposed development

- **Integrated Residential Cycle Storage**
Where houses benefit from **direct side or rear access from the street to private rear gardens**, it is assumed that residents will utilise these secure, convenient spaces for **primary bicycle storage**. This approach integrates cycle parking naturally within the dwelling curtilage.
- **Rear Access Facilitation for Larger Units**
The design of houses incorporates **rear access laneways**, enabling efficient and practical access to rear gardens. This supports:
 - Secure storage of bicycles and bins
 - Convenient day-to-day access without reliance on internal circulation
 - Reduced clutter and enhanced streetscape quality
- **Policy-Compliant Cycle Parking Provision**
Cycle parking is provided in accordance with **Compact Settlement Guidelines (SPPR 4)**, ensuring a **minimum provision of 1 cycle parking space per bedroom** across all residential units.
- **Visitor Cycle Parking Provision**
Dedicated visitor cycle parking is provided at a rate of **no less than 1 space per 3 residential units**, ensuring that short-stay and visitor demand is adequately catered for and supports cycling as a viable mode for all trip purposes.
- **Convenience, Security and Accessibility**
All cycle parking—both residential and visitor—is designed to be:
 - **Easily accessible and well-located**
 - **Secure and overlooked where possible**
 - **Integrated with the wider active travel network**
- **Support for Active Travel Behaviour**
The overall approach to cycle parking provision supports and encourages **everyday cycling**, aligning with national and local policy objectives to prioritise sustainable mobility and reduce reliance on private cars.



Table 5-6 – Cycle Parking Provided

BICYCLE PARKING RESIDENTIAL UNITS	No. Residential Units	No. of Bedrooms	Residential Bicycle Parking Requirement (Apt Guidelines)	Residential Bicycle Parking Proposed	Visitor Bicycle Parking Requirement (Apt Guidelines)*	Visitor Bicycle Parking Proposed (External Sheffield Stands)	Total Residential and Visitor Bicycle Parking Requirement (Apt Guidelines)	Total Bicycle Parking Provision	Motor bicycle Parking Proposed
Apartment Block 1 (East)	54	95	95	88	27	24	122	112	3
Apartment Block 2 (East)	41	73	73	80	21	24	94	104	
Apartment Block 3 (Central)	38	63	63	67	19	18	82	85	2
Apartment Block 4 (Central)	35	62	62	68	18	18	80	86	3
Mid-terrace houses	45			48				48	4
TOTALS	168	293	293	351	84	84	377	435	12

RESIDENTIAL BICYCLE PARKING TYPE APARTMENTS & DUPLEXES	No. Sheffield Stand Spaces in Internal Bicycle Stores	No. Semi-Vertical Spaces in Internal Bicycle Stores	No. Stacked Spaces in Internal Bicycle Stores	No. Cargo Spaces	No. External Bicycle Locker Spaces (Horizontal)	No. Sheffield Stand Spaces in External Bicycle Stores	No. External Bicycle Store Spaces (Stacked)	No. External Bicycle Store Spaces (Vertical)	Total Residential Bicycle Parking
Apartment Block 1 (East)	52		32	4					88
Apartment Block 2 (East)	44		32	4					80
Apartment Block 3 (Central)	36	28		3					67
Apartment Block 4 (Central)	16	20		4		28			68
TOTALS	148	48	64	15		28			303
	48.8%	15.8%	21.1%	5.0%		9.2%			100.0%

Key Cycle Parking takeaways are:

Cycle parking provision has been calculated based on a requirement of **1 space per bedroom for residents**, supplemented by **visitor parking at a rate of 1 space per 3 units**.

- A total of **377 spaces are required** to meet guideline standards
- The development **exceeds this requirement**, providing **435 cycle parking spaces overall**

This represents a **significant uplift above minimum standards**, ensuring that current and future demand for cycling can be comfortably accommodated across all residential units.

Distribution Across the Development

Cycle parking is distributed proportionally across all apartment blocks and houses, ensuring that:

- Each apartment block meets or exceeds both **residential and visitor requirements**
- Houses are catered for through a combination of **in-curtilage storage and designated spaces**
- Visitor parking is provided consistently across the site, typically through **external Sheffield stands located in accessible and visible locations**

This balanced distribution ensures **equitable access to cycle parking for all residents and visitors**, regardless of dwelling type or location within the site.

Diversity of Cycle Parking Types

A key strength of the proposal is the **range of cycle parking typologies**, designed to maximise usability, efficiency, and inclusivity:

- **Sheffield stands (internal and external)** form the backbone of provision, accounting for the largest proportion of spaces (~49%), offering simple, robust, and universally accessible parking



- **Semi-vertical parking (~16%)** improves space efficiency while remaining practical for regular users
- **Stacked systems (~21%)** provide higher-density storage in apartment blocks where space constraints exist
- **Cargo and oversized bicycle spaces (~5%)** ensure inclusivity for non-standard bicycles, including family and adapted cycles
- **External lockers and covered facilities (~9%)** provide secure, weather-protected options for residents

This mix ensures that different user needs are catered for, from everyday commuters to families and occasional cyclists.

Accessibility and Convenience

Cycle parking locations have been carefully planned to ensure:

- **Direct and convenient access** from residential units, particularly for apartments via internal stores
- **Passive surveillance and natural oversight**, enhancing security
- Integration with the **wider active travel network**, enabling seamless onward journeys
- Adequate provision for **ground-level and accessible spaces**, ensuring ease of use for all residents

For houses, private rear garden access and laneways facilitate **secure, convenient at-home storage**, complementing the communal provision within apartment blocks.

Sustainable Mobility Benefits

The overall approach to cycle parking:

- **Exceeds minimum policy standards**
- Provides a **high-quality, diverse, and legible offering**
- Actively supports **modal shift toward cycling**
- Reinforces the development's **10-minute neighbourhood and sustainable transport objectives**

The proposed cycle parking strategy is **comprehensive, future-proofed, and best-practice driven**. By exceeding minimum requirements, incorporating a wide range of parking types, and ensuring strong accessibility, the development creates the conditions necessary to **encourage everyday cycling as a primary mode of transport for residents and visitors alike**.

The location of cycle storage is shown in Figure 5-26 below.





Figure 5-26 - Cycle Parking Locations

5.14 Cycle Audit

As required under Section 12.4.6.1 of the DLRCC Development Plan for new development of 5 residential units or more or non-residential development of 400sqm or over a Cycle Audit is required and has been prepared. Table 5-7 provides our response to the cycle audit questions outlined in section 12.4.6.2 Cycle Parking Assessment Criteria of the DLRCC Development Plan.

Table 5-7 - DLR Cycle Audit - Designer Response to Criteria

DLR Cycle Parking Assessment Criteria	Response
Is the number of cycle parking spaces and footprint adequate and is there suitable provision for parking of outsized formats (cargo bikes etc)?	Yes. Cycle parking numbers, both long stay and short stay for residential and non-residential uses accords with standards as shown in Section 5.12. The development proposes a mix of bicycle stand types such as vertical stands and Sheffield style stands and spaces for oversized cycle such as cargo bikes. The Sheffield and vertical stands are widely distributed across the development, particularly at high density destinations such as apartment entrances, adjacent to retail entrances and the neighbourhood centre where demand is anticipated.
Is the location of cycle parking convenient, appropriate, and secure with adequate provision for covered parking?	Yes. Cycle parking for different uses is located in the most appropriate location for that use to ensure its usability and optimal functionality. The residential cycle parking is located on the ground floor level. Visitor cycle storage is provided across the development, some located within the public realm at convenient locations, some that is sheltered within recessed entrance areas and more within the pergola structure along the northern facade.
Is the cycle parking area accessible in terms of dedicated access routes with ramps and/or kerb dishing where required?	Yes. Cycle parking areas are accessible with gradients within tolerances
Do the internal cycle access routes connect well with off-site cycle facilities – existing and proposed?	Yes. Cycle provision links are proposed throughout the Old Connaught Local Area Plan. The development is near to the BusConnects Dublin – Bray to City Centre cycle route. There are cycle links linking the development to the future nearby developments.
Is there adequate and appropriately designed and integrated provision for ancillary cycling and pedestrian facilities including showers, locker / changing rooms and drying areas?	Yes. Residential users have access to changing and showering facilities.
For short-term cycle parking (e.g., for customers or visitors), cycle parking is required at ground level. This should be located within 25 metres of the destination in an area of good passive surveillance. Weather protected covered facilities should	Yes, short term non-residential cycle parking is provided at ground floor level. Visitor cycle parking to apartments is located across the development in the public realm. Some bicycle storage is located within recessed entrances areas and within the pergola structure along the northern facade.

DLR Cycle Parking Assessment Criteria	Response
be considered where appropriate. Consideration should be given to using green roofs in the design of standalone cycle parking shelters. Appropriate cycle parking signage may also be required to direct cyclists to the end destination.	
For long-term cycle parking (e.g., for more than 3 hours for residents, staff, students), secure covered cycle parking is a requirement. This should be conveniently located within 50 metres of the destination and located near building access points where possible.	Yes, long term cycle parking is covered and located within 50m of destination.
In all cases it is a requirement to provide showers, changing facilities, lockers and clothes drying facilities, for use by staff that walk or cycle to work. CCTV cameras or passive surveillance of car parks and cycle parks may be required for personal safety and security considerations.	Yes. Contained with residential units. CCTV of car parking can be provided if required.
All cycle facilities in multi-storey car parks shall be at ground floor level and completely segregated from vehicular traffic. Cyclists should also have designated entry and exit routes at the car park and with minimum headroom of 2.4 metres to facilitate access by cyclists.	There is no multi-storey car park for this development, so this criterion is not applicable.
Within larger new developments cycle routes shall link to the existing cycle network where possible and maintain a high degree of permeability through developments. Cycle Audits may be required in such developments.	Cycle permeability is provided across the masterplan lands. Cycle provision links to existing and proposed external cycle infrastructure. Design of cycle network accords with NTA Cycle Manual. DMURS Quality Audit including Cycle Audit has been undertaken as part of the development. Cycle measures identified will be included in the scheme.

5.15 Quality Audit including Stage 1 RSA

A Quality Audit including a Stage 1 Road safety audit has been conducted on the proposed development. The Quality Audit was undertaken in accordance with Advice Note 4 of DMURS.

The audit highlighted the following elements:

- Road Safety Audit Stage 1 (including Risk Assessment);
- Pedestrian and Cycle Audits (e.g. Non-Motorised User Audit, Walkability Audit, Cycle Audit); and
- Mobility and Visually Impaired Users' Audits (e.g. Access Audit)

An AtkinsRealis Independent Audit Team undertook the Quality and Road Safety Audit in accordance with Section 6.0 of the DMURS Advice Note 4. The development has been modified to take into account the advice and recommendations of the audit where required. For more details of the Quality Audit and Road Safety Audit, please refer to AtkinsRéalís document (0126446DG0023).



6. Transport Impacts

The following section outlines the proposed methodology for assessing the **multi-modal transport impacts** of the Phase A1 development, as well as the **cumulative effects** arising from the full Old Connaught LAP lands on the surrounding transport network. This assessment will consider the interaction of all modes—walking, cycling, public transport, and vehicular movement—to ensure a comprehensive evaluation of network performance and infrastructure requirements.

6.1 Approach

The methodology for the Traffic Transport Assessment is based on the TII Traffic and Transport Assessment Guidelines (PE-PDV-02045)⁵, published in May 2014. Based on the document, the assessment methodology will consist of:

- **Baseline Transport Review:** Undertaking desktop review to assess baseline condition including baseline traffic, baseline road network, baseline active travel facilities and baseline public transport facilities.
- **Review of the future Year:** The future year analysis is to be done for three future design years (discussed in details further). The analysis would include
 - determination of future year traffic volume
 - review of future changes to existing road network
 - review of proposed public transport and active travel upgrades
- **Impact on the local road network:** In this step, the traffic related impact on the local road network is assessed for future design years.

6.2 Future Design Years

The following design years were considered for the future analysis:

- Opening Year: It is taken as 2028, assuming that the residential units will start to be occupied at that time
- Opening Year +5: 2033. By this time, it has been assumed that M11/N11 bridge would be completed
- Opening +15: 2043: By this time, it has been assumed that full LAP would be developed.

6.3 Background Growth

Background traffic was calculated based on the following approaches:

- For car-based trips, first the increase in people trips will be determined and then, based on the target mode share provided in the Transport Strategy for Greater Dublin Area 2022–2042 (Figure 6-1 below), car-based trips will be calculated.
- Heavy Vehicle trips will be increased as per the growth factors provided in TII's Project Appraisal Guidelines – Travel Demand Projections (PE-PAG-02017, October 2021).

The above two documents are summarised in the sections below.

⁵ <https://cdn.tii.ie/publications/PE-PDV-02045-01.pdf>

6.3.1 Transport Strategy for the Greater Dublin Area 2022-2042

The Transport Strategy for the Greater Dublin Area (GDA) 2022-2042 established the framework for transport provision for the city region. This Strategy, which is underpinned by the capital investment program set out in the National Development Plan 2021-2030, is based on the following over-riding objective:

“To contribute to the economic, social and cultural progress of the Greater Dublin Area by providing for the efficient, effective and sustainable movement of people and goods.”

For Greater Dublin Area (which includes the proposed development site), Figure 17.4 of the guidelines define the existing mode share (based on CSO 2016 data) and target mode share for 2042. This is summarised in the Figure 6-1 below.

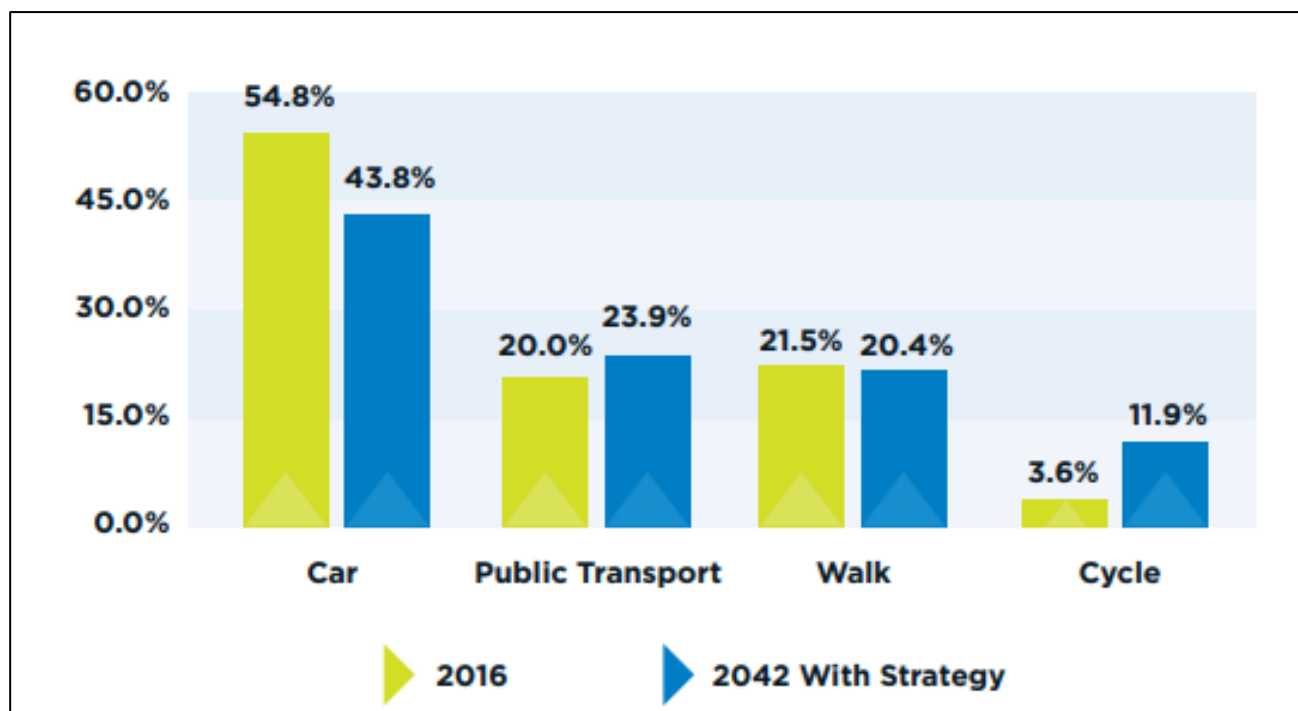


Figure 6-1 - GDA Mode Share Target (AM Peak)

6.3.2 TII Project Appraisal Guidelines for National Roads Unit 5.3 – Travel Demand Projections (PE-PAG-02017), October 2021

PAG Unit 5.1: Construction of Transport Models provides guidance on the development of transport models for use in the appraisal of transport infrastructure. The guidance addresses the scoping and construction of transport models which reflect transport demand and supply in a ‘Base Year’.

This Unit of the Project Appraisal Guidelines (PAG)⁶ provides guidance on the preparation of future travel demand projections for use in modelling and appraisal.

The guidance set out in this Unit is applicable for the modelling and appraisal of National Road schemes, although the guidance is equally applicable to traffic on regional and local road schemes.

⁶ <https://cdn.tii.ie/publications/PE-PAG-02017-03.pdf>

6.3.2.1 Link Based Growth Rates

For simple models, traffic flows are generally represented as vehicular traffic flows on links, with limited information on origin, destination or trip length. In such cases, future year traffic growth is projected using growth rates which describe likely traffic growth that may occur over the appraisal period of the scheme.

The derivation of link-based growth rates is based on an aggregate projection of growth in vehicle kilometres within a defined geographical area, with appropriate classifications by vehicle type and projected period. This allows the specification of a series of growth rates which can be applied directly to traffic flows on simple networks to generate an appropriate estimate of future traffic flows.

6.3.2.2 Alternative Future Demand Scenario

COVID-19 accelerated change in terms of when people travel, how they travel and whether they travel at all. With more people working from home, there was less travel to employment centres, but more travel to and within local centres. There was less travel by public transport but more walking and cycling.

As travel restrictions are lifted in 2021, employees who were able to work from home during the pandemic will start to return to their place of work. However, there are potential long-term effects that will outlast the pandemic. The return to the workplace for a cohort of people will potentially be a blended mix of home/office work, and this change in home working arrangements has the potential to reduce overall travel demand on the National Roads Network relative to existing projections of future demand.

To assess the potential impact of increased home working on demand on the National Roads Network, a sensitivity growth scenario referred to as an 'Alternative Future Demand Scenario' has been developed by TII which may be used as part of the appraisal process for TII schemes.

Based on this guidance, the growth factors for Dublin Metropolitan from the Alternative Future Demand Scenario (as shown in the Table 6-1 below) were used to estimate future traffic volumes for modelling purposes.

Table 6-1 - Link-Based Growth Rates: Alternative Future Demand Sensitivity Scenario

Metropolitan Area	Alternative Future Demand Sensitivity Scenario					
	2016-2030		2030-2040		2040-2050	
	LV	HV	LV	HV	LV	HV
Dublin	1.0136	1.0295	1.0051	1.0136	1.0044	1.0162
Cork	1.0144	1.0294	1.0090	1.0149	1.0083	1.0182
Galway	1.0141	1.0217	1.0097	1.0182	1.0096	1.0220
Limerick	1.0149	1.0329	1.0072	1.0134	1.0069	1.0177
Waterford	1.0116	1.0317	1.0052	1.0153	1.0049	1.0194

Based on the above, methodologies for determining future year traffic are summarised in the sections below.

6.3.3 Car Based Trips

The car-based trips were determined in two steps:

- People trips were increased over the period using population targets in the DLRCC Development Plan 2022–2028.
- Then, based on the car-based mode share for Dun Laoghaire-Rathdown County from the latest CSO 2022 survey, and adjusting for the target mode share provided in the GDA Transport Strategy 2022–2042, car trips were calculated as:

Car trips = People trips for that year × Mode share for that year.

6.3.3.1 Increase in People Trips

As per Table 2.3 of the DLRCC Development Plan 2022–2028, the population is projected to increase from 218,000 in 2016 to as high as 263,875 in 2031. This accounts for around 16% increase over the 12-year period, or an average of 1.75% per annum.

It is highly likely that all the increase in population will not result in a one-to-one increase in people trips. However, taking a precautionary approach, it was assumed that the increase in population will directly translate into an increase in people trips. Therefore, over the period, people trips will increase linearly by 1.75% per annum.

6.3.3.2 Mode Share for different years

Based on the latest CSO 2022 survey data, mode share for different modes of travel within Dun Laoghaire-Rathdown County is summarised in Table 6 -2 below.

Table 6 -2 - Mode Share: Dun Laoghaire-Rathdown County

Means of Travel	Number of residents travelling to work	%
On Foot	6,862	6.5%
Bicycle	6,372	6.1%
Bus, minibus or coach	7,877	7.5%
Train, DART or LUAS	12,927	12.3%
Motorcycle or scooter	749	0.7%
Car Driver	42,886	40.7%
Car passenger	1,985	1.9%
Van	2,280	2.2%
Other (incl. lorry)	163	0.2%
Work mainly at or from home	19,513	18.5%
Not stated	3,650	3.5%
Total	105,264	100.0%

From the table above, for car-based mode share, percentage of people using Car Driver, Vans, Motorcycle or Scooter, Other (including Lorry) and Not Stated were combined. Based on that the mode share for different modes is summarised below.

- Car Based – 47%
- Pedestrian – 6.5%
- Cycle – 6.1%
- Public Transport – 19.8%

The mode share for the future year was adjusted based on the target mode share for GDA as summarised in Figure 6-1. This is summarised below.



- Car-based mode share is expected to reduce by around 11% from 2016 to 2042, i.e. around 0.42% reduction per annum. Therefore, car-based mode share was reduced by a step of 0.42% each year.
- Cycle-based mode share is expected to increase by around 8% from 2016 to 2042, i.e. around 0.32% increase per annum. Therefore, cycle-based mode share was increase by a step of 0.32% each year.
- For walking, the mode share is expected to be reduced. However, taking precautionary approach, the mode share for walking (pedestrian) was increased by same percentage as that of cycling (0.32%).
- Public Transport-based mode share is expected to increase by around 4% from 2016 to 2042, i.e. around 0.16% increase per annum. Therefore, public transport-based mode share was increase by a step of 0.16% each year.

Based on the above assumptions, the mode share for different years is summarised in Figure 6-2 below.

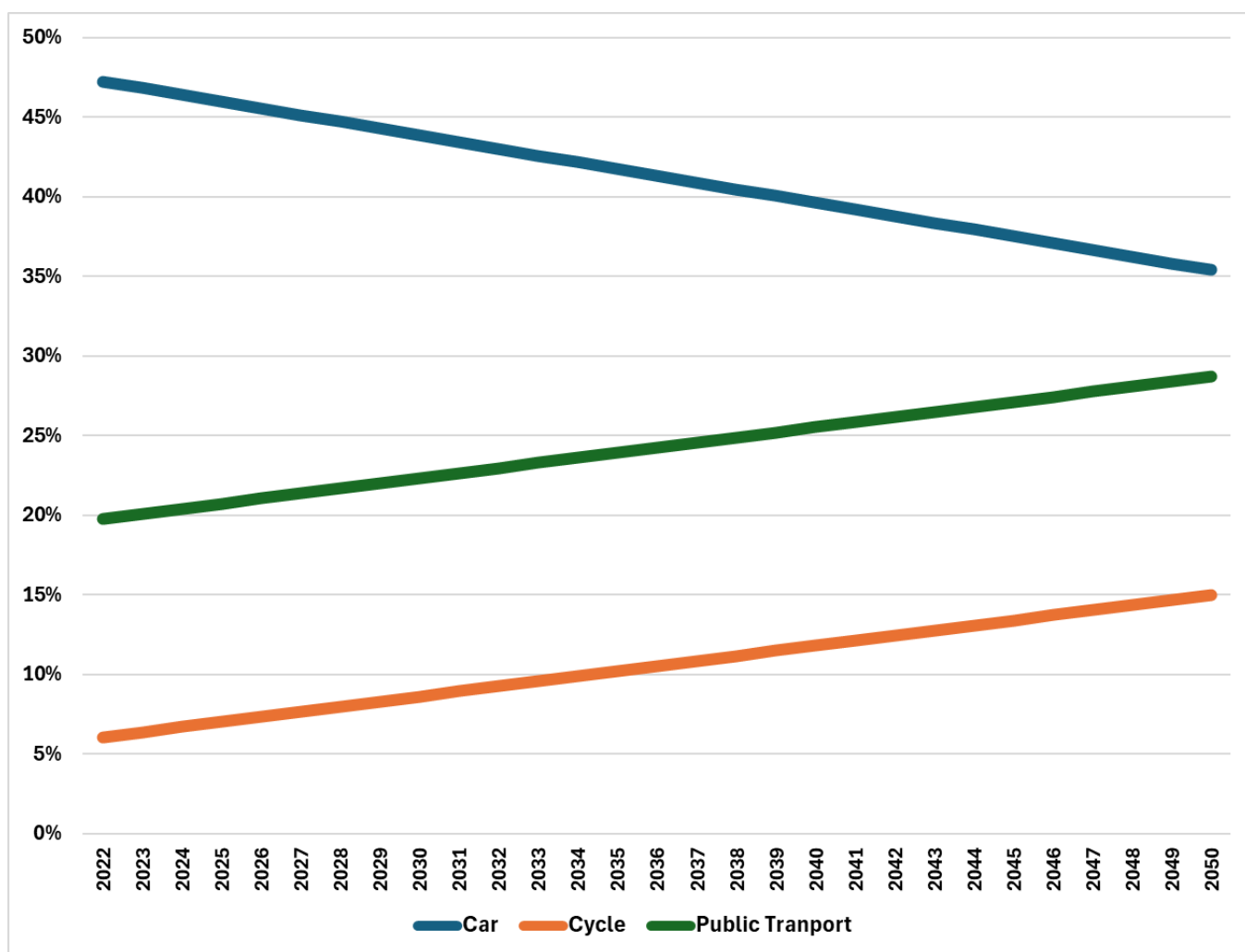


Figure 6-2 - Mode Share for different design years

Based on the above assumptions, mode share for different modes for corresponding design years are summarised below:

- Car Based (47.2% as per 2022 data and reducing by -0.42% per year)
 - Base Year (2025): $47.2\% - 0.42\% \times (2025-2022) = 45.97\%$
 - Opening Year (2028): $47.2\% - 0.42\% \times (2028-2022) = 44.70\%$
 - Opening Year + 5 (2033): $47.2\% - 0.42\% \times (2033-2022) = 42.59\%$
 - Opening Year + 15 (2043): $47.2\% - 0.42\% \times (2043-2022) = 38.36\%$
- Cycle (6.1% as per 2022 data and increasing by +0.32% per year)
 - Base Year (2025): $6.1\% + 0.32\% \times (2025-2022) = 7.01\%$
 - Opening Year (2028): $6.1\% + 0.32\% \times (2028-2022) = 7.97\%$
 - Opening Year + 5 (2033): $6.1\% + 0.32\% \times (2033-2022) = 9.56\%$
 - Opening Year + 15 (2043): $6.1\% + 0.32\% \times (2043-2022) = 12.76\%$
- Pedestrian (6.5% as per 2022 data and +0.32% per year)
 - Base Year (2025): $6.5\% + 0.32\% \times (2025-2022) = 6.97\%$
 - Opening Year (2028): $6.5\% + 0.32\% \times (2028-2022) = 7.42\%$
 - Opening Year + 5 (2033): $6.5\% + 0.32\% \times (2033-2022) = 8.17\%$
 - Opening Year + 15 (2043): $6.5\% + 0.32\% \times (2043-2022) = 9.67\%$
- PT (19.8% as per 2022 data and increasing by +0.15% per year)
 - Base Year (2025): $19.8\% + 0.15\% \times (2025-2022) = 20.72\%$
 - Opening Year (2028): $19.8\% + 0.15\% \times (2028-2022) = 21.68\%$
 - Opening Year + 5 (2033): $19.8\% + 0.15\% \times (2033-2022) = 23.28\%$
 - Opening Year + 15 (2043): $19.8\% + 0.15\% \times (2043-2022) = 26.47\%$

6.3.3.3 Calculation for car-based trips

Let's take 100 people trips as an example for the base year 2025 (year for which the traffic survey was done). Then, based on a 1.75% annual increase in people trips, the trips for the three design years will be:

- Base Year (2025): 100 trips (assumed)
- Opening Year (2028): $100 \times (1 + 1.75\% \times (2028-2025)) = 105.25$ trips
- Opening Year + 5 (2033): $100 \times (1 + 1.75\% \times (2033-2025)) = 114$ trips
- Opening Year + 15 (2043): $100 \times (1 + 1.75\% \times (2043-2025)) = 131.5$ trips

Thereafter, car trips are calculated based on the formula: Car trips = People trips × Car-based Mode share

- Base Year (2025): $100 \times 45.97\% = 45.97$ trips
- Opening Year (2028): $105.25 \times 44.70\% = 47.05$ trips (+2.3% from base year)
- Opening Year + 5 (2033): $114 \times 42.59\% = 48.55$ trips (+5.61% from base year)
- Opening Year + 15 (2043): $131.5 \times 38.36\% = 50.44$ trips (+9.72% from base year)

6.3.3.4 Comparison Growth factors based on TII Forecasting model

The growth factors for Dublin Metropolitan based on TII's Alternate Growth Factors for Dublin Metropolitan Area is summarised in Section 6.3.2.2.

Based on that, the percentage increase in car-based trips compared to the base year for various design years is summarised below:



- Opening Year (2028): $1.0136^{(2028-2025)} = 4.14\%$ increase
- Opening Year + 5 (2033): $1.0136^{(2030-2025)} \times 1.0051^{(2033-2030)} = 8.63\%$ increase
- Opening Year + 15 (2043): $1.0136^{(2030-2025)} \times 1.0051^{(2040-2030)} \times 1.0044^{(2043-2040)} = 14.06\%$ increase

Based on this, the increase in car-based trips was found to be slightly higher. However, with various transport strategies in place, that higher increase is not what is envisaged in the future. Therefore, growth based on the increase in trips and mode share adjustment will be used to determine car-based trips.

A comparison of growth for car-based trips based on both methods is summarised in Figure 6-3 for all years between 2026 and 2042 (future horizon year).

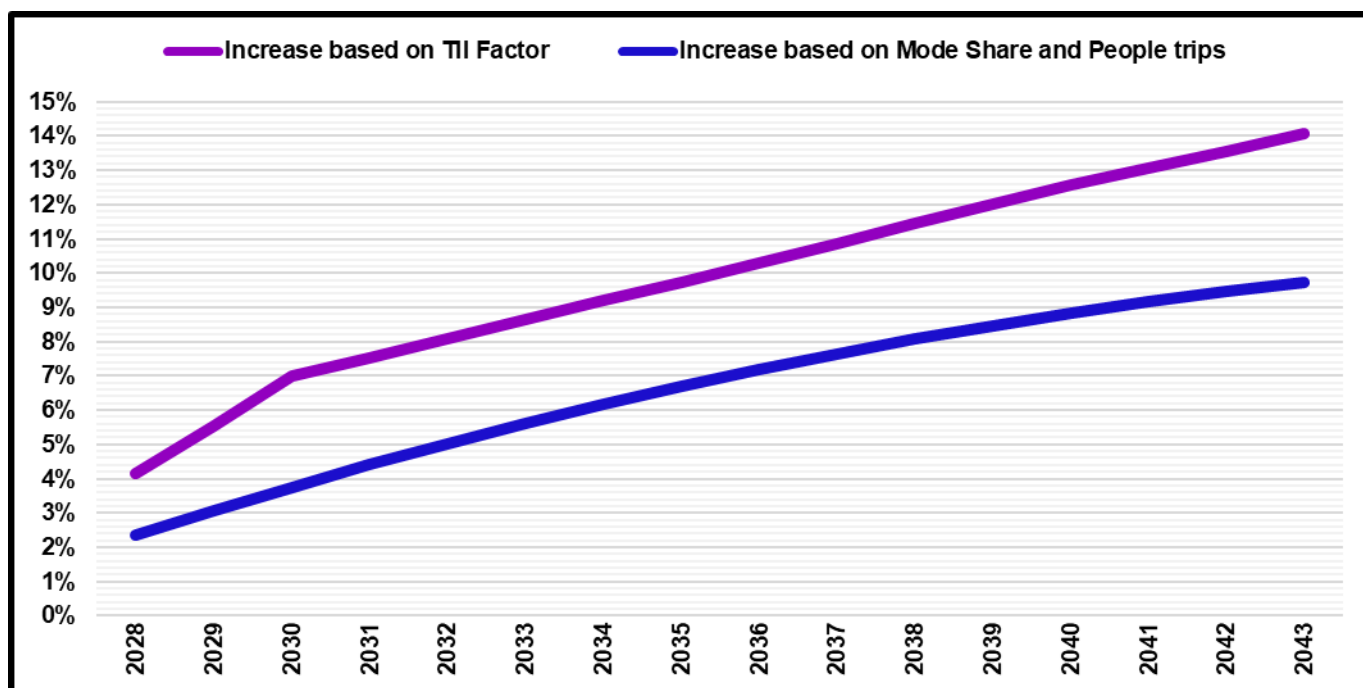


Figure 6-3 - Comparison of growth factors

6.3.4 Heavy Vehicles Trips

Heavy Vehicle (HV) trips will be increased as per the TII growth factors provided in Figure 6-3 above. Based on that, compared to the base year, HV trips will increase as follows for various design years:

- Opening Year (2028): 9.11%
- Opening Year + 5 (2033): 20.43%
- Opening Year + 15 (2043): 38.91%

6.4 Trip Generation

6.4.1 People Trips Rate

The person trip rate for the residential developments was estimated using the TRICS (Trip Rate Information Computer System) database using the “Residential – Houses Privately Owned” and “Residential – Flats Privately Owned” subcategories respectively for Houses and Apartment Units. This gives the total number of trips generated per unit regardless of transport mode. The direct output from TRICS is included in Appendix A and summarised in the Table 6-3 below.

Table 6-3 - People trip rate from TRICS

Period	TRICS Trip Rates (People)	
	Arrivals	Departures
Apartments/Duplex		
AM Peak (08:00-09:00)	0.133	0.441
PM Peak (16:00-17:00)	0.405	0.254
Houses		
AM Peak (08:00-09:00)	0.231	0.804
PM Peak (16:00-17:00)	0.585	0.332

6.4.2 Trip Rates by Travel Mode

Based on the Mode share discussed above in Section 6.3.3.2, the trip rate for all the different modes was calculated by multiplying the people trip rate and the percentage share of each mode. This is summarised in the Table 6-4 below.

Table 6-4 – Trip rate for different modes

Mode	Mode Share	AM Peak				PM Peak			
		Houses		Apartments		Houses		Apartments	
		Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep
Opening Year									
Active Mode	15.39%	0.0355	0.1237	0.0205	0.0679	0.0900	0.0511	0.0623	0.0391
Public Transport	21.68%	0.0501	0.1743	0.0288	0.0956	0.1268	0.0720	0.0878	0.0551
Cars	44.70%	0.1033	0.3594	0.0595	0.1971	0.2615	0.1484	0.1810	0.1135
Other modes	18.23%	0.0421	0.1466	0.0242	0.0804	0.1066	0.0605	0.0738	0.0463
Total	100%	0.231	0.804	0.133	0.441	0.585	0.332	0.405	0.254
Opening Year + 5									
Active Mode	17.73%	0.0410	0.1426	0.0236	0.0782	0.1037	0.0589	0.0718	0.0450
Public Transport	23.28%	0.0538	0.1871	0.0310	0.1026	0.1362	0.0773	0.0943	0.0591
Cars	42.59%	0.0984	0.3424	0.0566	0.1878	0.2491	0.1414	0.1725	0.1082
Other modes	24.20%	0.0559	0.1946	0.0322	0.1067	0.1416	0.0803	0.0980	0.0615
Total	100%	0.231	0.804	0.133	0.441	0.585	0.332	0.405	0.254
Opening Year + 15									



Active Mode	22.43%	0.0518	0.1803	0.0298	0.0989	0.1312	0.0745	0.0908	0.0570
Public Transport	26.47%	0.0611	0.2128	0.0352	0.1167	0.1548	0.0879	0.1072	0.0672
Cars	38.36%	0.0886	0.3084	0.0510	0.1692	0.2244	0.1273	0.1553	0.0974
Other modes	24.20%	0.0559	0.1946	0.0322	0.1067	0.1416	0.0803	0.0980	0.0615
Total	100%	0.231	0.804	0.133	0.441	0.585	0.332	0.405	0.254

6.4.3 Trip Generation

Based on the above trip rates, the hourly trips from the proposed and other developments within LAP for different design years are summarised in Table 6-5. Please note in the Table 6-5 below, AT means Active Travel mode and PT means Public Transport mode. For Opening Year+5 and +15, it was assumed that development along southern character area was also included in the analysis (mentioned as remaining LAP in table below).

Table 6-5 – Trip Generation by mode

Mode	Castlethorn		DLRCC		Remaining LAP		AM Peak				PM Peak			
							Castlethorn		Others		Castlethorn		Others	
	House	Apt	House	Apt	House	Apt	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep
Opening Year														
AT	104	168	9	74	0	0	8	26	2	7	21	13	6	4
PT	104	168	9	74	0	0	10	33	2	8	27	16	7	5
Cars	104	168	9	74	0	0	21	70	5	18	58	35	16	10
Other	104	168	9	74	0	0	8	29	2	7	23	14	6	4
Total							46	158	12	40	129	77	35	22
Opening Year + 5														
AT	292	311	9	74	164	308	21	73	18	60	58	34	50	30
PT	292	311	9	74	164	308	23	80	19	66	64	38	55	33
Cars	292	311	9	74	164	308	46	158	39	131	126	75	109	66
Other	292	311	9	74	164	308	26	90	22	74	72	43	62	37
Total							117	401	98	332	320	190	276	167
Opening Year + 15														
AT	292	311	9	74	164	308	28	97	24	80	77	46	66	40
PT	292	311	9	74	164	308	25	85	21	70	68	40	59	35
Cars	292	311	9	74	164	308	42	143	35	118	114	67	98	59
Other	292	311	9	74	164	308	26	90	22	74	72	43	62	37
Total							121	415	101	343	331	196	285	172

6.5 Trip Distribution

The distribution of trips to the local network is based on the data obtained from Census 2016 Place of Work, School or College - Census of Anonymised Records (POWSCAR) for the Bray Area. The data for the year 2022 is only available to bona fide researchers who are approved by the CSO and signed up as Officers of Statistics. Consequently, it wasn't used. However, since travel patterns to different destinations are unlikely to have changed significantly from the 2016 data, the 2016 data can be considered appropriate for use.

Based on the POWSCAR data, the methodology used for determining the percentage of trips to/from the different zones of the study area is summarised below.

- Commuter data originating from Bray was filtered and their destinations determined.
- Thereafter, the most likely routes taken by commuters to reach various destinations from Bray were determined using Google Maps for the AM peak period. (e.g. people travelling to Dublin are likely to use the M50/M11),
- Based on these likely routes to different destinations, the total number of people traveling to different zones within the study area was calculated. The raw data from the POWSCAR for Bray Region is summarised in Appendix D
- The percentage of trips arriving to these zones are not in POWSCAR data, and therefore it was assumed that the same percentage of trips will apply to arrivals also.
- In addition, since the data for the PM peak is not available, so the corresponding AM peak data were used for PM peak also.

The zones within the study area are summarised in the Table 6-6.

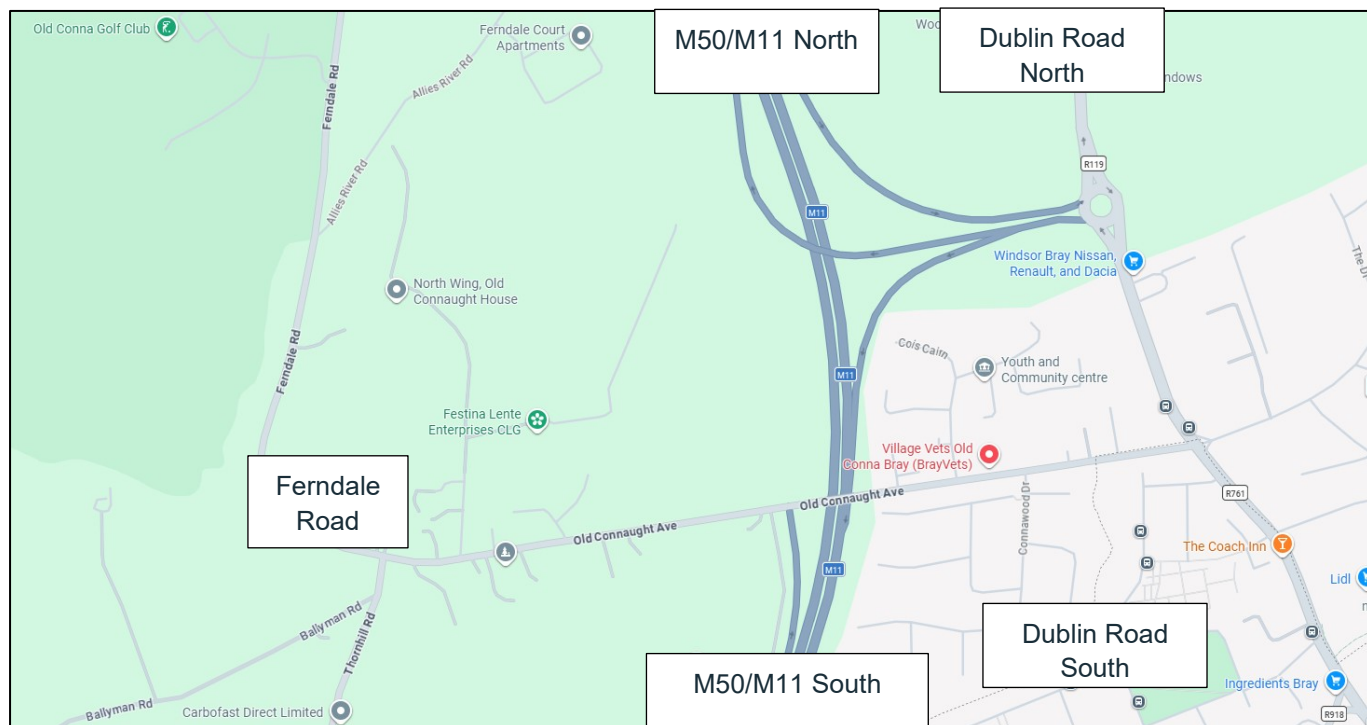


Figure 6-4 - Zones within study area

Table 6-6 - Percentage of commuters to different zones

ZONES	Percentage
Ferndale	0.50%
M50/M11 North	69.92%
Dublin Road North	18.99%
Dublin Road South	9.75%
M11/N11 South	0.84%
Total	100%

6.5.1 Routes taken for different zones

6.5.1.1 Opening Year (2028)

For the Opening Year (2028), the proposed new bridge along the N11/M11 is assumed not to be in place. Therefore, all trips to and from the development would utilise the existing Old Connaught Avenue link to access Dublin Road.

The routes taken to and from the different zones are summarised below.

6.5.1.1.1 Dublin Road North and South

Vehicles travelling to and from Dublin Road (DR) north and south would utilise the routes illustrated in the Figure 6-5 below.

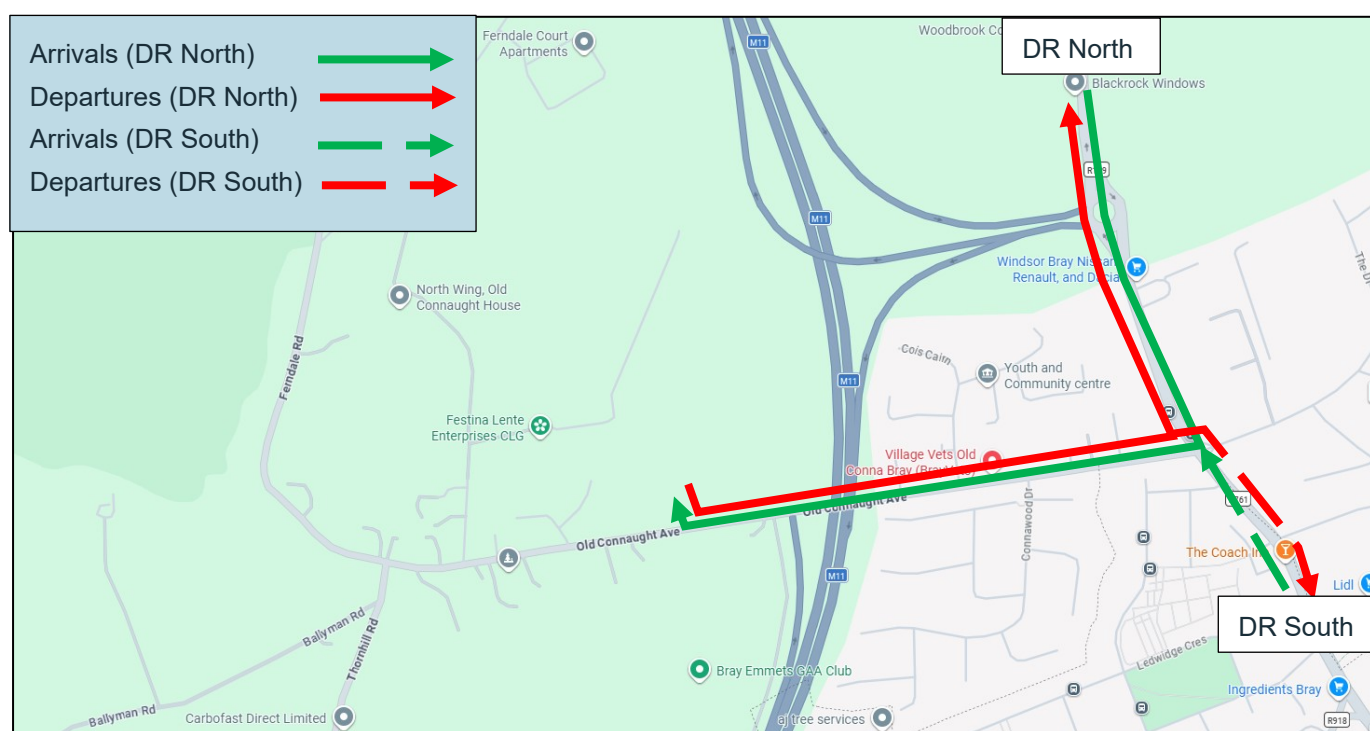


Figure 6-5 - Route to/from Dublin Road: Opening year

6.5.1.1.2 M1/M50 North and south and Ferndale Road

Vehicles travelling to and from the M11/M50 motorway and Ferndale Road would utilise the routes illustrated in the Figure 6-6 below.

The M11 Junction 5 interchange operates with directional constraints:

- Vehicles arriving from the M11 south must utilise the northbound off-ramp onto Old Connaught Avenue to access Bray.
- Vehicles departing towards the M11 south must use the southbound on-ramp at Wilford Roundabout.
- Vehicles travelling to/from the M11 north can utilise the northbound on-ramp and southbound off-ramp at Wilford Roundabout.

These routes are illustrated in Figure 6-6 below.

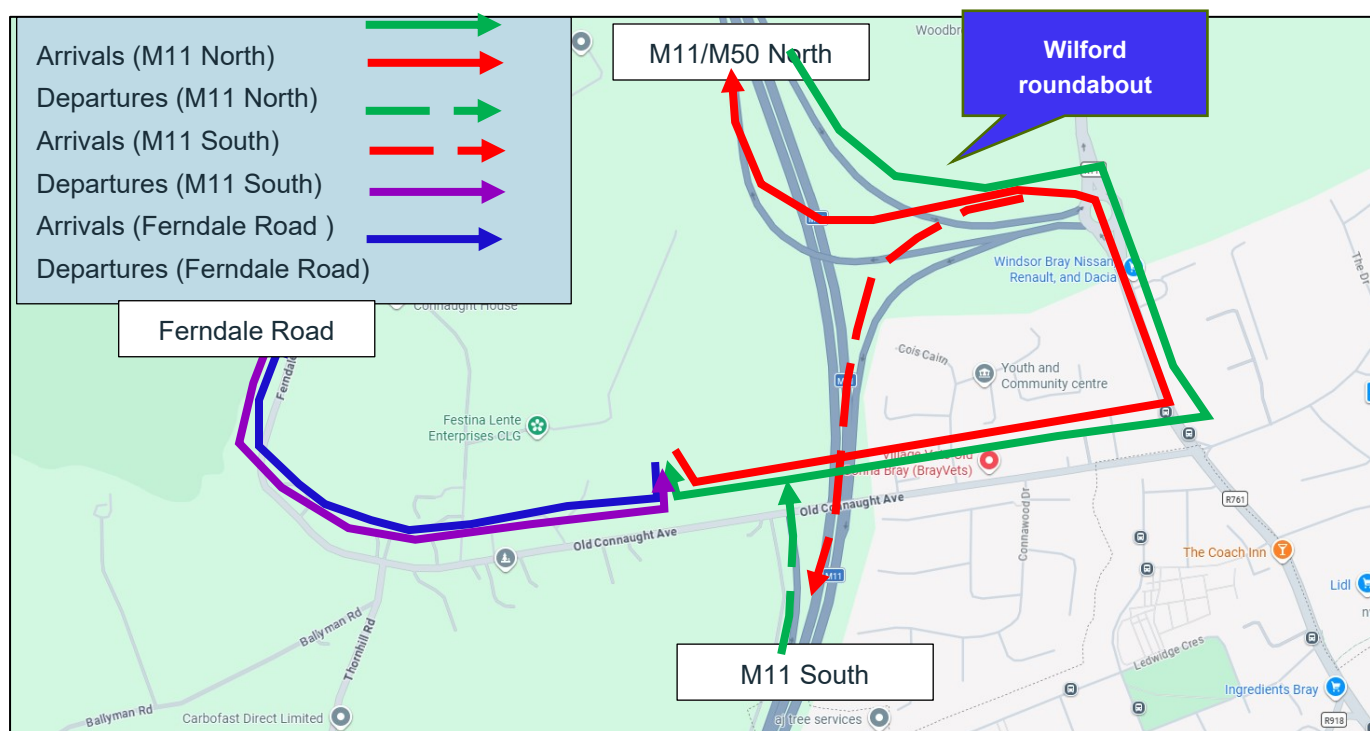


Figure 6-6 - Route to/from Motorway (M11/M50) and Ferndale Road: Opening year

6.5.1.2 Opening Year + 5 (2032)

For the Opening Year +5 scenario (2032), it is assumed that the new M11/N11 bridge (5.9), spanning the M11 and connecting Woodbrook and Shanganagh Castle, will be operational. Accordingly, it is assumed that all development traffic travelling towards the motorway and Dublin Road (northbound) would utilise the proposed new bridge.

In addition, the proposed East–West and North–South link roads are assumed to be in place. The proposed vehicular routing for movements to and from the various zones is summarised below.

6.5.1.2.1 Dublin Road North/South

Vehicles arriving/departing towards Dublin Road would be using the new bridge, while arriving/departing to Dublin Road south would continue to be using the existing Old Connaught Avenue link as summarised in Figure 6-7 below.

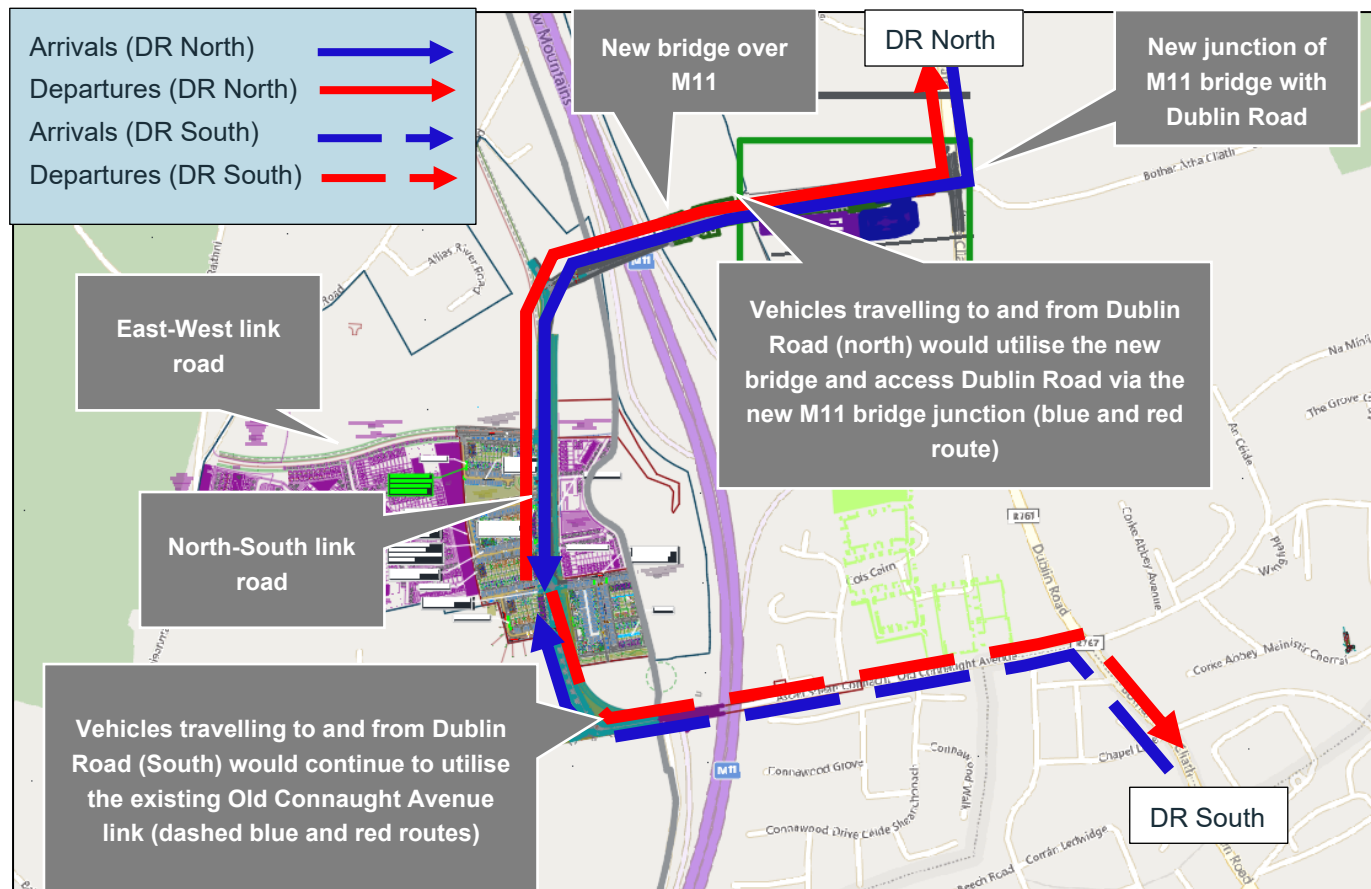


Figure 6-7 - Route to/from Dublin Road: Opening year

6.5.1.2.2 M11/M50 North and South and Ferndale Road

- Vehicles arriving from and departing to the M11/M50 north would utilise the new bridge and travel via Wilford Roundabout to access the appropriate ramps.
- Vehicles travelling towards the M11 south would follow the same route, using the new bridge and proceeding via Wilford Roundabout.
- Vehicles arriving from the M11 south would utilise the existing northbound off-ramp onto Old Connaught Avenue.
- For movements to and from Ferndale Road, vehicles would utilise the new East–West link road.

These routes are summarised in the Figure 6-8 below.

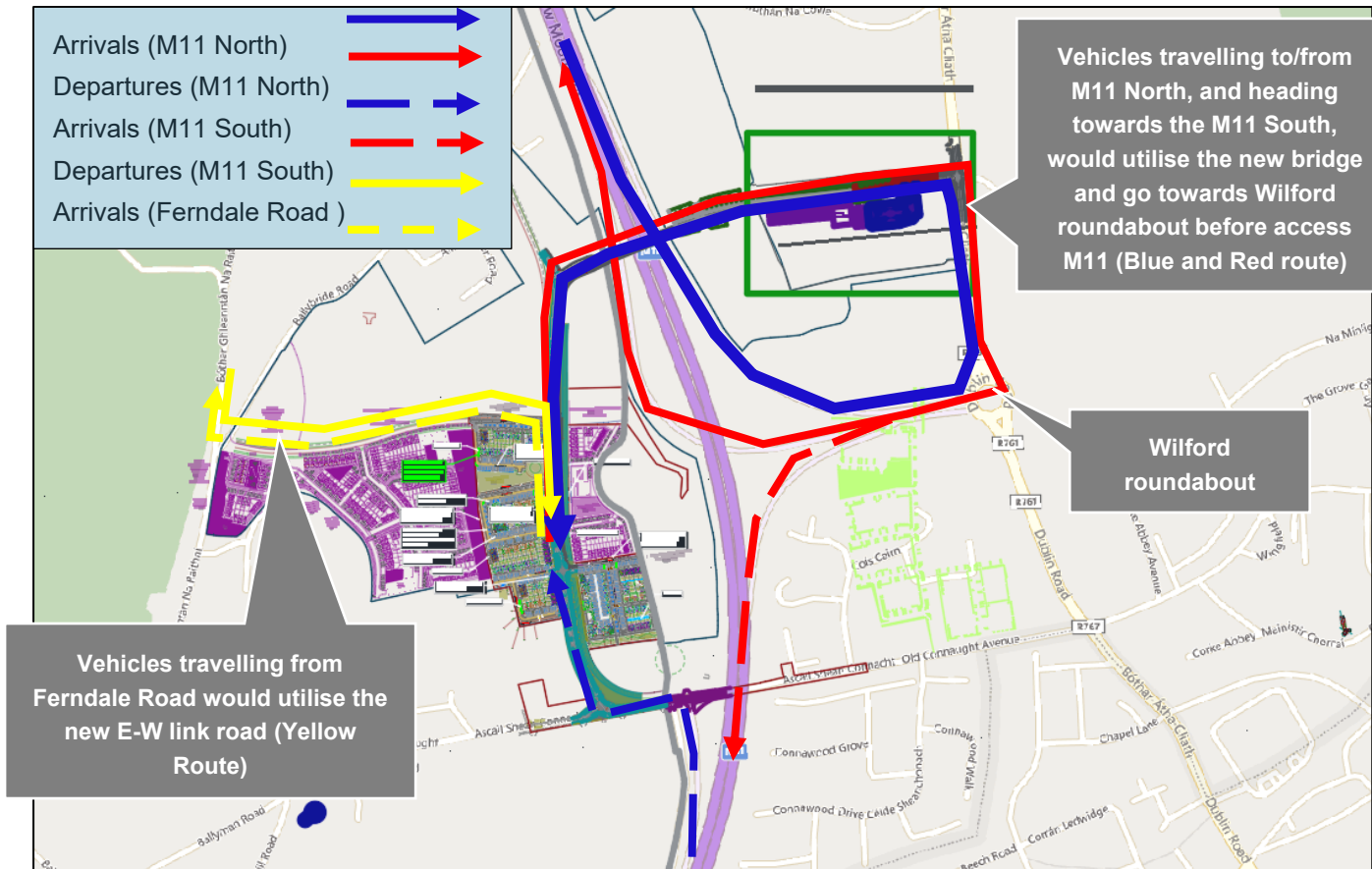


Figure 6-8 - Route to/from Dublin Road: Opening year

6.5.1.2.3 Redistribution of the existing traffic

The existing traffic from Ferndale Road and Thornhill Road going towards M11 North and Dublin Road North zones were also assumed to be redistributed using the new link road (Noth-South and East-West link road) and new M11 bridge as summarised in Figure 6-9.

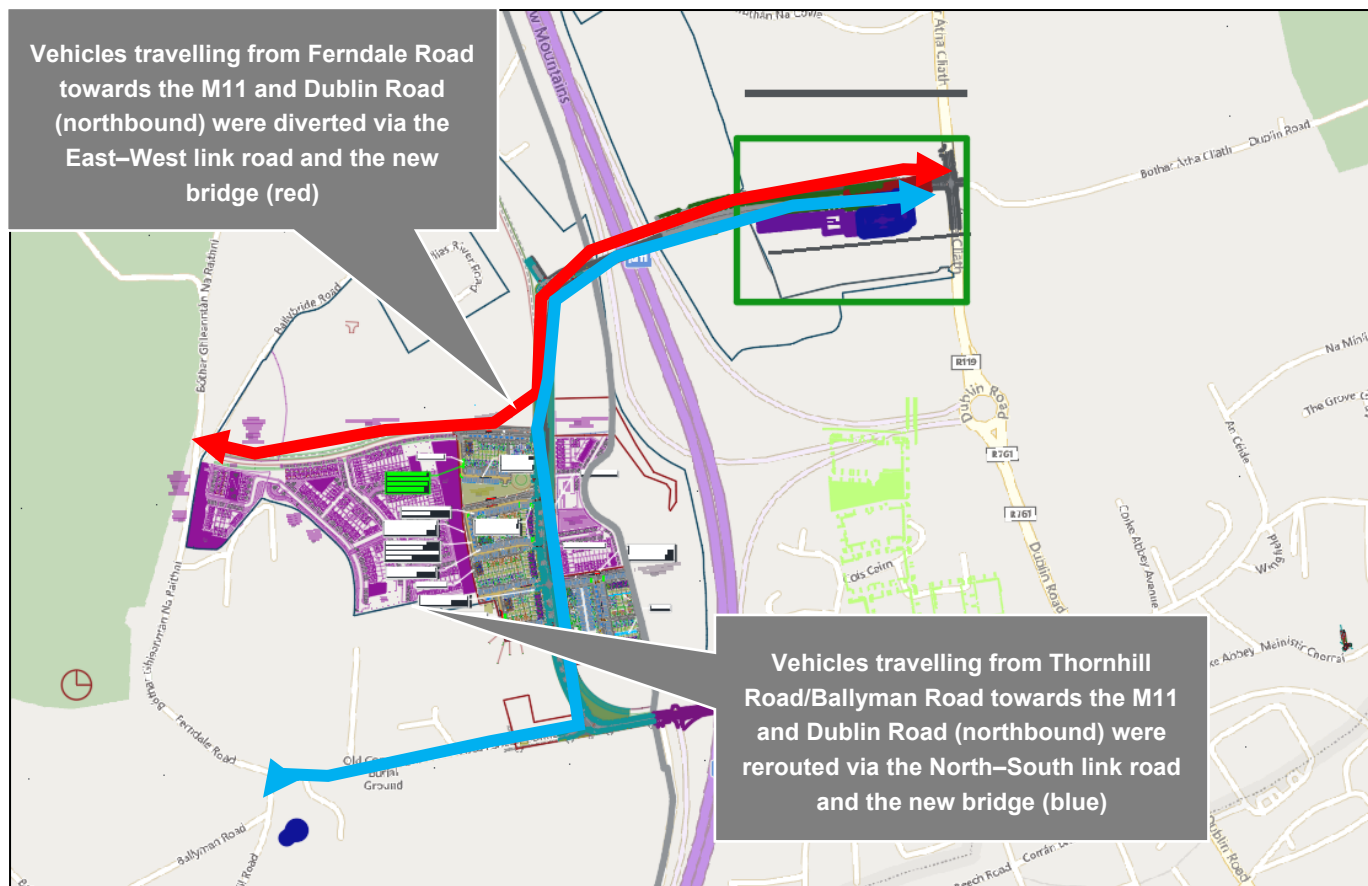


Figure 6-9 - Route to/from Dublin Road: Opening year

6.5.1.3 Opening Year +15

For Opening Year+15, it was assumed that the entire Phase A residential lands will be developed to be developed, along with the bus gates along Old Connaught Avenue. These bus gates would restrict the through movements between Ferndale Road and Dublin Road and would create a quiet street environment. Based on that that the proposed routes for the diverted existing traffic and development traffic are summarised below.

6.5.1.3.1 Diversion of existing traffic between Ferndale Road and Dublin Road

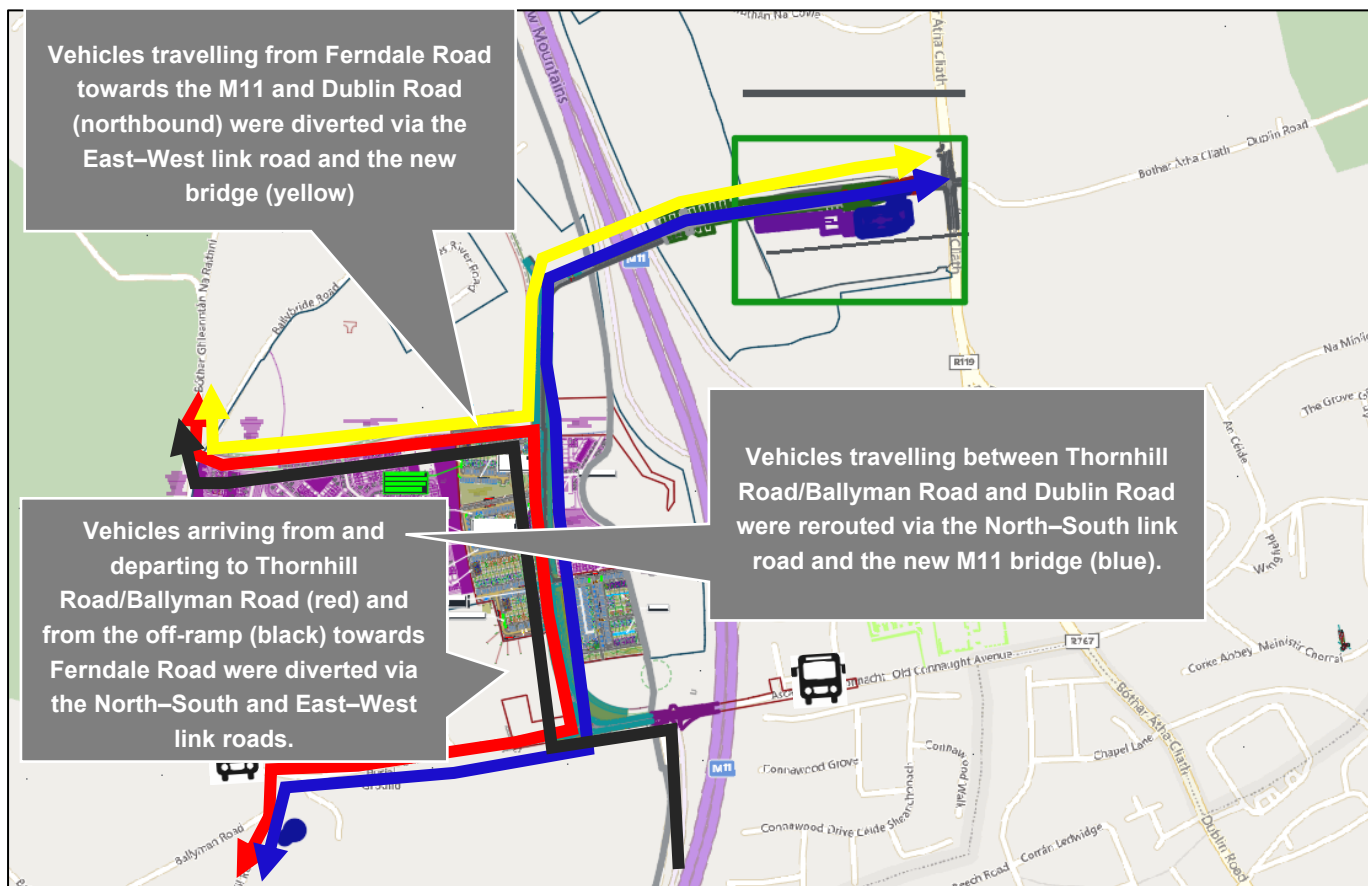


Figure 6-10 - Route to/from Dublin Road: Opening year

6.5.1.3.2 Proposed development trips route

Due to the bus gate along Old Connaught Avenue, vehicles travelling to and from Dublin Road would be required to use the new bridge for all zones, except for vehicles arriving from the M11 southern zones. These vehicles would continue to use the existing northbound off-ramp.

These movements are summarised in the Figure 6-11 below.

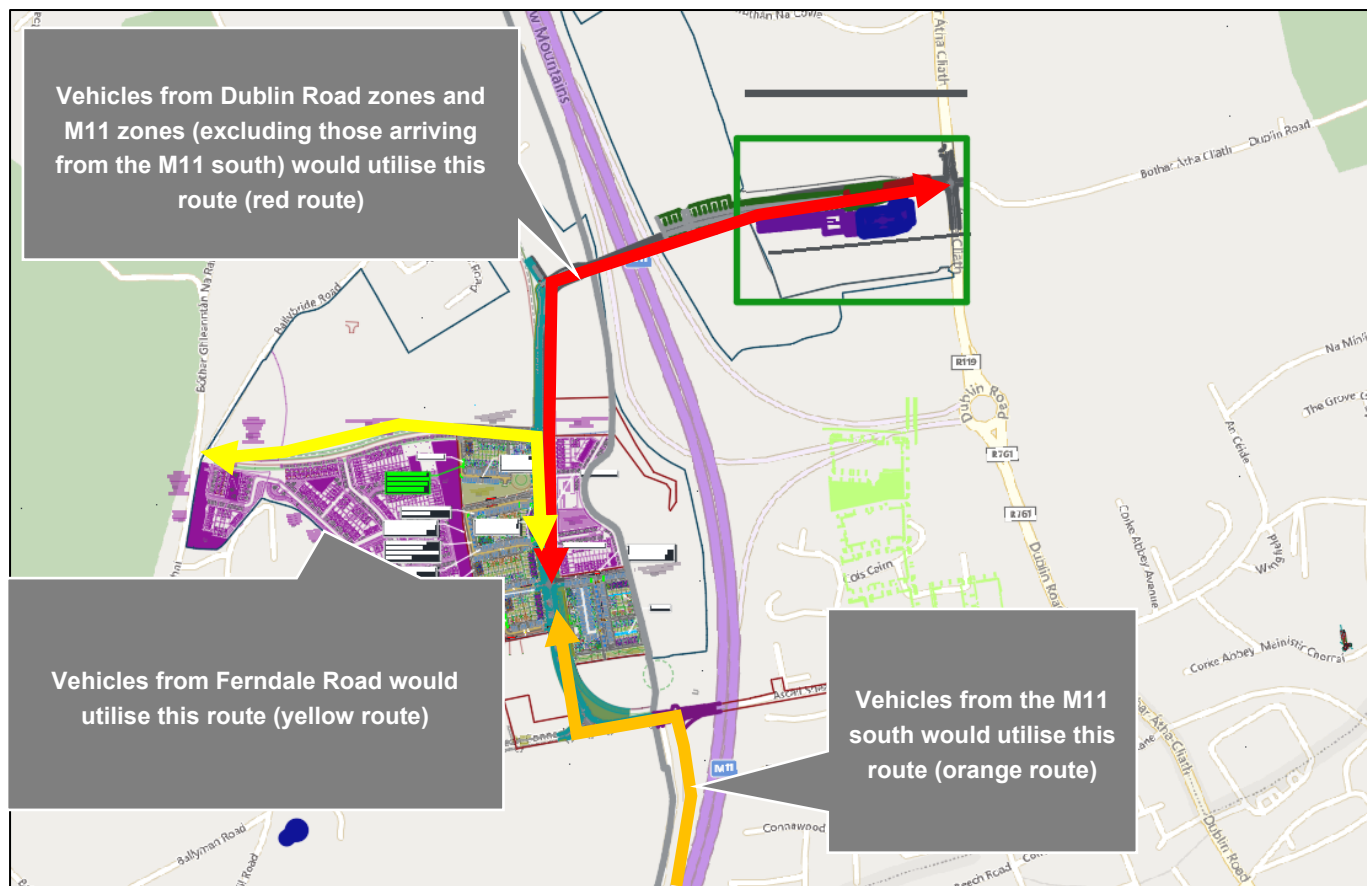


Figure 6-11 - Route to/from Dublin Road: Opening year

6.5.2 Modelling Software

Depending on the junction type, the following software were used for the assessment.

- Signalised: JCT LinSig v3
- Priority/Roundabout: TRL Junction 11

The terminology associated with this software are mentioned below.

JCT LinSig v3.

- **DOS:** This is the ratio of demand flow to capacity on a link. The saturation level is normally 90%. A degree of saturation below 90% represents a junction that is operating in an efficient and stable condition. If a link has a degree of saturation of between 90% and 100% it may still be operating to an adequate standard depending on the acceptability of queuing and delay. A degree of saturation of above 100% is considered to be over-capacity.
- **Mean Maximum Queue (MMQ):** The sum of the maximum queue on a link (including uniform, random and oversaturation queues) averaged over all the cycles in the modelled time period.
- **Average Delay:** The average delay for each passenger car unit (pcu) on the lane averaged over the modelled time period.
- **Practical Reserve Capacity (PRC):** A measure of how much additional traffic could pass through the junction whilst maintaining a maximum degree of saturation of 90% on all lanes. Measured as a percentage.

TRL Junction 11

- **RFC:** This is the ratio of demand flow to capacity. The practical capacity threshold is normally approximately 0.85. An RFC below 0.85 represents a junction which is operating in an efficient and stable condition. An RFC of between 0.85 and 1 represents variable operation and may be said to be operating adequately if the queueing and delay are deemed acceptable. RFC values in excess of 1 represent an oversaturated condition.
- **Queue Length:** This represents the maximum of the average queue length in pcu per time segment.
- **Average Delay:** This shows the average amount of traffic delay at the junction per vehicle over the peak hour period.
- **Level of Service (LOS):** LOS for intersections is a function of the average vehicle control delay. LOS may be calculated per movement or per approach for any intersection configuration.



7. Traffic Impact Assessment (Junction Modelling)

As per TII Traffic and transport assessment guidelines, a detailed assessment for the development which would generate significant additional trips on adjoining infrastructure should be undertaken.

Based on that, the following key junctions within the network were considered for the analysis:

- Wilford Roundabout (Dublin Road/M11-Junction 5 slips)
- Dublin Road-Old Connaught Avenue-Cork Abbey signalised junction
- Proposed North-South link road junction with Old Connaught Avenue (Refer to Section 5.6.1)
- Proposed East-West/North-South Link Road Signalised Junction (Refer to Section 5.6.1)
- Proposed M11/N11 bridge from Old Connaught Avenue/Dublin Road Signalised junction (Refer to Section 5.9)

These junctions were closest to the proposed development and trips from the development are going to use them to commute to M50 and M11 and Bray/Dún Laoghaire area.

7.1 Background traffic condition

Dublin Road corridor from Wilford Roundabout till Bray Central (R760/761 junction) is a congested corridor with significant congestion and delay happening during both AM and PM peak period. Since the junctions are close to each other the spill back of queue on one junction impacts the other junctions down stream of it along this corridor.

A typical google maps traffic data congestion for this corridor is summarised in the Figure 7-1 below.

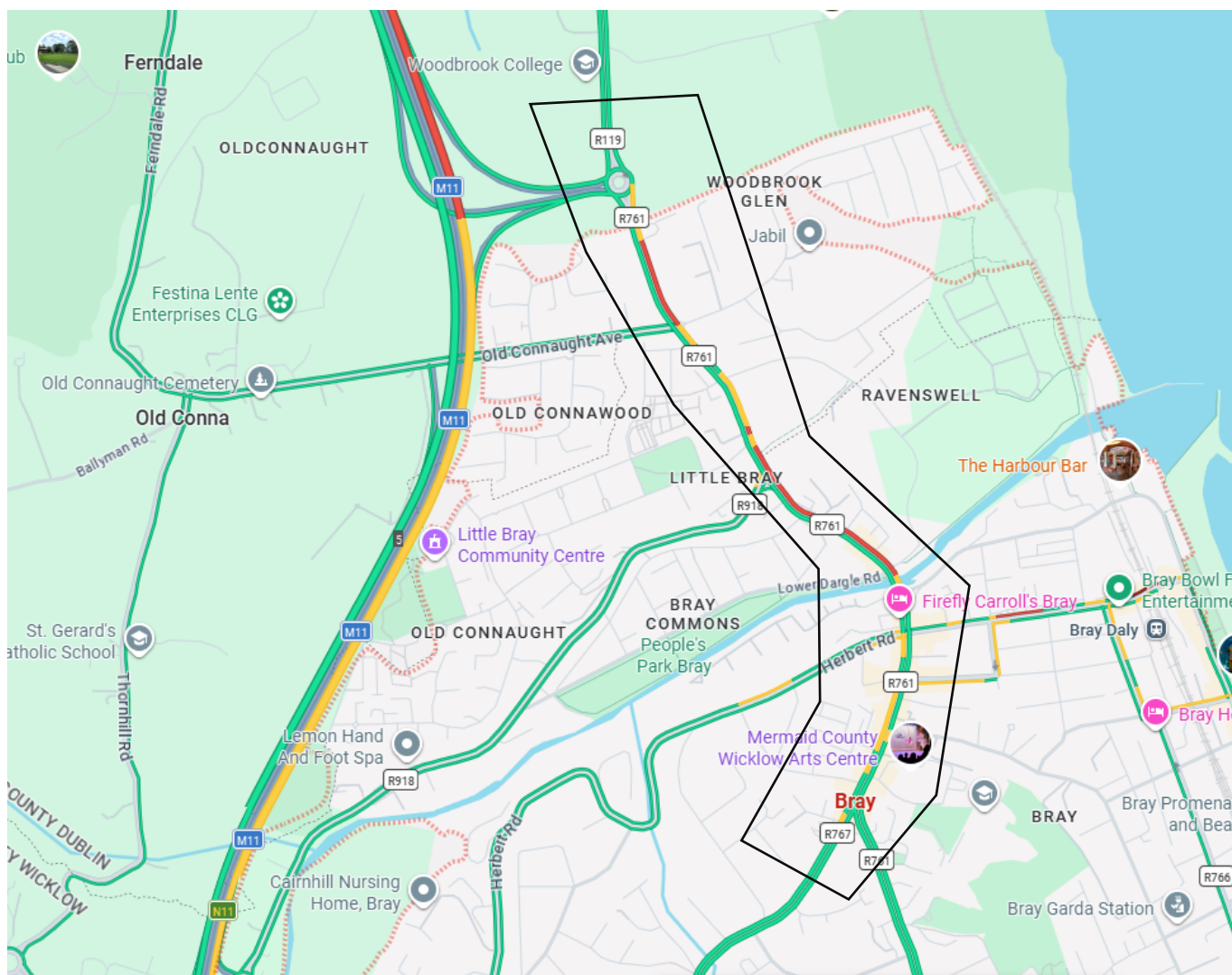


Figure 7-1 - Route to/from Dublin Road: Opening year

However, since the assessment is limited to only two junctions along this corridor: Wilford Roundabout and Dublin Road/Old Connaught Avenue junction. Therefore, individual junction modelling was undertaken for these two junctions. Therefore. The impact of spillback of queue from one junction to another was not taken under consideration for the analysis.

These junctions were modelled using either TRL Junction 11 or JCT LinSig (v3) software depending on type of the junction. The TRL Junction 11 software was used to model priority junctions and the LinSig software for signalised junctions. Further details are summarised in the subsequent section. For each junction. the analysis was done for the three design years as discussed earlier in the section.

7.2 Dublin Rd-Cork Abbey-Old Connaught Avenue

7.2.1 Opening Year

7.2.2 Geometry

For the opening year, the junction is modelled as an existing 4-arm signalised junction as summarised in Figure 7-2 below.



Figure 7-2 – Existing Junction Geometry

The lane assignment of all the arms for Old Connaught-Dublin Road-Cork Abbey junction are summarised below:

- **Dublin Road North:** The arm is a single lane with right turning pocket of around 70meters length. Towards the junction it has a slip lane for left turners which can accommodate 1-2 cars. These left turning vehicles need to wait for the non-conflicting movement
- **Dublin Road South:** The arm is again a single lane with right turning pocket of around 30 meters. There is no slip lane for left tuners along this arm. A pedestrian crossing is there along this arm.
- **Old Connaught Avenue:** The arm is again a single lane with right turning pocket of around 60 metres. Along this arm, a pedestrian crossing is present.
- **Cork Abbey:** The arm has a single lane with small right turning pocket for left and right turners (to accommodate 2-3 vehicles) towards the signal.

7.2.3 Model Scenarios

- Do Minimum: It represents the existing infrastructure. Traffic in this scenario only includes the background growth of trips as discussed in Section 6.3.
- Do Something 1: It includes Do Nothing infrastructure + Background Growth of traffic + Proposed Phase A1 development
- Do Something Scenario 2: It includes all the infrastructure and trips in Do Something Scenario 1+ Any other trips from the LAP (which includes DLRCC lands)

7.2.4 Traffic Volume for Different Scenarios

7.2.4.1 Do Minimum Opening Year

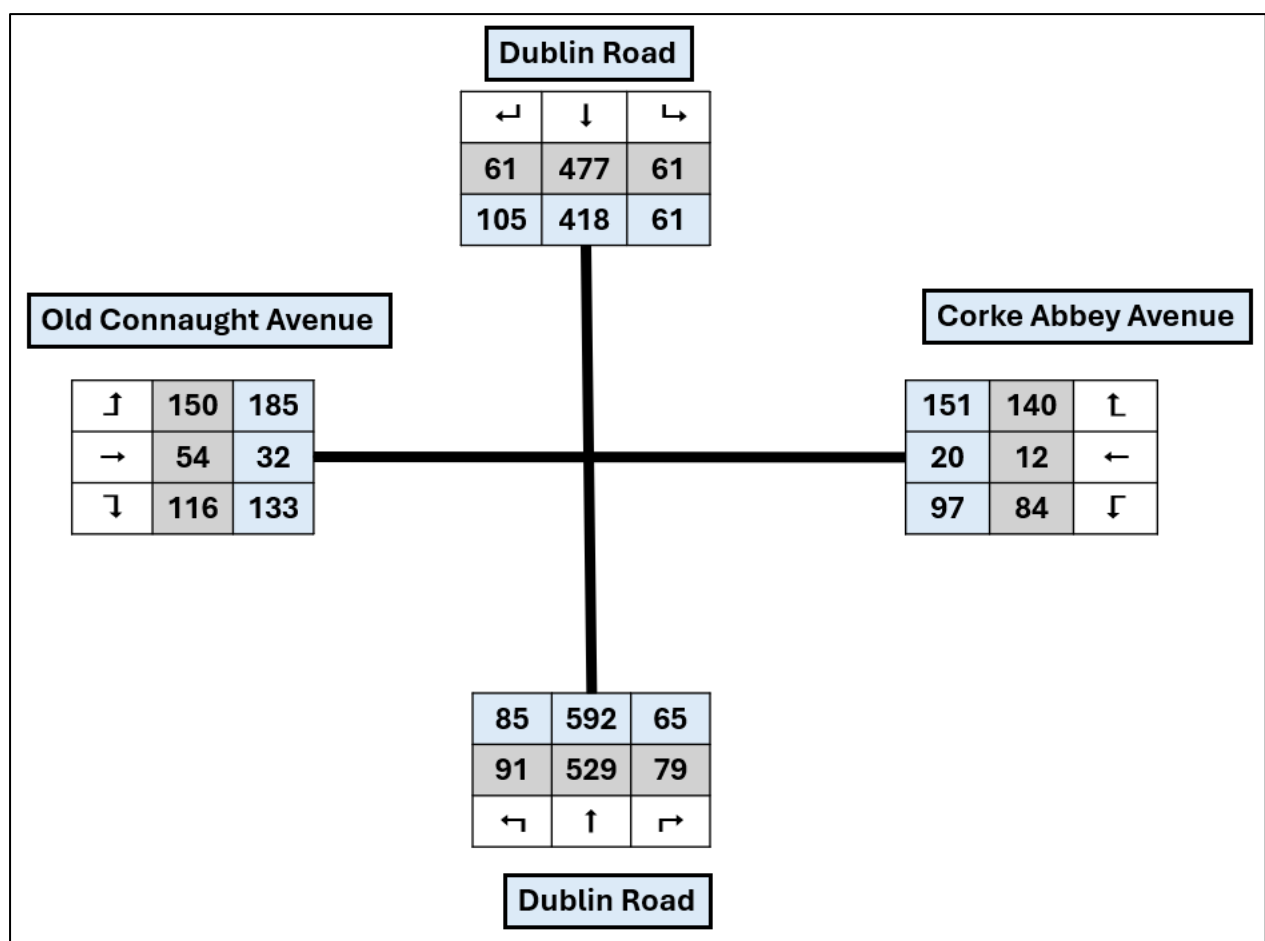


Figure 7-3 – Do Minimum Traffic Volumes Opening Year

7.2.4.2 Do Something 1 Opening Year

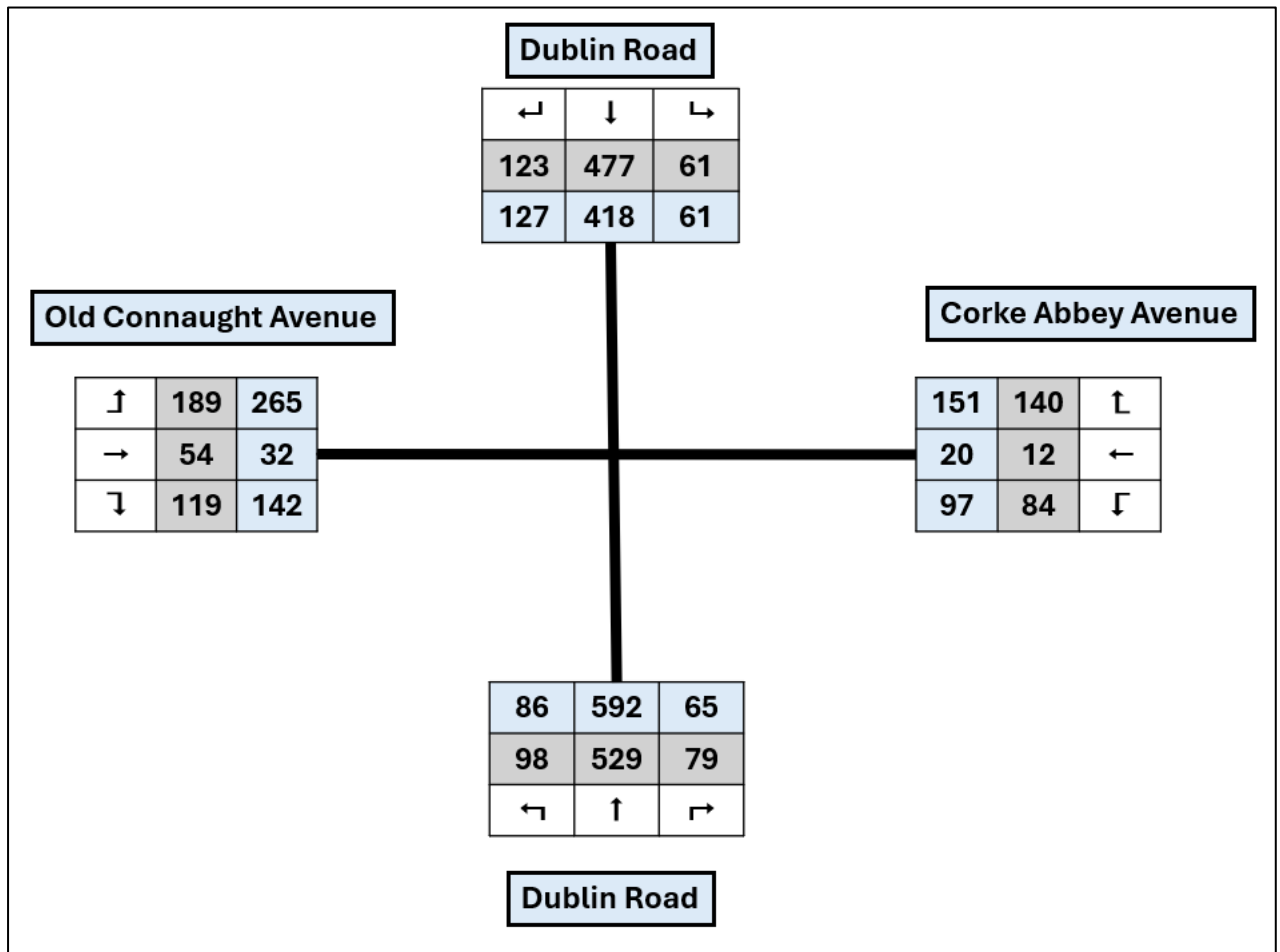


Figure 7-4 - Do Something 1 Traffic Volumes Opening Year

7.2.4.3 Do Something 2 Opening Year

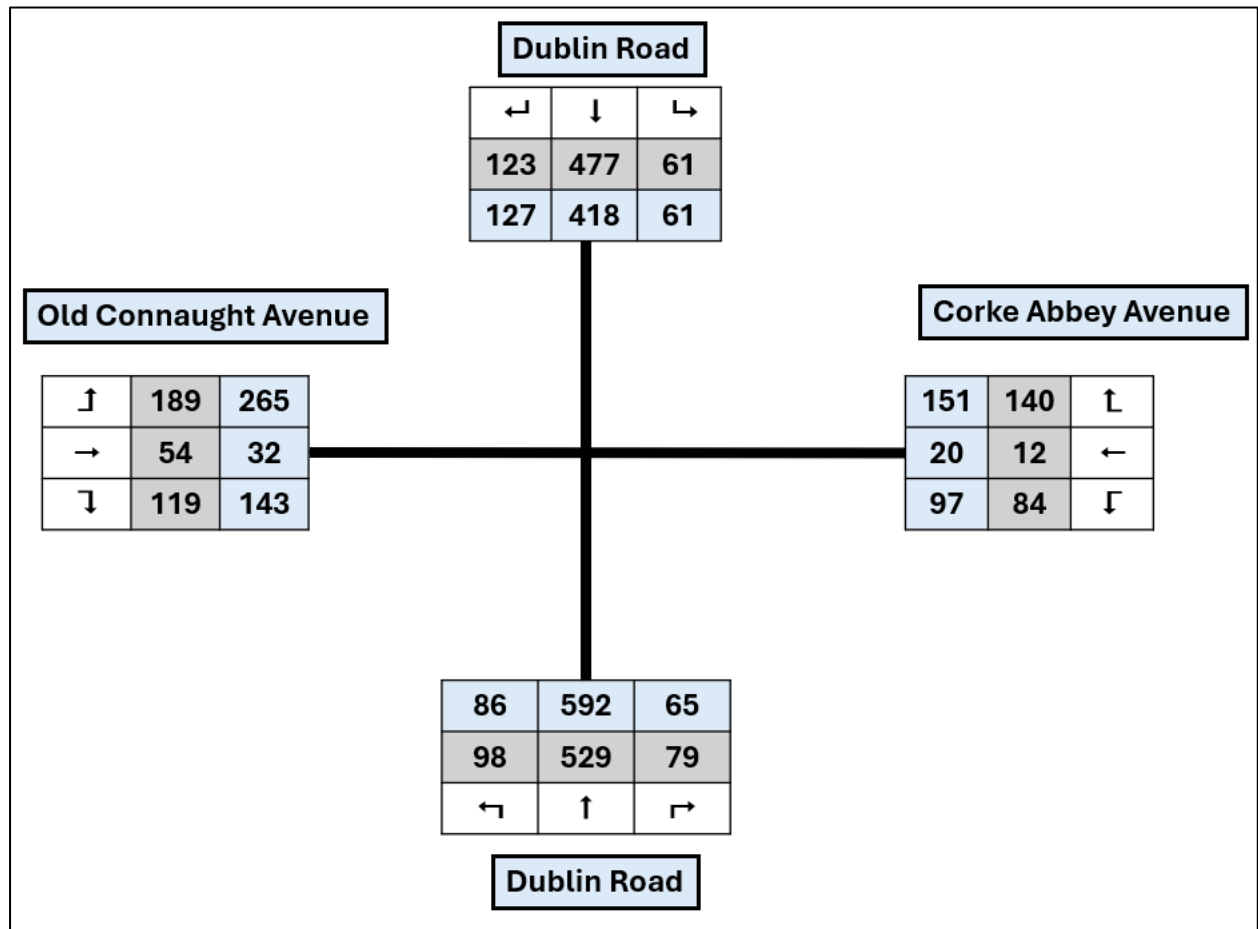


Figure 7-5 - Do Something 2 Traffic Volumes Opening Year

7.2.4.4 Do Minimum Opening Year + 5

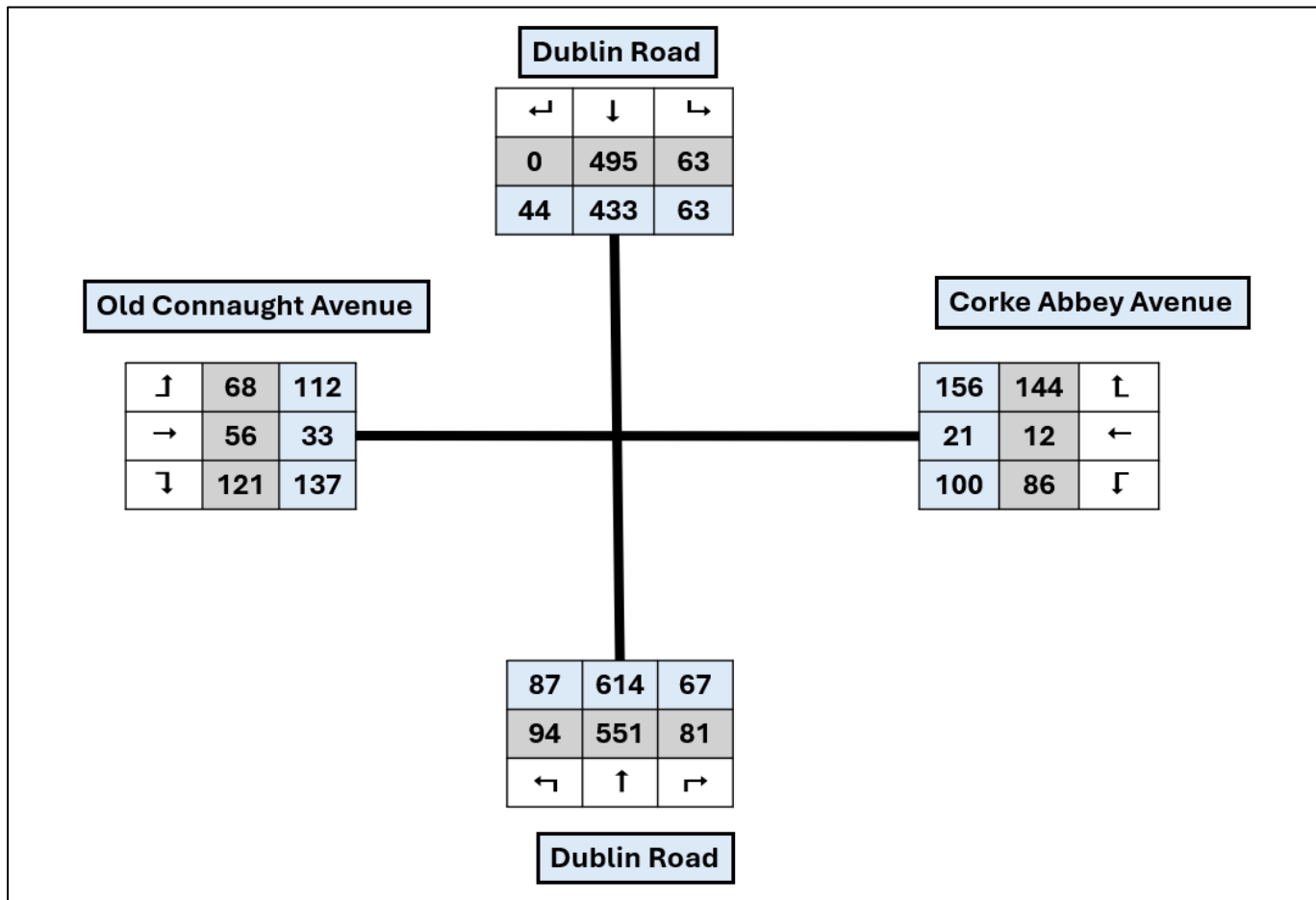


Figure 7-6 – Do Minimum Traffic Volumes Opening Year + 5

7.2.4.5 Do Something 1 Opening Year + 5

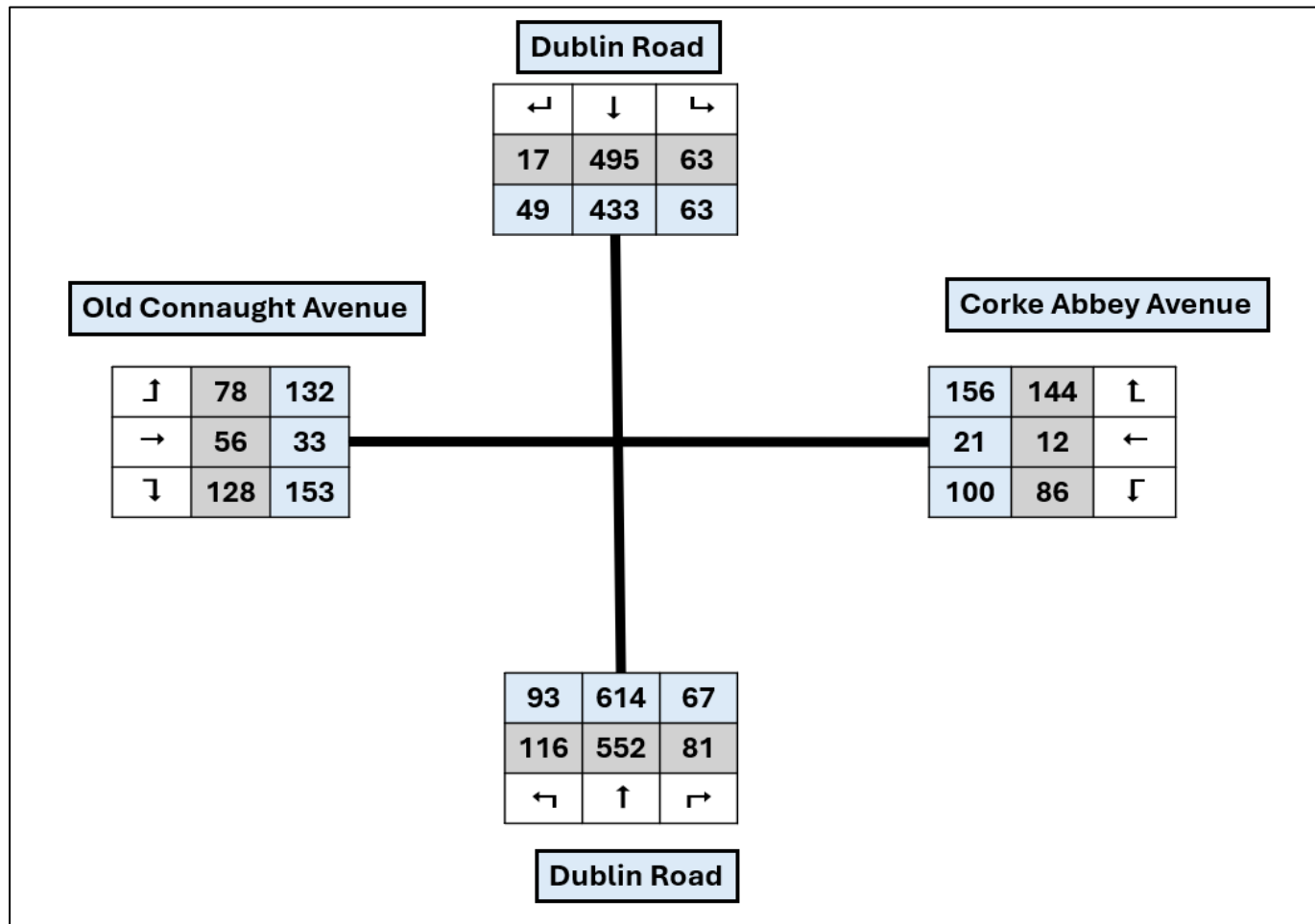


Figure 7-7 - Do Something 1 Traffic Volumes Opening Year + 5

7.2.4.6 Do Something 2 Opening Year + 5

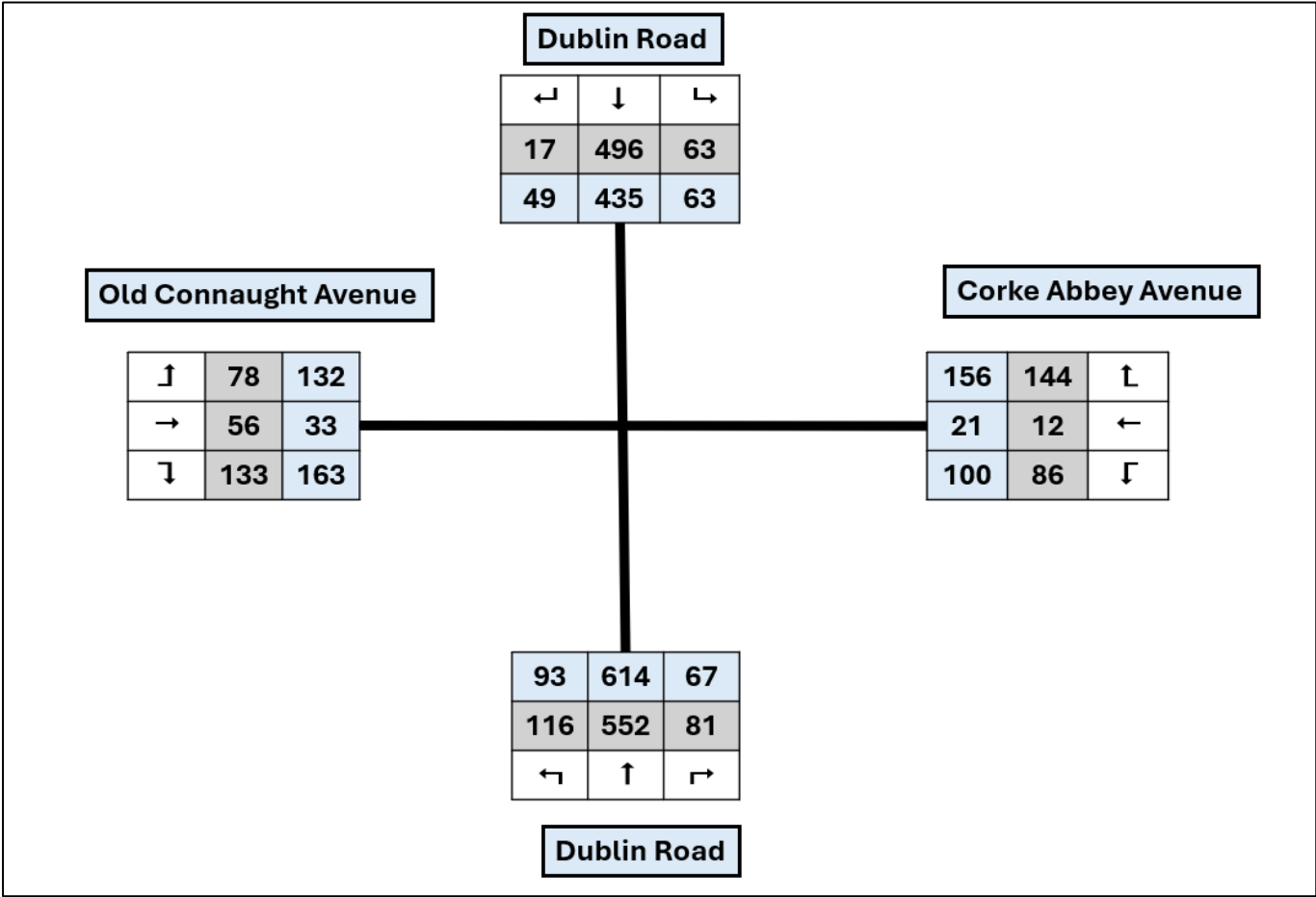


Figure 7-8 - Do Something 2 Traffic Volumes Opening Year + 5



7.2.4.7 Do Minimum Opening Year + 15

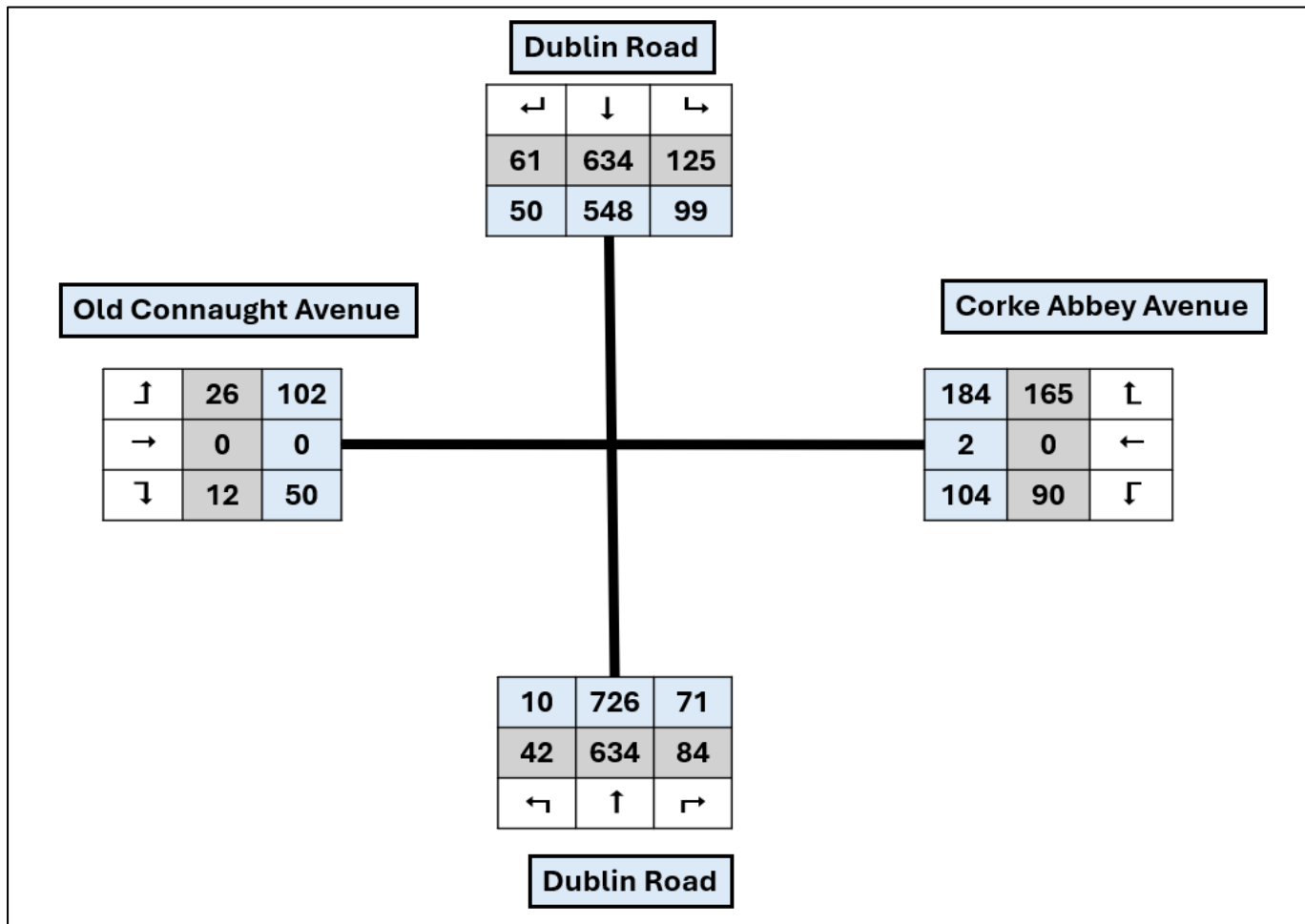


Figure 7-9 – Do Minimum Traffic Volumes Opening Year + 15

7.2.4.8 Do Something 1 Opening Year + 15

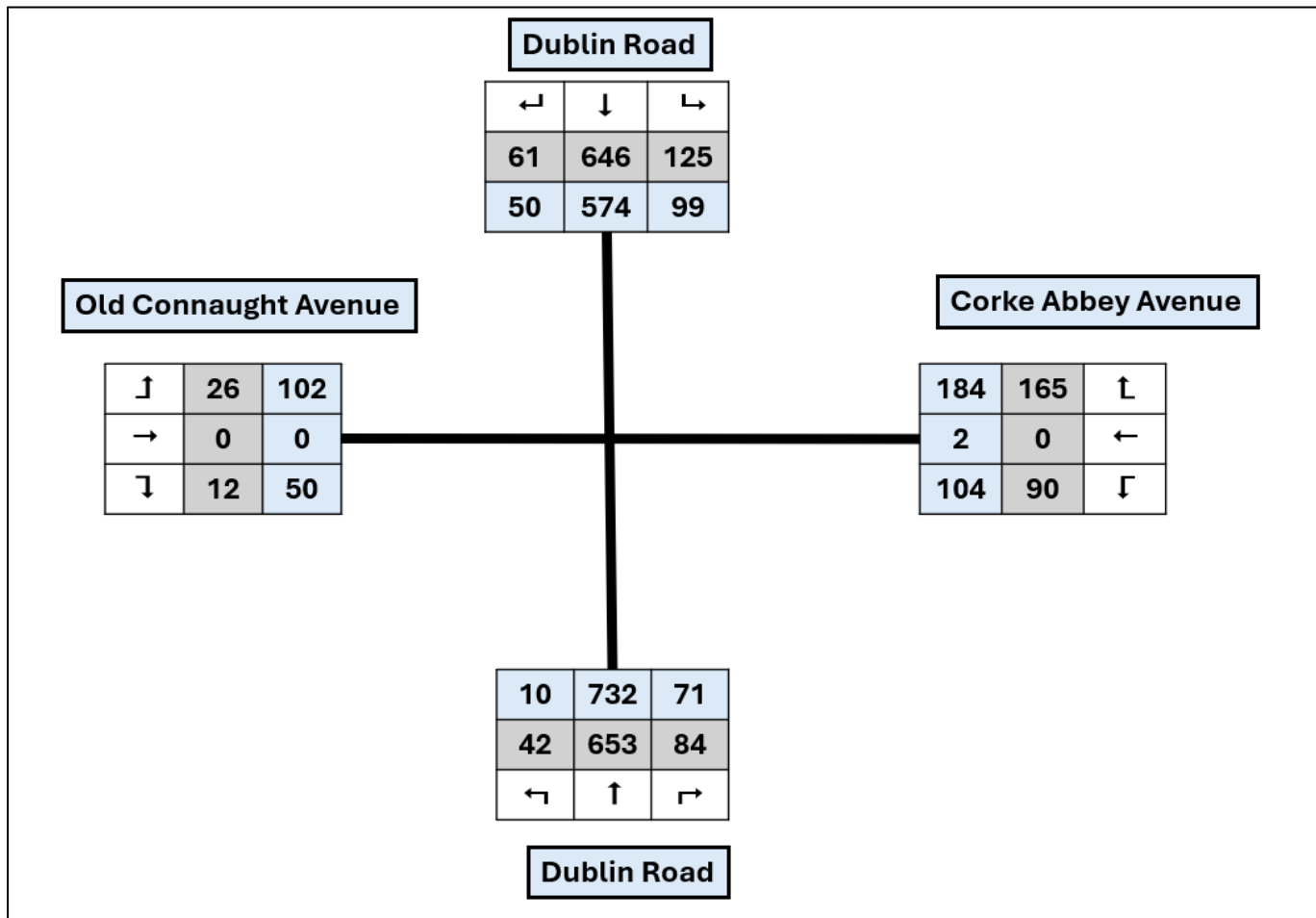


Figure 7-10 - Do Something 1 Traffic Volumes Opening Year + 15

7.2.4.9 Do Something 2 Opening Year + 15

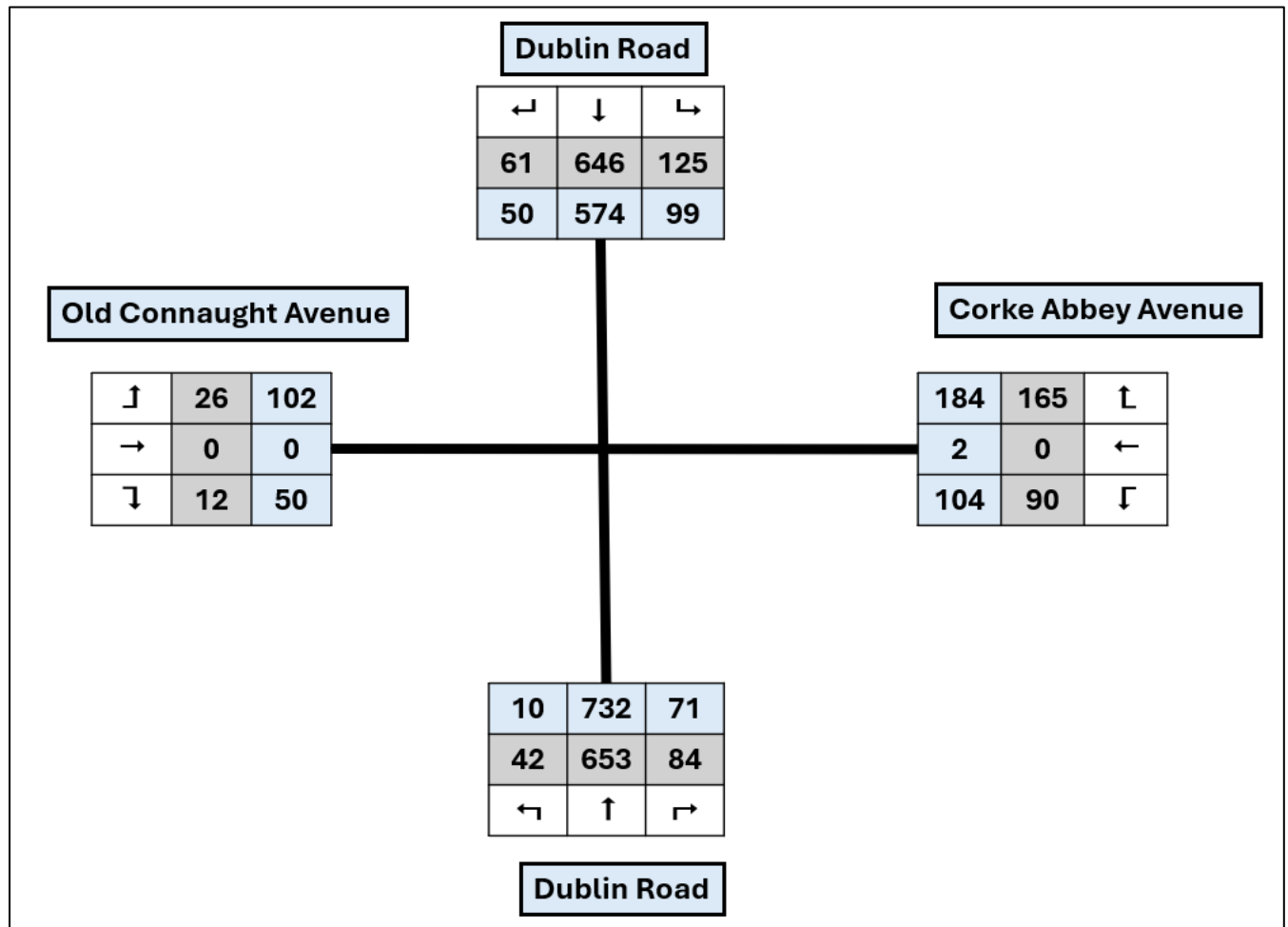


Figure 7-11 - Do Something 2 Traffic Volumes Opening Year + 15

7.2.4.10 Geometry (Proposed upgrade)

This junction has been proposed to be upgraded as part of Bray BusConnects proposal. The proposed layout is shown in Figure 7-12 below. As per the design, the junction will have bus priority lane along Dublin Road in both directions. Also, 1-way cycle lane is to be provided along Dublin Road in both directions.

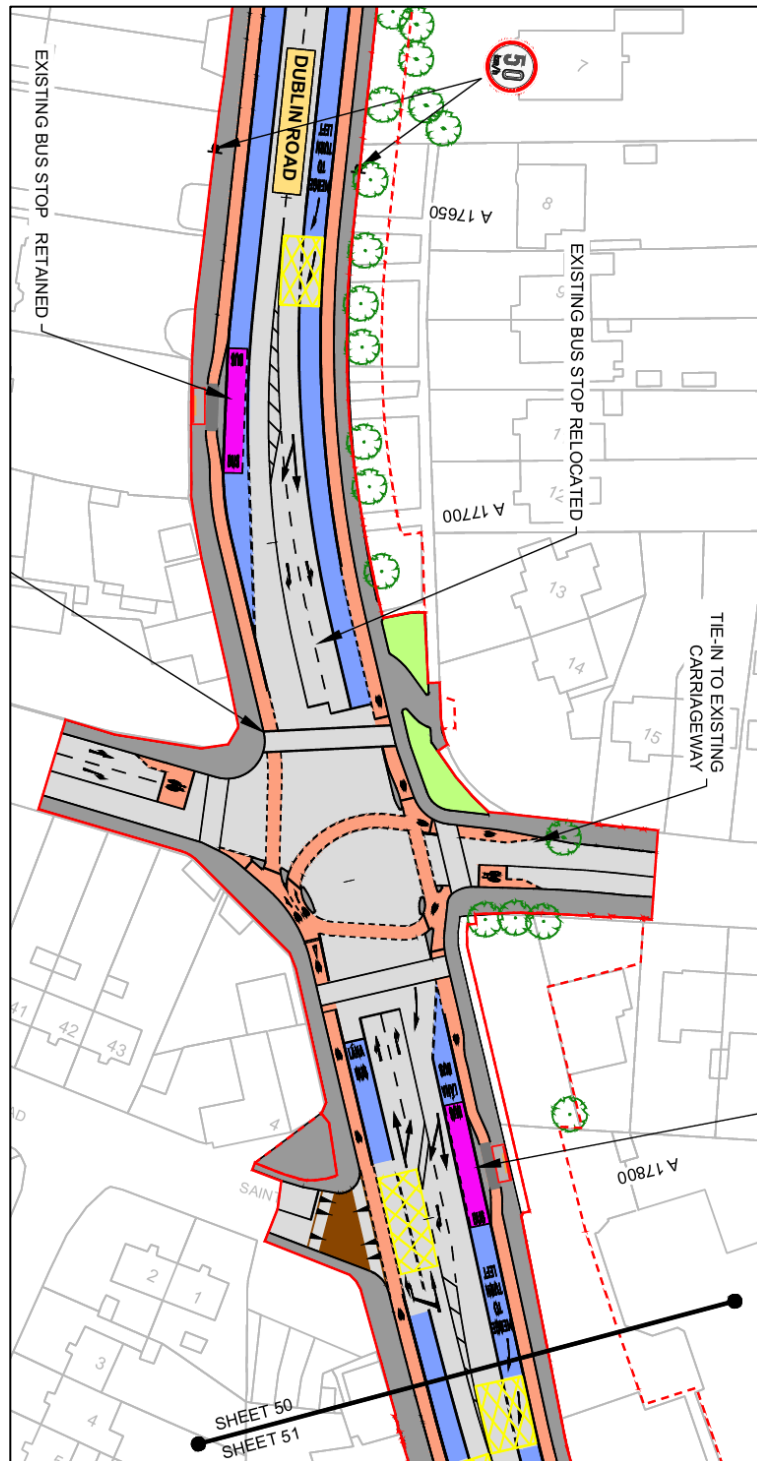


Figure 7-12 – Proposed BusConnects Junction Upgrade

For the analysis it was assumed that the proposed design will be not effective for Opening Year scenarios, and hence the junction was modelled as per existing condition for opening year scenarios. For opening Year+5 and +15, the junction is modelled as per the proposed layout of the BusConnects.

7.2.4.11 Modelling Scenarios

For all the design years the junction will be modelled for following scenarios:

- Do Minimum: It represents proposed infrastructure based on Bus Connects Design. Traffic in this scenario only includes the background growth of trips as discussed in Section 6.3. Table 7-1 also includes the redistribution of trips due to proposed new M11 bridge (OY+5 and +15) and Bus Gates proposal along Old Connaught Avenue (in OY+15).
- Do Something 1: It includes Do Minimum infrastructure + Background Growth of traffic + Proposed development from full masterplan lands owned by Castlethorn.
- Do Something Scenario 2: It includes all the infrastructure and trips in Do Something Scenario 1+ Any other trips from the LAP (which includes DLRCC lands and Southern Character Area of LAP) for both design years.

7.2.5 Stage Sequence

Since for all the scenarios this is modelled as a signalised junction, JCT Linsig v3 is used for modelling.

7.2.5.1 Opening Year

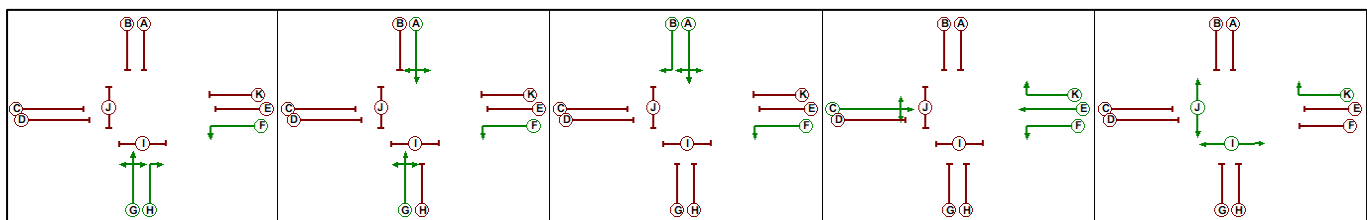


Figure 7-13 – Stage Sequence: Opening year

- The first stage provides a general green on the Dublin Road southern arm and left turners on Corke Abbey Avenue receive a green.
- In the second stage, both Dublin Road arms receive a general green with right turners progressing when gaps in traffic occur, the Corke Abbey Avenue left turning green continues with the Dublin Road northern arm having priority.
- In the third stage the Corke Abbey Avenue left turning green continues and the northern Dublin Road arm receives a general green.
- In the fourth stage, the Corke Abbey Avenue arm receives a green and the Old Connaught Avenue arm receives a green with right turners waiting for gaps to progress.
- In the final stage both pedestrian crossings receive a green while the right turners on the Corke Abbey Avenue receive a green.

7.2.5.2 Opening Year + 5 and +15

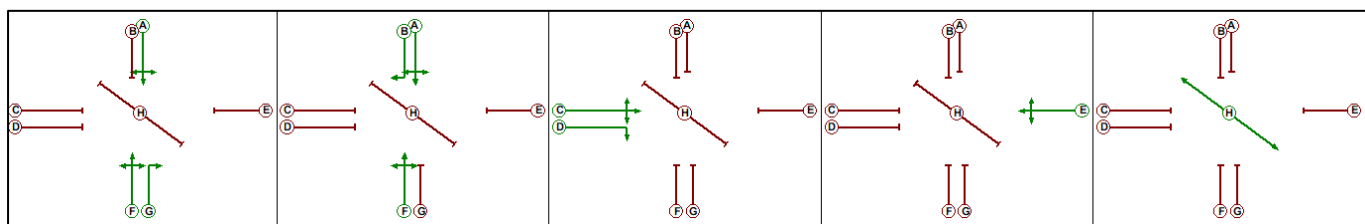


Figure 7-14 – Stage Sequence Opening year + 5 and Opening Year + 15

- The first stage provides a general green on the Dublin Road southern arm, while the northern Dublin Road arm gets a green for straight and left turning movements.
- In the second stage, the Dublin Road northern arm receives a general green and the southern Dublin Road arm gets a green for left turning and straight movements.
- In the third stage the Old Connaught Avenue arm receives a green.
- In the fourth stage, the Corke Abbey Avenue arm receives a green.
- In the final stage all pedestrian crossings receive a green.

7.2.6 Modelling Results

7.2.6.1 Opening Year

Table 7-1 - LinSig Modelling Results: Old Connaught/Dublin Road Junction: OY Scenarios

Opening Year (2028)								
Arm	AM Peak				PM Peak			
	MMQ	Delay	DOS	PRC	MMQ	Delay	DOS	PRC
DM								
Dublin Rd N Southbound	14.6 PCU	30 seconds	53.30%	2.90%	16.6 PCU	28 seconds	56.60%	25.5%
Cork Abbey Rd Westbound	7.4 PCU	1 minute and 34 seconds	39.60%		5.7 PCU	1 minute and 7 seconds	57.00%	
Dublin Rd S Northbound	32.1 PCU	57 seconds	87.40%		24 PCU	38 seconds	71.70%	
Old Connaught Ave Eastbound	11.3 PCU	1 minute and 27 seconds	81.40%		8.5 PCU	1 minute and 2 seconds	60.00%	

Opening Year (2028)								
Arm	AM Peak				PM Peak			
	MMQ	Delay	DOS	PRC	MMQ	Delay	DOS	PRC
DS1								
Dublin Rd N Southbound	19.8 PCU	44 seconds	68.70%	-18.4%	20.3 PCU	36 seconds	66.20%	24.3%
Cork Abbey Rd Westbound	10.3 PCU	2 minutes and 40 seconds	92.30%		6 PCU	1 minute and 12 seconds	49.00%	
Dublin Rd S Northbound	32.9 PCU	1 minute	88.80%		24.5 PCU	39 seconds	72.40%	
Old Connaught Ave Eastbound	33 PCU	3 minutes and 52 seconds	106.50%		10.6 PCU	1 minute and 5 seconds	62.70%	
DS2								
Dublin Rd N Southbound	19.8 PCU	44 seconds	68.70%	-18.4%	20.3 PCU	36 seconds	66.20%	24.3%
Cork Abbey Rd Westbound	10.3 PCU	2 minutes and 40 seconds	92.30%		6 PCU	1 minute and 12 seconds	49.00%	
Dublin Rd S Northbound	32.9 PCU	1 minute	88.80%		24.5 PCU	39 seconds	72.40%	
Old Connaught Ave Eastbound	33 PCU	3 minutes and 52 seconds	106.50%		10.6 PCU	1 minute and 5 seconds	62.70%	



7.2.6.2 Opening Year+5

Table 7-2 - LinSig Modelling Results: Old Connaught/Dublin Road Junction: OY+5 Scenarios

Opening Year+5 (2033)								
Arm	AM Peak				PM Peak			
	MMQ	Delay	DOS	PRC	MMQ	Delay	DOS	PRC
DM								
Dublin Rd N Southbound	11.8 PCU	19 seconds	44.20%	22.3%	12.5 PCU	16 seconds	44.00%	52.60%
Cork Abbey Rd Westbound	6.4 PCU	1 minute and 48 seconds	72.60%		4.4 PCU	1 minute and 21 seconds	43.90%	
Dublin Rd S Northbound	26.3 PCU	34 seconds	73.60%		18.2 PCU	21 seconds	59.00%	
Old Connaught Ave Eastbound	6.5 PCU	1 minute and 10 seconds	54.40%		5.5 PCU	1 minute and 9 seconds	50.00%	
DS1								
Dublin Rd N Southbound	12 PCU	17 seconds	42.90%	21.40%	12.6 PCU	17 seconds	45.10%	47.6%
Cork Abbey Rd Westbound	6.4 PCU	1 minute and 48 seconds	71.60%		4.4 PCU	1 minute and 21 seconds	44.00%	
Dublin Rd S Northbound	26.8 PCU	35 seconds	74.20%		19.3 PCU	21 seconds	61.00%	



Opening Year+5 (2033)								
Arm	AM Peak				PM Peak			
	MMQ	Delay	DOS	PRC	MMQ	Delay	DOS	PRC
Old Connaught Ave Eastbound	7.6 PCU	1 minute and 13 seconds	61.90%		6.0 PCU	1 minute and 10 seconds	55.00%	
DS2								
Dublin Rd N Southbound	12 PCU	17 seconds	42.90%	21.40%	12.6 PCU	17 seconds	45.10%	47.6%
Cork Abbey Rd Westbound	6.4 PCU	1 minute and 48 seconds	71.60%		4.4 PCU	1 minute and 21 seconds	44.00%	
Dublin Rd S Northbound	26.8 PCU	35 seconds	74.20%		19.3 PCU	21 seconds	61.00%	
Old Connaught Ave Eastbound	7.6 PCU	1 minute and 13 seconds	61.90%		6.0 PCU	1 minute and 10 seconds	55.00%	

7.2.6.3 Opening Year +15

Table 7-3 - LinSig Modelling Results: Old Connaught/Dublin Road Junction: OY+15 Scenarios

Opening Year+15 (2043)								
Arm	AM Peak				PM Peak			
	MMQ	Delay	DOS	PRC	MMQ	Delay	DOS	PRC
DM								
Dublin Rd N Southbound	21.5 PCU	32 seconds	65.00%	-0.60%	26.1 PCU	30 seconds	71.50%	25.9%



Opening Year+15 (2043)								
Arm	AM Peak				PM Peak			
	MMQ	Delay	DOS	PRC	MMQ	Delay	DOS	PRC
Cork Abbey Rd Westbound	16.3 PCU	1 minute 53 seconds	90.50%		11.5 PCU	1 minute and 17 seconds	69.20%	
Dublin Rd S Northbound	35.9 PCU	58 seconds	89.90%		23.9 PCU	31 seconds	69.30%	
Old Connaught Ave Eastbound	4.4 PCU	1 minute and 9 seconds	38.30%		1 PCU	1 minute and 4 seconds	9.8%	
DS1								
Dublin Rd N Southbound	23.1 PCU	33 seconds	67.50%	-0.7%	26.5 PCU	30 seconds	71.80%	25.4%
Cork Abbey Rd Westbound	16.3 PCU	1 minute and 53 seconds	90.50%		11.8 PCU	1 minute and 20 seconds	71.70%	
Dublin Rd S Northbound	36.7 PCU	59 seconds	90.60%		24.5 PCU	31 seconds	70.30%	
Old Connaught Ave Eastbound	4.4 PCU	1 minutes and 9 seconds	38.30%		1 PCU	1 minute and 4 seconds	9.8%	
DS2								
Dublin Rd N Southbound	23.1 PCU	33 seconds	67.50%	-0.7%	26.5 PCU	30 seconds	71.80%	25.4%
Cork Abbey Rd Westbound	16.3 PCU	1 minute and 53 seconds	90.50%		11.8 PCU	1 minute and 20 seconds	71.70%	



Opening Year+15 (2043)								
Arm	AM Peak				PM Peak			
	MMQ	Delay	DOS	PRC	MMQ	Delay	DOS	PRC
Dublin Rd S Northbound	36.7 PCU	59 seconds	90.60%		24.5 PCU	31 seconds	70.30%	
Old Connaught Ave Eastbound	4.4 PCU	1 minutes and 9 seconds	38.30%		1 PCU	1 minute and 4 seconds	9.8%	

7.2.7 Summary of the Old Connaught/Cork Abbey/Dublin Road junction

AM Peak

- In Opening Year, the junction operates within capacity in the Do Minimum scenario whilst the Do Something scenarios are over capacity with -18.4% PRC.
- In Opening Year as compared to the Do Minimum Scenario, The Do Something scenarios perform worse than the Do Minimum primarily driven from the increased traffic volumes on the Old Connaught Avenue arm. Increase in Queues on the Old Connaught Avenue arm were in the order of approximately 22 pcu while delays increased by approximately 2 minutes and 20 seconds on this arm. The DoS increases by from 39.6% to 92.3% on the Corke Abbey Westbound arm in the Do Something scenario.
- In Opening Year + 5 and Opening Year +15, conditions improve and the junction performs within capacity due to the proposed M11 bridge connecting to the Old Connaught LAP lands. In Comparison with the Do Something Opening Year scenarios with a PRC of -18.4% the PRC improves to 21.4% PRC, a significant increase in reserve capacity due to the proposed upgrades, this is due to a large volume of northbound trips taking the M11 Bridge route reducing volumes on this junction.

PM Peak

In Opening Year, Opening Year +5 and Opening Year +15, all arms operate within capacity across all scenarios:

- The Opening Year Do Nothing performs similar on all arms compared to the Do Something scenarios aside from the Dublin Road Southbound arm where the DoS increases from approximately 56% to 66%. The junction performs undercapacity with a PRC of approximately 24% in the Do Something scenarios. The delays increase by a maximum of 8 seconds across all arms and queues increase by a maximum of approximately 6 pcu.
- In the Opening Year +5 Do Something scenarios the junction performance improves, resulting from the proposed M11 Bridge connecting to the Old Connaught LAP Lands which



would result in a decrease of northbound trips on this junction, with an approximate increase of 23% reserve capacity in the Do Something Scenarios.

- In the Opening Year +15 scenarios the PRC decreases by approximately 22% from the growth in traffic volumes, however the junction remains below capacity with PRC values above 25% across all scenarios.

Overall

The junction performs satisfactorily in the AM and PM peaks up to 2033. In Opening year +15, capacity issues are limited to the AM peak, while PM peak performance remains within capacity.

7.3 Proposed M11 Bridge Junction

7.3.1 Opening Year

7.3.2 Geometry

For the opening year, the junction is modelled as an existing 3-arm signalised junction as summarised in Table 7-10 below.

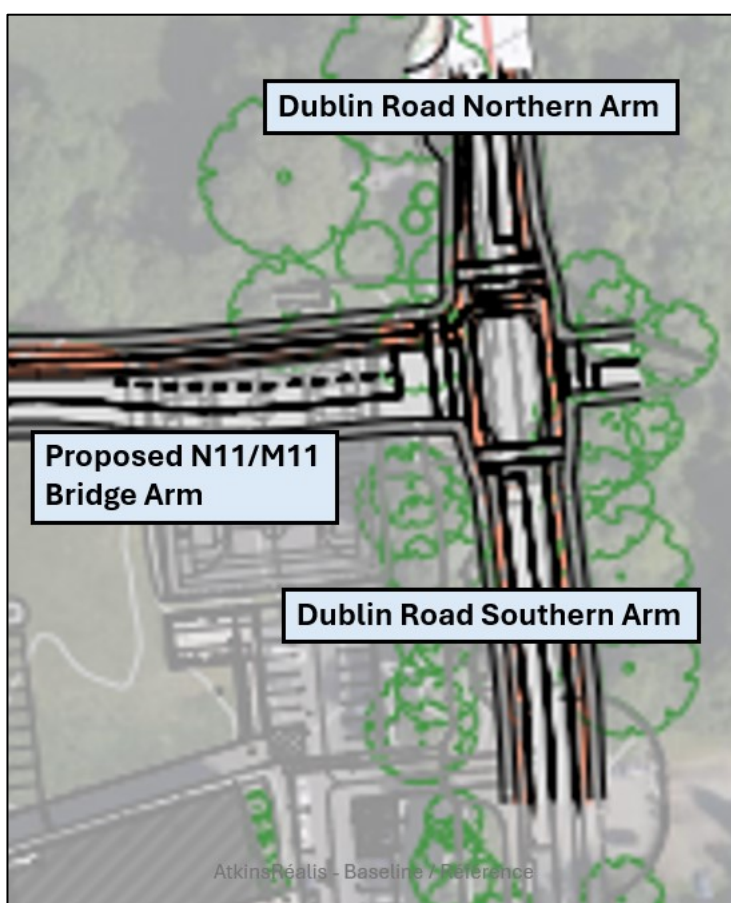


Figure 7-15 – M11 Bridge Junction Geometry

The lane assignment of all the arms for Proposed M11 Bridge junction are summarised below:

- **Bridge arm:** The arm is a single lane with right turning pocket.
- **Dublin Road South:** The arm is again a single lane. A pedestrian crossing is there along this arm.
- **Dublin Road North:** The arm is again a single lane. A pedestrian crossing is there along this arm

7.3.3 Model Scenarios

- Do Something 1: It includes Do Nothing infrastructure + Background Growth of traffic + Proposed Phase A1 development
- Do Something Scenario 2: It includes all the infrastructure and trips in Do Something Scenario 1+ Any other trips from the LAP (which includes DLRCC lands)

7.3.4 Traffic Volume for Different Scenarios

7.3.4.1 Do Something 1 Opening Year + 5

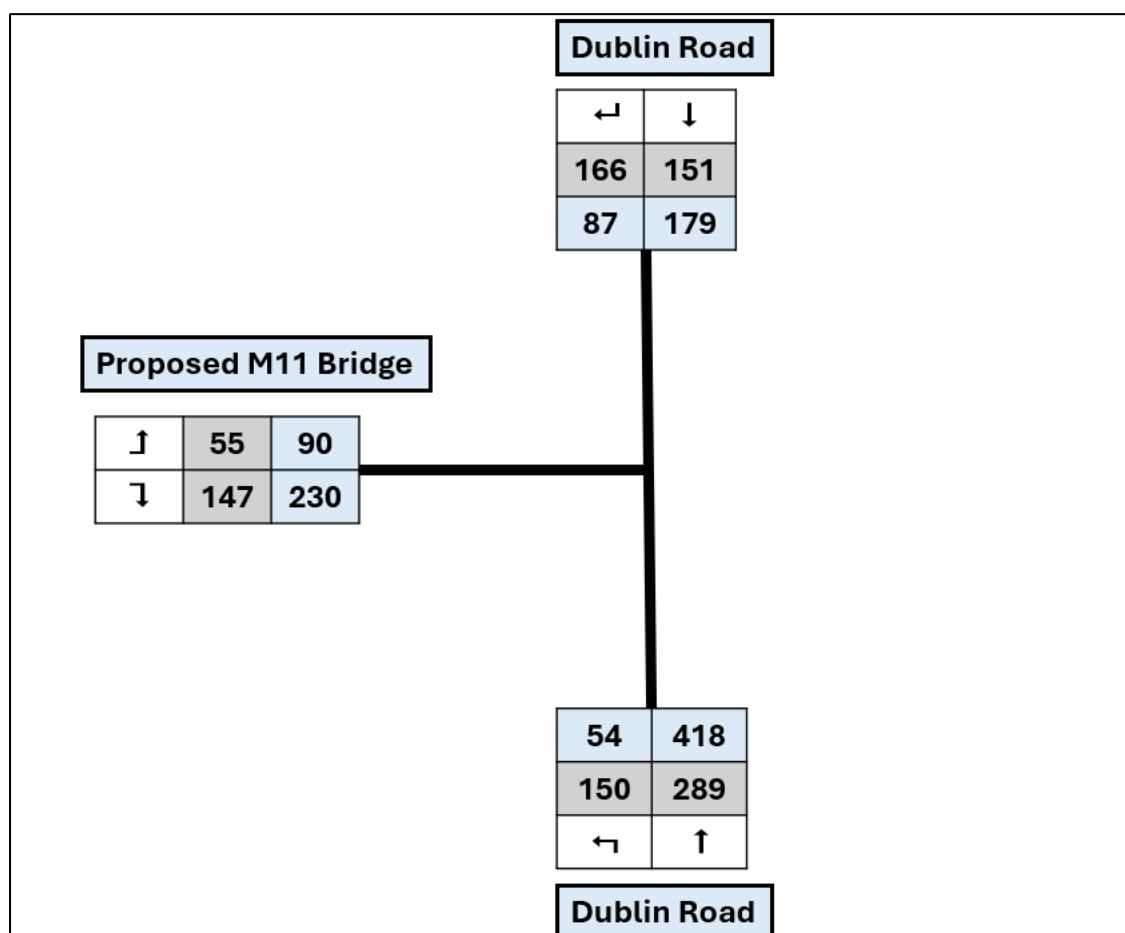


Figure 7-16 – Do Something 1 Opening year Traffic Volumes

7.3.4.2 Do Something 2 Opening Year + 5

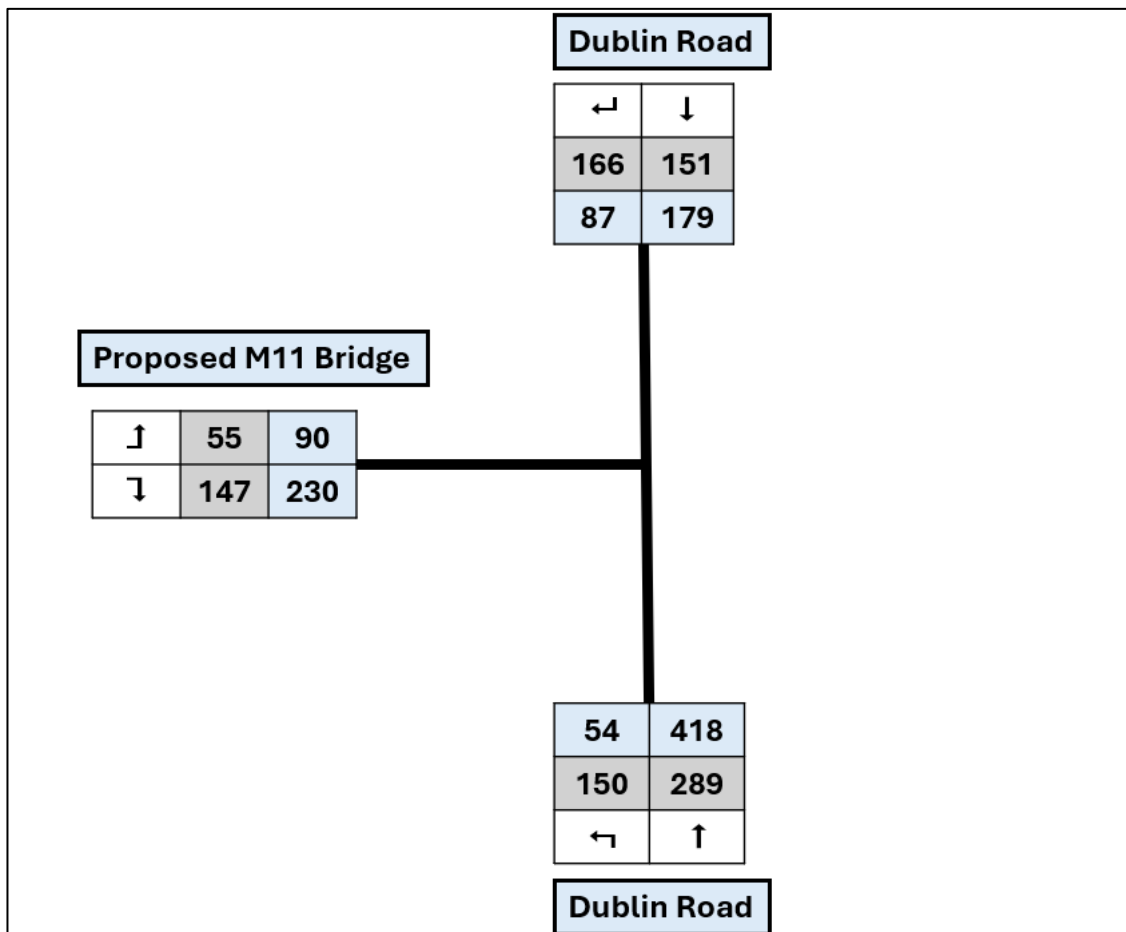


Figure 7-17 - Do Something 2 Opening year Traffic Volumes

7.3.4.3 Do Something 1 Opening Year + 15

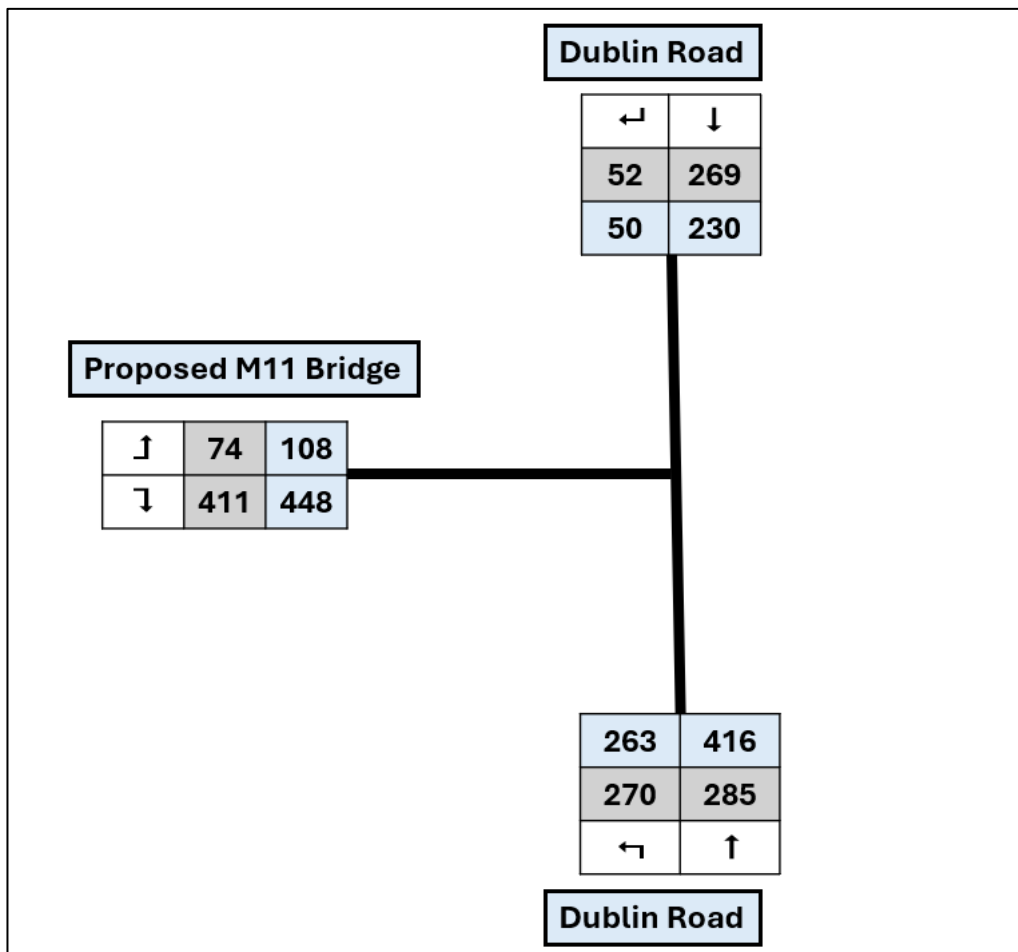


Figure 7-18 - Do Something 1 Traffic Volumes Opening Year + 15

7.3.4.4 Do Something 2 Opening Year + 15

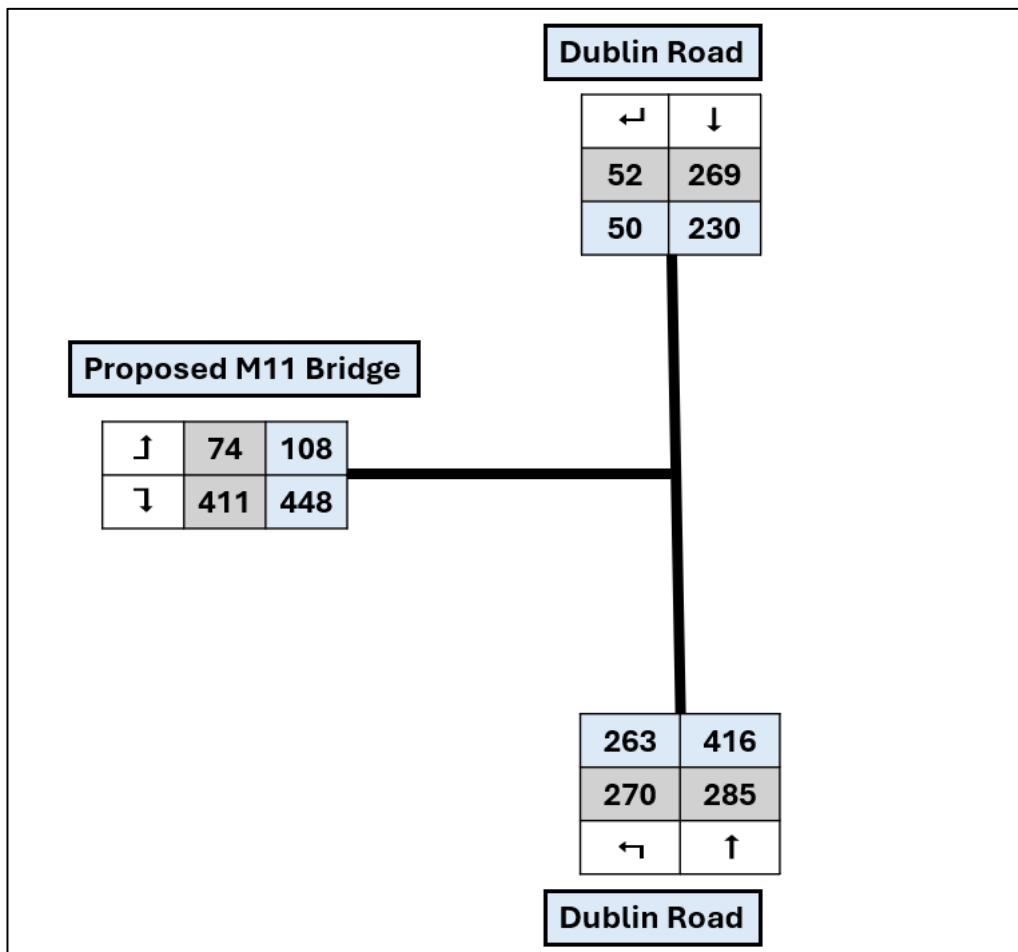


Figure 7-19 - Do Something 2 Traffic Volumes Opening Year + 15

7.3.4.5 Modelling Scenarios

For all the design years the junction will be modelled for following scenarios:

- Do Something 1: It includes Do Minimum infrastructure + Background Growth of traffic + Proposed development from full masterplan lands owned by Castlethorn.
- Do Something Scenario 2: It includes all the infrastructure and trips in Do Something Scenario 1+ Any other trips from the LAP (which includes DLRCC lands and Southern Character Area of LAP) for both design years.

7.3.5 Stage Sequence

Since for all the scenarios this is modelled as a signalised junction, JCT LinSig v3 is used for modelling.

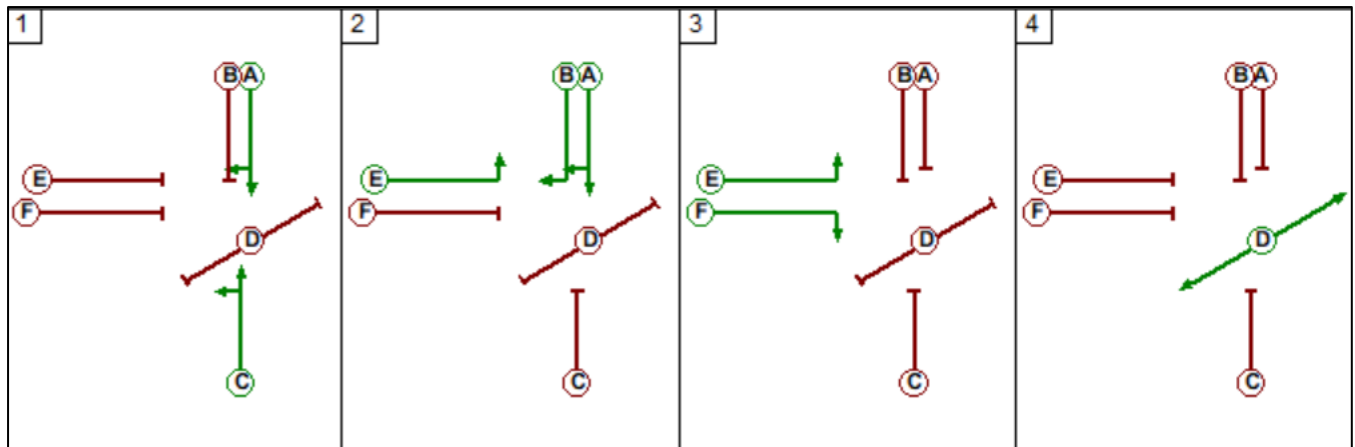


Figure 7-20 – Stage Sequence Proposed M11 Bridge Junction

- In the first stage, the southern Dublin Road arm receives a general green while the northern arm receives a green for straight movements.
- In the second stage the northern Dublin Road arm receives a general green and the M11 Bridge arm receives a green for left turning movements.
- In the third stage the M11 Bridge arm receives a general green.
- In the final stage pedestrians receive a green.

7.3.6 Modelling Results

7.3.6.1 Opening Year +5

Table 7-4 - LinSig Modelling Results: Proposed M11 Bridge Junction: OY+5 Scenarios

Opening Year+5 (2033)								
Arm	AM Peak				PM Peak			
	MMQ	Delay	DOS	PRC	MMQ	Delay	DOS	PRC
DS1								
Bridge Arm	6.7 PCU	43 seconds	44.50%	96.9%	4.7 PCU	53 seconds	43.30%	104%
Dublin Road Northbound	9.7 PCU	20 seconds	45.70%		7.6 PCU	19 seconds	43.50%	
Dublin Road Southbound	3.3 PCU	30 seconds	36.50%		3.1 PCU	32 seconds	44.10%	
DS2								
Bridge Arm	6.7 PCU	43 seconds	44.50%	96.9%	4.7 PCU	53 seconds	43.30%	104%

Opening Year+5 (2033)								
Arm	AM Peak				PM Peak			
	MMQ	Delay	DOS	PRC	MMQ	Delay	DOS	PRC
Dublin Road Northbound	9.7 PCU	20 seconds	45.70%		7.6 PCU	19 seconds	43.50%	
Dublin Road Southbound	3.3 PCU	30 seconds	36.50%		3.1 PCU	32 seconds	44.10%	

7.3.6.2 Opening Year +15

Table 7-5 - LinSig Modelling Results: Proposed M11 Bridge Junction: OY+15 Scenarios

Opening Year+15 (2043)								
Arm	AM Peak				PM Peak			
	MMQ	Delay	DOS	PRC	MMQ	Delay	DOS	PRC
DS1								
Bridge Arm	14.3 PCU	45 seconds	71.10%	26.7%	12 PCU	39 seconds	60.50%	45.9%
Dublin Road Northbound	16.3 PCU	26 seconds	70.30%		10.6 PCU	22 seconds	61.70%	
Dublin Road Southbound	4.7 PCU	27 seconds	29.70%		6.1 PCU	29 seconds	35.6%	
DS2								
Bridge Arm	14.3 PCU	45 seconds	71.10%	26.7%	12 PCU	39 seconds	60.50%	45.9%
Dublin Road Northbound	16.3 PCU	26 seconds	70.30%		10.6 PCU	22 seconds	61.70%	
Dublin Road Southbound	4.7 PCU	27 seconds	29.70%		6.1 PCU	29 seconds	35.6%	

7.3.7 Summary of the Proposed M11 Bridge junction

AM Peak

In Opening Year +5, junction performance is good across both scenarios:



- The bridge arm operates at 44.5% DoS with queues of 6.7 PCU and delays of 43 seconds.
- Dublin Road northbound arm queues are 9.7 PCU, delays of 20 seconds and DoS of 45.7%.
- Dublin Road southbound arm performs with 3.3 PCU, 30 seconds delay and 36.5% DoS.

In Opening Year +15, flows increase but remain within capacity

PM Peak

In Opening Year +5, junction performance is well within capacity:

- The bridge arm has 4.7 PCU with 53 seconds delay and DoS between 43.3%.
- Dublin Road northbound arm operates with 7.6 PCU, 19 seconds delay and DoS of 43.5%.
- Dublin Road southbound arm has low queues of 3.1 PCU, 32 seconds delay and DoS between 44.1%.

In Opening Year +15, moderate increases occur but the junction performance remains within capacity.

Overall

Junction performance is within capacity in both peaks across all scenarios. In Opening Year +5, all arms operate well within capacity with low delays. In Opening Year +15, flows increase but performance remains acceptable, with DoS below 80% and no over-capacity issues.

7.4 Internal Signalised Junction

7.4.1 Opening Year

7.4.2 Geometry

For the opening year, the junction is modelled as an existing 3-arm signalised junction as summarised in Figure 7-21 below.



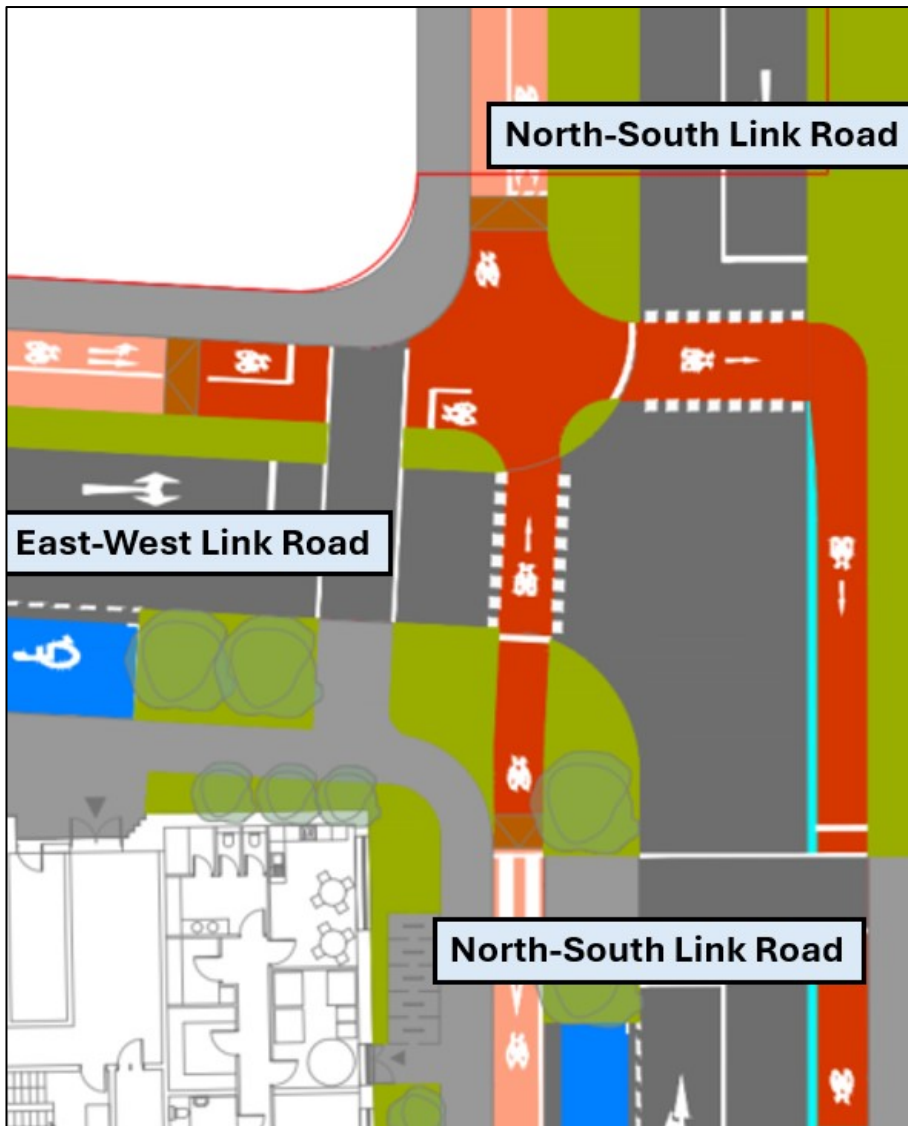


Figure 7-21 – Proposed East-West/North South Signalised Junction

The lane assignment of all the arms for East-West/North South Signalised Junction are summarised below:

- **Western arm:** The arm is a single lane with right turning pocket. A pedestrian crossing is there along this arm
- **Southern arm:** The arm is again a single lane. A pedestrian crossing is there along this arm.
- **Northern arm:** The arm is again a single lane.

7.4.3 Model Scenarios

- **Do Something 1:** It includes Do Nothing infrastructure + Background Growth of traffic + Proposed Phase A1 development
- **Do Something Scenario 2:** It includes all the infrastructure and trips in Do Something Scenario 1+ Any other trips from the LAP (which includes DLRCC lands)

7.4.4 Traffic Volume for Different Scenarios

7.4.4.1 Do Something 1 Opening Year + 5

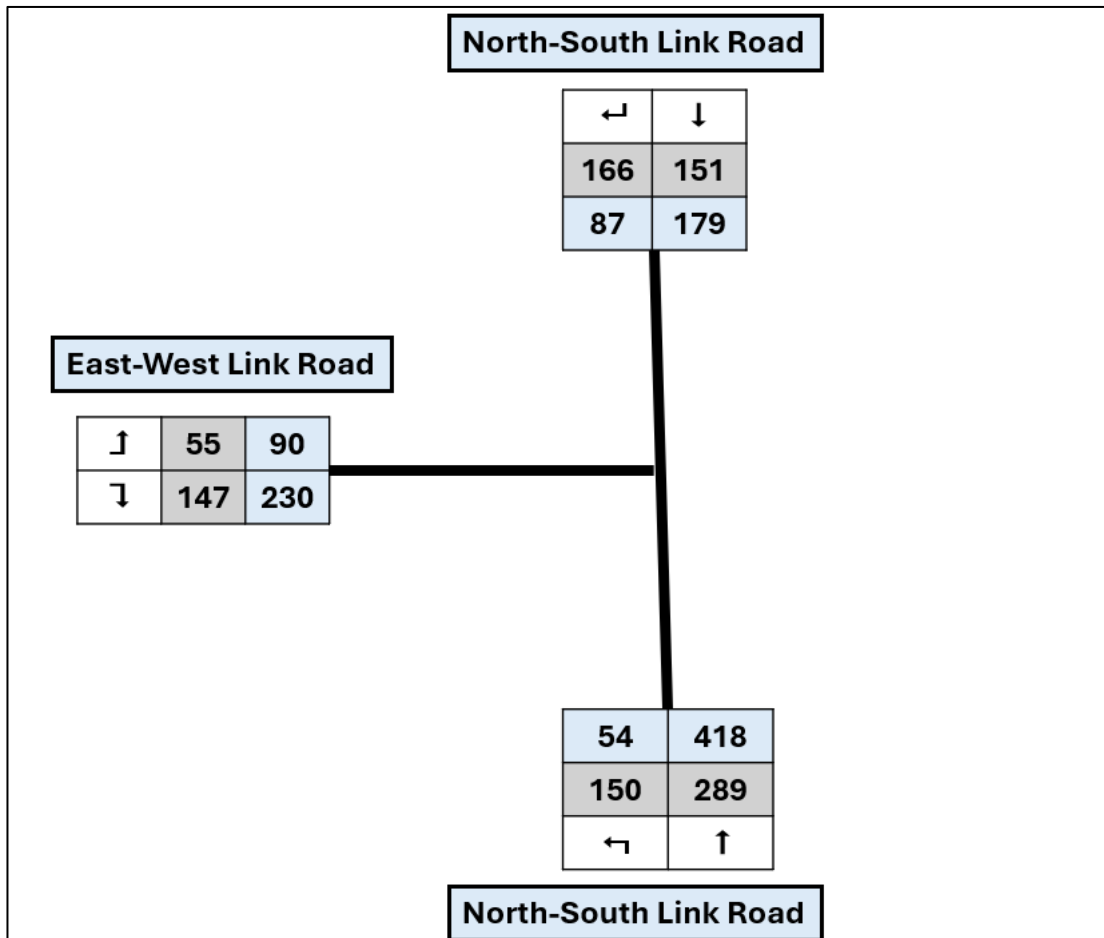


Figure 7-22 - Traffic Volumes Do Something 1 Proposed Internal Signalised Junction

7.4.4.2 Do Something 2 Opening Year + 5

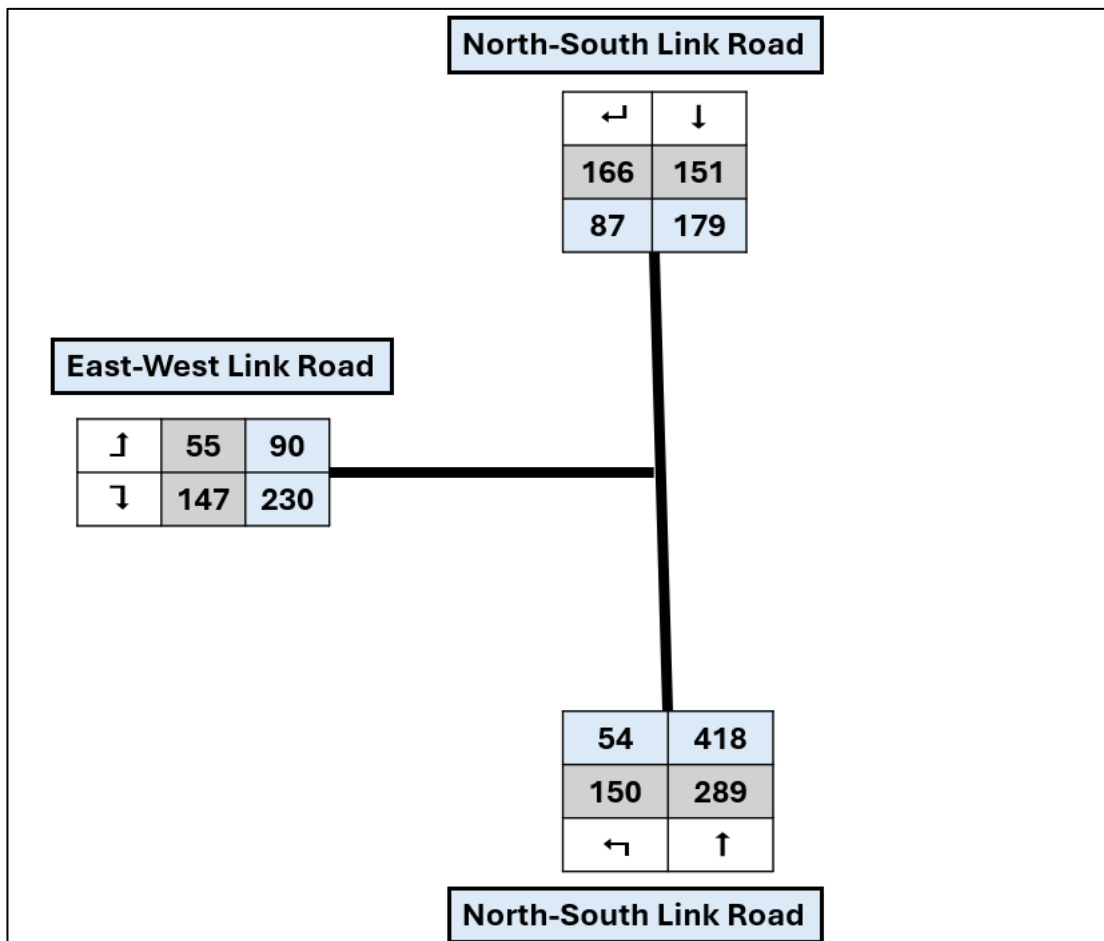


Figure 7-23 – Traffic Volumes Do Something 2 Proposed Internal Signalised Junction

7.4.4.3 Do Something 1 Opening Year + 15

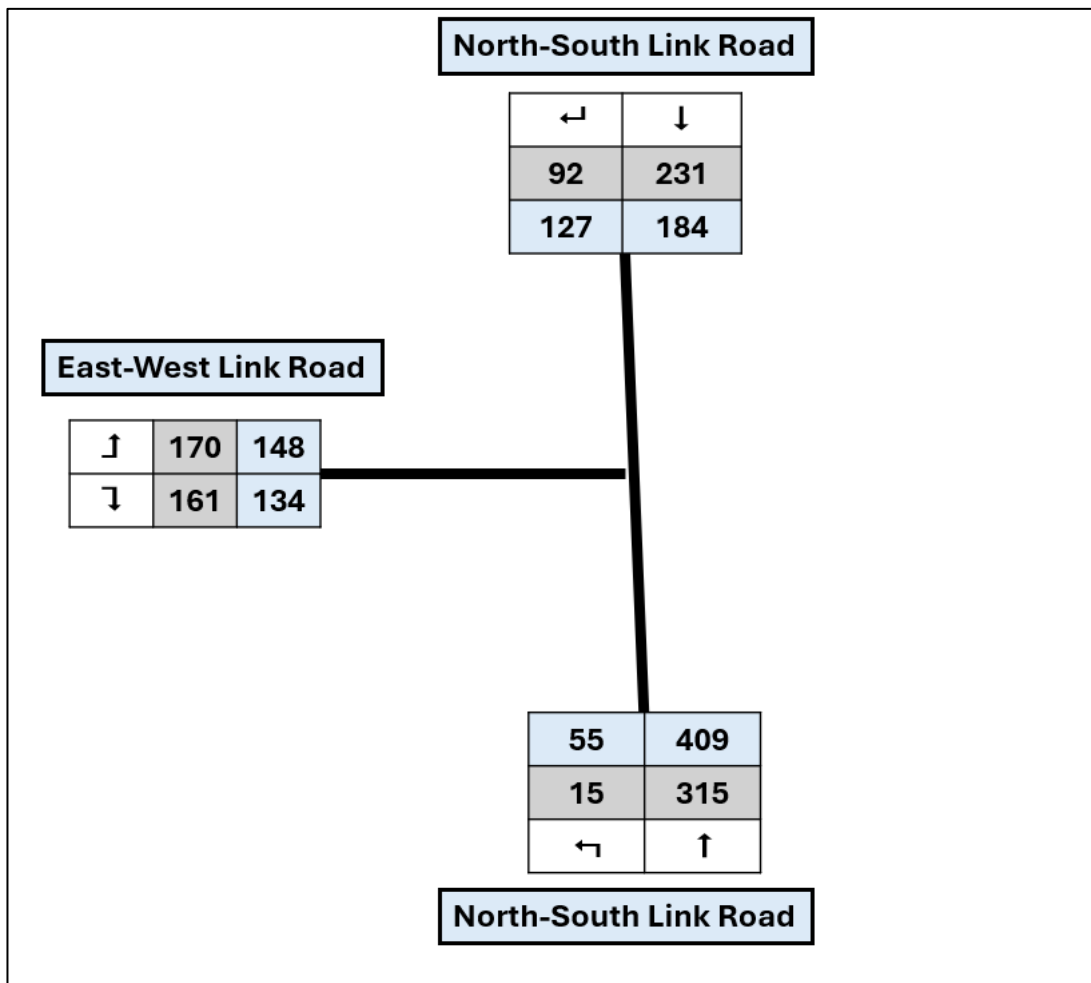


Figure 7-24 - Do Something 1 Traffic Volumes Opening Year + 15

7.4.4.4 Do Something 2 Opening Year + 15

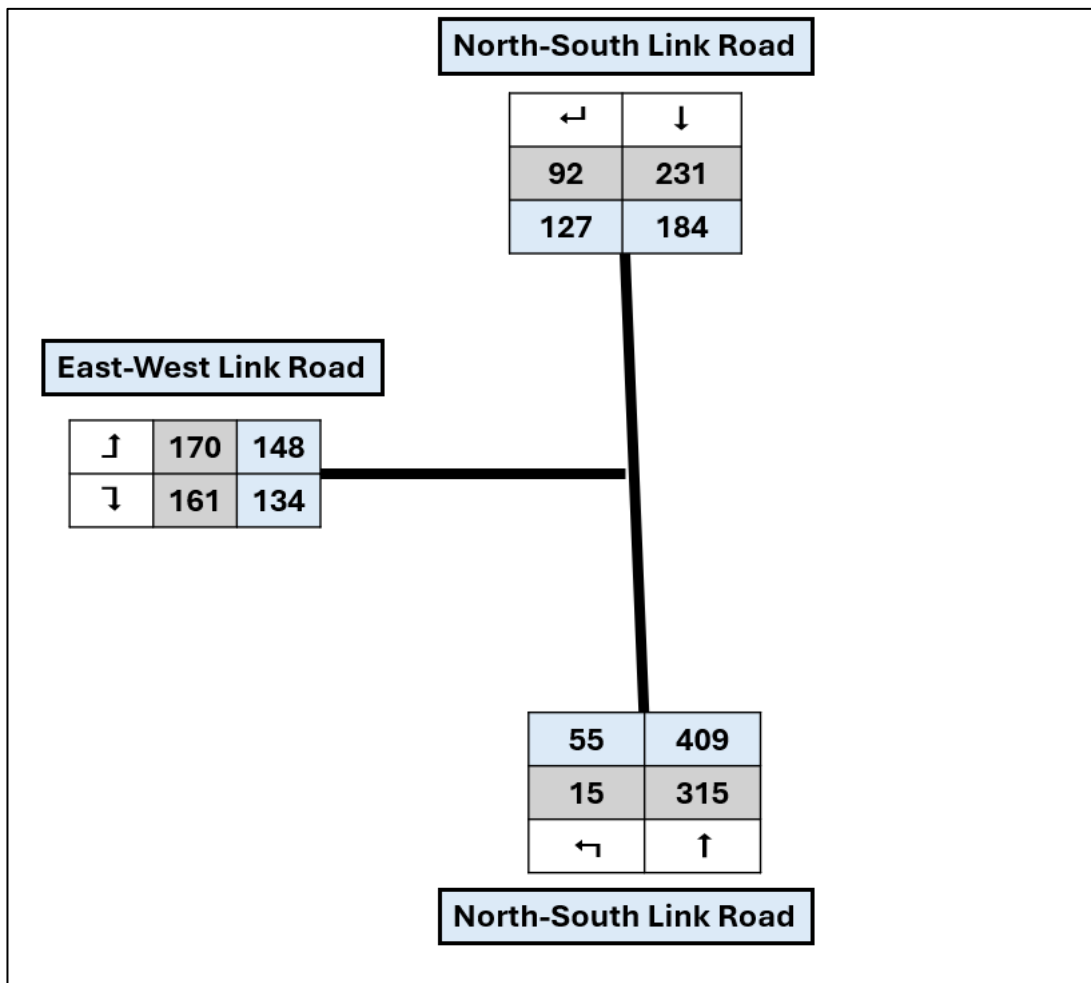


Figure 7-25 - Do Something 2 Traffic Volumes Opening Year + 15

7.4.4.5 Modelling Scenarios

For all the design years the junction will be modelled for following scenarios:

- Do Something 1: It includes Do Minimum infrastructure + Background Growth of traffic + Proposed development from full masterplan lands owned by Castlethorn.
- Do Something Scenario 2: It includes all the infrastructure and trips in Do Something Scenario 1+ Any other trips from the LAP (which includes DLRCC lands and Southern Character Area of LAP) for both design years

7.4.5 Stage Sequence

Since for all the scenarios this is modelled as a signalised junction, JCT Linsig v3 is used for modelling.

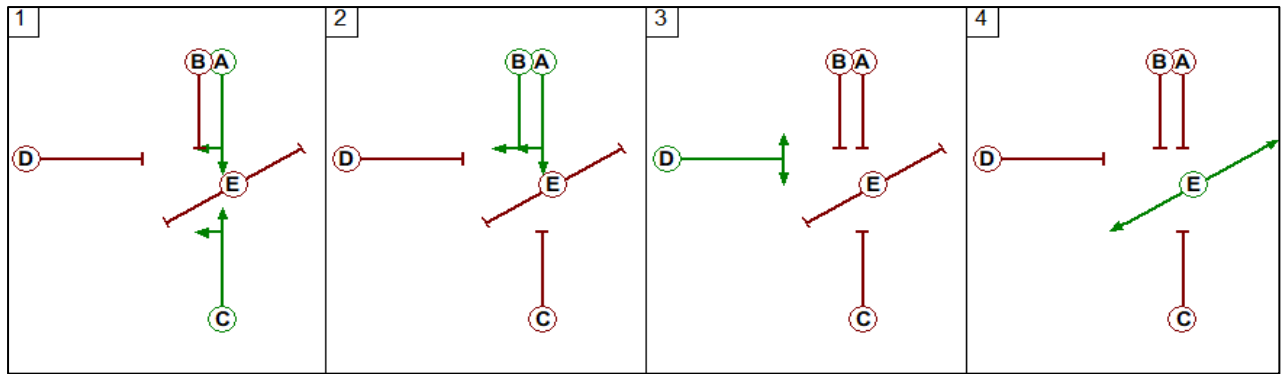


Figure 7-26 – Stage Sequencing of The Proposed Internal Signalised Junction

- For the first stage the southern arm receives a general green while the northern link road arm receives a green for straight on movements.
- For the second stage the northern link road arm receives a general green.
- In the third stage, the East-West link arm receives a general green.
- In the final stage the pedestrians receive a green.

7.4.6 Modelling Results

7.4.6.1 Opening Year +5

Table 7-6 - LinSig Modelling Results: Proposed Internal Junction: OY+5 Scenarios

Opening Year+5 (2033)								
Arm	AM Peak				PM Peak			
	MMQ	Delay	DOS	PRC	MMQ	Delay	DOS	PRC
DS1								
East - West Road Arm	2.6 PCU	35 seconds	27.70%	224.6%	2.2 PCU	41 seconds	28.50%	199.1%
North - South Road Northbound	3.8 PCU	21 seconds	27.50%		2.9 PCU	34 seconds	28.90%	
North-South Road Southbound	1.8 PCU	14 seconds	16.8%		4.5 PCU	13 seconds	30.10%	
DS2								
East - West Road Arm	2.6 PCU	35 seconds	27.70%	224.6%	2.2 PCU	41 seconds	28.50%	199.1%

Opening Year+5 (2033)								
Arm	AM Peak				PM Peak			
	MMQ	Delay	DOS	PRC	MMQ	Delay	DOS	PRC
North - South Road Northbound	3.8 PCU	21 seconds	27.50%		2.9 PCU	34 seconds	28.90%	
North-South Road Southbound	1.8 PCU	14 seconds	16.8%		4.5 PCU	13 seconds	30.10%	

7.4.6.2 Opening Year +15

Table 7-7 - LinSig Modelling Results: Proposed Internal Junction: OY+15 Scenarios

Opening Year+15 (2043)								
Arm	AM Peak				PM Peak			
	MMQ	Delay	DOS	PRC	MMQ	Delay	DOS	PRC
DS1								
East - West Road Arm	6.9 PCU	40 seconds	60.20%	46.3%	7.4 PCU	33 seconds	55.60%	62.20%
North - South Road Northbound	10.1 PCU	28 seconds	61.50%		7.2 PCU	31 seconds	52.80%	
North-South Road Southbound	7 PCU	30 seconds	55.60%		7.3 PCU	30 seconds	55.40%	
DS2								
East - West Road Arm	6.9 PCU	40 seconds	60.20%	46.3%	7.4 PCU	33 seconds	55.60%	62.20%
North - South Road Northbound	10.1 PCU	28 seconds	61.50%		7.2 PCU	31 seconds	52.80%	



North-South Road Southbound	7 PCU	30 seconds	55.60%		7.3 PCU	30 seconds	55.40%	
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7.4.7 Summary of the Proposed Internal junction

Overall

Junction performance is very good across all scenarios and both assessment years. All arms operate well within capacity, with degree of saturation remaining below 65% in all cases. Queue lengths and delays are low throughout, indicating no performance issues. This displays a future-proof junction proposal that will perform well with both the proposed development and M11 Bridge.

7.5 Wilford Roundabout

7.5.1 Opening Year

7.5.2 Geometry

For the opening year, the junction is modelled as an existing 3-arm signalised junction as summarised in Figure 7-27 below.





Figure 7-27 – Wilford Roundabout Existing Geometry

The lane assignment of all the arms for Wilford Roundabout are summarised below:

- **Western arm:** The arm is a dual lane with a left turning and right turning lane.
- **Southern arm:** The arm is a single lane.
- **Northern arm:** The arm is again a single lane.

7.5.3 Model Scenarios

- **Do Minimum:** It represents the existing infrastructure. Traffic in this scenario only includes the background growth of trips as discussed in Section 6.3.
- **Do Something 1:** It includes Do Nothing infrastructure + Background Growth of traffic + Proposed Phase A1 development
- **Do Something Scenario 2:** It includes all the infrastructure and trips in Do Something Scenario 1+ Any other trips from the LAP (which includes DLRCC lands)

7.5.4 Traffic Volume for Different Scenarios

7.5.4.1 Do Minimum Opening Year

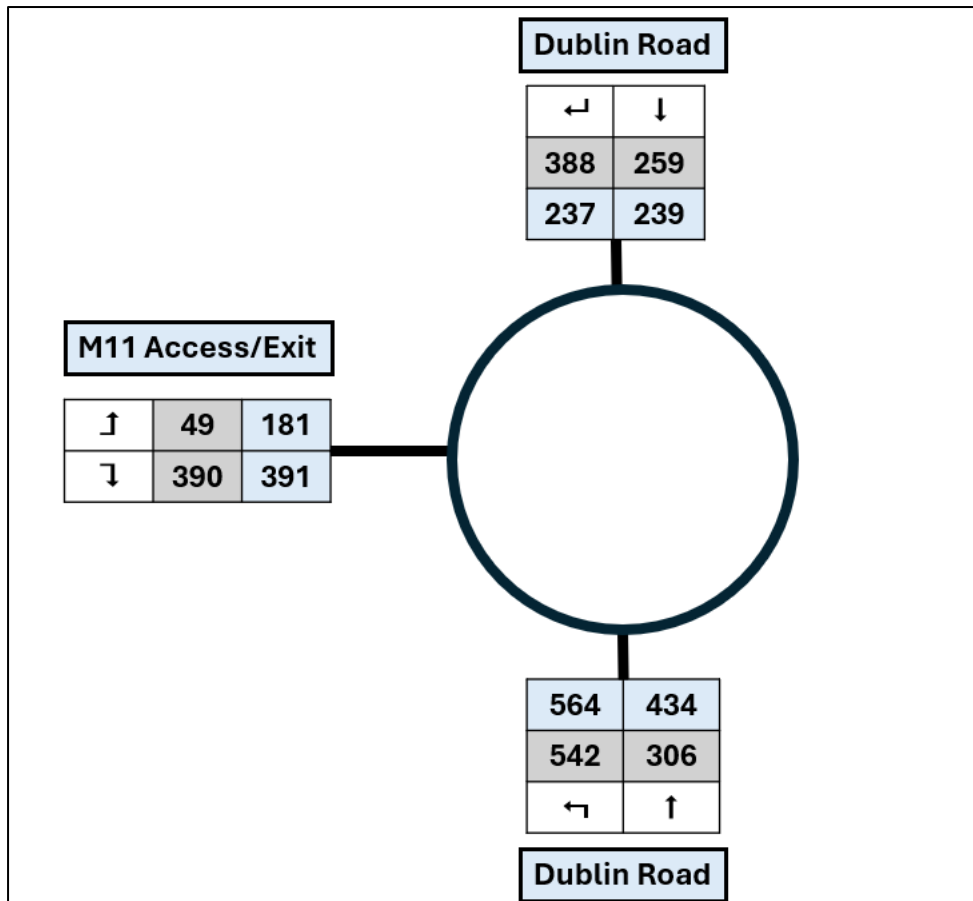


Figure 7-28 – Wilford Roundabout Traffic Volumes Do Minimum Opening year

7.5.4.2 Do Something 1 Opening Year

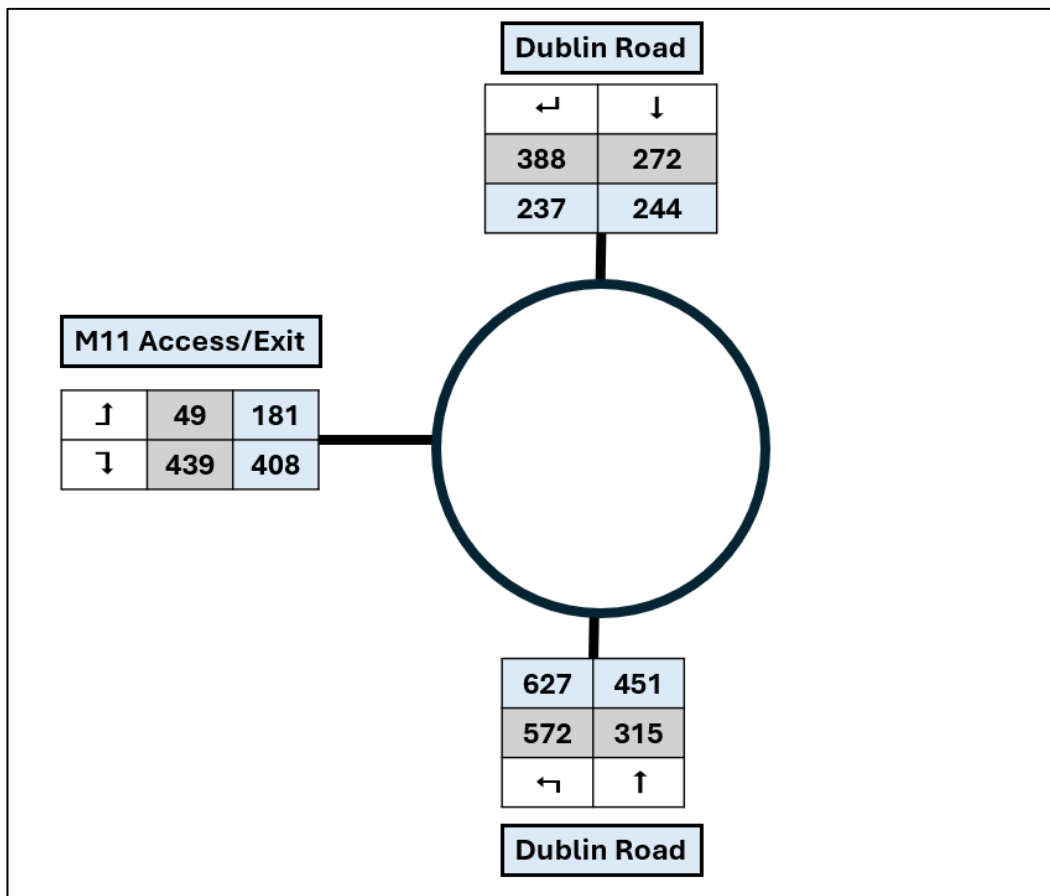


Figure 7-29 - Wilford Roundabout Traffic Volumes Do Something 1 Opening year

7.5.4.3 Do Something 2 Opening Year

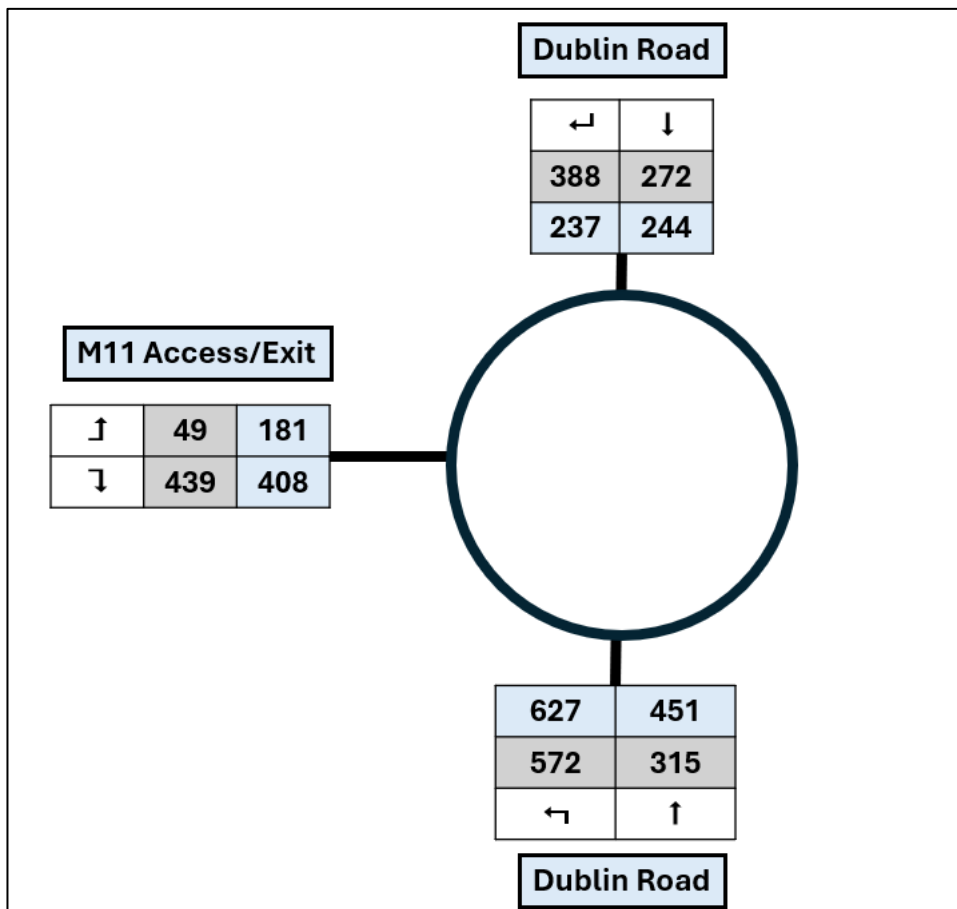


Figure 7-30 - Wilford Roundabout Traffic Volumes Do Something 2 Opening year

7.5.4.4 Do Minimum Opening Year + 5

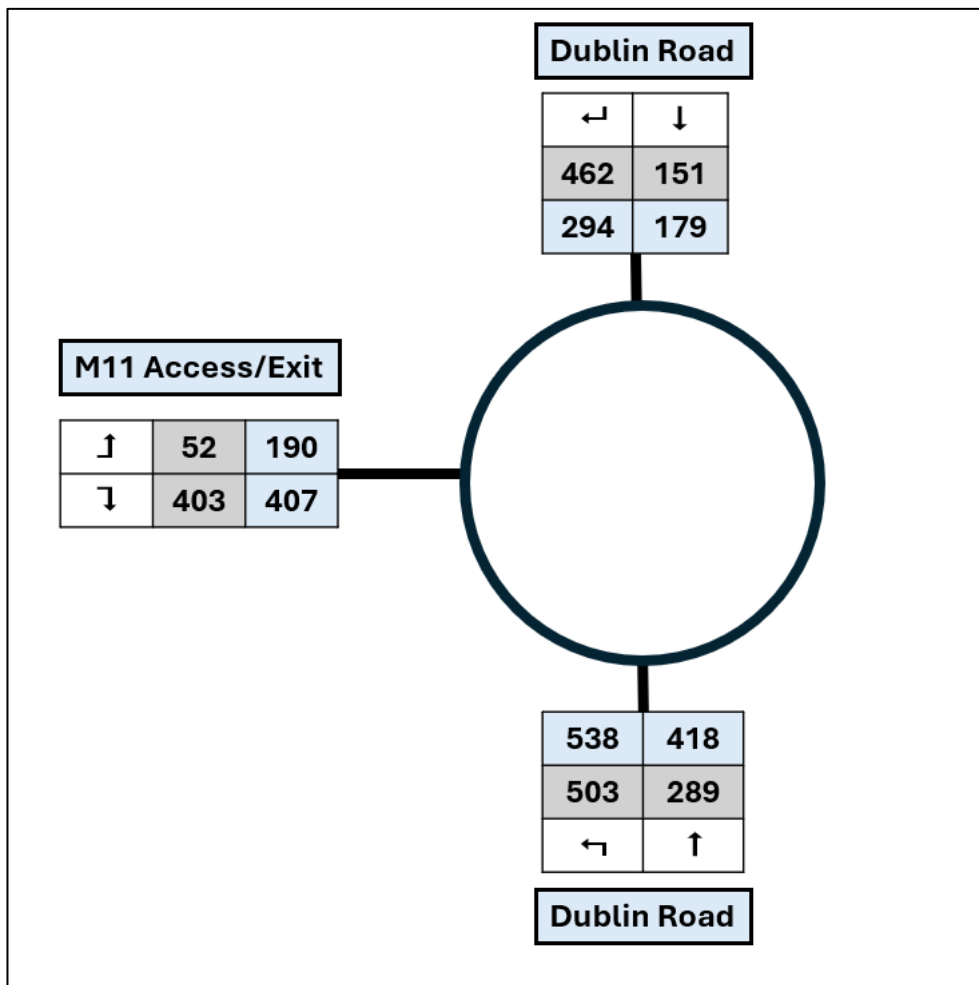


Figure 7-31 – Do Minimum Traffic Volumes Opening Year + 5

7.5.4.5 Do Something 1 Opening Year + 5

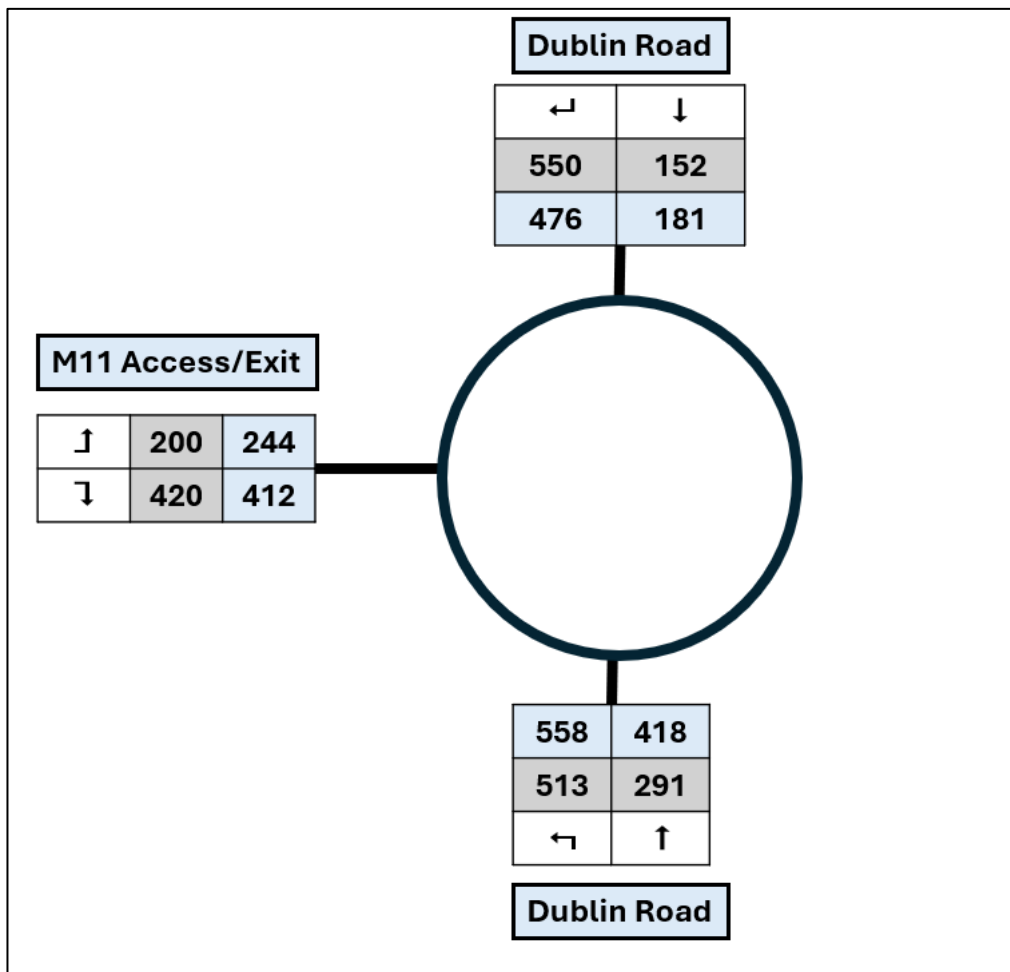


Figure 7-32 - Do Something 1 Traffic Volumes Opening Year + 5

7.5.4.6 Do Something 2 Opening Year + 5

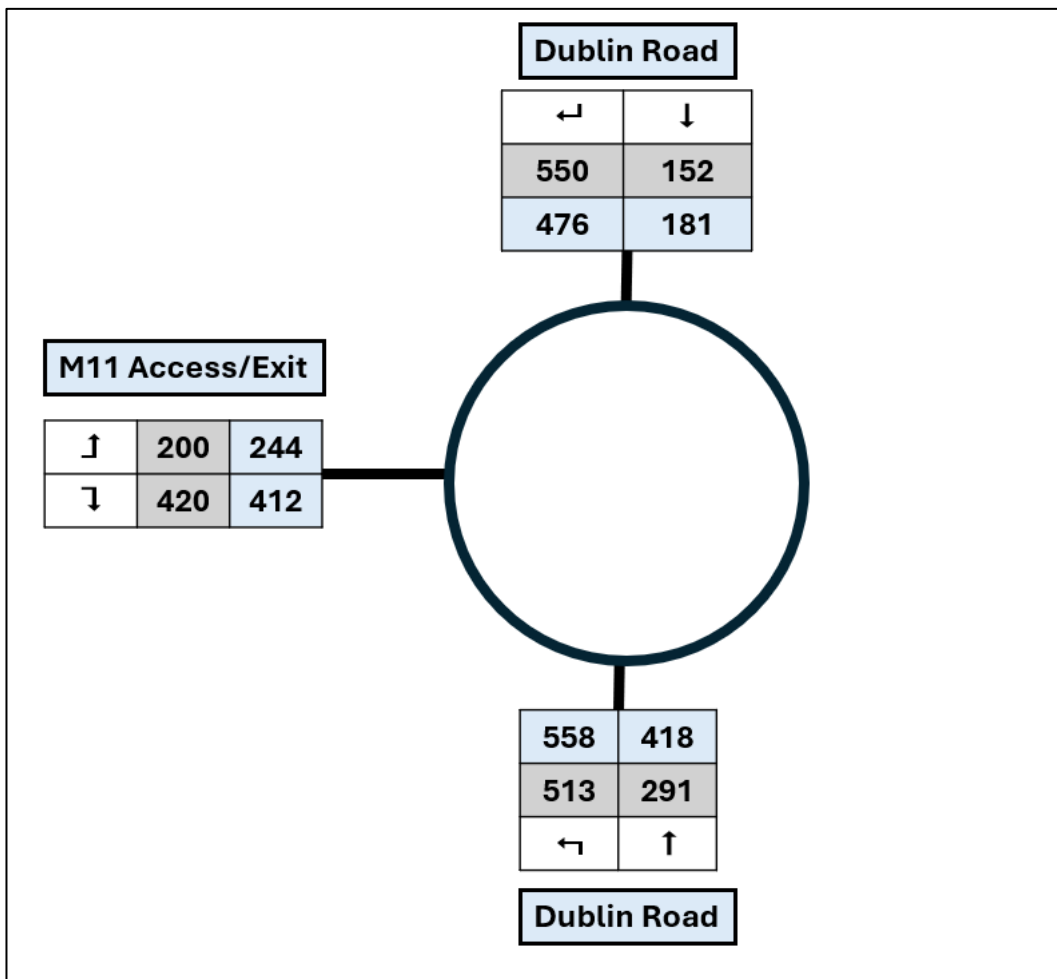


Figure 7-33 - Do Something 2 Traffic Volumes Opening Year + 5

7.5.4.7 Do Minimum Opening Year + 15

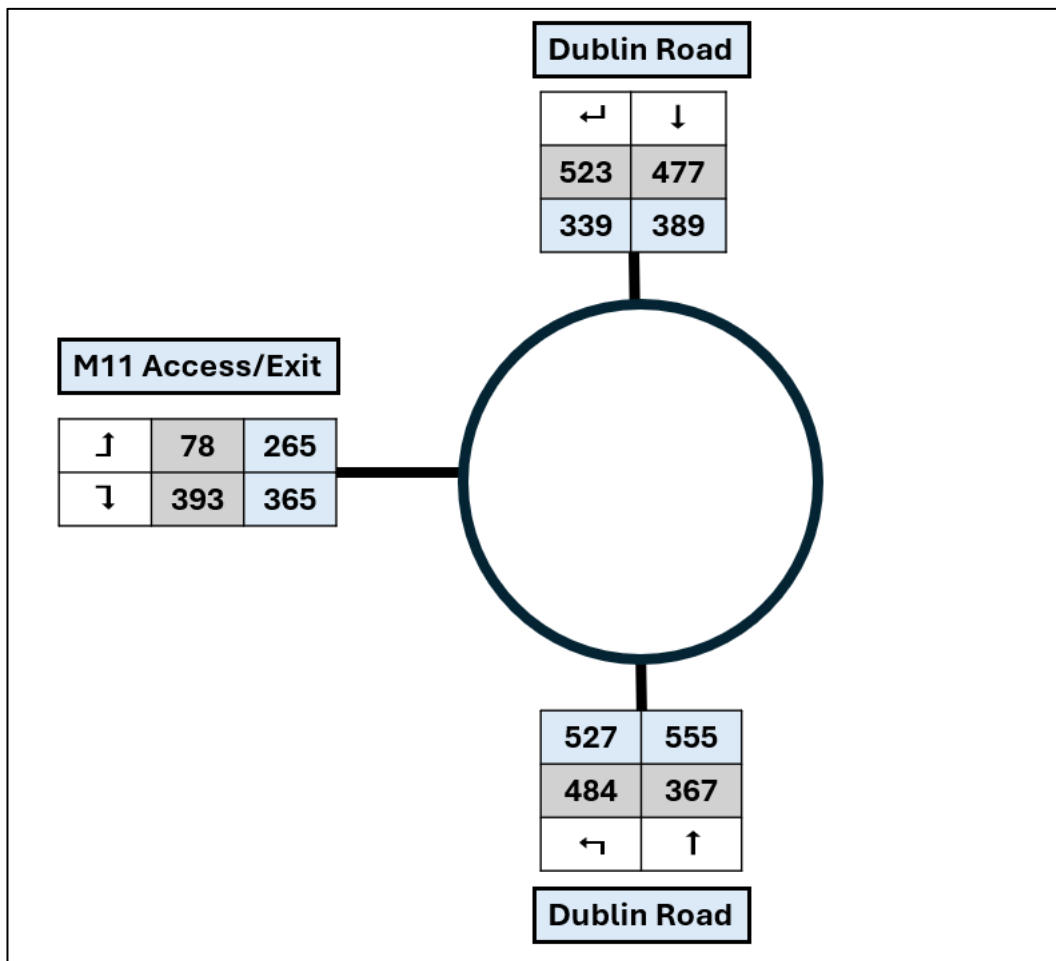


Figure 7-34 – Do Minimum Traffic Volumes Opening Year + 15

7.5.4.8 Do Something 1 Opening Year + 15

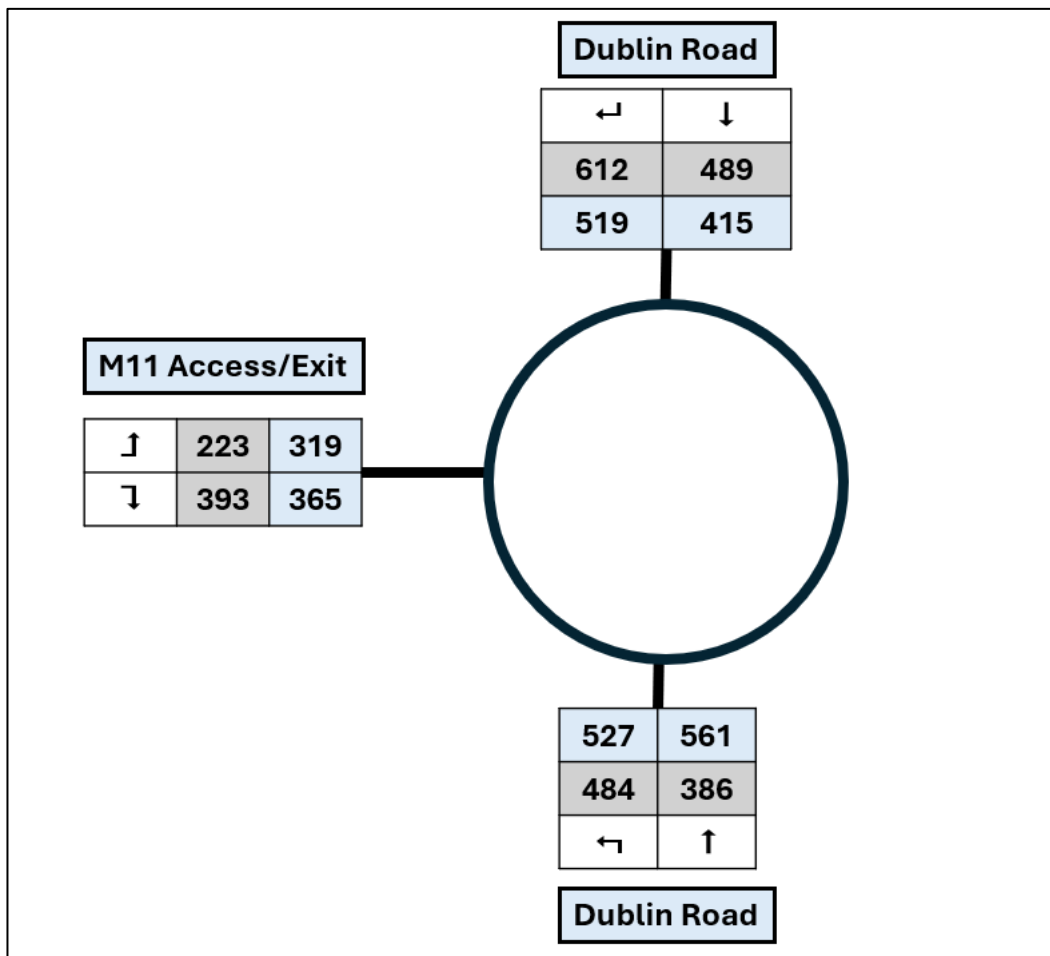


Figure 7-35 - Do Something 1 Traffic Volumes Opening Year + 15

7.5.4.9 Do Something 2 Opening Year + 15

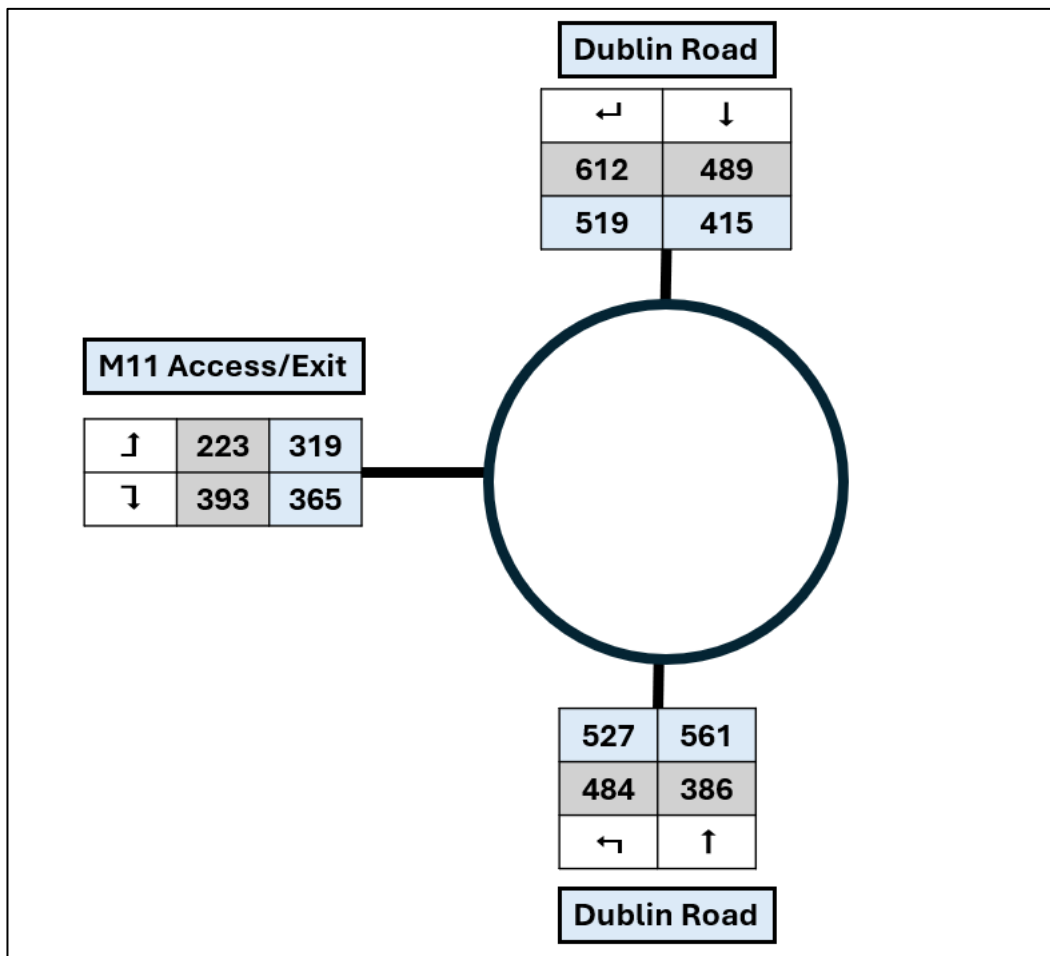


Figure 7-36 - Do Something 2 Traffic Volumes Opening Year + 15

7.5.4.10 Geometry (Proposed upgrade)

This junction has been proposed to be upgraded as part of Bray BusConnects proposal. The proposed layout is shown in Figure 7-37 below. As per the design, the junction will have bus priority lane along Dublin Road in both directions. Also, 1-way cycle lane is to be provided along Dublin Road in both directions.

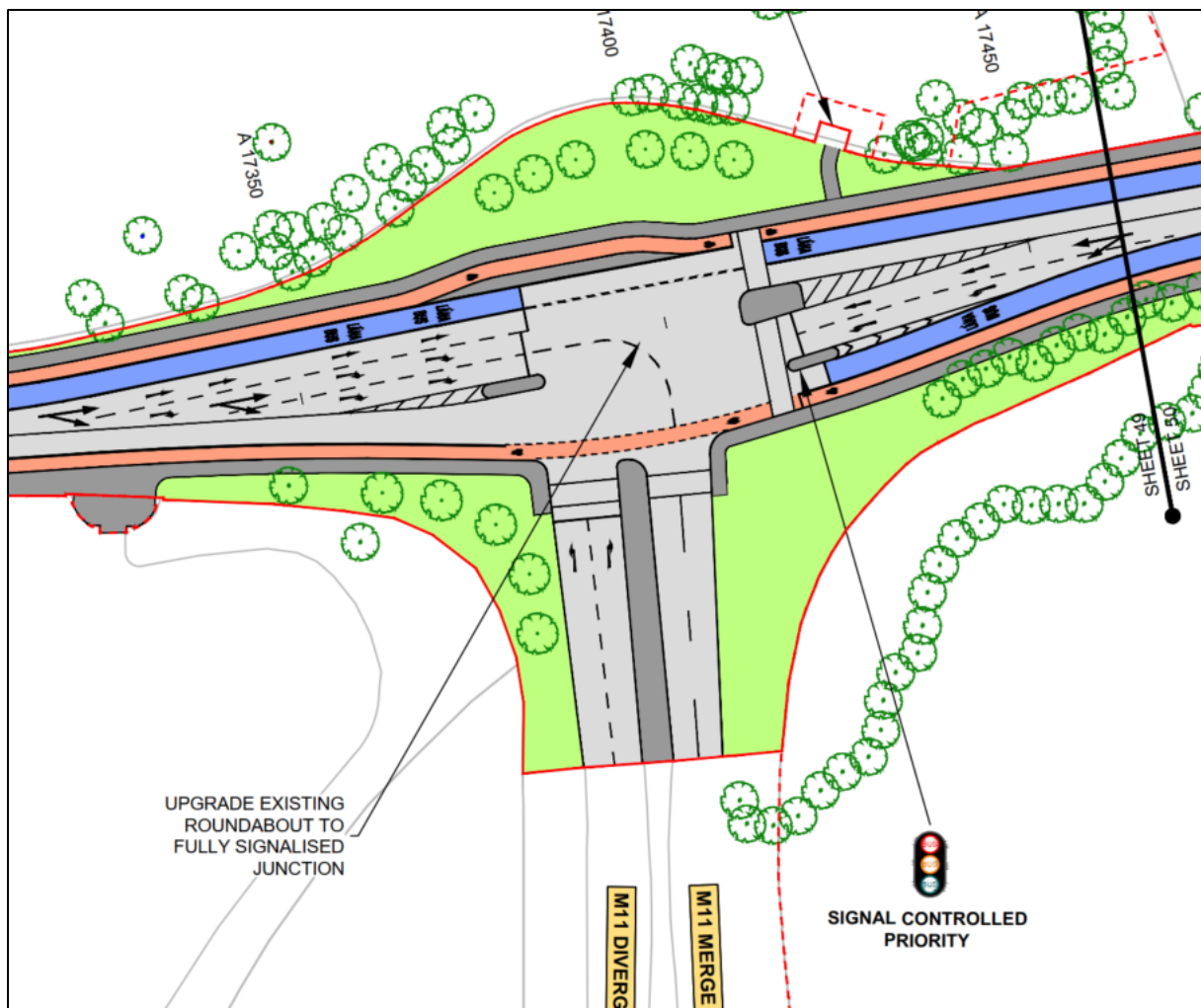


Figure 7-37 - Route to/from Dublin Road: Opening year

For the analysis it was assumed that the proposed design will be not effective for Opening Year scenarios, and hence the junction was modelled as per existing condition for opening year scenarios. For opening Year+5 and +15, the junction is modelled as per the proposed layout of the BusConnects.

7.5.5 Stage Sequence

For the scenario opening year scenarios this is modelled as a priority roundabout and then a signalised junction in the opening year + 5 and opening year + 15 scenarios, the stage sequence is shown in Figure 7-38 below.

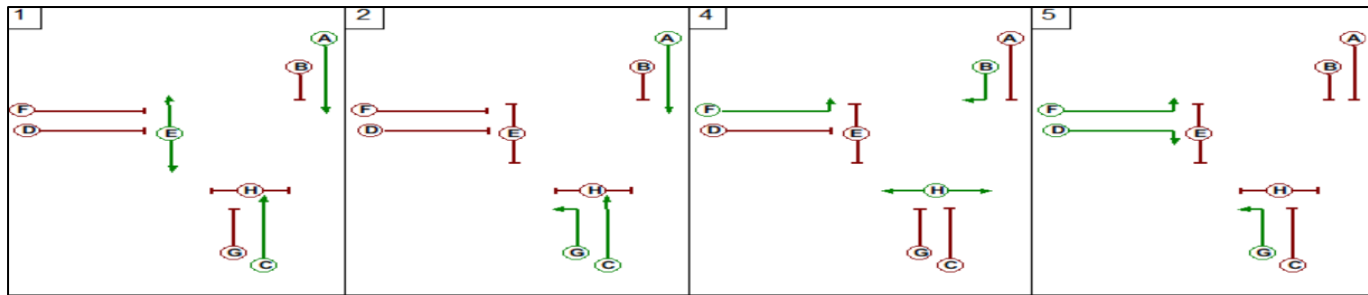


Figure 7-38 – Stage Sequencing of The Proposed Upgraded Signalised Junction

- For the first stage both Dublin Road arms receive a green for straight movements while the pedestrian crossing on the M11 access receives a green.
- For the second stage both Dublin Road arms receive a green for straight movements and the southern Dublin Road arm additionally receives left turning green.
- In the third stage, the northern Dublin Road arm receives a green for right turning movements, the southern Dublin Road arm receives a green for the pedestrian crossing and the M11 Access arm receives a left turning green.
- In the final stage the M11 Access arm receives a general green and the southern Dublin Road arm receives a left turning green.

7.5.5.1 Modelling Scenarios

For all the design years the junction will be modelled for following scenarios:

- Do Minimum: It represents proposed infrastructure based on Bus Connects Design. Traffic in this scenario only includes the background growth of trips as discussed in Section 6.3. It also includes the redistribution of trips due to proposed new M11 bridge (OY+5 and +15) and Bus Gates proposal along Old Connaught Avenue (in OY+15) shown in Table 7-9 & Table 7-10.
- Do Something 1: It includes Do Minimum infrastructure + Background Growth of traffic + Proposed development from full masterplan lands owned by Castlethorn.
- Do Something Scenario 2: It includes all the infrastructure and trips in Do Something Scenario 1+ Any other trips from the LAP (which includes DLRCC lands and Southern Character Area of LAP) for both design years.

7.5.6 Modelling Results

7.5.6.1 Opening Year +

Table 7-8 - Junctions Modelling Results: Wilford Roundabout Junction: OY Scenarios

Opening Year (2028)								
Arm	AM Peak				PM Peak			
	Queue	Delay	RFC	LOS	Queue	Delay	RFC	LOS
DS1								
Dublin Road North	0.6 PCU	4 seconds	0.35	A	1 PCU	5 seconds	0.48	A
Dublin Road South	2.9 PCU	9 seconds	0.74	A	2 PCU	8 seconds	0.67	A
M11 Access/Exit	0.8 PCU	4 seconds	0.42	A	0.4 PCU	3 seconds	0.3	A
DS2								
Dublin Road North	0.6 PCU	4 seconds	0.36	A	1 PCU	5 seconds	0.5	A
Dublin Road South	3.9 PCU	12 seconds	0.8	A	2.3 PCU	9 seconds	0.7	A
M11 Access/Exit	0.8 PCU	4 seconds	0.43	A	0.5 PCU	3 seconds	0.34	A
DS2								
Dublin Road North	0.6 PCU	4 seconds	0.36	A	1 PCU	5 seconds	0.5	A
Dublin Road South	3.9 PCU	12 seconds	0.8	A	2.3 PCU	9 seconds	0.7	A
M11 Access/Exit	0.8 PCU	4 seconds	0.43	A	0.5 PCU	3 seconds	0.34	A

7.5.6.2 Opening Year +5

Table 7-9 - LinSig Modelling Results: Wilford Roundabout Junction: OY+5 Scenarios

Opening Year + 5 (2033)								
Arm	AM Peak				PM Peak			
	MMQ	Delay	DOS	PRC	MMQ	Delay	DOS	PRC
DM								
Dublin Road North Arm	9.2 PCU	1 minute and 11 seconds	91.50%	-2.60%	23.1 PCU	1 minute and 41 seconds	99.10%	-10.2%
Dublin Road South Arm	30 PCU	41 seconds	92.30%		31.6 PCU	1 minute and 21 seconds	98.70%	
M11 Access/Exit	16.9 PCU	1 minute and 18 seconds	89.90%		19.8 PCU	1 minutes and 45 seconds	95.90%	
DS1								
Dublin Road North Arm	52.5 PCU	4 minutes and 5 seconds	110.30%	-23.1%	50.6 PCU	3 minutes and 27 seconds	107.80%	-20.3%
Dublin Road South Arm	78.8 PCU	3 minute and 41 seconds	109.40%		53.7 PCU	3 minutes 1 second	106.40%	
M11 Access/Exit	40.4 PCU	4 minutes and 45 seconds	110.80%		36.8 PCU	4 minutes and 7 seconds	108.20%	
DS2								
Dublin Road North Arm	52.5 PCU	4 minutes and 5 seconds	110.30%	-23.1%	50.6 PCU	3 minutes and 27 seconds	107.80%	-20.3%
Dublin Road South Arm	78.8 PCU	3 minute and 41 seconds	109.40%		53.7 PCU	3 minutes 1 second	106.40%	
M11 Access/Exit	40.4 PCU	4 minutes and 45 seconds	110.80%		36.8 PCU	4 minutes and 7 seconds	108.20%	



7.5.6.3 Opening Year +15

Table 7-10 - LinSig Modelling Results: Wilford Roundabout Road Junction: OY+15 Scenarios

Opening Year + 15 (2043)								
Arm	AM Peak				PM Peak			
	MMQ	Delay	DOS	PRC	MMQ	Delay	DOS	PRC
DM								
Dublin Road North Arm	27.9 PCU	1 minute and 50 seconds	101.30%	-13.20%	124.2 PCU	6 minutes and 29 seconds	121.40%	-34.9%
Dublin Road South Arm	56.6 PCU	1 minute and 43 seconds	101.90%		36.3 PCU	1 minute and 23 seconds	99.10%	
M11 Access/Exit	20.1 PCU	2 minute and 7 seconds	98.20%		46.4 PCU	5 minutes and 58 seconds	115.80%	
DS1								
Dublin Road North Arm	111.8 PCU	6 minutes and 15 seconds	120.20%	-34.3%	181.1 PCU	8 minutes and 59 seconds	133.70%	-48.6%
Dublin Road South Arm	136.9 PCU	6 minutes and 26 seconds	120.90%		50.4 PCU	2 minutes and 17 seconds	103.60%	
M11 Access/Exit	47.5 PCU	6 minutes and 43 seconds	118.80%		63.6 PCU	8 minutes and 38 second	127.90%	
DS2								
Dublin Road North Arm	111.8 PCU	6 minutes and 15 seconds	120.20%	-34.3%	181.1 PCU	8 minutes and 59 seconds	133.70%	-48.6%
Dublin Road South Arm	136.9 PCU	6 minutes and 26 seconds	120.90%		50.4 PCU	2 minutes and 17 seconds	103.60%	
M11 Access/Exit	47.5 PCU	6 minutes and 43 seconds	118.80%		63.6 PCU	8 minutes and 38 second	127.90%	



7.5.7 Summary of the Wilford Roundabout junction

AM Peak

Opening Year: All arms operate within capacity with queues below 3.9 PCU, delays up to 12 seconds and RFC up to 0.80.

Opening Year +5:

- DM operates slightly over capacity (DoS up to 92.3%, queues up to 30 PCU, delays up to 1 minute 11 seconds).
- DS scenarios exceed capacity on all arms (DoS above 100%, queues up to 78.8 PCU, delays up to 4 minutes and 45 seconds).

Opening Year +15:

- DM remains over capacity (DoS up to 101.9%).
- DS scenarios show significant over-capacity (queues up to 136.9 PCU, delays up to 6 minutes and 26 seconds, DoS above 120.9%).

PM Peak

Opening Year: All arms operate within capacity with queues below 2.3 PCU, delays below 9 seconds and RFC below 0.70.

Opening Year +5:

- DM operates over capacity (DoS up to 99.1%, delays up to 1 minute and 45 seconds).
- DS scenarios exceed capacity on all arms (queues up to 53.7 PCU, delays up to 4 minutes and 7 seconds, DoS above 108%).

Opening Year +15:

- DM shows over capacity (DoS above 121%, delays up to 6 minutes 29 seconds).
- DS scenarios show significant over capacity (queues up to 181.1 PCU, delays up to 8 minutes 59 second, DoS above 133%).

Overall

In the Opening Year the junction performance is slightly over capacity. Opening Year +5 and Opening Year +15 show increased capacity issues at the junction at the junction in DS scenarios. The degree of saturation increases substantially by Opening Year +15. Despite the relatively high congestion observed in the Do Something scenarios the redistribution of trips resulting from the proposed M11 Bridge connecting Dublin Road to the Old Connaught LAP Lands will alleviate pressure on the junction as observed in Section 7.2.6 of this report.



7.6 Proposed Access Junction

7.6.1 Opening Year

7.6.2 Geometry

For the opening year, the junction is modelled as an existing 3-arm signalised junction as summarised in Figure 7-39 below.

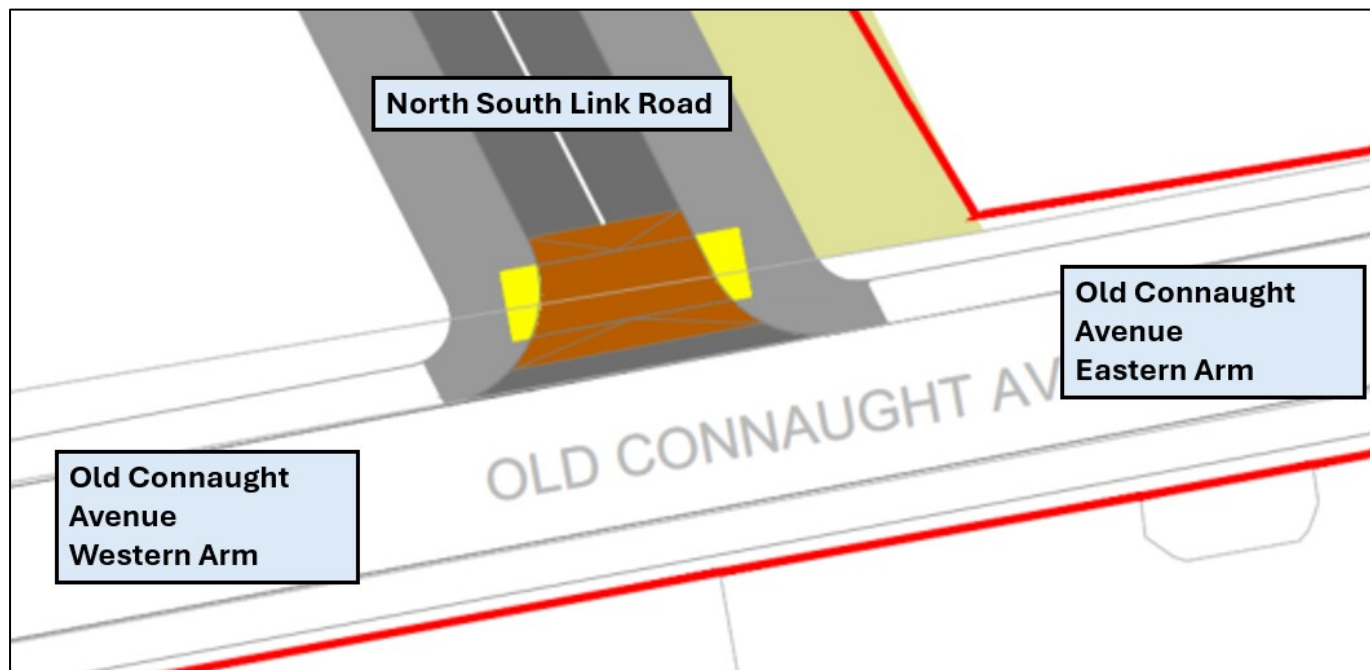


Figure 7-39 – Wilford Roundabout Existing Geometry

The lane assignment of all the arms for the Proposed Access Junction are summarised below:

- **Western arm:** The arm is a single lane.
- **Northern arm:** The arm is a single lane.
- **Eastern arm:** The arm is again a single lane.

7.6.3 Model Scenarios

- **Do Something 1:** It includes Do Nothing infrastructure + Background Growth of traffic + Proposed Phase A1 development
- **Do Something Scenario 2:** It includes all the infrastructure and trips in Do Something Scenario 1+ Any other trips from the LAP (which includes DLRCC lands)

7.6.4 Traffic Volume for Different Scenarios

7.6.4.1 Do Something 1 Opening Year

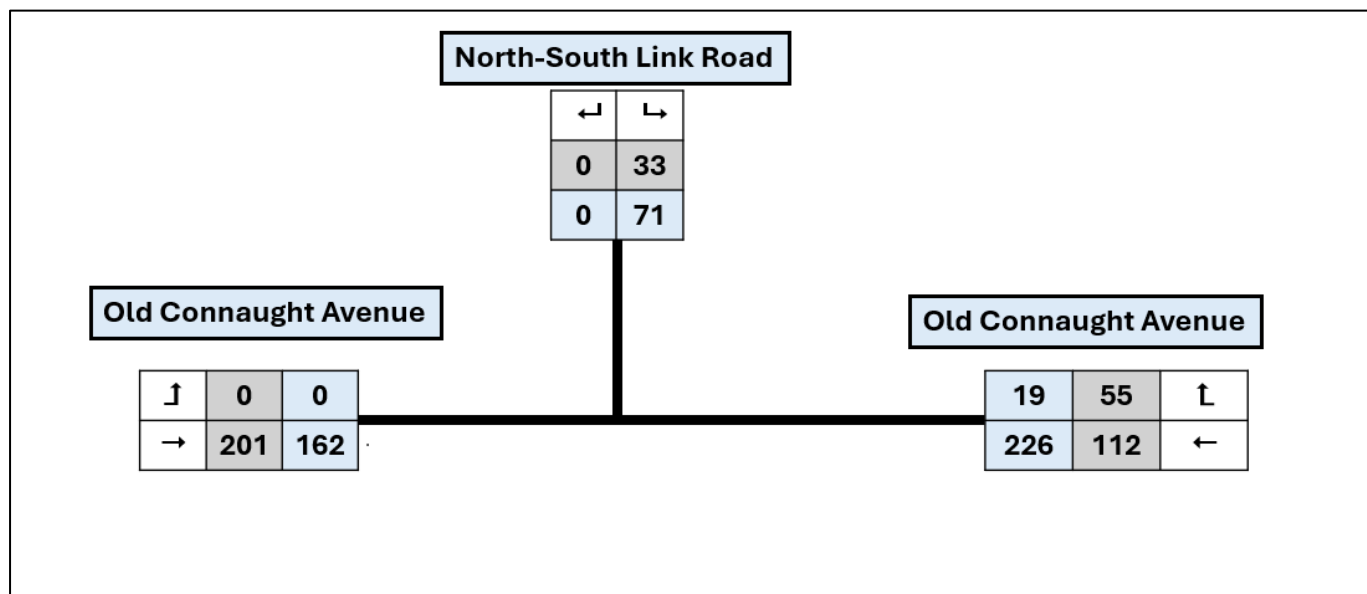


Figure 7-40 - Proposed Access Junction Traffic Volumes Do Something 1 Opening year

7.6.4.2 Do Something 2 Opening Year

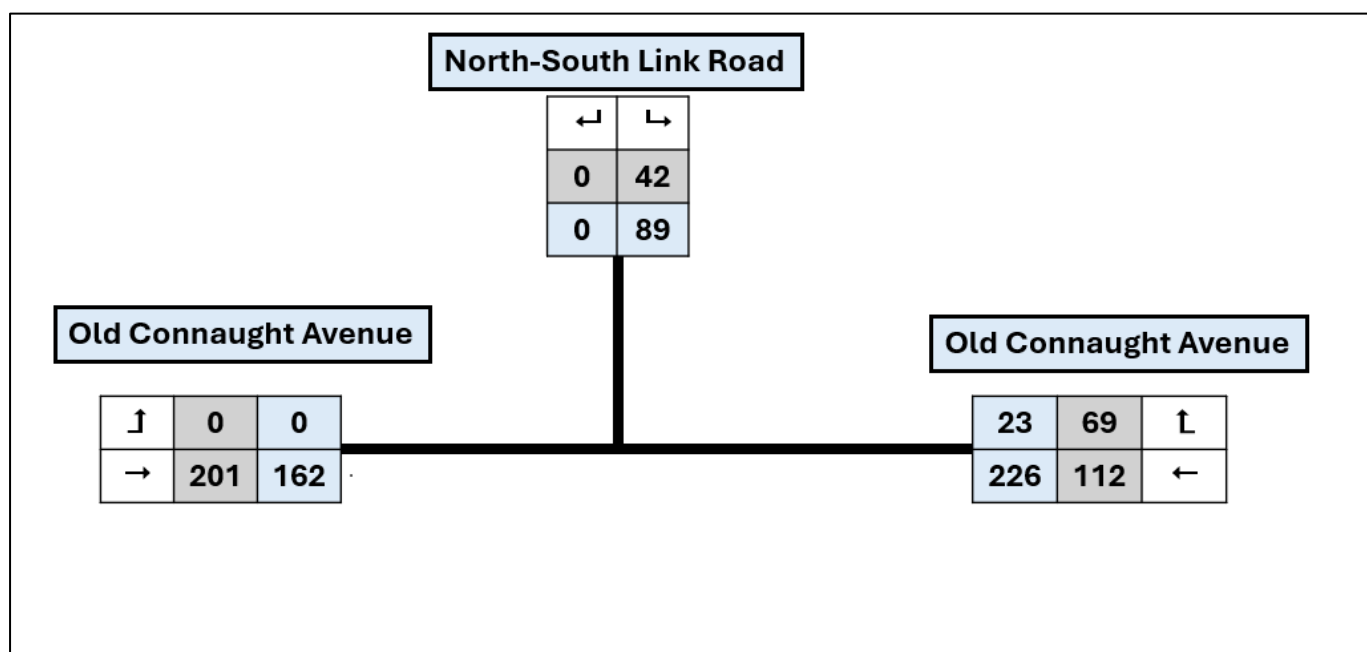


Figure 7-41 – Proposed Access Junction Traffic Volumes Do Something 2 Opening year

7.6.4.3 Do Something 1 Opening Year + 5

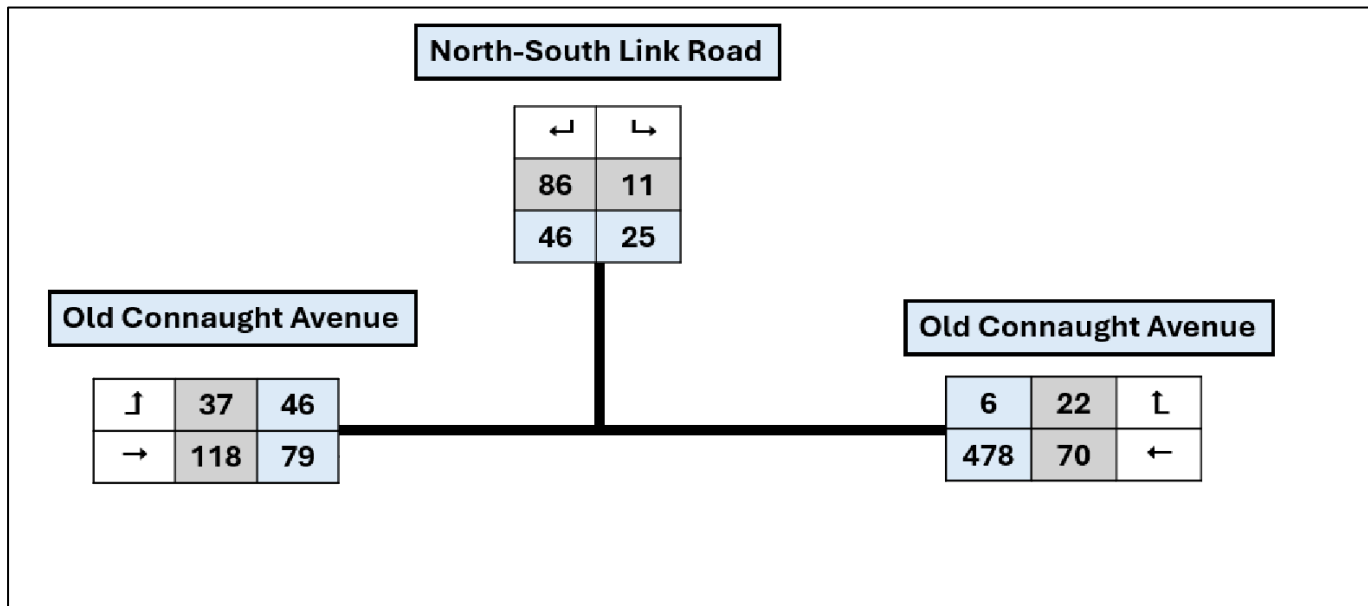


Figure 7-42 - Do Something 1 Traffic Volumes Opening Year + 5

7.6.4.4 Do Something 2 Opening Year + 5

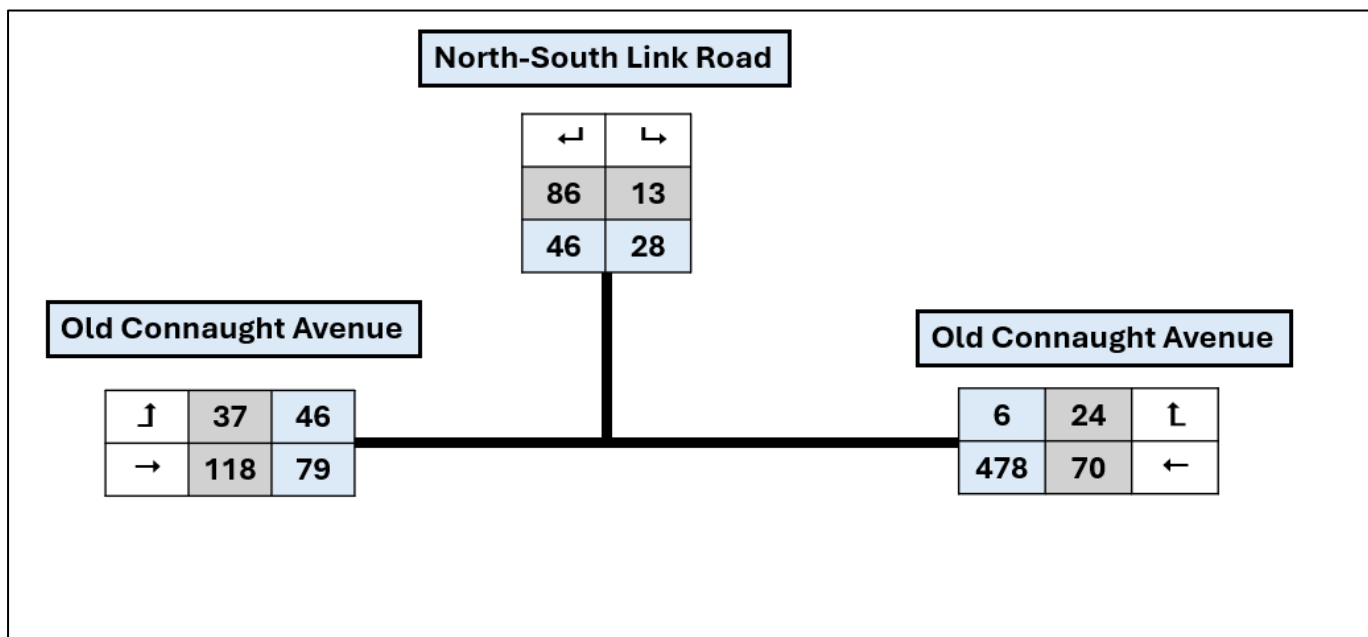


Figure 7-43 - Do Something 2 Traffic Volumes Opening Year + 5

7.6.4.5 Do Something 1 Opening Year + 15

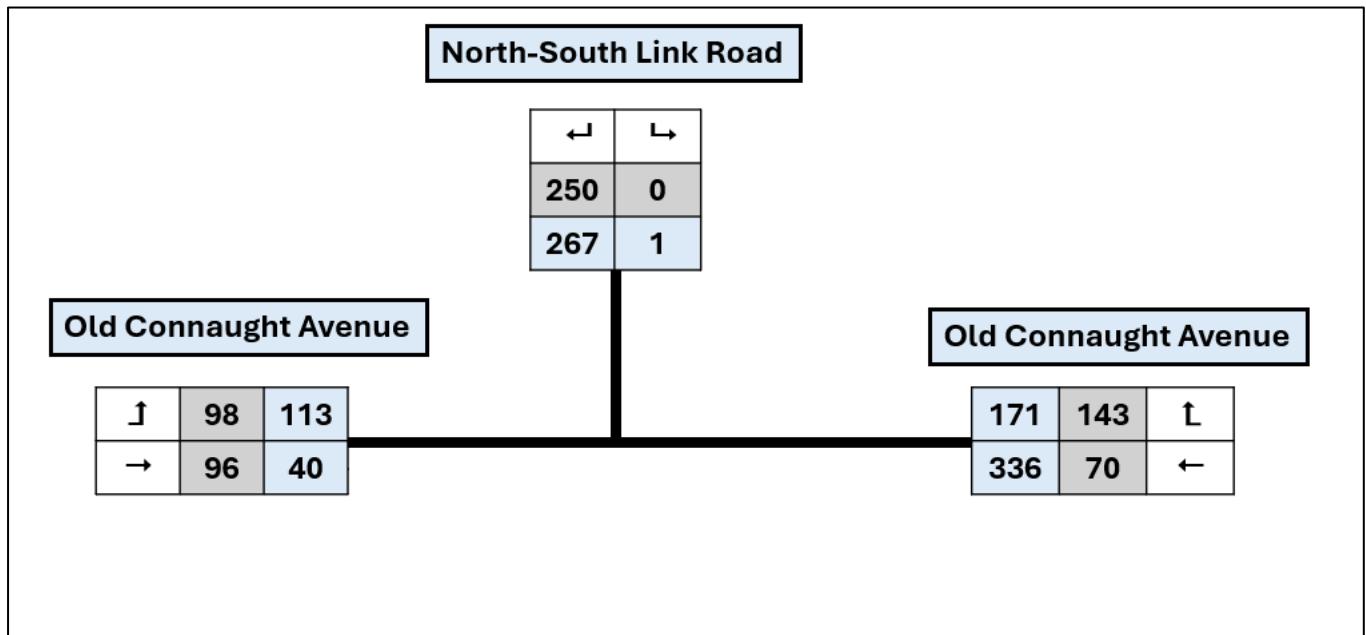


Figure 7-44 - Do Something 1 Traffic Volumes Opening Year + 15

7.6.4.6 Do Something 2 Opening Year + 15

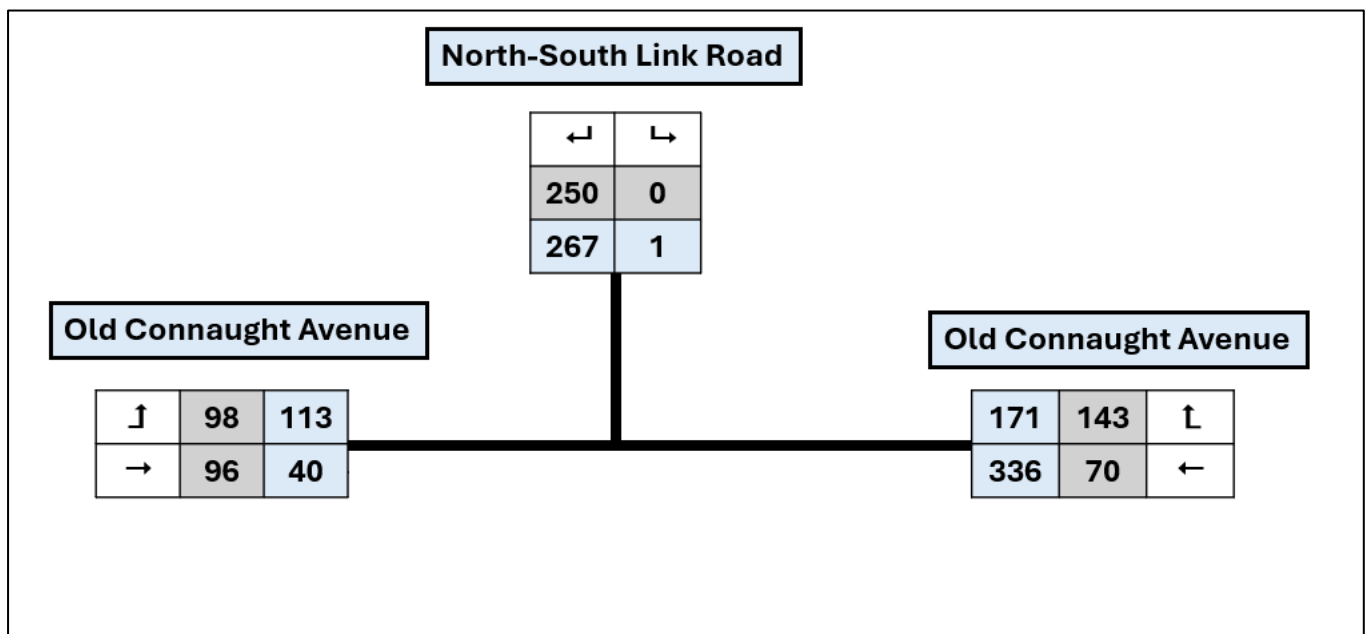


Figure 7-45 - Do Something 2 Traffic Volumes Opening Year + 15

7.6.4.7 Modelling Scenarios

For all the design years the junction will be modelled for following scenarios:



- Do Something 1: It includes Do Minimum infrastructure + Background Growth of traffic + Proposed development from full masterplan lands owned by Castlethorn.
- Do Something Scenario 2: It includes all the infrastructure and trips in Do Something Scenario 1+ Any other trips from the LAP (which includes DLRCC lands and Southern Character Area of LAP) for both design years.

7.6.5 Modelling Results

7.6.5.1 Opening Year

Table 7-11 - Junctions Modelling Results: Proposed Access Junction: OY Scenarios

Opening Year (2028)								
Arm	AM Peak				PM Peak			
	Queue	Delay	RFC	LOS	Queue	Delay	RFC	LOS
DS1								
Old Connaught Avenue	0.2 PCU	7 seconds	0.16	A	0.1 PCU	6 seconds	0.08	A
Proposed Access	0 PCU	7 seconds	0.05	A	0.2 PCU	8 seconds	0.14	A
DS2								
Old Connaught Avenue	0.1 PCU	7 seconds	0.13	A	0.1 PCU	6 seconds	0.06	A
Proposed Access	0 PCU	7 seconds	0.04	A	0.1 PCU	8 seconds	0.11	A

7.6.5.2 Opening Year +5

Table 7-12 - Junctions Modelling Results: Proposed Access Junction: OY+5 Scenarios

Opening Year+5 (2033)								
Arm	AM Peak				PM Peak			
	Queue	Delay	RFC	LOS	Queue	Delay	RFC	LOS
DS1								
Old Connaught Avenue	0.1 PCU	6 seconds	0.05	A	0 PCU	6 seconds	0.02	A
Proposed Access	0 PCU	7 seconds	0.01	A	0.1 PCU	7 seconds	0.05	A
DS2								



Opening Year+5 (2033)								
Arm	AM Peak				PM Peak			
	Queue	Delay	RFC	LOS	Queue	Delay	RFC	LOS
Old Connaught Avenue	0 PCU	6 seconds	0.04	A	0 PCU	6 seconds	0.02	A
Proposed Access	0 PCU	7 seconds	0.01	A	0 PCU	7 seconds	0.05	A

7.6.5.3 Opening Year +15

Table 7-13 - Junctions Modelling Results: Proposed Access Junction: OY+15 Scenarios

Opening Year+15 (2043)								
Arm	AM Peak				PM Peak			
	Queue	Delay	RFC	LOS	Queue	Delay	RFC	LOS
DS1								
Old Connaught Avenue	0.7 PCU	15 seconds	0.42	B	0.3 PCU	11 seconds	0.24	B
Proposed Access	0.4 PCU	9 seconds	0.26	A	0.4 PCU	10 seconds	0.29	A
DS2								
Old Connaught Avenue	0.7 PCU	15 seconds	0.42	B	0.3 PCU	11 seconds	0.24	B
Proposed Access	0.4 PCU	9 seconds	0.26	A	0.4 PCU	10 seconds	0.29	A

7.6.6 Summary of the Proposed Access junction

- Junction performance is well within capacity across all assessment years and both scenarios.
- All movements operate with very low queues, minimal delays and RFC well below capacity.
- Levels of service remain at A throughout, with minor reductions to B on Old Connaught Avenue by Opening Year +15.



7.7 Summary of Modelling Results

- **Dublin Rd-Cork Abbey-Old Connaught Ave Junction:** The junction performs adequately in all PM Peak scenarios. The junction performance in the OY AM Peak scenarios is over capacity and improves in the OY +5 and OY+15 scenarios due to the proposed BusConnects upgrades.
- **East-West, North-South Junction:** There is an increase in delays from the OY scenario to the OY+5 scenario. Despite this increase, the DOS and PRC values suggest that the junction was operating well within capacity, with the impact of the additional trips observed to be negligible.
- **M11 Bridge-Dublin Rd Junction:** The bridge junction was designed and modelled to serve the residents of the proposed development, therefore the queue lengths and delays in the OY+5 scenario are acceptable. This suggests that overall, the junction was operating well within capacity, with the impact of the additional trips observed to be minor.
- **Wilford Roundabout:** In the OY scenario, the junction is modelled as its existing priority roundabout, and was operating well within capacity, with the impact of the additional trips observed to be minor. The junction was then modelled as an independent signalised junction for the OY+5 and OY+15 scenarios as per Bus Connects design, not taking into account the traffic impact from nearby junctions which caused a negative PRC in the DN OY+5 scenario. Despite the increase in queues and delays in the DN_CT and DN_AT scenarios, the junction remains operating well within capacity, with the impact of the additional trips observed to be moderate but acceptable.
- **North-South Old Connaught Ave Access Junction:** There is an increase in delays from the OY scenario to the OY+5 and OY+15 scenarios. Despite this increase, the DOS and PRC values suggest that the junction was operating well within capacity, with the impact of the additional trips observed to be negligible.

8. Summary & Conclusion

8.1 Summary

This Traffic and Transport Assessment (TTA) evaluates the transport implications of the proposed Old Connaught **Phase A1 LRD development**, comprising **271 residential units**, a crèche, and associated infrastructure within the Old Connaught Local Area Plan (LAP) area.

The assessment has been prepared in alignment with **national, regional, and local policy**, including the National Development Plan, Sustainable Mobility Policy, GDA Transport Strategy, Climate Action Plan, and the Old Connaught LAP.

Key Transport Strategy

- The development adopts a **plan-led, multimodal transport approach**, integrating:
 - **Walking and cycling infrastructure**
 - **Public transport accessibility**
 - **Road network improvements**
- It aligns with the “**10-minute neighbourhood**” **concept**, encouraging local trips by active and sustainable modes.

Infrastructure Provision

Phase A1 delivers key enabling infrastructure required by the LAP:

- **North–South Link Road** (spine route with future bridge connection)
- **East–West Link Road**
- **Segregated cycle tracks and active travel network**
- **Luas corridor safeguarding and potential stop**

All streets are designed in accordance with **DMURS principles**, promoting:

- Low speeds (30 km/h)
- High-quality pedestrian environment
- Safe and coherent cycling provision

Accessibility and Connectivity

- Existing access to high-frequency bus services along the **R761 Dublin Road (~700m)**
- Proximity to **Woodbrook DART station (~2.6 km)**



- Future benefit from **BusConnects** and **GDA Cycle Network expansion**

Parking and Sustainable Travel Measures

- Car parking designed within **planning standards (reduced car dependency)**
- Significant **cycle parking provision (≥1 space per bedroom + visitor spaces)**
- EV, disabled, and visitor spaces included
- Full **cycle audit and road safety audit completed**

Traffic and Transport Assessment

- Trip generation based on **TRICS** with future **mode shift assumptions**:
 - Reduction in car mode share
 - Increase in walking, cycling, and public transport
- Junction modelling undertaken for:
 - **Opening Year (2028)**
 - **+5 years (2033)**
 - **+15 years (2043)**

Key Findings

- **Most junctions operate within capacity** across all scenarios, including:
 - Internal junctions
 - Proposed M11 bridge junction
 - Site access junction
- **Old Connaught Avenue / Dublin Road junction:**
 - Performs adequately in opening years and under future year conditions when bus gate reduces flows on Old Connaught Avenue
- **Wilford Roundabout:**
 - Operates within capacity initially
 - Becomes **over-capacity in future design years** (linked to wider growth, not solely this development)



8.2 Conclusion

The assessment demonstrates that the **Old Connaught Phase A1 LRD development is acceptable from a transport and traffic perspective**, subject to planned infrastructure delivery and future network improvements.

Key conclusions are:

- **Strong alignment with planning policy:** The proposal fully accords with national and regional objectives to prioritise sustainable mobility, reduce car dependence, and support compact growth.
- **Integrated and sustainable design:** The scheme delivers critical infrastructure early, including **link roads, active travel routes, and public transport corridors**, enabling long-term sustainable travel behaviour.
- **Encouragement of modal shift:** The development supports a transition towards **walking, cycling, and public transport**, consistent with projected reductions in car mode share.
- **Road network performance:**
 - The **local and site access network will operate efficiently**
 - Identified constraints (e.g. Wilford Roundabout in future years) are primarily due to **cumulative regional growth**, not the development in isolation
- **Compliance with best practice:** The scheme complies with **DMURS, Cycle Design Manual, and TII guidelines**, ensuring a safe, high-quality urban environment.

The proposed development can be accommodated on the transport network without significant adverse impacts, while actively contributing to the delivery of a sustainable, well-connected community in accordance with the Old Connaught LAP vision.



APPENDICES

Appendix A. Junction Model Results



Basic Results Summary
Basic Results Summary

User and Project Details

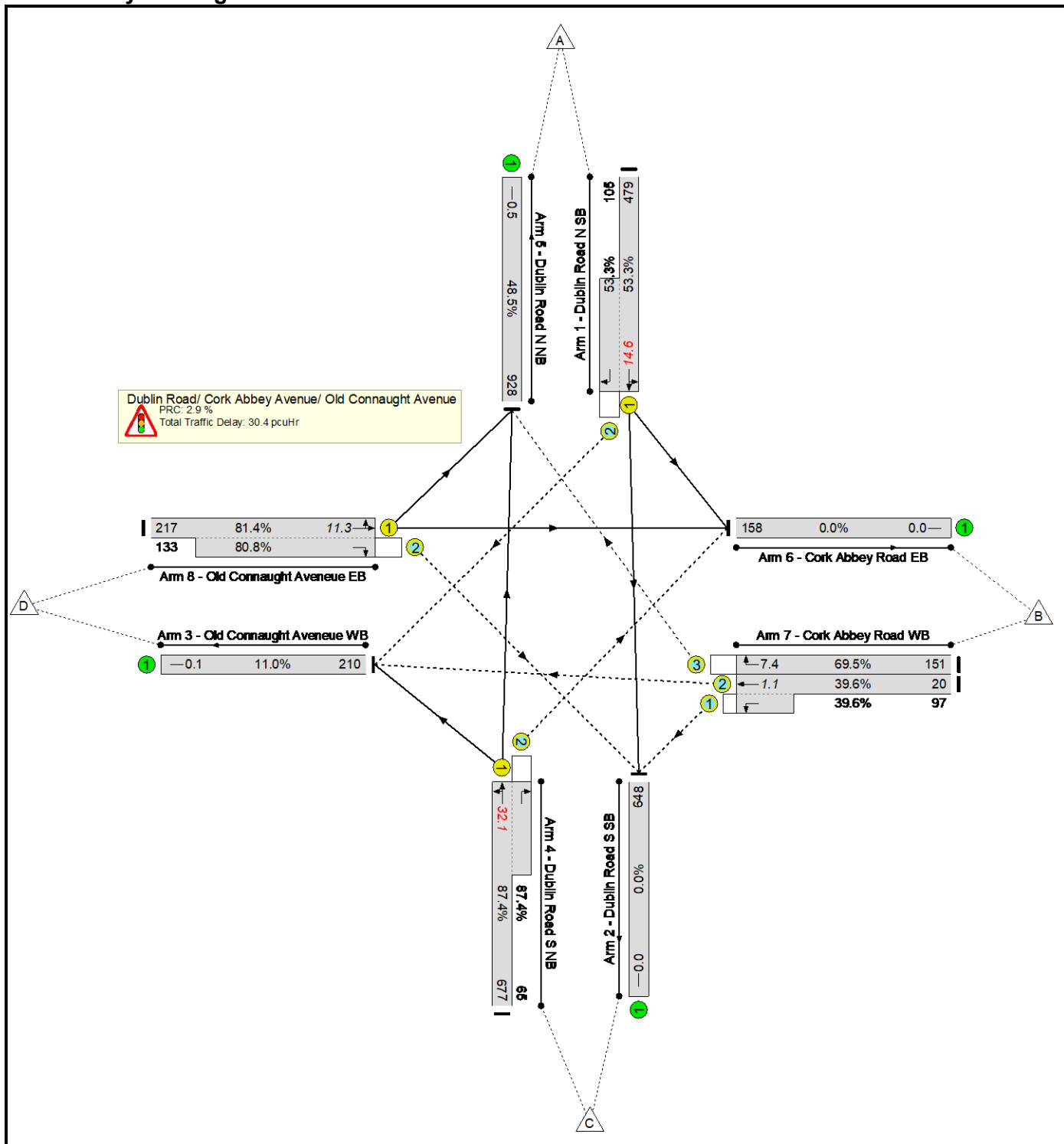
Project:	
Title:	
Location:	
Additional detail:	
File name:	J1 Dublin Rd-Cork Abbey-Old Connaught Ave Opening.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	DN OY_AM	DN OY_AM	Network Control Plan 1	08:00 - 09:00	158	2.9	30.36
2	DN_CT_AM	DN+CT OY_AM	Network Control Plan 1	08:00 - 09:00	158	-18.4	56.32
3	DN_AT_AM	DN+AT OY_AM	Network Control Plan 1	08:00 - 09:00	158	-18.4	56.32
4	DN_OY_PM	DN OY_PM	Network Control Plan 1	16:00 - 17:00	158	25.5	21.00
5	DN OY_CT_PM	DN+CT OY_PM	Network Control Plan 1	16:00 - 17:00	158	24.3	24.42
6	DN OY AT PM	DN+AT OY_PM	Network Control Plan 1	16:00 - 17:00	158	24.3	24.42

Scenario 1: 'DN OY_AM' (FG1: 'DN OY_AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

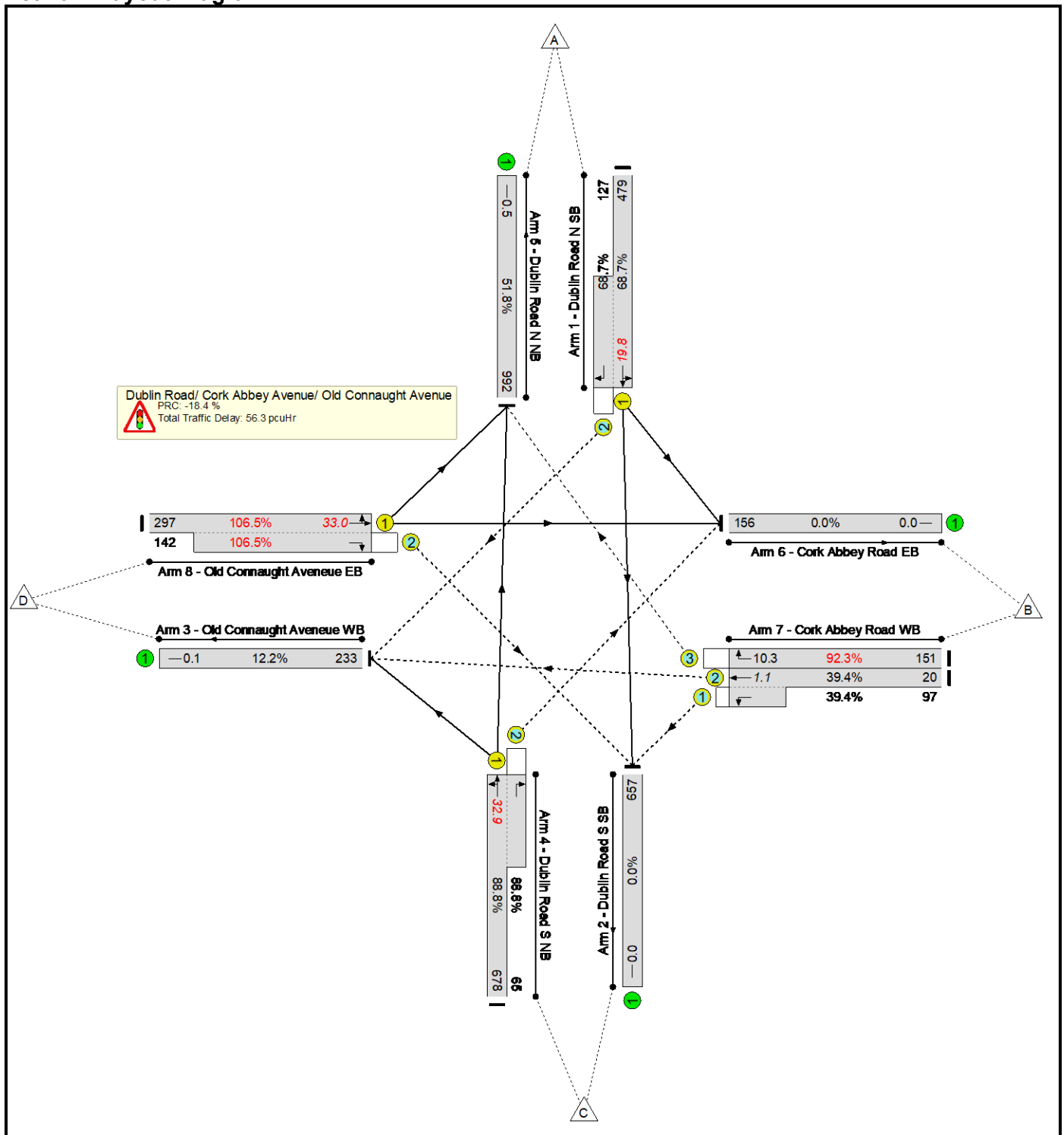


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	87.4%	451	234	3	30.4	-	-
Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue	-	-	-		-	-	-	-	-	-	-	87.4%	451	234	3	30.4	-	-
1/1+1/2	Dublin Road N SB Ahead Right Left	U+O	A	B	1	84	30	-	584	1965:1865	899+197	53.3 : 53.3%	62	42	1	4.8	29.8	14.6
3/1	Old Connaught Avenue WB	U	-		-	-	-	-	210	1915	1915	11.0%	-	-	-	0.1	1.1	0.1
4/1+4/2	Dublin Road S NB Left Ahead Right	U+O	G	H	1	67	13	-	742	1935:1855	774+74	87.4 : 87.4%	47	18	0	11.7	57.0	32.1
5/1	Dublin Road N NB	U	-		-	-	-	-	928	1915	1915	48.5%	-	-	-	0.5	1.8	0.5
7/2+7/1	Cork Abbey Road WB Left Ahead	O	E F		1	21:128	-	-	117	2025:2065	51+245	39.6 : 39.6%	175	59	0	0.8	25.6	1.1
7/3	Cork Abbey Road WB Right	O	K		1	36	-	-	151	1695	217	69.5%	34	115	2	3.9	94.1	7.4
8/1+8/2	Old Connaught Avenue EB Right Left Ahead	U+O	C	D	1	21	0	-	350	1915:1940	267+165	81.4 : 80.8%	133	0	0	8.5	87.2	11.3
C1 - Cycle 1 PRC for Signalled Lanes (%): 2.9 Total Delay for Signalled Lanes (pcuHr): 29.83 Cycle Time (s): 158 PRC Over All Lanes (%): 2.9 Total Delay Over All Lanes (pcuHr): 30.36																		

Network Layout Diagram

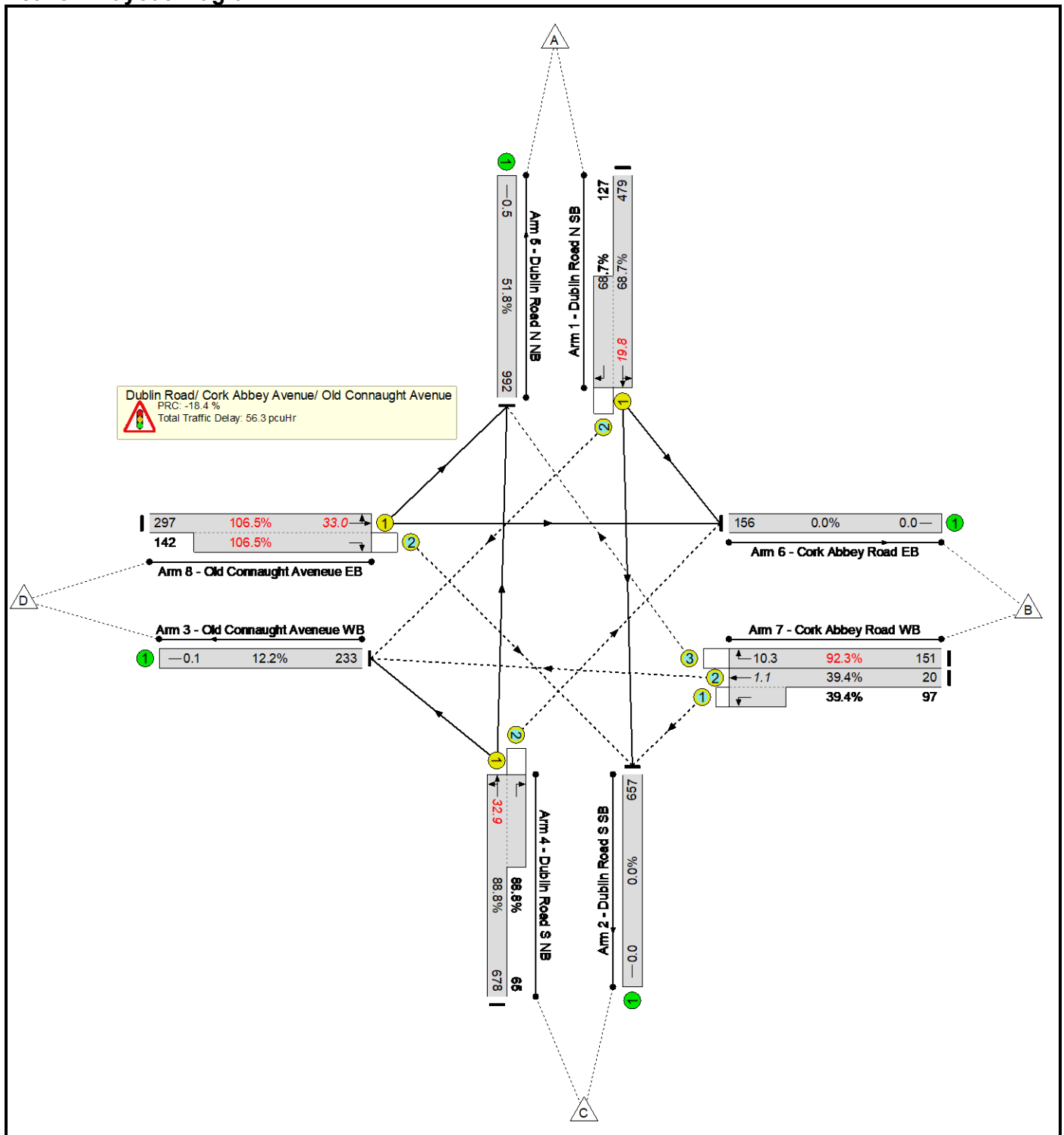


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	106.5%	378	327	13	56.3	-	-
Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue	-	-	-		-	-	-	-	-	-	-	106.5%	378	327	13	56.3	-	-
1/1+1/2	Dublin Road N SB Ahead Right Left	U+O	A	B	1	66	30	-	606	1965:1865	697+185	68.7 : 68.7%	53	72	2	7.4	44.0	19.8
3/1	Old Connaught Avenue WB	U	-		-	-	-	-	233	1915	1915	12.2%	-	-	-	0.1	1.1	0.1
4/1+4/2	Dublin Road S NB Left Ahead Right	U+O	G	H	1	66	30	-	743	1935:1855	763+73	88.8 : 88.8%	29	36	0	12.4	60.2	32.9
5/1	Dublin Road N NB	U	-		-	-	-	-	1008	1915	1915	51.8%	-	-	-	0.5	1.9	0.5
7/2+7/1	Cork Abbey Road WB Left Ahead	O	E F		1	22:128	-	-	117	2025:2065	51+246	39.4 : 39.4%	154	80	0	0.9	27.1	1.1
7/3	Cork Abbey Road WB Right	O	K		1	37	-	-	151	1695	164	92.3%	0	139	12	6.7	160.6	10.3
8/1+8/2	Old Connaught Avenue EB Right Left Ahead	U+O	C	D	1	22	0	-	439	1915:1940	279+133	106.5 : 106.5%	142	0	0	28.3	231.9	33.0
C1 - Cycle 1 PRC for Signalled Lanes (%): -18.4 PRC Over All Lanes (%): -18.4 Total Delay for Signalled Lanes (pcuHr): 55.71 Total Delay Over All Lanes (pcuHr): 56.32 Cycle Time (s): 158																		

Network Layout Diagram

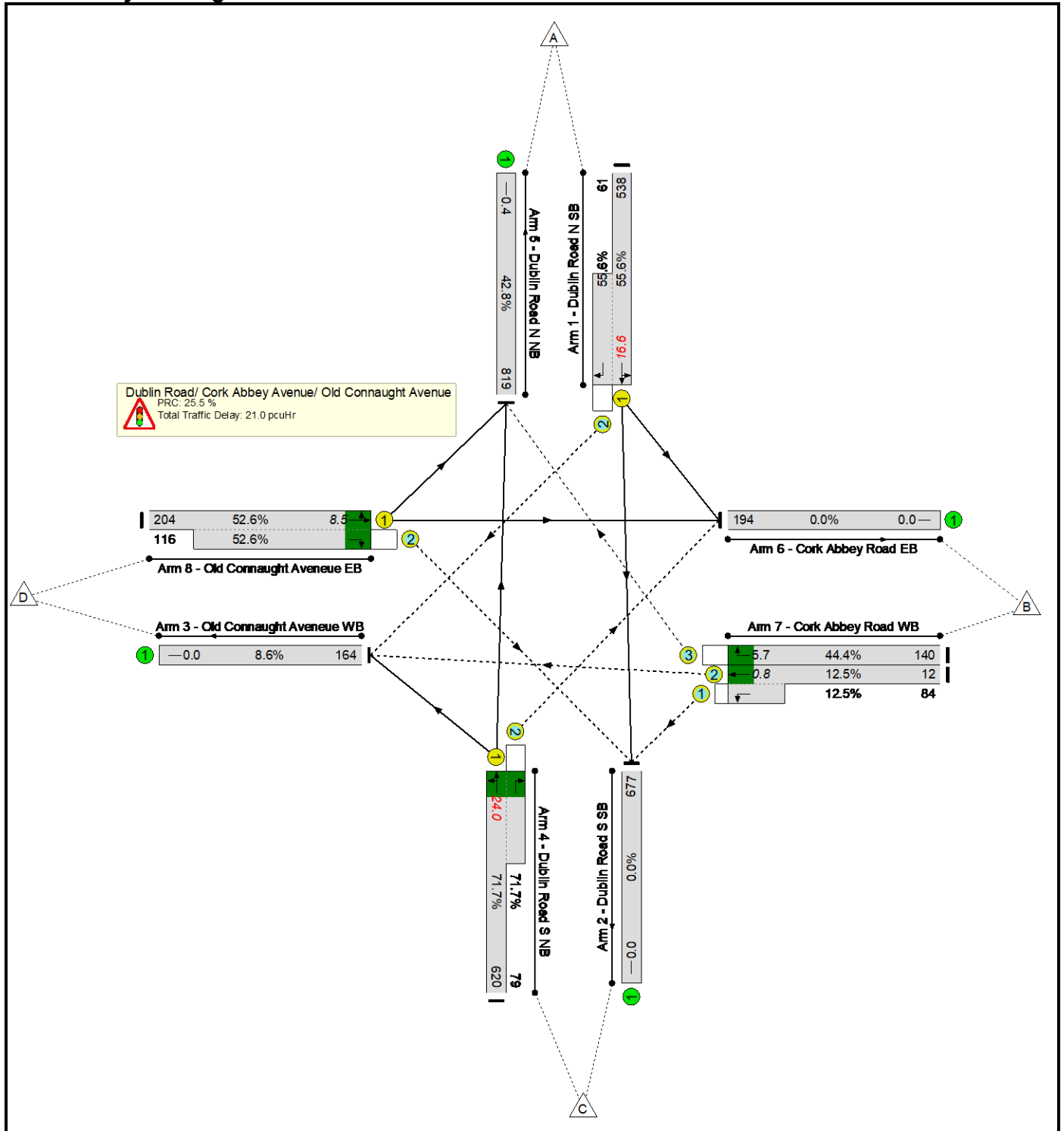


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	106.5%	378	327	13	56.3	-	-
Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue	-	-	-		-	-	-	-	-	-	-	106.5%	378	327	13	56.3	-	-
1/1+1/2	Dublin Road N SB Ahead Right Left	U+O	A	B	1	66	30	-	606	1965:1865	697+185	68.7 : 68.7%	53	72	2	7.4	44.0	19.8
3/1	Old Connaught Avenue WB	U	-		-	-	-	-	233	1915	1915	12.2%	-	-	-	0.1	1.1	0.1
4/1+4/2	Dublin Road S NB Left Ahead Right	U+O	G	H	1	66	30	-	743	1935:1855	763+73	88.8 : 88.8%	29	36	0	12.4	60.2	32.9
5/1	Dublin Road N NB	U	-		-	-	-	-	1008	1915	1915	51.8%	-	-	-	0.5	1.9	0.5
7/2+7/1	Cork Abbey Road WB Left Ahead	O	E F		1	22:128	-	-	117	2025:2065	51+246	39.4 : 39.4%	154	80	0	0.9	27.1	1.1
7/3	Cork Abbey Road WB Right	O	K		1	37	-	-	151	1695	164	92.3%	0	139	12	6.7	160.6	10.3
8/1+8/2	Old Connaught Avenue EB Right Left Ahead	U+O	C	D	1	22	0	-	439	1915:1940	279+133	106.5 : 106.5%	142	0	0	28.3	231.9	33.0
C1 - Cycle 1 PRC for Signalled Lanes (%): -18.4 PRC Over All Lanes (%): -18.4 Total Delay for Signalled Lanes (pcuHr): 55.71 Total Delay Over All Lanes (pcuHr): 56.32 Cycle Time (s): 158																		

Network Layout Diagram

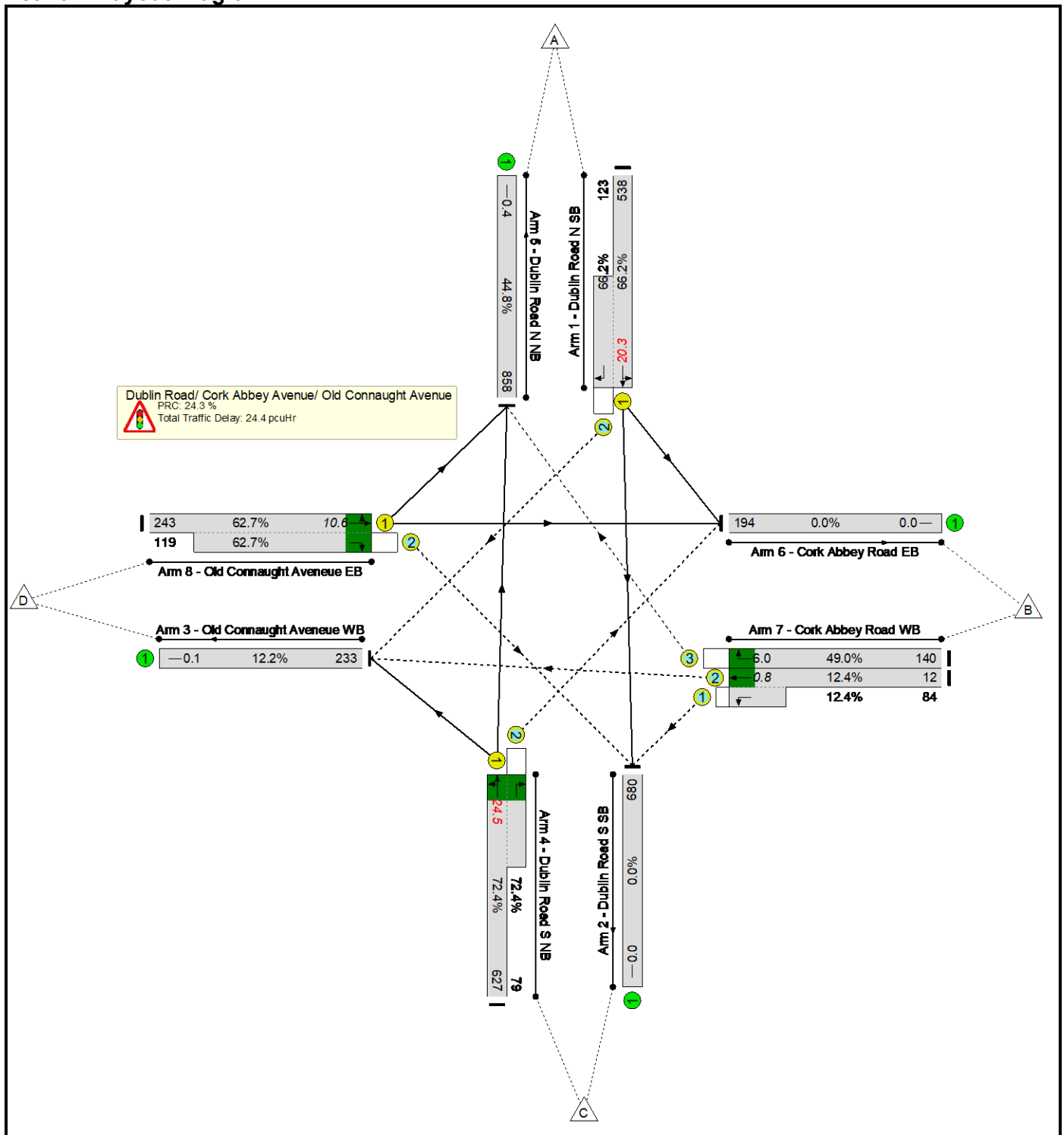


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	71.7%	492	93	3	21.0	-	-
Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue	-	-	-		-	-	-	-	-	-	-	71.7%	492	93	3	21.0	-	-
1/1+1/2	Dublin Road N SB Ahead Right Left	U+O	A	B	1	84	30	-	599	1965:1865	968+110	55.6 : 55.6%	51	9	1	4.7	28.1	16.6
3/1	Old Connaught Avenue WB	U	-		-	-	-	-	164	1915	1915	8.6%	-	-	-	0.0	1.0	0.0
4/1+4/2	Dublin Road S NB Left Ahead Right	U+O	G	H	1	67	13	Y:Y	699	1935:1855	865+110	71.7 : 71.7%	55	24	0	7.4	38.0	24.0
5/1	Dublin Road N NB	U	-		-	-	-	-	819	1915	1915	42.8%	-	-	-	0.4	1.6	0.4
7/2+7/1	Cork Abbey Road WB Left Ahead	O	E F		1	21:128	-	Y:-	96	2025:2065	96+670	12.5 : 12.5%	143	49	0	0.4	14.9	0.8
7/3	Cork Abbey Road WB Right	O	K		1	36	-	Y	140	1695	316	44.4%	127	12	2	2.6	67.0	5.7
8/1+8/2	Old Connaught Avenue EB Right Left Ahead	U+O	C	D	1	21	0	Y:Y	320	1915:1940	388+221	52.6 : 52.6%	116	0	0	5.5	62.2	8.5
C1 - Cycle 1 PRC for Signalled Lanes (%): 25.5 Total Delay for Signalled Lanes (pcuHr): 20.58 Cycle Time (s): 158 PRC Over All Lanes (%): 25.5 Total Delay Over All Lanes (pcuHr): 21.00																		

Network Layout Diagram

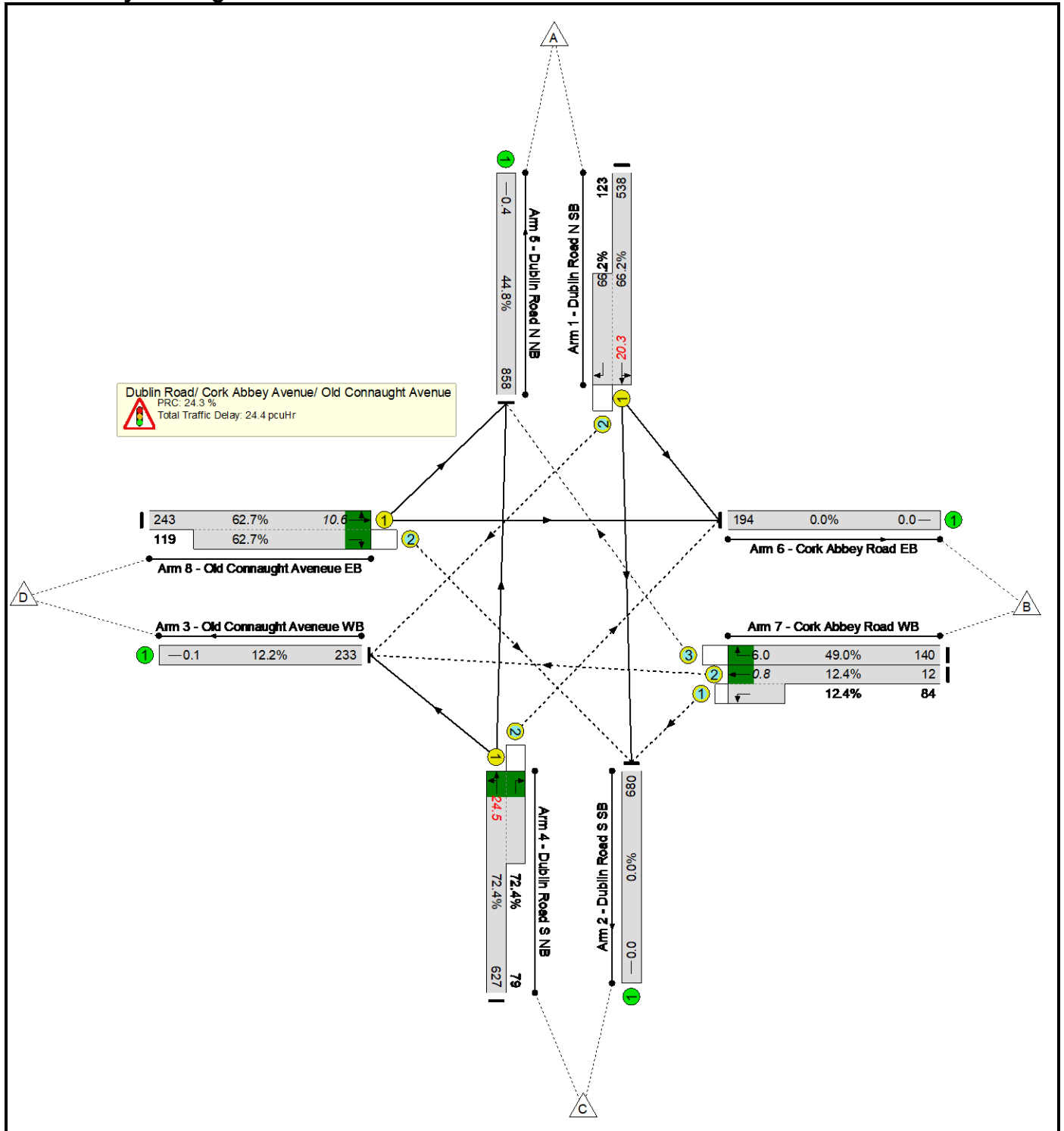


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	72.4%	502	148	3	24.4	-	-
Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue	-	-	-		-	-	-	-	-	-	-	72.4%	502	148	3	24.4	-	-
1/1+1/2	Dublin Road N SB Ahead Right Left	U+O	A	B	1	76	30	-	661	1965:1865	813+186	66.2 : 66.2%	104	18	2	6.6	35.8	20.3
3/1	Old Connaught Avenue WB	U	-		-	-	-	-	233	1915	1915	12.2%	-	-	-	0.1	1.1	0.1
4/1+4/2	Dublin Road S NB Left Ahead Right	U+O	G	H	1	67	21	Y:Y	706	1935:1855	866+109	72.4 : 72.4%	44	35	0	7.6	38.6	24.5
5/1	Dublin Road N NB	U	-		-	-	-	-	858	1915	1915	44.8%	-	-	-	0.4	1.7	0.4
7/2+7/1	Cork Abbey Road WB Left Ahead	O	E F		1	21:128	-	Y:-	96	2025:2065	96+675	12.4 : 12.4%	135	57	0	0.4	16.2	0.8
7/3	Cork Abbey Road WB Right	O	K		1	36	-	Y	140	1695	285	49.0%	100	38	2	2.8	72.4	6.0
8/1+8/2	Old Connaught Avenue EB Right Left Ahead	U+O	C	D	1	21	0	Y:Y	362	1915:1940	388+190	62.7 : 62.7%	119	0	0	6.6	65.2	10.6
C1 - Cycle 1 PRC for Signalled Lanes (%): 24.3 PRC Over All Lanes (%): 24.3 Total Delay for Signalled Lanes (pcuHr): 23.94 Total Delay Over All Lanes (pcuHr): 24.42 Cycle Time (s): 158																		

Network Layout Diagram

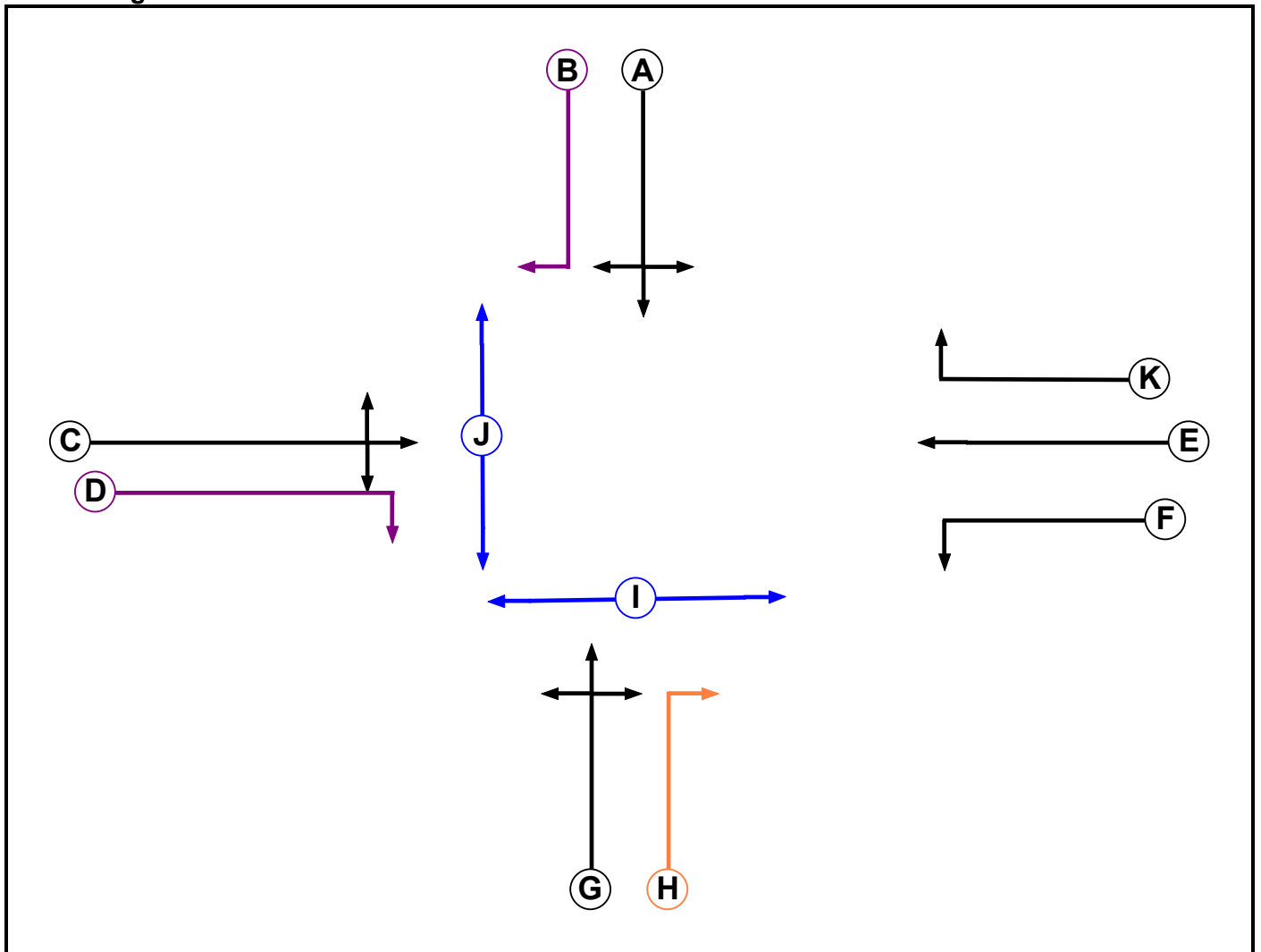


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	72.4%	502	148	3	24.4	-	-
Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue	-	-	-		-	-	-	-	-	-	-	72.4%	502	148	3	24.4	-	-
1/1+1/2	Dublin Road N SB Ahead Right Left	U+O	A	B	1	76	30	-	661	1965:1865	813+186	66.2 : 66.2%	104	18	2	6.6	35.8	20.3
3/1	Old Connaught Avenue WB	U	-		-	-	-	-	233	1915	1915	12.2%	-	-	-	0.1	1.1	0.1
4/1+4/2	Dublin Road S NB Left Ahead Right	U+O	G	H	1	67	21	Y:Y	706	1935:1855	866+109	72.4 : 72.4%	44	35	0	7.6	38.6	24.5
5/1	Dublin Road N NB	U	-		-	-	-	-	858	1915	1915	44.8%	-	-	-	0.4	1.7	0.4
7/2+7/1	Cork Abbey Road WB Left Ahead	O	E F		1	21:128	-	Y:-	96	2025:2065	96+675	12.4 : 12.4%	135	57	0	0.4	16.2	0.8
7/3	Cork Abbey Road WB Right	O	K		1	36	-	Y	140	1695	285	49.0%	100	38	2	2.8	72.4	6.0
8/1+8/2	Old Connaught Avenue EB Right Left Ahead	U+O	C	D	1	21	0	Y:Y	362	1915:1940	388+190	62.7 : 62.7%	119	0	0	6.6	65.2	10.6
C1 - Cycle 1 PRC for Signalled Lanes (%): 24.3 PRC Over All Lanes (%): 24.3 Total Delay for Signalled Lanes (pcuHr): 23.94 Total Delay Over All Lanes (pcuHr): 24.42 Cycle Time (s): 158																		

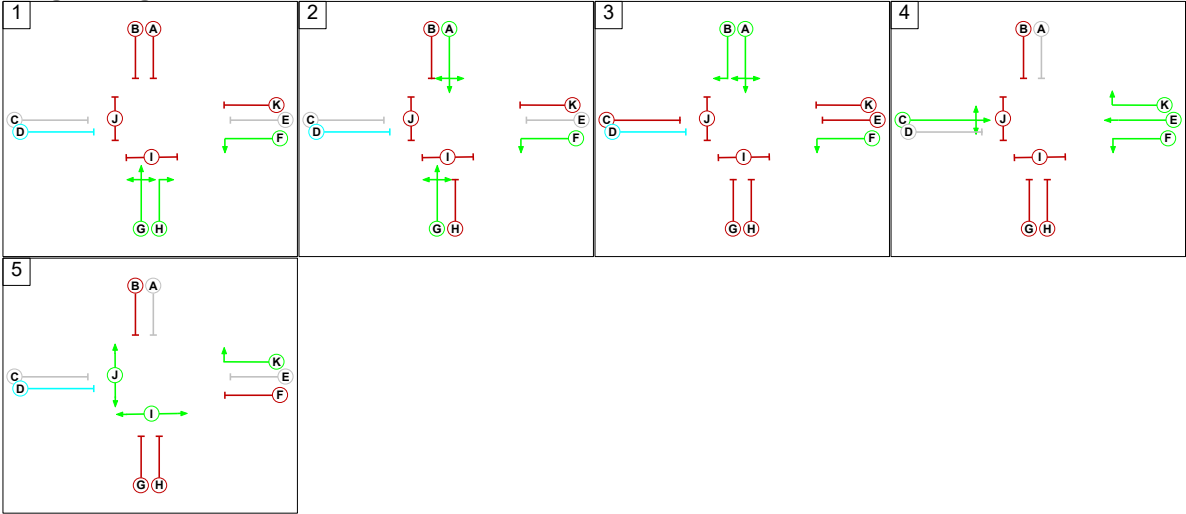
Basic Results Summary
Phase Diagram



Phase Intergreens Matrix

Terminating Phase	Starting Phase											
		A	B	C	D	E	F	G	H	I	J	K
	A		-	-	-	-	-	-	-	-	-	-
	B	-		5	-	5	-	-	-	-	-	5
	C	-	-		-	-	-	-	-	-	-	-
	D	-	-	-		-	-	-	-	-	-	-
	E	-	-	-	-		-	-	-	-	-	-
	F	-	-	-	-	-		-	-	5	5	-
	G	-	5	-	-	-	-		-	-	-	-
	H	5	-	-	-	-	-	-		-	-	-
	I	-	-	-	-	-	15	15	15		-	-
	J	-	-	-	-	-	15	15	15	-		-
	K	-	-	-	-	-	-	15	15	-	-	

Stage Diagram



Scenario 1: 'DN OY_AM' (FG1: 'DN OY_AM', Plan 1: 'Network Control Plan 1')

Bonus Green Times

No Bonus Greens are defined For Scenario 1

Basic Results Summary

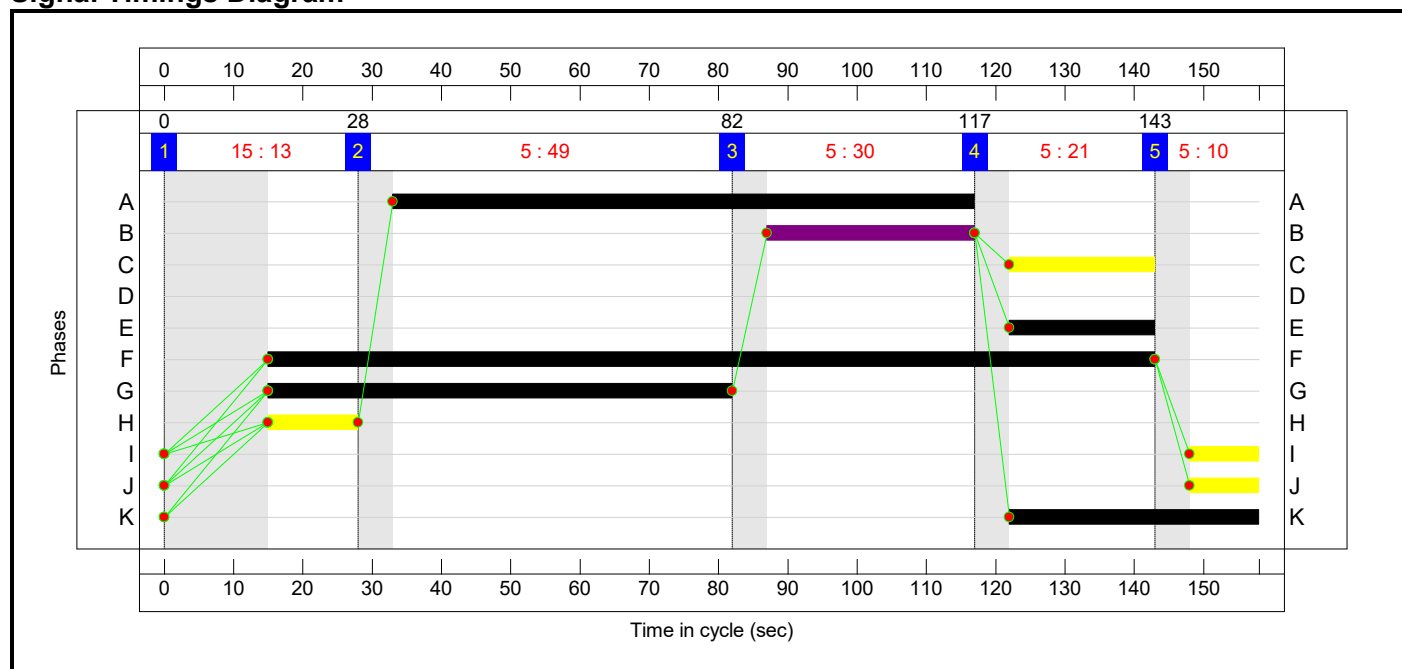
Network Summary

Total Network Delay: 30.36 pcuHr

Worst PRC: 2.93 % (On Lane 4/1)
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Basic Results Summary

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road N SB Ahead Right Left	Traffic	84	33	117
B	Dublin Road N SB Right IGA	Ind. Arrow	30	87	117
C	Old Connaught Avenue EB Right Left Ahead	Traffic	21	122	143
D	Old Connaught Avenue EB Right IGA	Ind. Arrow			
E	Cork Abbey Road WB Ahead	Traffic	21	122	143
F	Cork Abbey Road WB Left	Traffic	128	15	143
G	Dublin Road S NB Left Ahead Right	Traffic	67	15	82
H	Dublin Road S NB Right Filter CI/Amb	Filter with Closing Amber (Not UK)	13	15	28
I	Pedestrians across AL1	Pedestrian	10	148	0
J	Pedestrians across	Pedestrian	10	148	0
K	Cork Abbey Road WB Right	Traffic	36	122	0

Scenario 2: 'DN_CT_AM' (FG3: 'DN+CT OY_AM', Plan 1: 'Network Control Plan 1')

Bonus Green Times

No Bonus Greens are defined For Scenario 2

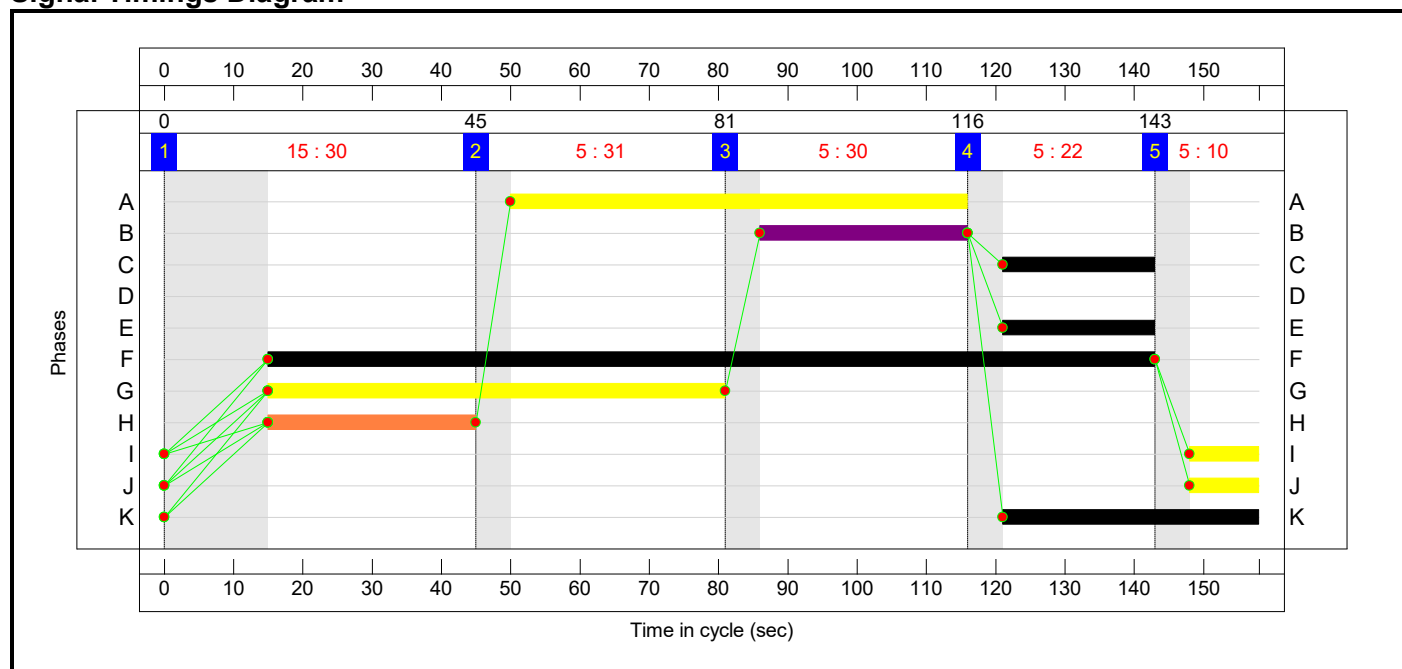
Basic Results Summary

Network Summary

Total Network Delay: 56.32 pcuHr
Worst PRC: -18.38 % (On Lane 8/1)

Basic Results Summary

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road N SB Ahead Right Left	Traffic	66	50	116
B	Dublin Road N SB Right IGA	Ind. Arrow	30	86	116
C	Old Connaught Avenue EB Right Left Ahead	Traffic	22	121	143
D	Old Connaught Avenue EB Right IGA	Ind. Arrow			
E	Cork Abbey Road WB Ahead	Traffic	22	121	143
F	Cork Abbey Road WB Left	Traffic	128	15	143
G	Dublin Road S NB Left Ahead Right	Traffic	66	15	81
H	Dublin Road S NB Right Filter CI/Amb	Filter with Closing Amber (Not UK)	30	15	45
I	Pedestrians across AL1	Pedestrian	10	148	0
J	Pedestrians across	Pedestrian	10	148	0
K	Cork Abbey Road WB Right	Traffic	37	121	0

Scenario 3: 'DN_AT_AM' (FG5: 'DN+AT OY_AM', Plan 1: 'Network Control Plan 1')

Bonus Green Times

No Bonus Greens are defined For Scenario 3

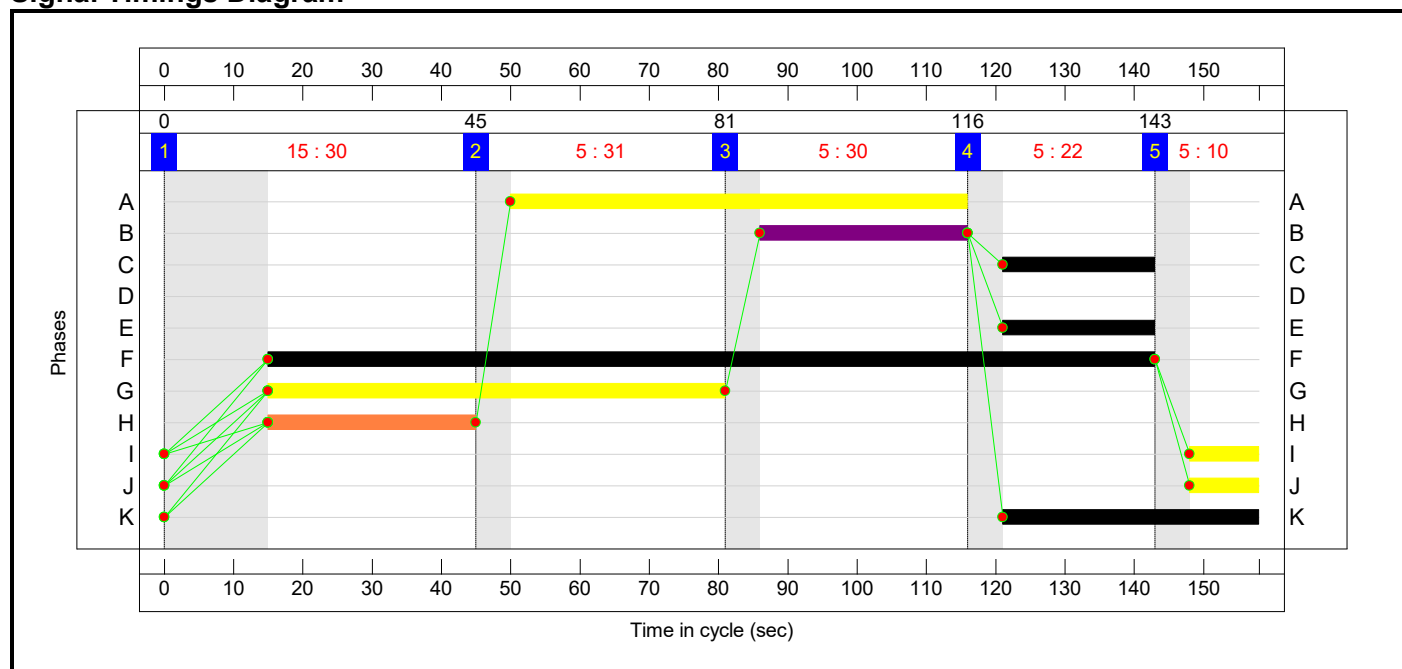
Basic Results Summary

Network Summary

Total Network Delay: 56.32 pcuHr
Worst PRC: -18.38 % (On Lane 8/1)

Basic Results Summary

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road N SB Ahead Right Left	Traffic	66	50	116
B	Dublin Road N SB Right IGA	Ind. Arrow	30	86	116
C	Old Connaught Avenue EB Right Left Ahead	Traffic	22	121	143
D	Old Connaught Avenue EB Right IGA	Ind. Arrow			
E	Cork Abbey Road WB Ahead	Traffic	22	121	143
F	Cork Abbey Road WB Left	Traffic	128	15	143
G	Dublin Road S NB Left Ahead Right	Traffic	66	15	81
H	Dublin Road S NB Right Filter CI/Amb	Filter with Closing Amber (Not UK)	30	15	45
I	Pedestrians across AL1	Pedestrian	10	148	0
J	Pedestrians across	Pedestrian	10	148	0
K	Cork Abbey Road WB Right	Traffic	37	121	0

Basic Results Summary

Scenario 4: 'DN_OY_PM' (FG2: 'DN OY_PM', Plan 1: 'Network Control Plan 1')

Bonus Green Times

Junction: Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue					
Lane	Description	Stage Change	Type	Usage	Value (s)
4/1	Dublin Road S NB Left Ahead	2 -> 3	End	Demand Dependency	10
4/2	Dublin Road S NB Right	2 -> 3	End	Demand Dependency	10
7/2	Cork Abbey Road WB Ahead	3 -> 4	Start	Demand Dependency	10
7/3	Cork Abbey Road WB Right	3 -> 4	Start	Demand Dependency	10
8/1	Old Connaught Avenue EB Left Ahead	3 -> 4	Start	Demand Dependency	10
8/2	Old Connaught Avenue EB Right	3 -> 4	Start	Demand Dependency	10

Basic Results Summary

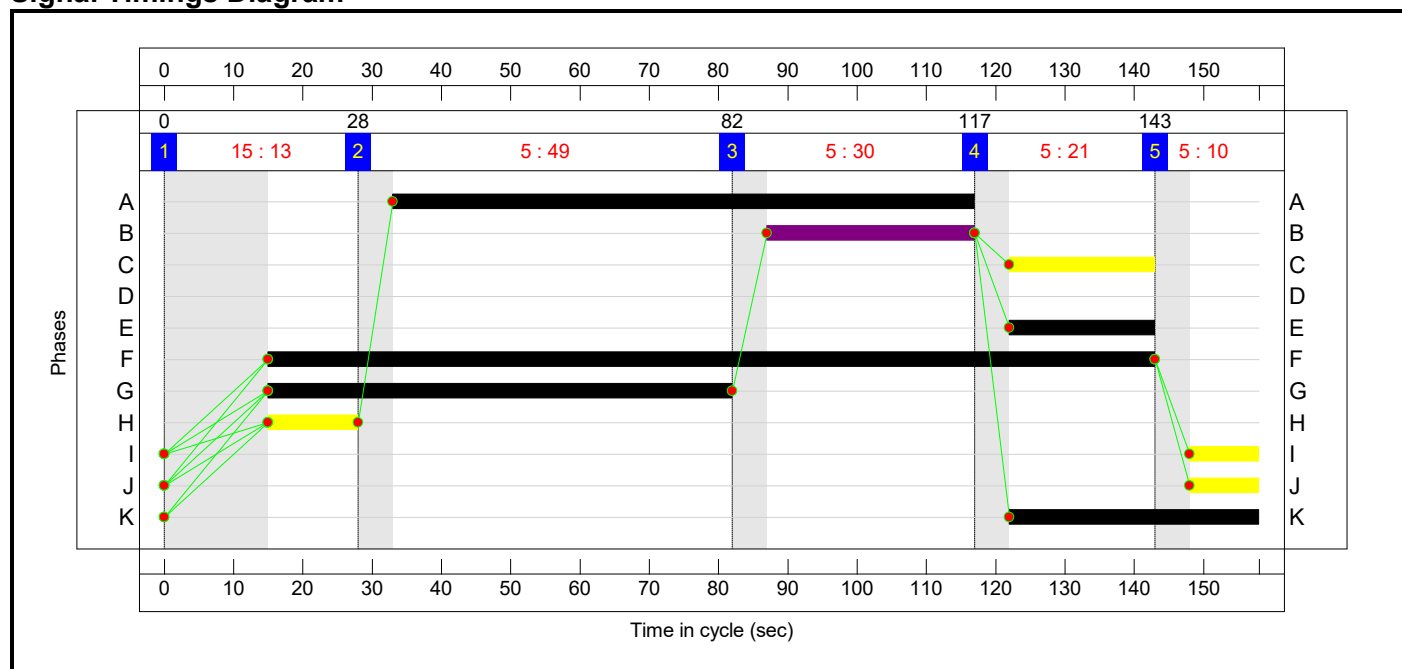
Network Summary

Total Network Delay: 21.00 pcuHr

Worst PRC: 25.53 % (On Lane 4/1)

Basic Results Summary

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road N SB Ahead Right Left	Traffic	84	33	117
B	Dublin Road N SB Right IGA	Ind. Arrow	30	87	117
C	Old Connaught Avenue EB Right Left Ahead	Traffic	21	122	143
D	Old Connaught Avenue EB Right IGA	Ind. Arrow			
E	Cork Abbey Road WB Ahead	Traffic	21	122	143
F	Cork Abbey Road WB Left	Traffic	128	15	143
G	Dublin Road S NB Left Ahead Right	Traffic	67	15	82
H	Dublin Road S NB Right Filter CI/Amb	Filter with Closing Amber (Not UK)	13	15	28
I	Pedestrians across AL1	Pedestrian	10	148	0
J	Pedestrians across	Pedestrian	10	148	0
K	Cork Abbey Road WB Right	Traffic	36	122	0

Basic Results Summary

Scenario 5: 'DN OY_CT_PM' (FG4: 'DN+CT OY_PM', Plan 1: 'Network Control Plan 1')

Bonus Green Times

Junction: Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue					
Lane	Description	Stage Change	Type	Usage	Value (s)
4/1	Dublin Road S NB Left Ahead	2 -> 3	End	Demand Dependency	10
4/2	Dublin Road S NB Right	2 -> 3	End	Demand Dependency	10
7/2	Cork Abbey Road WB Ahead	3 -> 4	Start	Demand Dependency	10
7/3	Cork Abbey Road WB Right	3 -> 4	Start	Demand Dependency	10
8/1	Old Connaught Avenue EB Left Ahead	3 -> 4	Start	Demand Dependency	10
8/2	Old Connaught Avenue EB Right	3 -> 4	Start	Demand Dependency	10

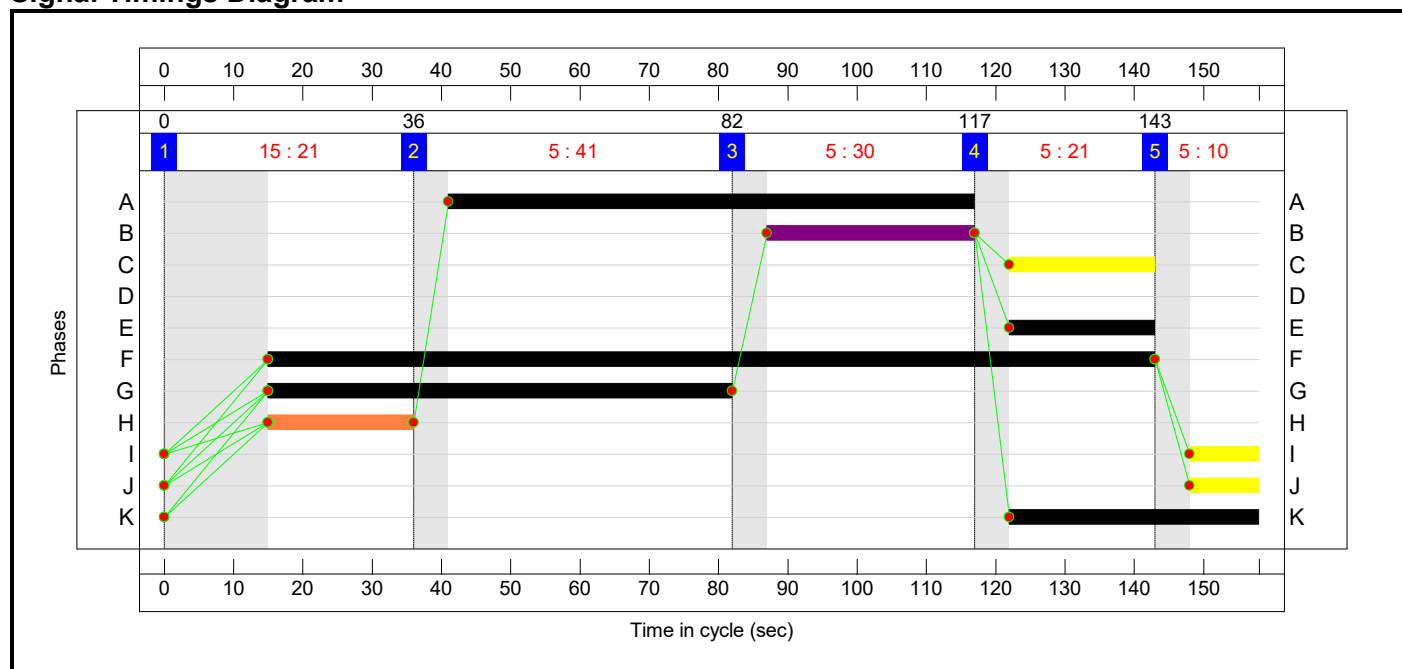
Basic Results Summary

Network Summary

Total Network Delay: 24.42 pcuHr
Worst PRC: 24.26 % (On Lane 4/1)

Basic Results Summary

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road N SB Ahead Right Left	Traffic	76	41	117
B	Dublin Road N SB Right IGA	Ind. Arrow	30	87	117
C	Old Connaught Avenue EB Right Left Ahead	Traffic	21	122	143
D	Old Connaught Avenue EB Right IGA	Ind. Arrow			
E	Cork Abbey Road WB Ahead	Traffic	21	122	143
F	Cork Abbey Road WB Left	Traffic	128	15	143
G	Dublin Road S NB Left Ahead Right	Traffic	67	15	82
H	Dublin Road S NB Right Filter CI/Amb	Filter with Closing Amber (Not UK)	21	15	36
I	Pedestrians across AL1	Pedestrian	10	148	0
J	Pedestrians across	Pedestrian	10	148	0
K	Cork Abbey Road WB Right	Traffic	36	122	0

Basic Results Summary

Scenario 6: 'DN OY AT PM' (FG6: 'DN+AT OY_PM', Plan 1: 'Network Control Plan 1')

Bonus Green Times

Junction: Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue					
Lane	Description	Stage Change	Type	Usage	Value (s)
4/1	Dublin Road S NB Left Ahead	2 -> 3	End	Demand Dependency	10
4/2	Dublin Road S NB Right	2 -> 3	End	Demand Dependency	10
7/2	Cork Abbey Road WB Ahead	3 -> 4	Start	Demand Dependency	10
7/3	Cork Abbey Road WB Right	3 -> 4	Start	Demand Dependency	10
8/1	Old Connaught Avenue EB Left Ahead	3 -> 4	Start	Demand Dependency	10
8/2	Old Connaught Avenue EB Right	3 -> 4	Start	Demand Dependency	10

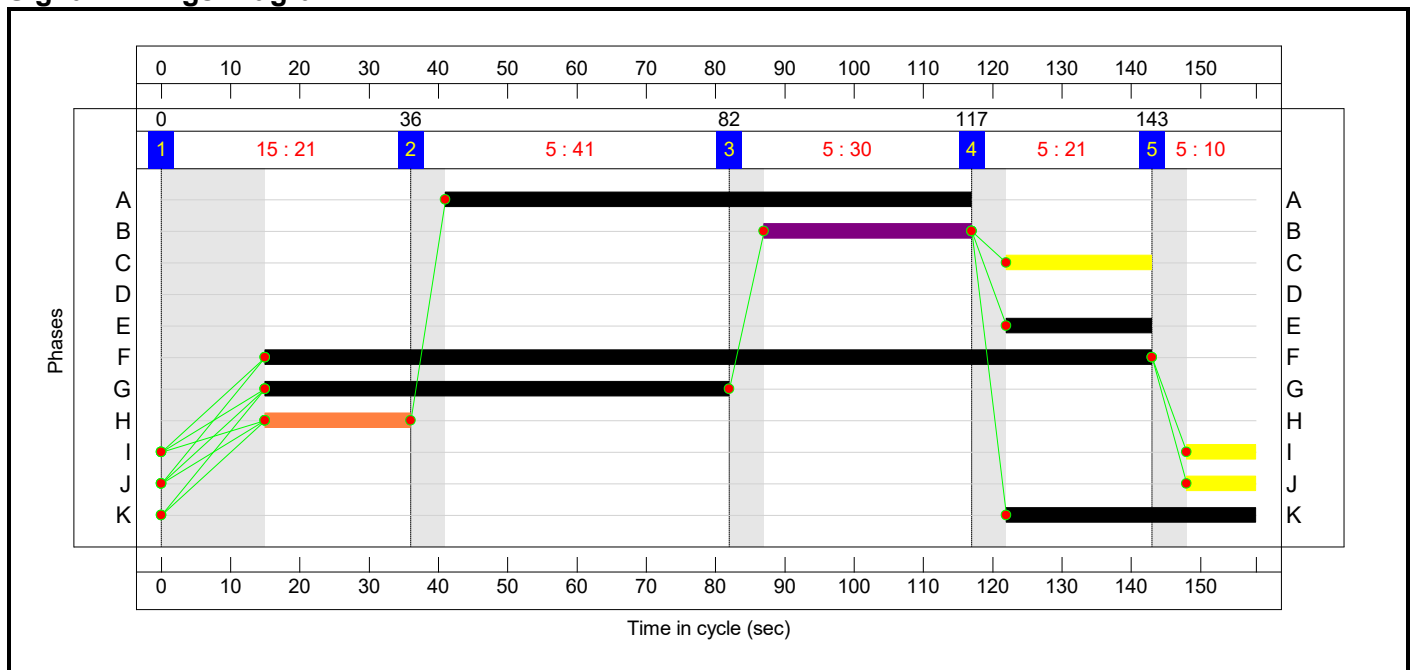
Basic Results Summary

Network Summary

Total Network Delay: 24.42 pcuHr
Worst PRC: 24.26 % (On Lane 4/1)

Basic Results Summary

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road N SB Ahead Right Left	Traffic	76	41	117
B	Dublin Road N SB Right IGA	Ind. Arrow	30	87	117
C	Old Connaught Avenue EB Right Left Ahead	Traffic	21	122	143
D	Old Connaught Avenue EB Right IGA	Ind. Arrow			
E	Cork Abbey Road WB Ahead	Traffic	21	122	143
F	Cork Abbey Road WB Left	Traffic	128	15	143
G	Dublin Road S NB Left Ahead Right	Traffic	67	15	82
H	Dublin Road S NB Right Filter CI/Amb	Filter with Closing Amber (Not UK)	21	15	36
I	Pedestrians across AL1	Pedestrian	10	148	0
J	Pedestrians across	Pedestrian	10	148	0
K	Cork Abbey Road WB Right	Traffic	36	122	0

Basic Results Summary
Basic Results Summary

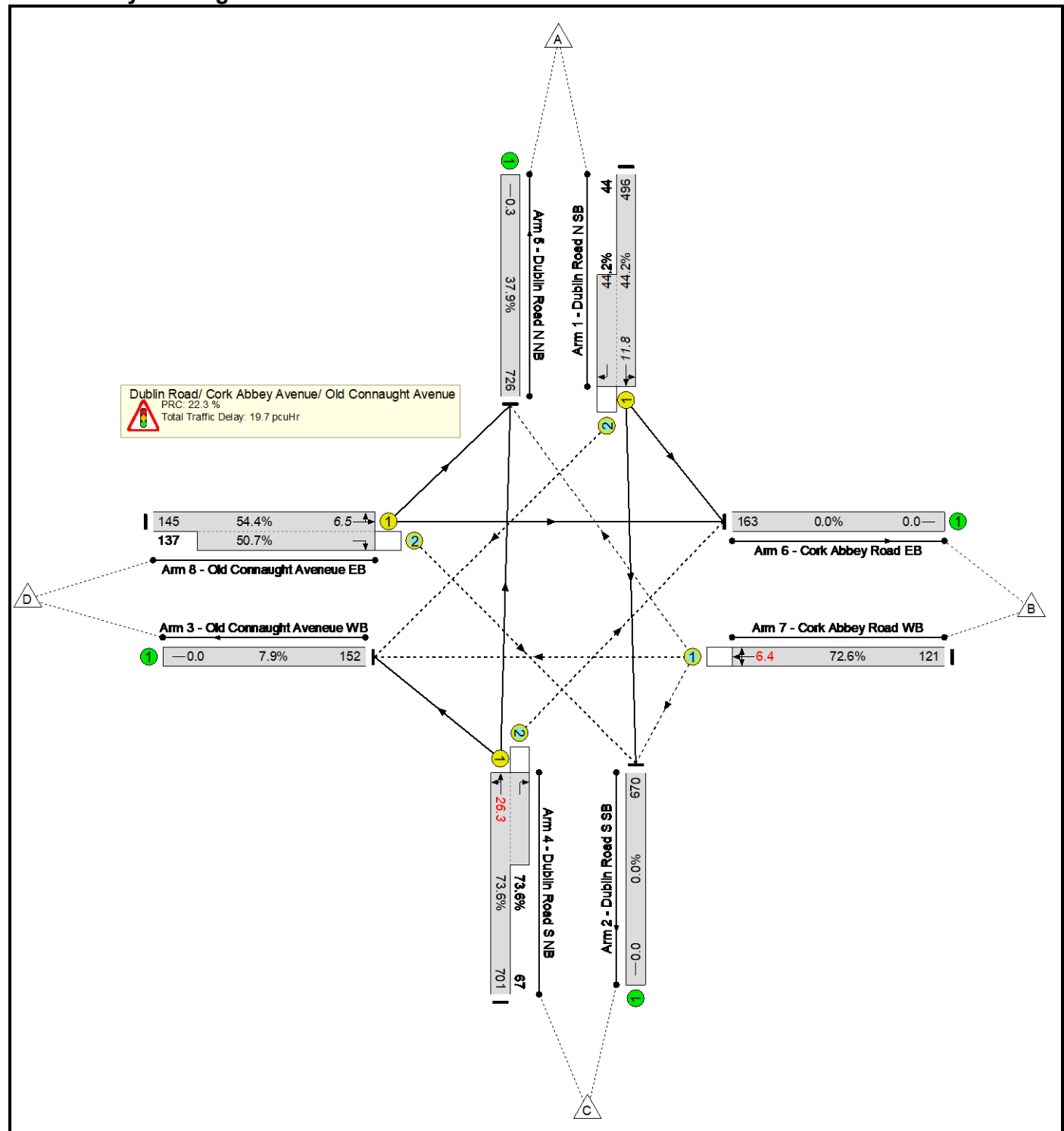
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	J1 Dublin Rd-Cork Abbey-Old Connaught Ave Opening - OP+5.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	DN OY_AM	DN OY_AM	Network Control Plan 1	08:00 - 09:00	158	22.3	19.67
2	DN_CT_AM	DN+CT OY_AM	Network Control Plan 1	08:00 - 09:00	158	21.4	20.97
3	DN_AT_AM	DN+AT OY_AM	Network Control Plan 1	08:00 - 09:00	158	21.4	20.97
4	DN_OY_PM	DN OY_PM	Network Control Plan 1	16:00 - 17:00	158	52.6	13.87
5	DN OY_CT_PM	DN+CT OY_PM	Network Control Plan 1	16:00 - 17:00	158	47.6	14.74
6	DN OY AT PM	DN+AT OY_PM	Network Control Plan 1	16:00 - 17:00	158	47.6	14.74

Network Layout Diagram

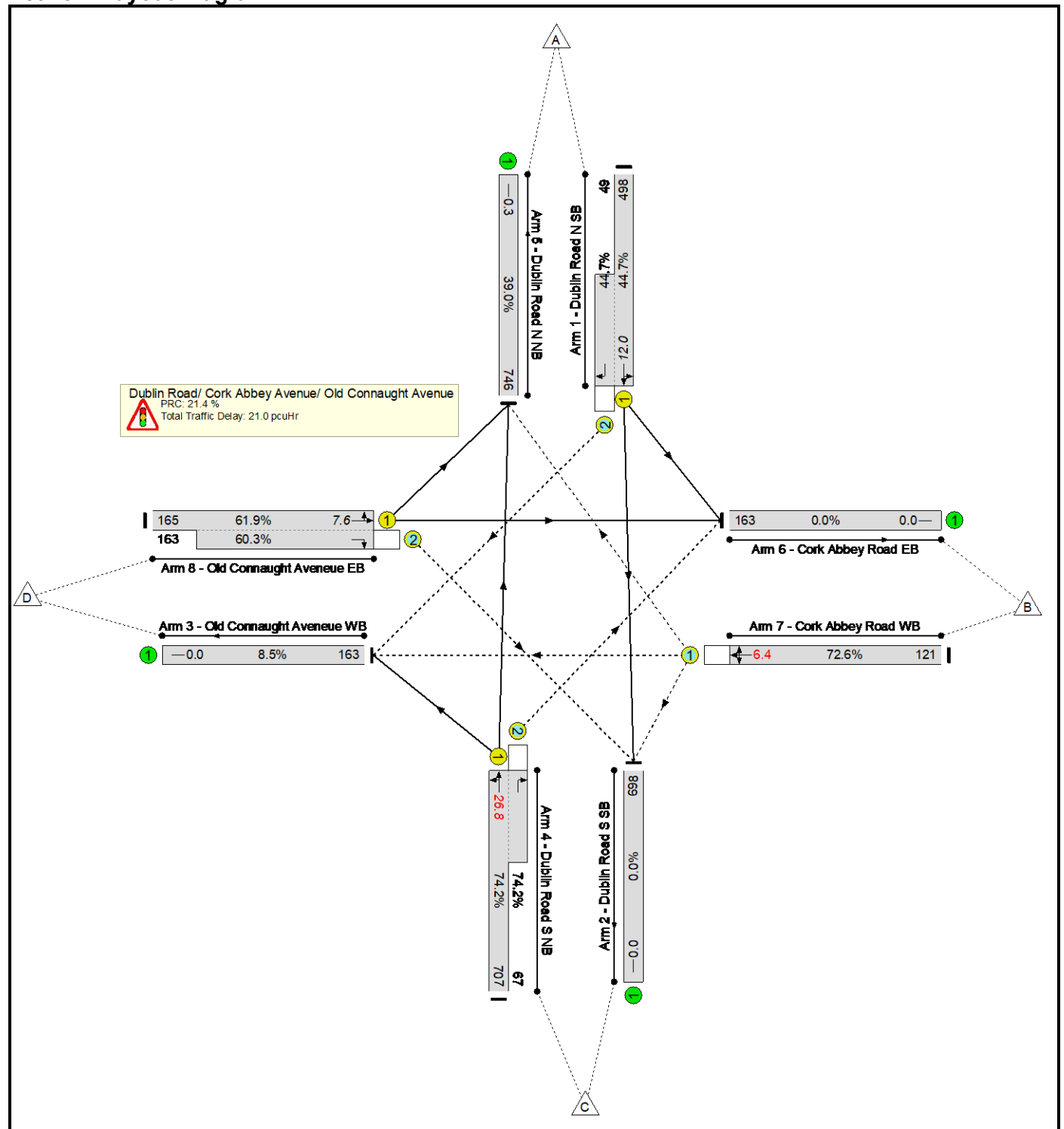


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	73.6%	93	272	3	19.7	-	-
Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue	-	-	-		-	-	-	-	-	-	-	73.6%	93	272	3	19.7	-	-
1/1+1/2	Dublin Road N SB Ahead Right Left	U+O	A	B	1	96	0	-	540	1965:1865	1123+100	44.2 : 44.2%	26	18	0	2.9	19.0	11.8
3/1	Old Connaught Avenue WB	U	-		-	-	-	-	152	1915	1915	7.9%	-	-	-	0.0	1.0	0.0
4/1+4/2	Dublin Road S NB Left Ahead Right	U+O	G	H	1	83	39	-	768	1935:1855	953+91	73.6 : 73.6%	67	0	0	7.3	34.4	26.3
5/1	Dublin Road N NB	U	-		-	-	-	-	726	1915	1915	37.9%	-	-	-	0.3	1.5	0.3
7/1	Cork Abbey Road WB Left Ahead Right	O	E		1	12	-	-	121	2025	167	72.6%	0	119	2	3.6	108.2	6.4
8/1+8/2	Old Connaught Avenue EB Right Left Ahead	U+O	C	D	1	21	21	-	282	1915:1940	267+270	54.4 : 50.7%	0	135	2	5.5	70.2	6.5
C1 - Cycle 1					PRC for Signalled Lanes (%): 22.3			22.3	Total Delay for Signalled Lanes (pcuHr): 19.32			19.67	Cycle Time (s): 158					
					PRC Over All Lanes (%):				Total Delay Over All Lanes(pcuHr):									

Network Layout Diagram

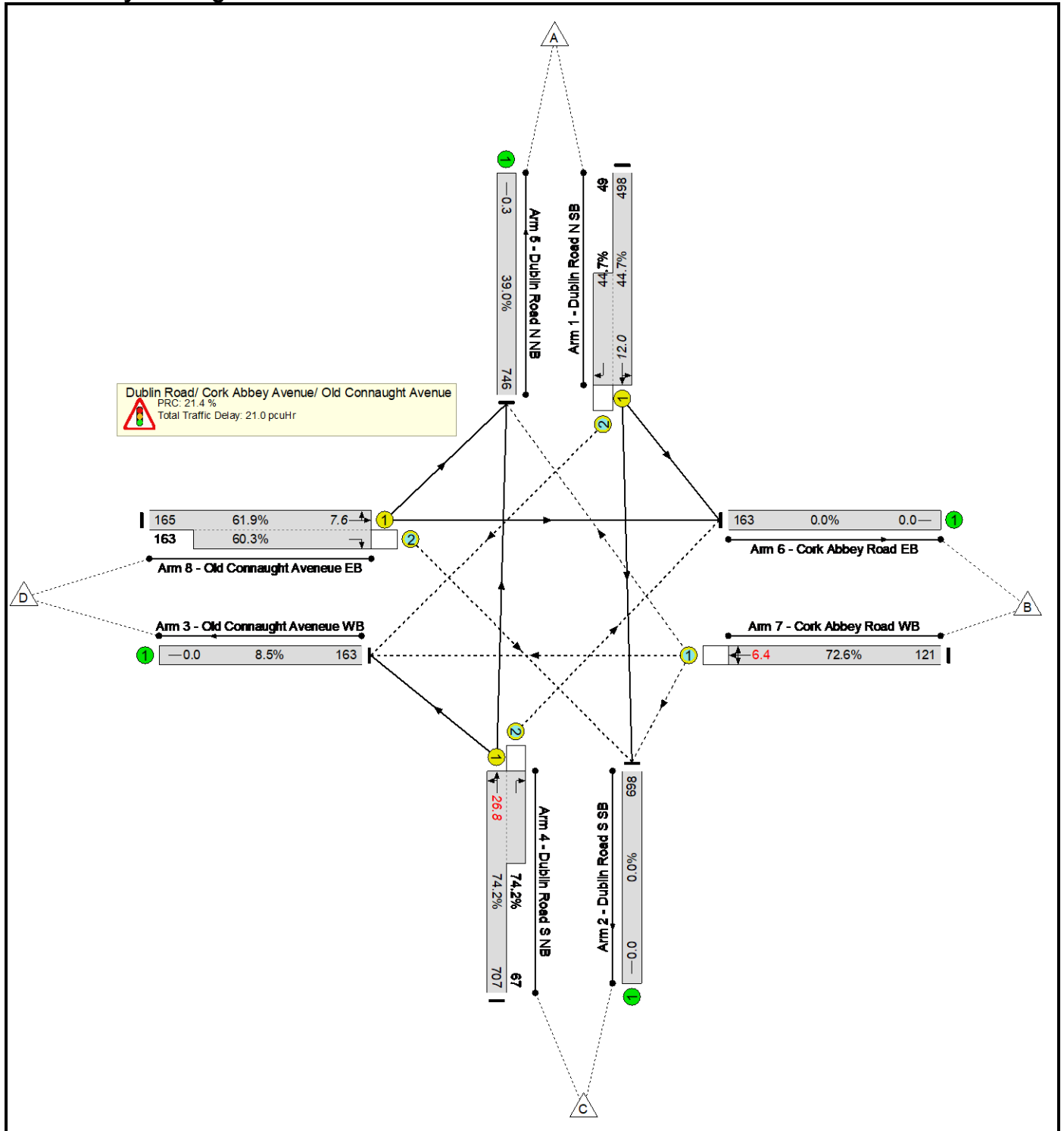


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	74.2%	96	300	4	21.0	-	-
Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue	-	-	-		-	-	-	-	-	-	-	74.2%	96	300	4	21.0	-	-
1/1+1/2	Dublin Road N SB Ahead Right Left	U+O	A	B	1	96	0	-	547	1965:1865	1115+110	44.7 : 44.7%	29	20	0	2.9	19.1	12.0
3/1	Old Connaught Avenue WB	U	-		-	-	-	-	163	1915	1915	8.5%	-	-	-	0.0	1.0	0.0
4/1+4/2	Dublin Road S NB Left Ahead Right	U+O	G	H	1	83	39	-	774	1935:1855	953+90	74.2 : 74.2%	67	0	0	7.5	34.7	26.8
5/1	Dublin Road N NB	U	-		-	-	-	-	746	1915	1915	39.0%	-	-	-	0.3	1.5	0.3
7/1	Cork Abbey Road WB Left Ahead Right	O	E		1	12	-	-	121	2025	167	72.6%	0	119	2	3.6	108.2	6.4
8/1+8/2	Old Connaught Avenue EB Right Left Ahead	U+O	C	D	1	21	21	-	328	1915:1940	267+270	61.9 : 60.3%	0	161	2	6.6	72.5	7.6
C1 - Cycle 1					PRC for Signalled Lanes (%):			21.4	Total Delay for Signalled Lanes (pcuHr):			20.61	Cycle Time (s): 158					
					PRC Over All Lanes (%):			21.4	Total Delay Over All Lanes (pcuHr):			20.97						

Network Layout Diagram

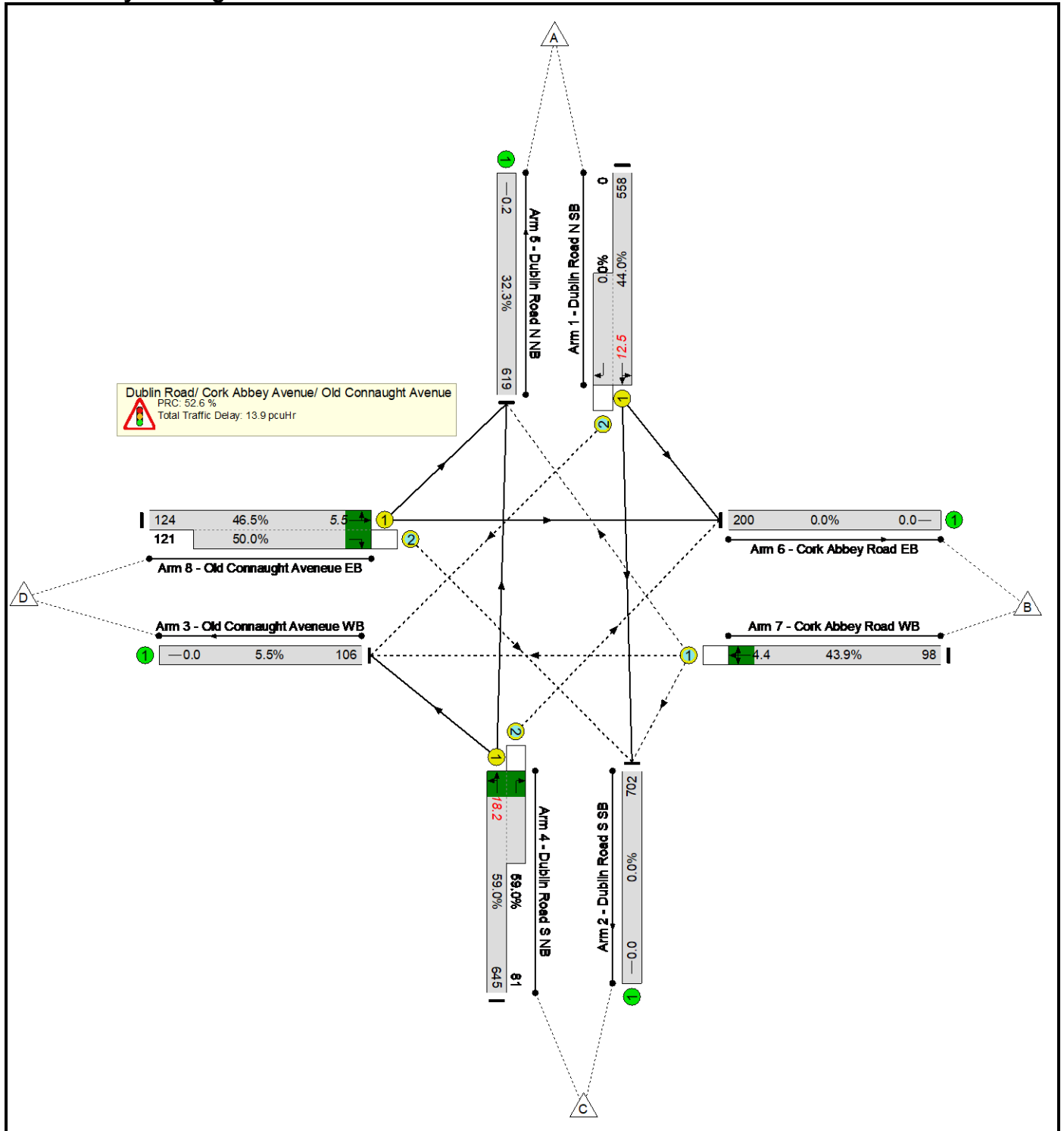


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	74.2%	96	300	4	21.0	-	-
Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue	-	-	-		-	-	-	-	-	-	-	74.2%	96	300	4	21.0	-	-
1/1+1/2	Dublin Road N SB Ahead Right Left	U+O	A	B	1	96	0	-	547	1965:1865	1115+110	44.7 : 44.7%	29	20	0	2.9	19.1	12.0
3/1	Old Connaught Avenue WB	U	-		-	-	-	-	163	1915	1915	8.5%	-	-	-	0.0	1.0	0.0
4/1+4/2	Dublin Road S NB Left Ahead Right	U+O	G	H	1	83	39	-	774	1935:1855	953+90	74.2 : 74.2%	67	0	0	7.5	34.7	26.8
5/1	Dublin Road N NB	U	-		-	-	-	-	746	1915	1915	39.0%	-	-	-	0.3	1.5	0.3
7/1	Cork Abbey Road WB Left Ahead Right	O	E		1	12	-	-	121	2025	167	72.6%	0	119	2	3.6	108.2	6.4
8/1+8/2	Old Connaught Avenue EB Right Left Ahead	U+O	C	D	1	21	21	-	328	1915:1940	267+270	61.9 : 60.3%	0	161	2	6.6	72.5	7.6
C1 - Cycle 1 PRC for Signalled Lanes (%): 21.4 PRC Over All Lanes (%): 21.4 Total Delay for Signalled Lanes (pcuHr): 20.61 Total Delay Over All Lanes (pcuHr): 20.97 Cycle Time (s): 158																		

Network Layout Diagram

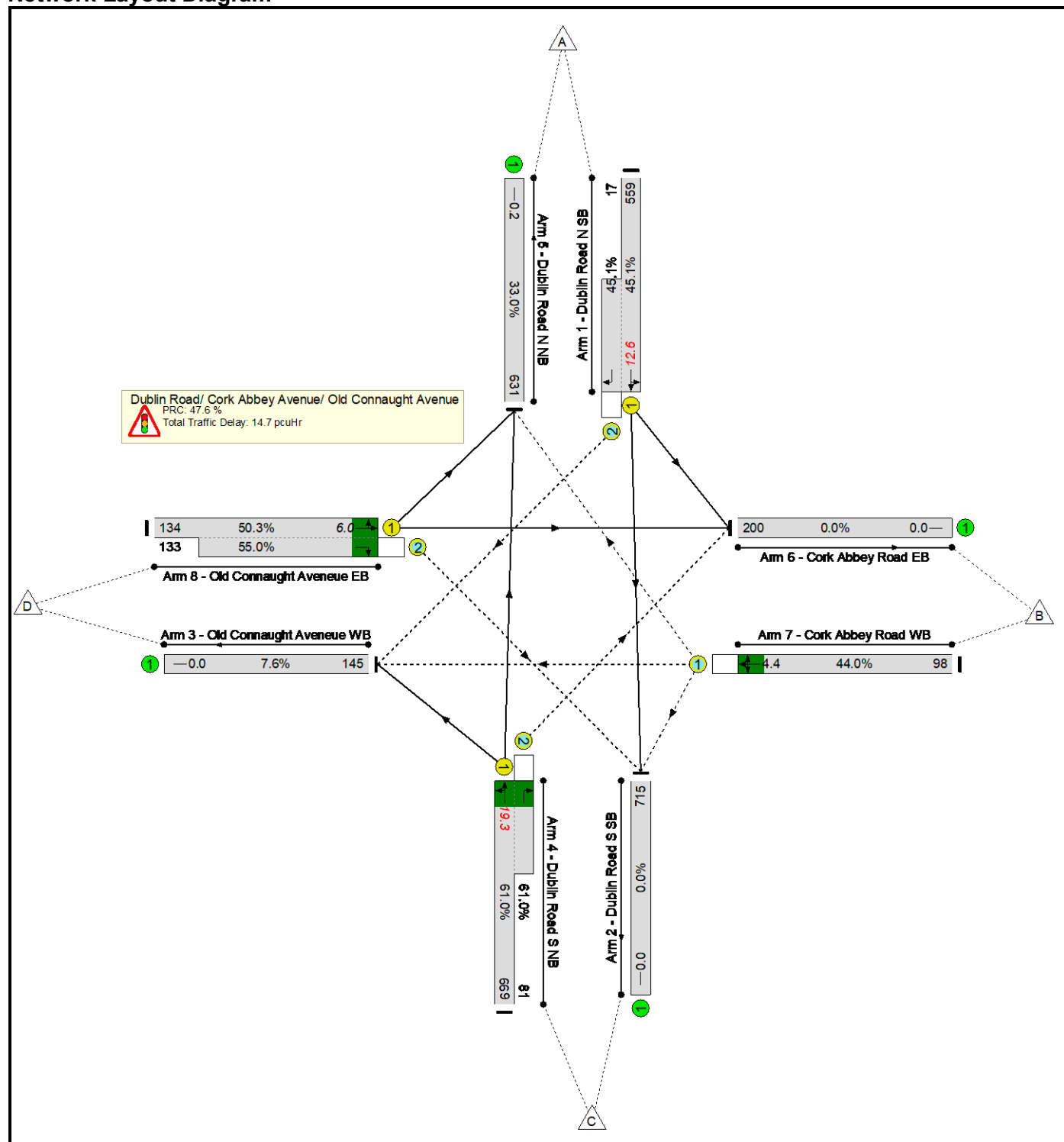


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	59.0%	132	166	2	13.9	-	-
Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue	-	-	-		-	-	-	-	-	-	-	59.0%	132	166	2	13.9	-	-
1/1+1/2	Dublin Road N SB Ahead Right Left	U+O	A	B	1	101	0	-	558	1965:1865	1269+0	44.0 : 0.0%	0	0	0	2.5	16.4	12.5
3/1	Old Connaught Avenue WB	U	-		-	-	-	-	106	1915	1915	5.5%	-	-	-	0.0	1.0	0.0
4/1+4/2	Dublin Road S NB Left Ahead Right	U+O	G	H	1	88	44	Y:Y	726	1935:1855	1093+137	59.0 : 59.0%	76	4	1	4.1	20.5	18.2
5/1	Dublin Road N NB	U	-		-	-	-	-	619	1915	1915	32.3%	-	-	-	0.2	1.4	0.2
7/1	Cork Abbey Road WB Left Ahead Right	O	E		1	7	-	Y	98	2025	223	43.9%	50	47	1	2.2	80.9	4.4
8/1+8/2	Old Connaught Avenue EB Right Left Ahead	U+O	C	D	1	21	21	-	245	1915:1940	267+242	46.5 : 50.0%	6	115	0	4.7	69.3	5.5
C1 - Cycle 1					PRC for Signalled Lanes (%):			52.6	Total Delay for Signalled Lanes (pcuHr):			13.60	Cycle Time (s): 158					
					PRC Over All Lanes (%):			52.6	Total Delay Over All Lanes(pcuHr):			13.87						

Network Layout Diagram

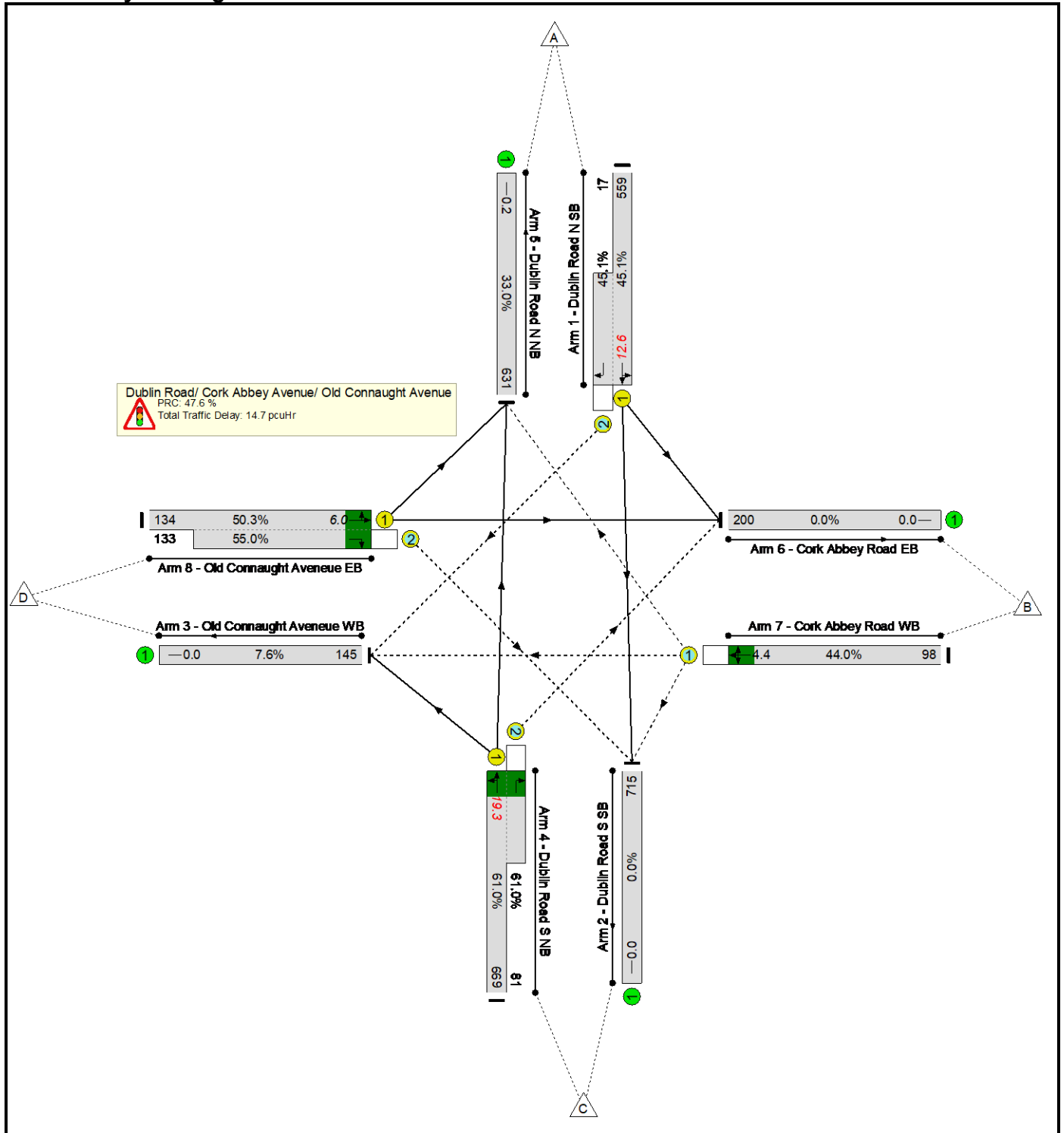


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	61.0%	143	184	2	14.7	-	-
Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue	-	-	-		-	-	-	-	-	-	-	61.0%	143	184	2	14.7	-	-
1/1+1/2	Dublin Road N SB Ahead Right Left	U+O	A	B	1	101	0	-	576	1965:1865	1238+38	45.1 : 45.1%	11	6	0	2.6	16.5	12.6
3/1	Old Connaught Avenue WB	U	-		-	-	-	-	145	1915	1915	7.6%	-	-	-	0.0	1.0	0.0
4/1+4/2	Dublin Road S NB Left Ahead Right	U+O	G	H	1	88	44	Y:Y	750	1935:1855	1097+133	61.0 : 61.0%	76	4	1	4.4	21.0	19.3
5/1	Dublin Road N NB	U	-		-	-	-	-	631	1915	1915	33.0%	-	-	-	0.2	1.4	0.2
7/1	Cork Abbey Road WB Left Ahead Right	O	E		1	7	-	Y	98	2025	223	44.0%	49	48	1	2.2	81.0	4.4
8/1+8/2	Old Connaught Avenue EB Right Left Ahead	U+O	C	D	1	21	21	-	267	1915:1940	267+242	50.3 : 55.0%	7	126	0	5.2	70.3	6.0
C1 - Cycle 1					PRC for Signalled Lanes (%):			47.6	Total Delay for Signalled Lanes (pcuHr):			14.45	Cycle Time (s): 158					
					PRC Over All Lanes (%):			47.6	Total Delay Over All Lanes (pcuHr):			14.74						

Network Layout Diagram

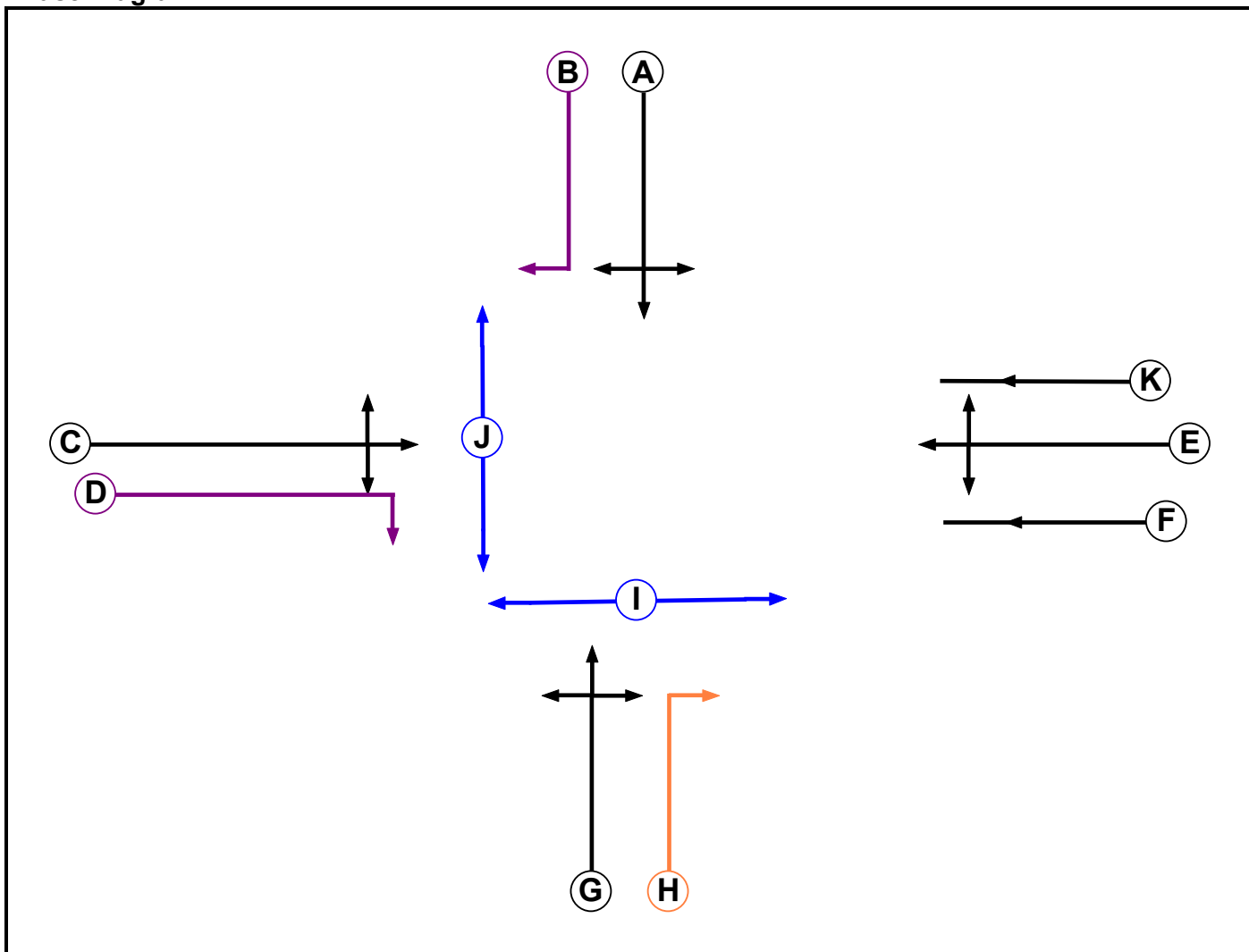


Basic Results Summary

Network Results

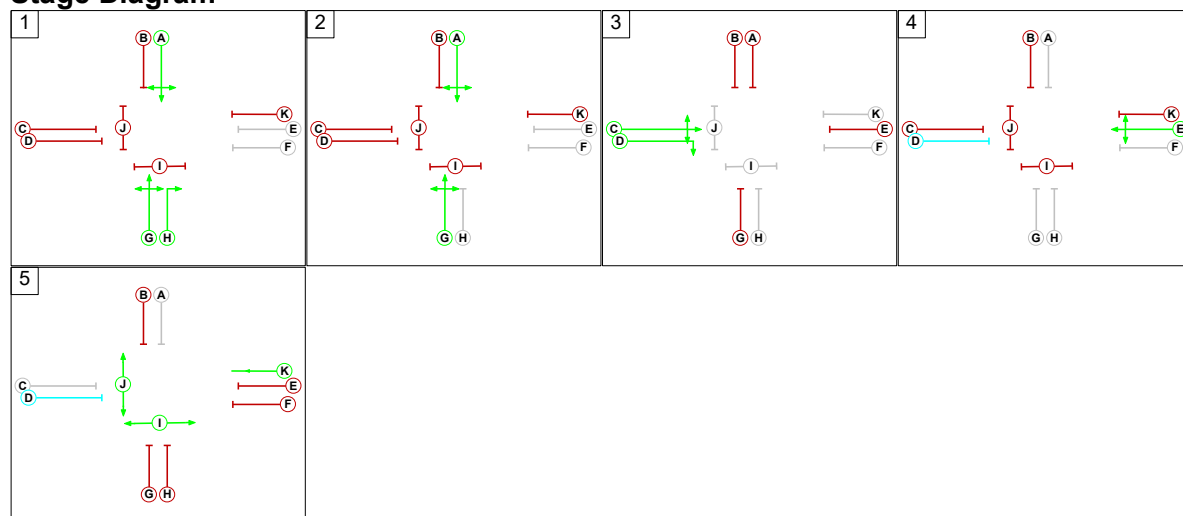
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	61.0%	143	184	2	14.7	-	-
Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue	-	-	-		-	-	-	-	-	-	-	61.0%	143	184	2	14.7	-	-
1/1+1/2	Dublin Road N SB Ahead Right Left	U+O	A	B	1	101	0	-	576	1965:1865	1238+38	45.1 : 45.1%	11	6	0	2.6	16.5	12.6
3/1	Old Connaught Avenue WB	U	-		-	-	-	-	145	1915	1915	7.6%	-	-	-	0.0	1.0	0.0
4/1+4/2	Dublin Road S NB Left Ahead Right	U+O	G	H	1	88	44	Y:Y	750	1935:1855	1097+133	61.0 : 61.0%	76	4	1	4.4	21.0	19.3
5/1	Dublin Road N NB	U	-		-	-	-	-	631	1915	1915	33.0%	-	-	-	0.2	1.4	0.2
7/1	Cork Abbey Road WB Left Ahead Right	O	E		1	7	-	Y	98	2025	223	44.0%	49	48	1	2.2	81.0	4.4
8/1+8/2	Old Connaught Avenue EB Right Left Ahead	U+O	C	D	1	21	21	-	267	1915:1940	267+242	50.3 : 55.0%	7	126	0	5.2	70.3	6.0
C1 - Cycle 1																		
PRC for Signalled Lanes (%):							47.6		Total Delay for Signalled Lanes (pcuHr):				14.45		Cycle Time (s): 158			
PRC Over All Lanes (%):							47.6		Total Delay Over All Lanes(pcuHr):				14.74					

Basic Results Summary
Phase Diagram



Phase Intergreens Matrix

	Starting Phase											
		A	B	C	D	E	F	G	H	I	J	K
Terminating Phase	A		-	-	-	-	-	-	-	-	-	-
	B	-		5	-	5	-	-	-	-	-	5
	C	5	-		-	5	-	-	-	-	-	-
	D	-	-	-		-	-	-	-	-	-	-
	E	-	-	-	-		-	-	-	7	7	7
	F	-	-	-	-	-		-	-	5	5	-
	G	-	5	5	5	-	-		-	-	-	-
	H	-	-	-	-	-	-	-		-	-	-
	I	-	-	-	-	-	15	15	15		-	-
	J	-	-	-	-	-	15	15	15	-		-
	K	-	-	-	-	-	-	15	15	-	-	

Stage Diagram

Scenario 1: 'DN OY_AM' (FG1: 'DN OY_AM', Plan 1: 'Network Control Plan 1')

Bonus Green Times

No Bonus Greens are defined For Scenario 1

Basic Results Summary

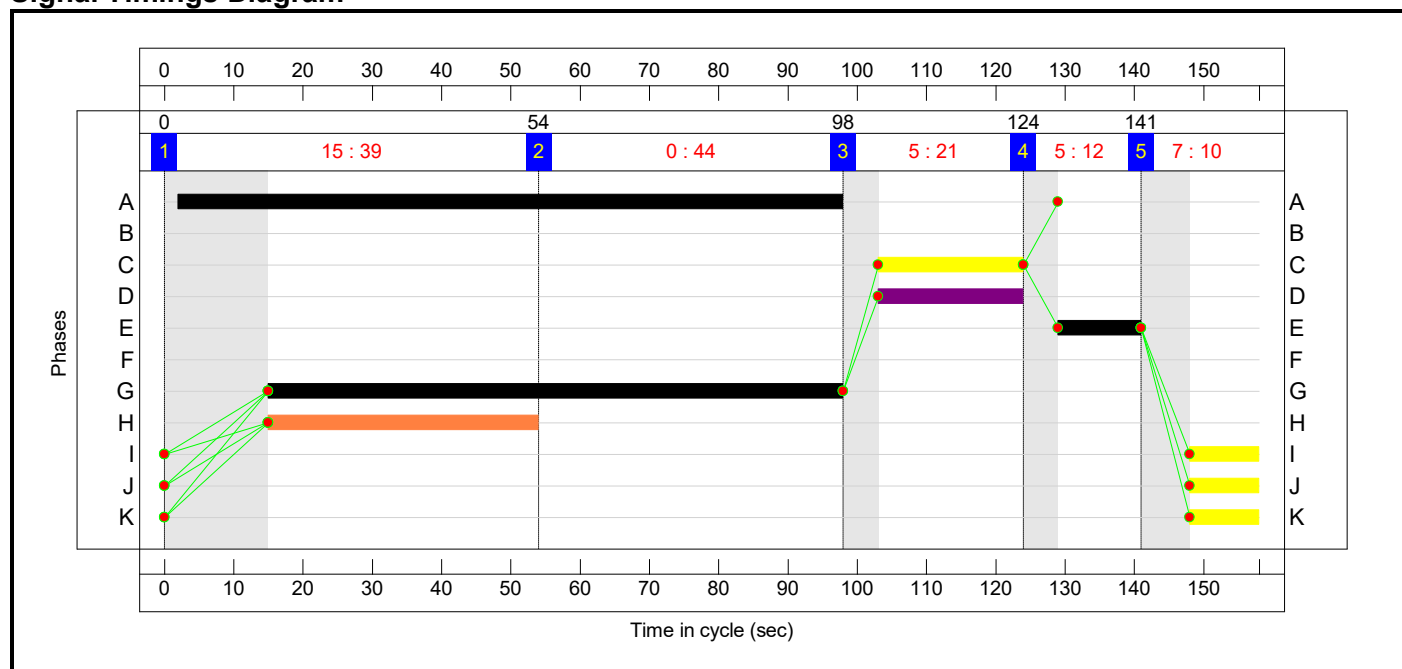
Network Summary

Total Network Delay: 19.67 pcuHr

Worst PRC: 22.31 % (On Lane 4/1)

Basic Results Summary

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road N SB Ahead Right Left	Traffic	96	2	98
B	Dublin Road N SB Right IGA	Ind. Arrow			
C	Old Connaught Avenue EB Right Left Ahead	Traffic	21	103	124
D	Old Connaught Avenue EB Right IGA	Ind. Arrow	21	103	124
E	Cork Abbey Road WB Left Ahead Right	Traffic	12	129	141
F		Traffic			
G	Dublin Road S NB Left Ahead Right	Traffic	83	15	98
H	Dublin Road S NB Right Filter Cl/Amb	Filter with Closing Amber (Not UK)	39	15	54
I	Pedestrians across AL1	Pedestrian	10	148	0
J	Pedestrians across	Pedestrian	10	148	0
K		Traffic	10	148	0

Scenario 2: 'DN_CT_AM' (FG3: 'DN+CT OY_AM', Plan 1: 'Network Control Plan 1')

Bonus Green Times

No Bonus Greens are defined For Scenario 2

Basic Results Summary

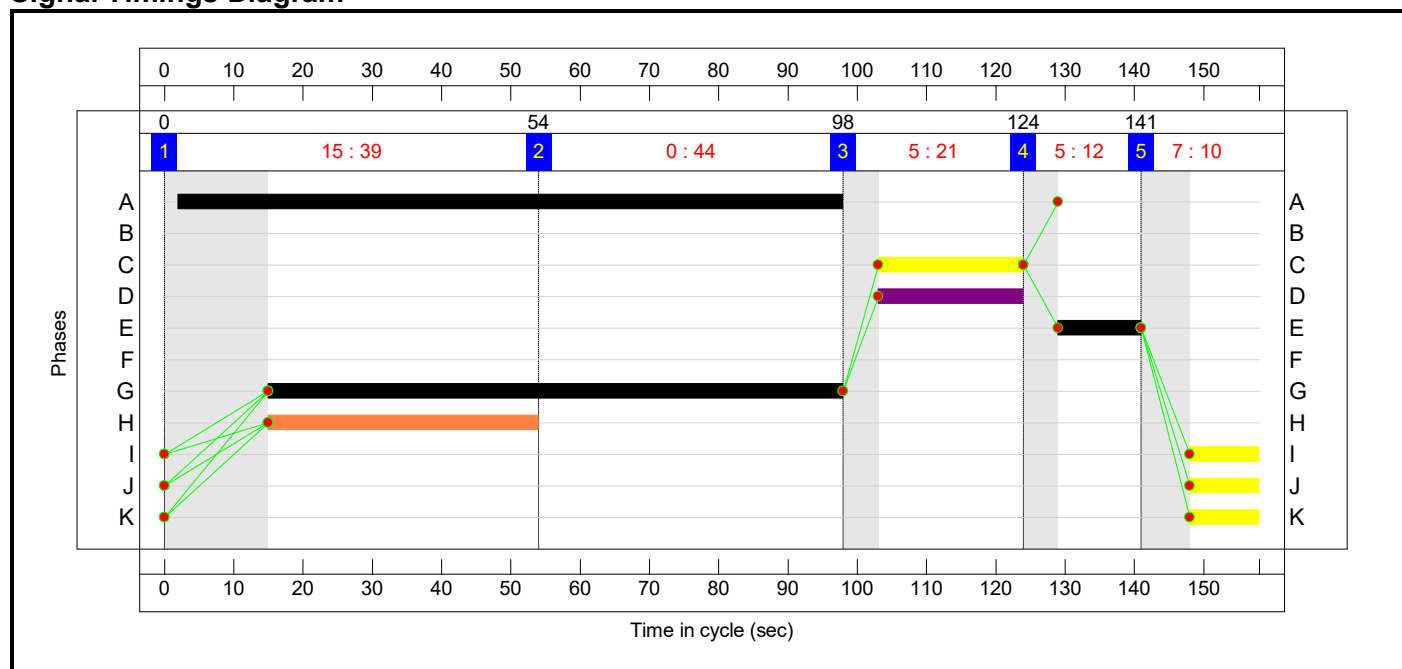
Network Summary

Total Network Delay: 20.97 pcuHr

Worst PRC: 21.35 % (On Lane 4/1)

Basic Results Summary

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road N SB Ahead Right Left	Traffic	96	2	98
B	Dublin Road N SB Right IGA	Ind. Arrow			
C	Old Connaught Avenue EB Right Left Ahead	Traffic	21	103	124
D	Old Connaught Avenue EB Right IGA	Ind. Arrow	21	103	124
E	Cork Abbey Road WB Left Ahead Right	Traffic	12	129	141
F		Traffic			
G	Dublin Road S NB Left Ahead Right	Traffic	83	15	98
H	Dublin Road S NB Right Filter Cl/Amb	Filter with Closing Amber (Not UK)	39	15	54
I	Pedestrians across AL1	Pedestrian	10	148	0
J	Pedestrians across	Pedestrian	10	148	0
K		Traffic	10	148	0

Scenario 3: 'DN_AT_AM' (FG5: 'DN+AT OY_AM', Plan 1: 'Network Control Plan 1')

Bonus Green Times

No Bonus Greens are defined For Scenario 3

Basic Results Summary

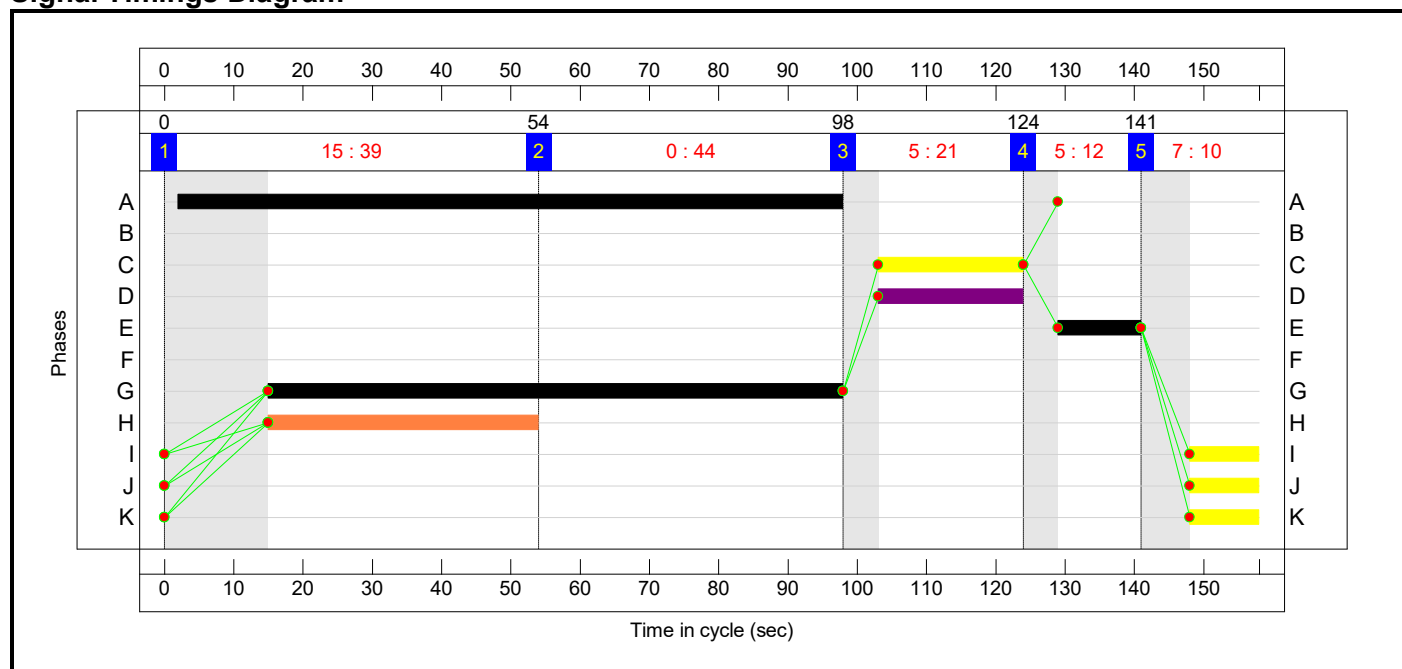
Network Summary

Total Network Delay: 20.97 pcuHr

Worst PRC: 21.35 % (On Lane 4/1)

Basic Results Summary

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road N SB Ahead Right Left	Traffic	96	2	98
B	Dublin Road N SB Right IGA	Ind. Arrow			
C	Old Connaught Avenue EB Right Left Ahead	Traffic	21	103	124
D	Old Connaught Avenue EB Right IGA	Ind. Arrow	21	103	124
E	Cork Abbey Road WB Left Ahead Right	Traffic	12	129	141
F		Traffic			
G	Dublin Road S NB Left Ahead Right	Traffic	83	15	98
H	Dublin Road S NB Right Filter Cl/Amb	Filter with Closing Amber (Not UK)	39	15	54
I	Pedestrians across AL1	Pedestrian	10	148	0
J	Pedestrians across	Pedestrian	10	148	0
K		Traffic	10	148	0

Basic Results Summary

Scenario 4: 'DN_OY_PM' (FG2: 'DN OY_PM', Plan 1: 'Network Control Plan 1')

Bonus Green Times

Junction: Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue					
Lane	Description	Stage Change	Type	Usage	Value (s)
4/1	Dublin Road S NB Left Ahead	2 -> 3	End	Demand Dependency	10
4/2	Dublin Road S NB Right	2 -> 3	End	Demand Dependency	10
7/1	Cork Abbey Road WB Left Ahead Right	3 -> 4	Start	Demand Dependency	10
8/1	Old Connaught Avenue EB Left Ahead	3 -> 4	Start	Demand Dependency	10
8/2	Old Connaught Avenue EB Right	3 -> 4	Start	Demand Dependency	10

Basic Results Summary

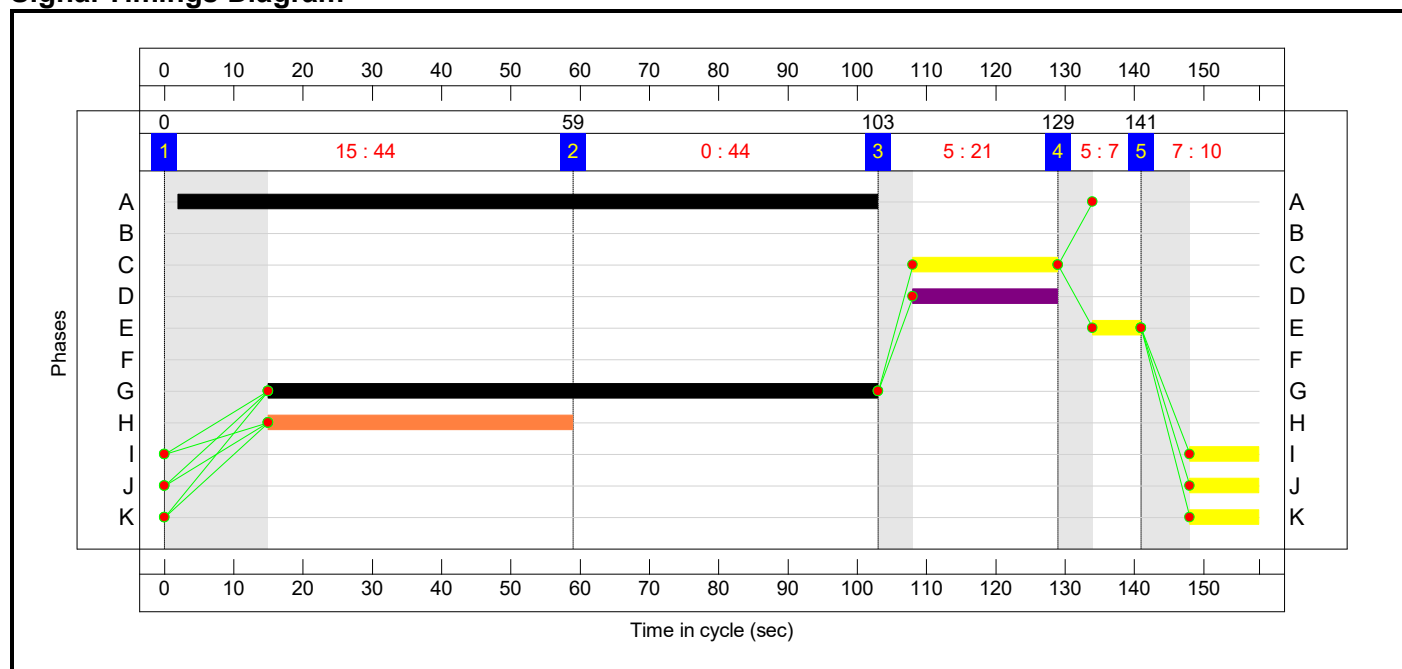
Network Summary

Total Network Delay: 13.87 pcuHr

Worst PRC: 52.56 % (On Lane 4/1)

Basic Results Summary

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road N SB Ahead Right Left	Traffic	101	2	103
B	Dublin Road N SB Right IGA	Ind. Arrow			
C	Old Connaught Avenue EB Right Left Ahead	Traffic	21	108	129
D	Old Connaught Avenue EB Right IGA	Ind. Arrow	21	108	129
E	Cork Abbey Road WB Left Ahead Right	Traffic	7	134	141
F		Traffic			
G	Dublin Road S NB Left Ahead Right	Traffic	88	15	103
H	Dublin Road S NB Right Filter Cl/Amb	Filter with Closing Amber (Not UK)	44	15	59
I	Pedestrians across AL1	Pedestrian	10	148	0
J	Pedestrians across	Pedestrian	10	148	0
K		Traffic	10	148	0

Basic Results Summary

Scenario 5: 'DN OY_CT_PM' (FG4: 'DN+CT OY_PM', Plan 1: 'Network Control Plan 1')

Bonus Green Times

Junction: Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue					
Lane	Description	Stage Change	Type	Usage	Value (s)
4/1	Dublin Road S NB Left Ahead	2 -> 3	End	Demand Dependency	10
4/2	Dublin Road S NB Right	2 -> 3	End	Demand Dependency	10
7/1	Cork Abbey Road WB Left Ahead Right	3 -> 4	Start	Demand Dependency	10
8/1	Old Connaught Avenue EB Left Ahead	3 -> 4	Start	Demand Dependency	10
8/2	Old Connaught Avenue EB Right	3 -> 4	Start	Demand Dependency	10

Basic Results Summary

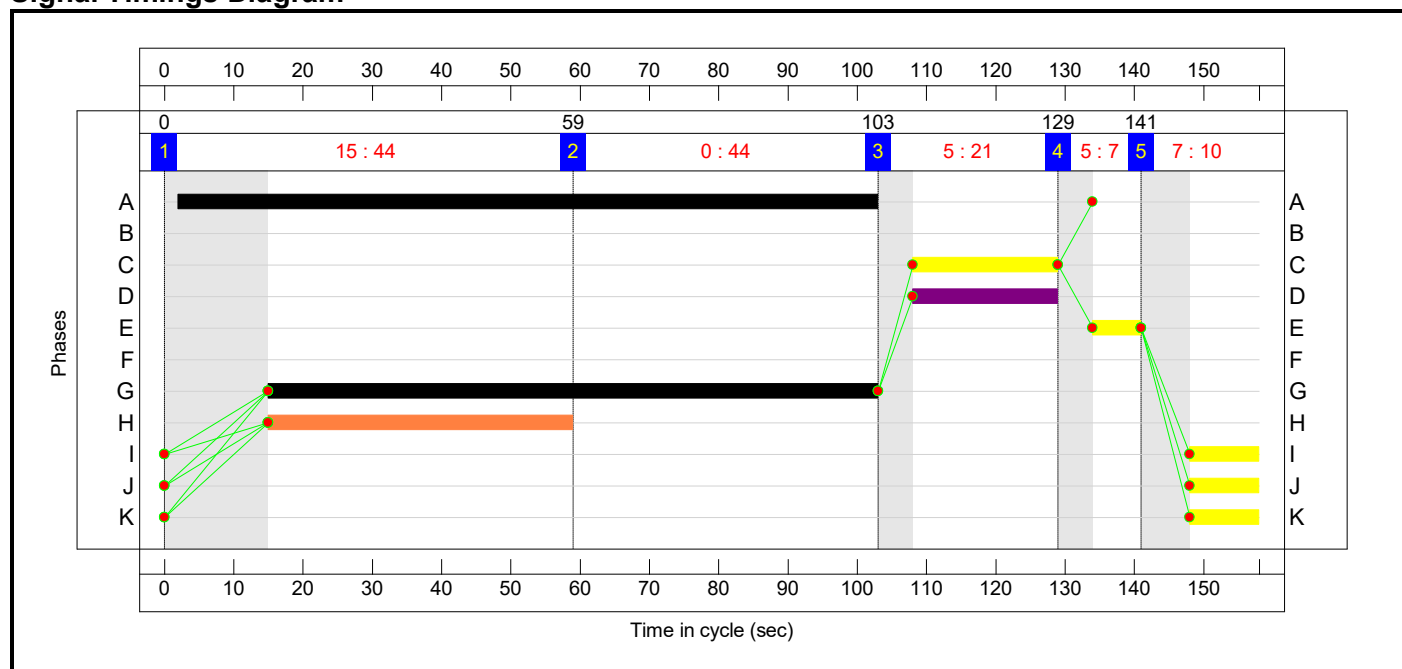
Network Summary

Total Network Delay: 14.74 pcuHr

Worst PRC: 47.61 % (On Lane 4/1)

Basic Results Summary

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road N SB Ahead Right Left	Traffic	101	2	103
B	Dublin Road N SB Right IGA	Ind. Arrow			
C	Old Connaught Avenue EB Right Left Ahead	Traffic	21	108	129
D	Old Connaught Avenue EB Right IGA	Ind. Arrow	21	108	129
E	Cork Abbey Road WB Left Ahead Right	Traffic	7	134	141
F		Traffic			
G	Dublin Road S NB Left Ahead Right	Traffic	88	15	103
H	Dublin Road S NB Right Filter Cl/Amb	Filter with Closing Amber (Not UK)	44	15	59
I	Pedestrians across AL1	Pedestrian	10	148	0
J	Pedestrians across	Pedestrian	10	148	0
K		Traffic	10	148	0

Basic Results Summary

Scenario 6: 'DN OY AT PM' (FG6: 'DN+AT OY_PM', Plan 1: 'Network Control Plan 1')

Bonus Green Times

Junction: Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue					
Lane	Description	Stage Change	Type	Usage	Value (s)
4/1	Dublin Road S NB Left Ahead	2 -> 3	End	Demand Dependency	10
4/2	Dublin Road S NB Right	2 -> 3	End	Demand Dependency	10
7/1	Cork Abbey Road WB Left Ahead Right	3 -> 4	Start	Demand Dependency	10
8/1	Old Connaught Avenue EB Left Ahead	3 -> 4	Start	Demand Dependency	10
8/2	Old Connaught Avenue EB Right	3 -> 4	Start	Demand Dependency	10

Basic Results Summary

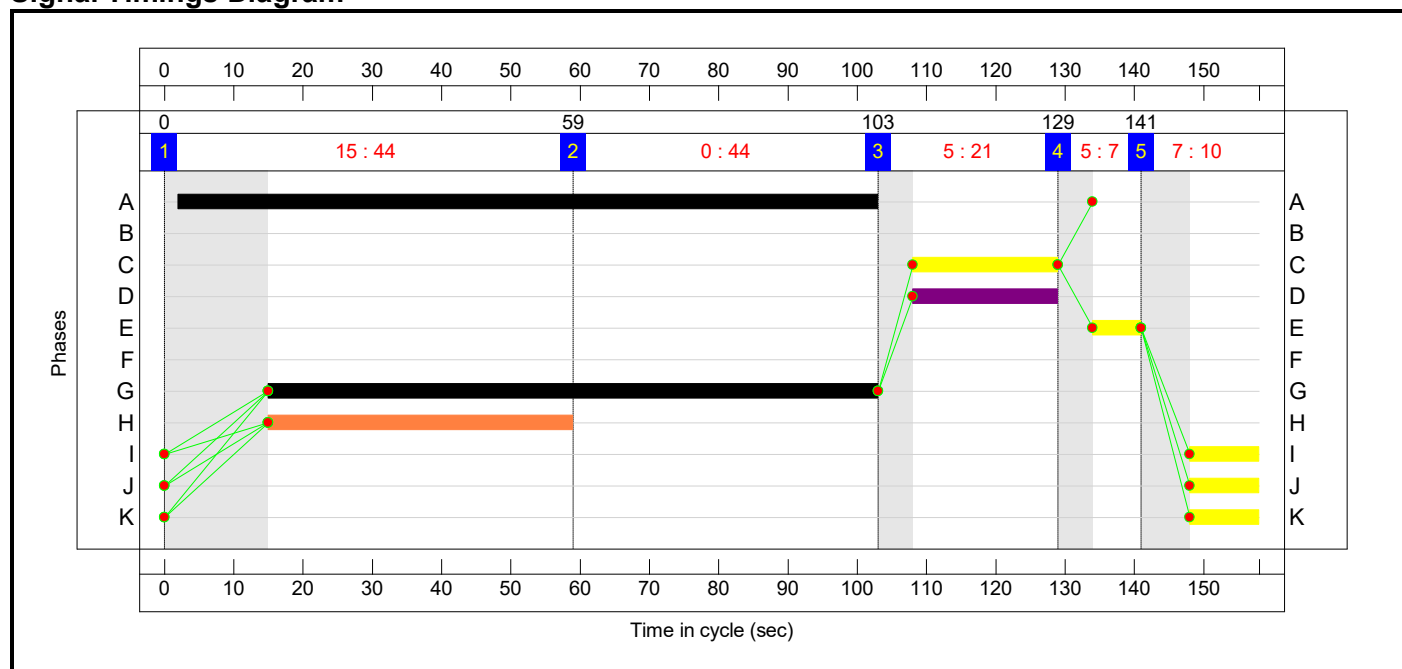
Network Summary

Total Network Delay: 14.74 pcuHr

Worst PRC: 47.61 % (On Lane 4/1)

Basic Results Summary

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road N SB Ahead Right Left	Traffic	101	2	103
B	Dublin Road N SB Right IGA	Ind. Arrow			
C	Old Connaught Avenue EB Right Left Ahead	Traffic	21	108	129
D	Old Connaught Avenue EB Right IGA	Ind. Arrow	21	108	129
E	Cork Abbey Road WB Left Ahead Right	Traffic	7	134	141
F		Traffic			
G	Dublin Road S NB Left Ahead Right	Traffic	88	15	103
H	Dublin Road S NB Right Filter Cl/Amb	Filter with Closing Amber (Not UK)	44	15	59
I	Pedestrians across AL1	Pedestrian	10	148	0
J	Pedestrians across	Pedestrian	10	148	0
K		Traffic	10	148	0

Basic Results Summary
Basic Results Summary

User and Project Details

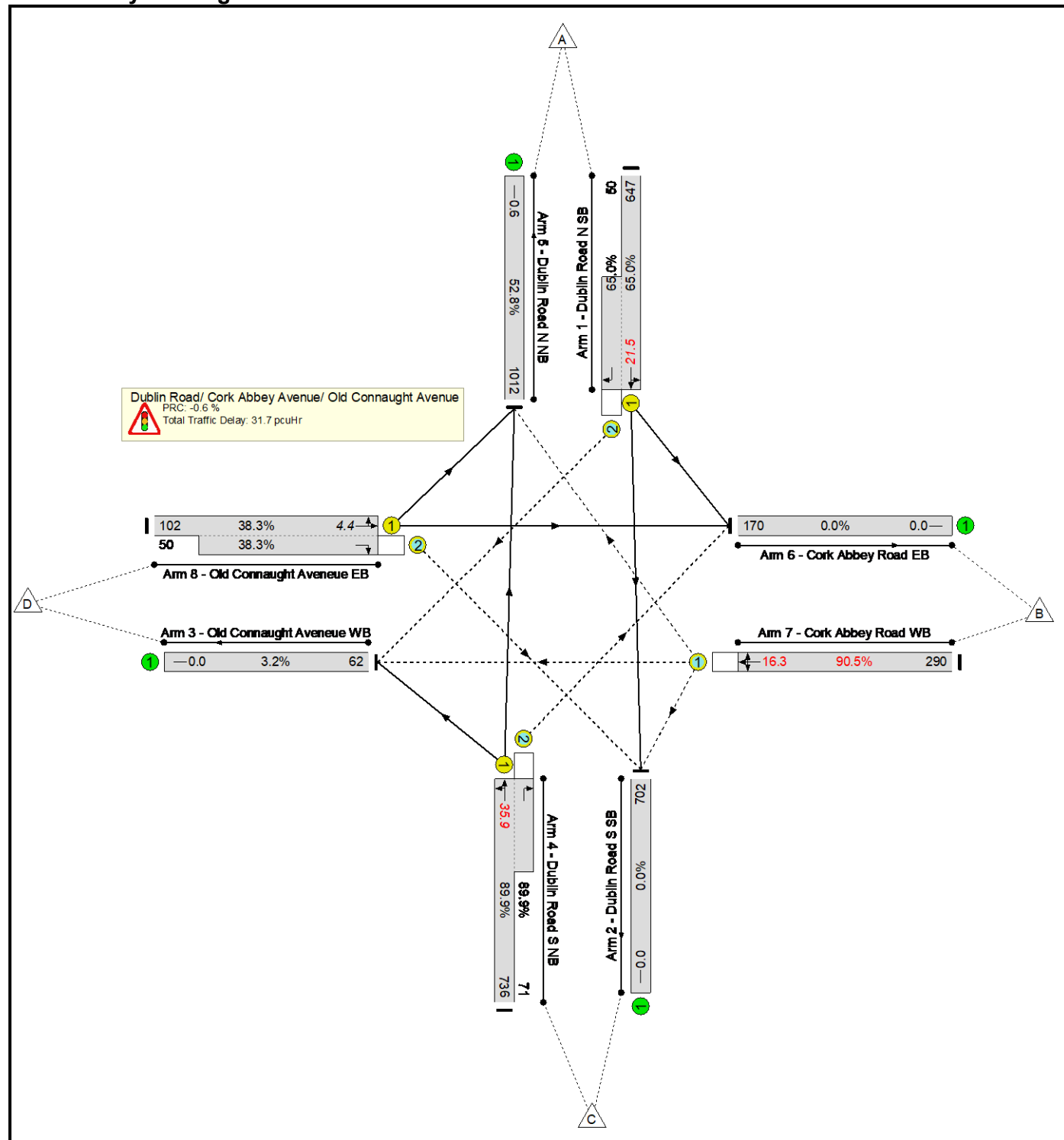
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Title:	
Location:	
Additional detail:	
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Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	DN OY_AM	DN OY_AM	Network Control Plan 1	08:00 - 09:00	158	-0.6	31.67
2	DN_CT_AM	DN+CT OY_AM	Network Control Plan 1	08:00 - 09:00	158	-0.7	32.50
3	DN_AT_AM	DN+AT OY_AM	Network Control Plan 1	08:00 - 09:00	158	-0.7	32.50
4	DN_OY_PM	DN OY_PM	Network Control Plan 1	16:00 - 17:00	158	25.9	19.99
5	DN OY_CT_PM	DN+CT OY_PM	Network Control Plan 1	16:00 - 17:00	158	25.4	20.32
6	DN OY AT PM	DN+AT OY_PM	Network Control Plan 1	16:00 - 17:00	158	25.4	20.32

Scenario 1: 'DN OY_AM' (FG1: 'DN OY_AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

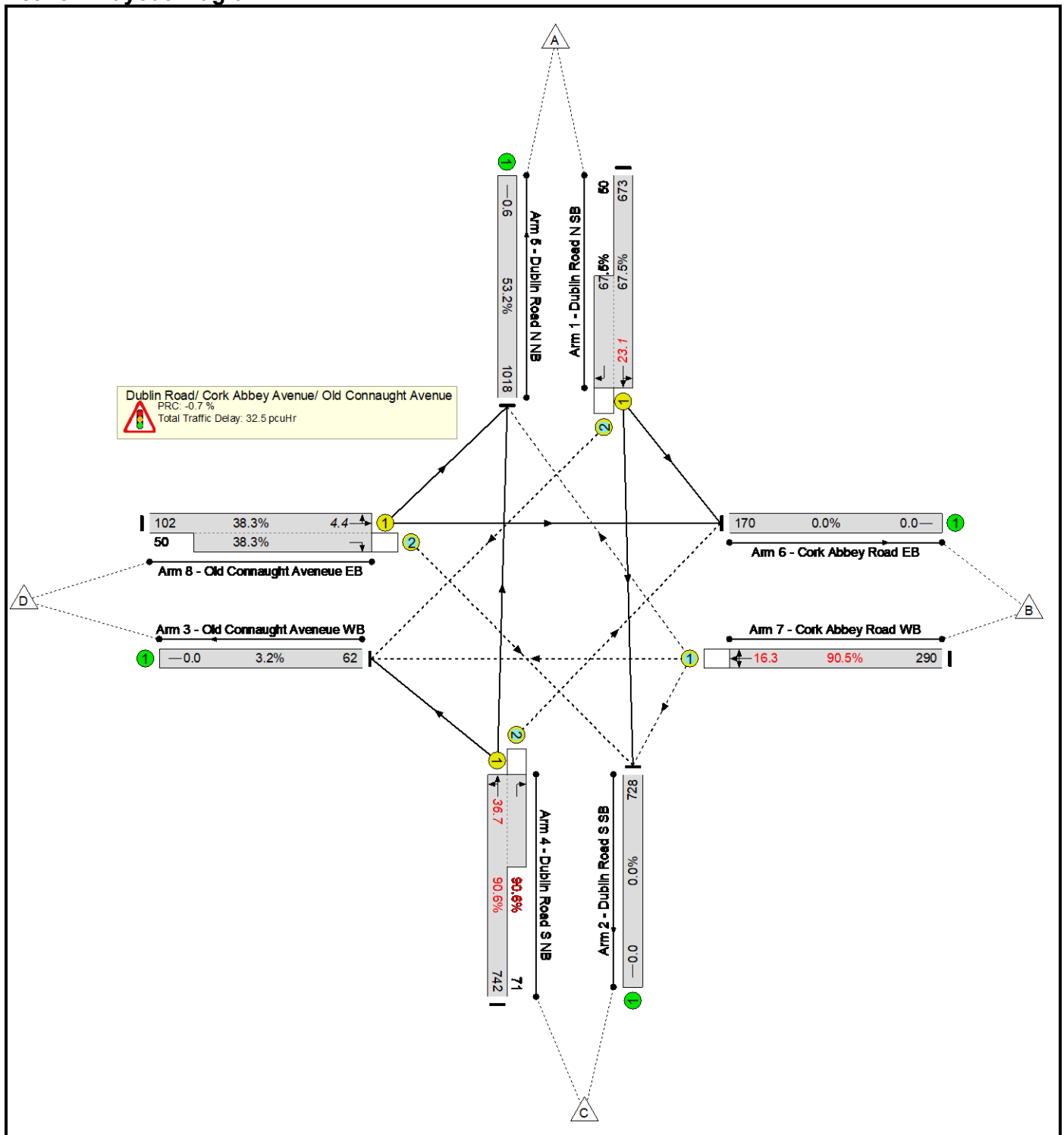


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	90.5%	106	351	4	31.7	-	-
Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue	-	-	-		-	-	-	-	-	-	-	90.5%	106	351	4	31.7	-	-
1/1+1/2	Dublin Road N SB Ahead Right Left	U+O	A	B	1	84	0	-	697	1965:1865	995+77	65.0 : 65.0%	35	15	0	6.1	31.7	21.5
3/1	Old Connaught Avenue WB	U	-		-	-	-	-	62	1915	1915	3.2%	-	-	-	0.0	1.0	0.0
4/1+4/2	Dublin Road S NB Left Ahead Right	U+O	G	H	1	71	34	-	807	1935:1855	818+79	89.9 : 89.9%	71	0	0	13.0	57.9	35.9
5/1	Dublin Road N NB	U	-		-	-	-	-	1012	1915	1915	52.8%	-	-	-	0.6	2.0	0.6
7/1	Cork Abbey Road WB Left Ahead Right	O	E		1	24	-	-	290	2025	320	90.5%	0	286	4	9.1	112.7	16.3
8/1+8/2	Old Connaught Avenue EB Right Left Ahead	U+O	C	D	1	21	21	-	152	1915:1940	267+131	38.3 : 38.3%	0	49	1	2.9	68.6	4.4
C1 - Cycle 1 PRC for Signalled Lanes (%): -0.6 PRC Over All Lanes (%): -0.6 Total Delay for Signalled Lanes (pcuHr): 31.09 Total Delay Over All Lanes (pcuHr): 31.67 Cycle Time (s): 158																		

Network Layout Diagram

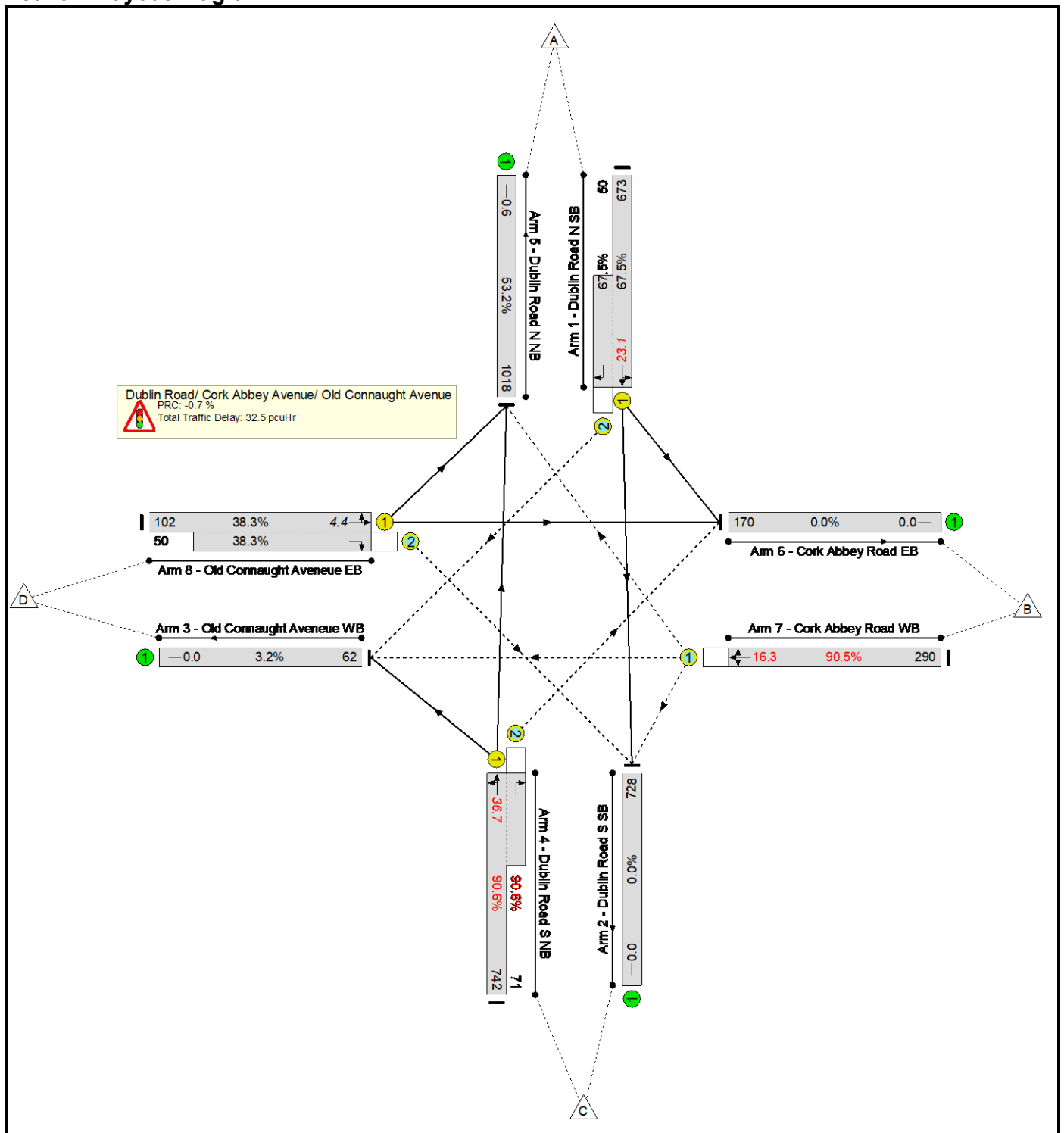


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	90.6%	106	350	4	32.5	-	-
Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue	-	-	-		-	-	-	-	-	-	-	90.6%	106	350	4	32.5	-	-
1/1+1/2	Dublin Road N SB Ahead Right Left	U+O	A	B	1	84	0	-	723	1965:1865	998+74	67.5 : 67.5%	35	15	0	6.6	32.6	23.1
3/1	Old Connaught Avenue WB	U	-		-	-	-	-	62	1915	1915	3.2%	-	-	-	0.0	1.0	0.0
4/1+4/2	Dublin Road S NB Left Ahead Right	U+O	G	H	1	71	34	-	813	1935:1855	819+78	90.6 : 90.6%	71	0	0	13.4	59.3	36.7
5/1	Dublin Road N NB	U	-		-	-	-	-	1018	1915	1915	53.2%	-	-	-	0.6	2.0	0.6
7/1	Cork Abbey Road WB Left Ahead Right	O	E		1	24	-	-	290	2025	320	90.5%	0	286	4	9.1	112.7	16.3
8/1+8/2	Old Connaught Avenue EB Right Left Ahead	U+O	C	D	1	21	21	-	152	1915:1940	267+131	38.3 : 38.3%	0	49	1	2.9	68.6	4.4
C1 - Cycle 1 PRC for Signalled Lanes (%): -0.7 PRC Over All Lanes (%): -0.7 Total Delay for Signalled Lanes (pcuHr): 31.92 Total Delay Over All Lanes (pcuHr): 32.50 Cycle Time (s): 158																		

Network Layout Diagram

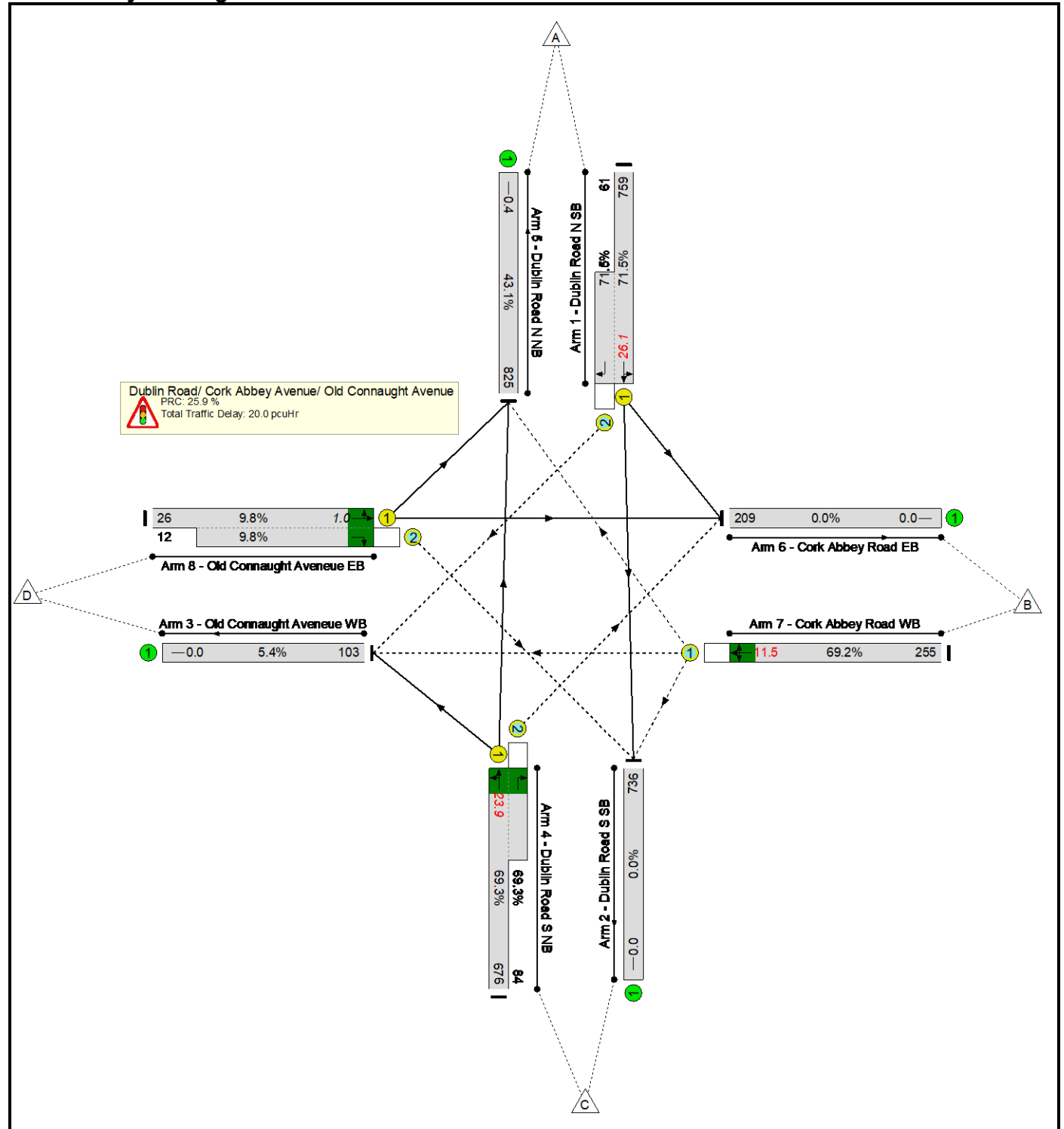


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	90.6%	106	350	4	32.5	-	-
Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue	-	-	-		-	-	-	-	-	-	-	90.6%	106	350	4	32.5	-	-
1/1+1/2	Dublin Road N SB Ahead Right Left	U+O	A	B	1	84	0	-	723	1965:1865	998+74	67.5 : 67.5%	35	15	0	6.6	32.6	23.1
3/1	Old Connaught Avenue WB	U	-		-	-	-	-	62	1915	1915	3.2%	-	-	-	0.0	1.0	0.0
4/1+4/2	Dublin Road S NB Left Ahead Right	U+O	G	H	1	71	34	-	813	1935:1855	819+78	90.6 : 90.6%	71	0	0	13.4	59.3	36.7
5/1	Dublin Road N NB	U	-		-	-	-	-	1018	1915	1915	53.2%	-	-	-	0.6	2.0	0.6
7/1	Cork Abbey Road WB Left Ahead Right	O	E		1	24	-	-	290	2025	320	90.5%	0	286	4	9.1	112.7	16.3
8/1+8/2	Old Connaught Avenue EB Right Left Ahead	U+O	C	D	1	21	21	-	152	1915:1940	267+131	38.3 : 38.3%	0	49	1	2.9	68.6	4.4
C1 - Cycle 1 PRC for Signalled Lanes (%): -0.7 PRC Over All Lanes (%): -0.7 Total Delay for Signalled Lanes (pcuHr): 31.92 Total Delay Over All Lanes (pcuHr): 32.50 Cycle Time (s): 158																		

Network Layout Diagram

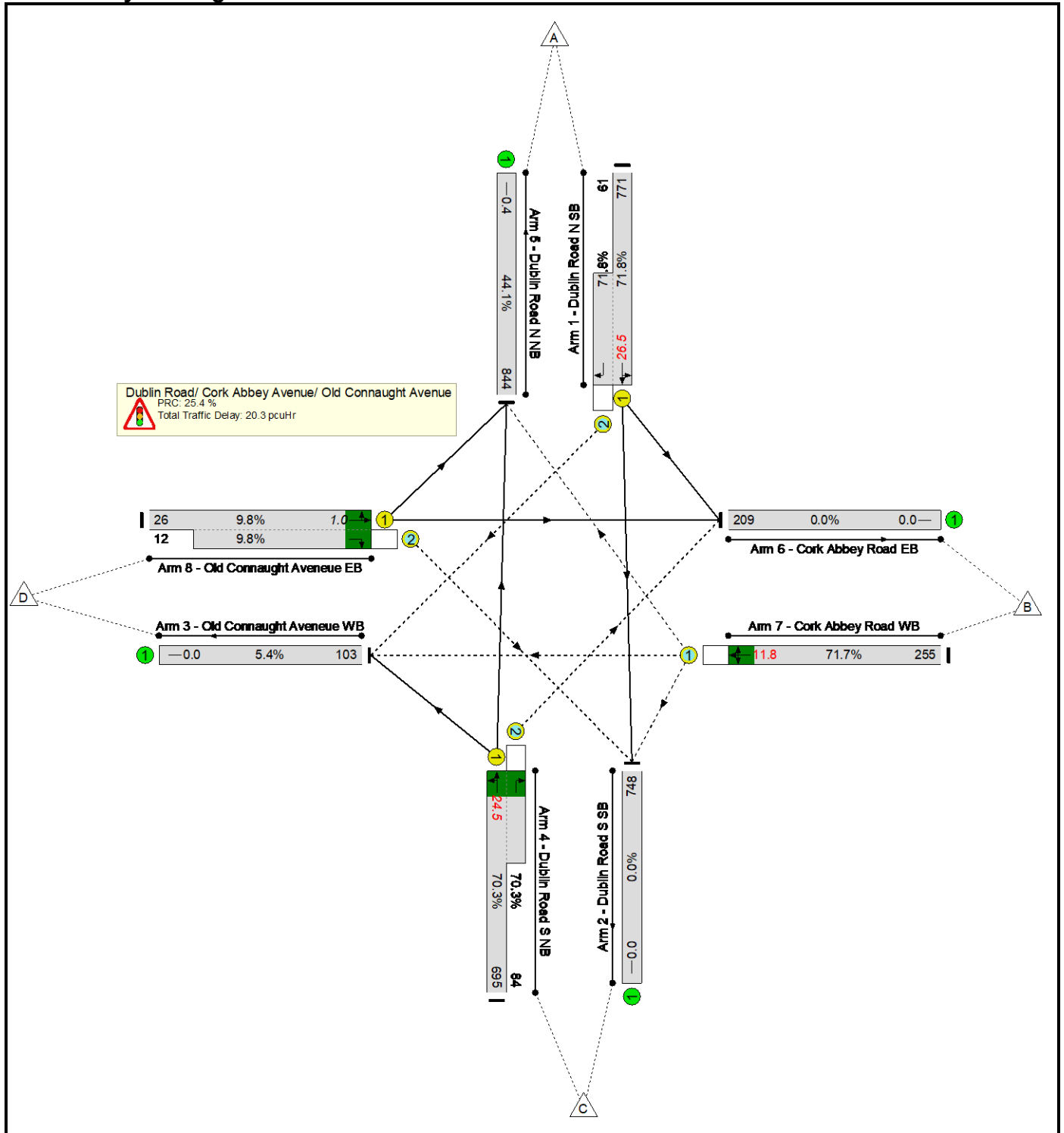


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	71.5%	178	230	4	20.0	-	-
Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue	-	-	-		-	-	-	-	-	-	-	71.5%	178	230	4	20.0	-	-
1/1+1/2	Dublin Road N SB Ahead Right Left	U+O	A	B	1	90	0	-	820	1965:1865	1062+85	71.5 : 71.5%	45	16	0	6.8	29.9	26.1
3/1	Old Connaught Avenue WB	U	-		-	-	-	-	103	1915	1915	5.4%	-	-	-	0.0	1.0	0.0
4/1+4/2	Dublin Road S NB Left Ahead Right	U+O	G	H	1	77	33	Y:Y	760	1935:1855	975+121	69.3 : 69.3%	79	4	1	6.6	31.4	23.9
5/1	Dublin Road N NB	U	-		-	-	-	-	825	1915	1915	43.1%	-	-	-	0.4	1.7	0.4
7/1	Cork Abbey Road WB Left Ahead Right	O	E		1	18	-	Y	255	2025	368	69.2%	54	198	3	5.5	77.3	11.5
8/1+8/2	Old Connaught Avenue EB Right Left Ahead	U+O	C	D	1	21	21	-	38	1915:1940	267+123	9.8 : 9.8%	1	11	0	0.7	64.4	1.0
C1 - Cycle 1 PRC for Signalled Lanes (%): 25.9 PRC Over All Lanes (%): 25.9 Total Delay for Signalled Lanes (pcuHr): 19.59 Total Delay Over All Lanes(pcuHr): 19.99 Cycle Time (s): 158																		

Network Layout Diagram

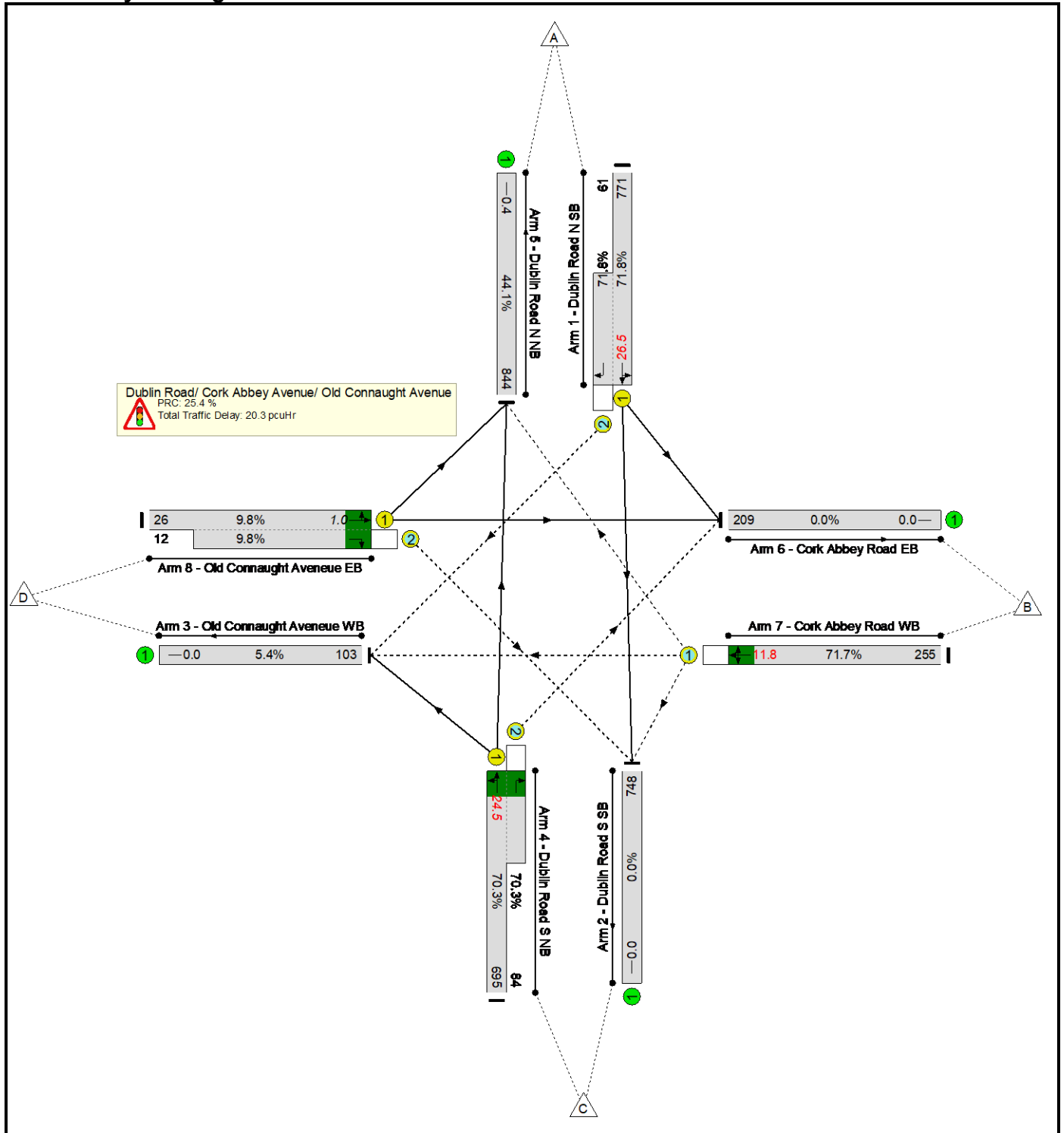


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	71.8%	178	229	4	20.3	-	-
Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue	-	-	-		-	-	-	-	-	-	-	71.8%	178	229	4	20.3	-	-
1/1+1/2	Dublin Road N SB Ahead Right Left	U+O	A	B	1	91	0	-	832	1965:1865	1074+85	71.8 : 71.8%	45	16	0	6.8	29.5	26.5
3/1	Old Connaught Avenue WB	U	-		-	-	-	-	103	1915	1915	5.4%	-	-	-	0.0	1.0	0.0
4/1+4/2	Dublin Road S NB Left Ahead Right	U+O	G	H	1	78	35	Y:Y	779	1935:1855	989+119	70.3 : 70.3%	79	4	1	6.7	31.1	24.5
5/1	Dublin Road N NB	U	-		-	-	-	-	844	1915	1915	44.1%	-	-	-	0.4	1.7	0.4
7/1	Cork Abbey Road WB Left Ahead Right	O	E		1	17	-	Y	255	2025	356	71.7%	54	198	3	5.7	80.2	11.8
8/1+8/2	Old Connaught Avenue EB Right Left Ahead	U+O	C	D	1	21	21	-	38	1915:1940	267+123	9.8 : 9.8%	1	11	0	0.7	64.4	1.0
C1 - Cycle 1 PRC for Signalled Lanes (%): 25.4 PRC Over All Lanes (%): 25.4 Total Delay for Signalled Lanes (pcuHr): 19.90 Total Delay Over All Lanes(pcuHr): 20.32 Cycle Time (s): 158																		

Network Layout Diagram

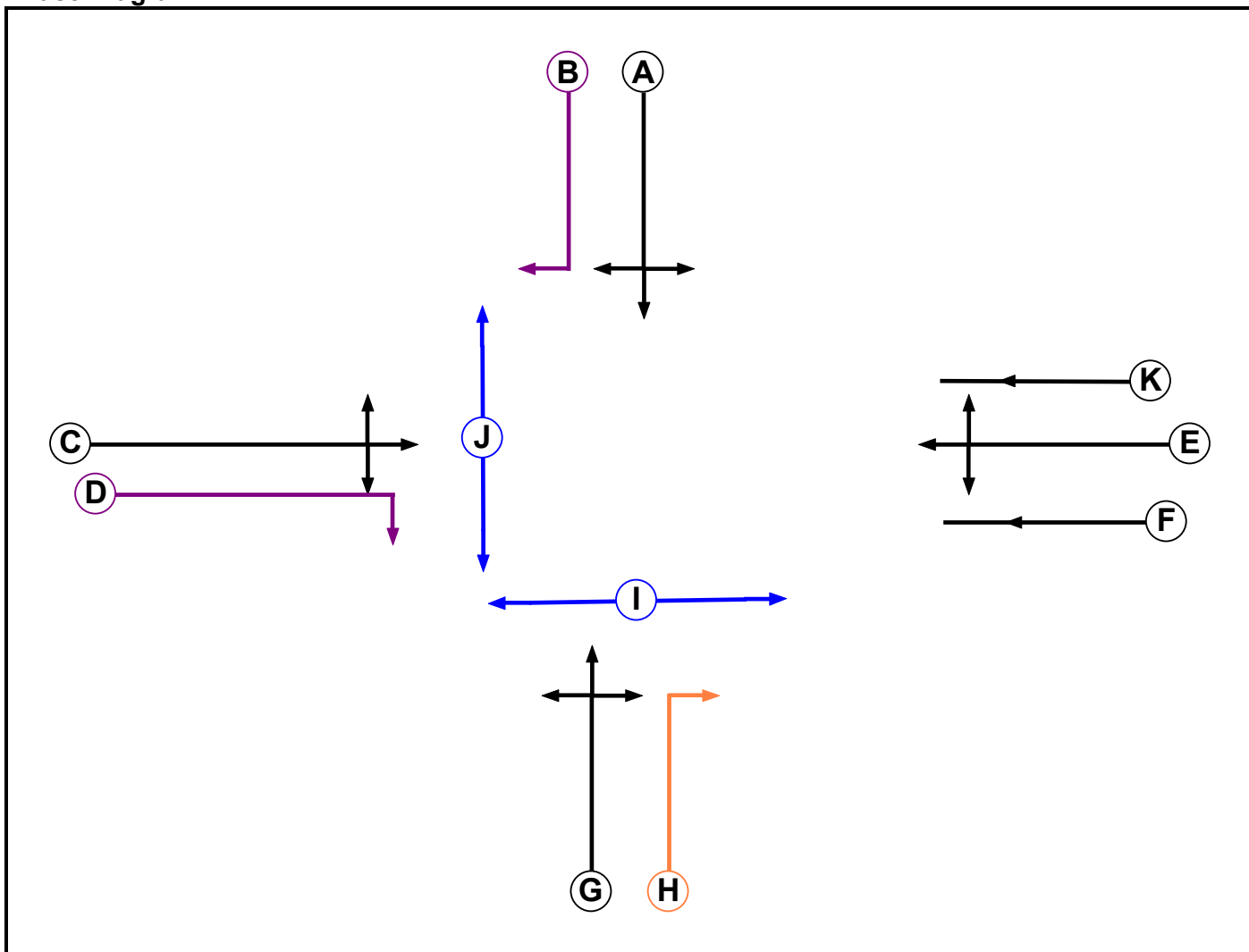


Basic Results Summary

Network Results

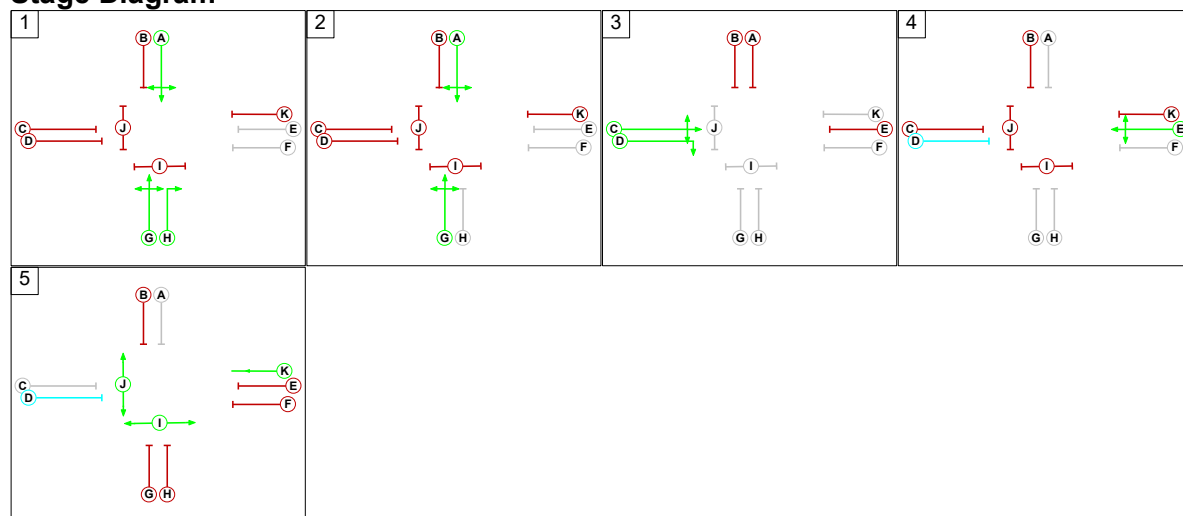
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	71.8%	178	229	4	20.3	-	-
Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue	-	-	-		-	-	-	-	-	-	-	71.8%	178	229	4	20.3	-	-
1/1+1/2	Dublin Road N SB Ahead Right Left	U+O	A	B	1	91	0	-	832	1965:1865	1074+85	71.8 : 71.8%	45	16	0	6.8	29.5	26.5
3/1	Old Connaught Avenue WB	U	-		-	-	-	-	103	1915	1915	5.4%	-	-	-	0.0	1.0	0.0
4/1+4/2	Dublin Road S NB Left Ahead Right	U+O	G	H	1	78	35	Y:Y	779	1935:1855	989+119	70.3 : 70.3%	79	4	1	6.7	31.1	24.5
5/1	Dublin Road N NB	U	-		-	-	-	-	844	1915	1915	44.1%	-	-	-	0.4	1.7	0.4
7/1	Cork Abbey Road WB Left Ahead Right	O	E		1	17	-	Y	255	2025	356	71.7%	54	198	3	5.7	80.2	11.8
8/1+8/2	Old Connaught Avenue EB Right Left Ahead	U+O	C	D	1	21	21	-	38	1915:1940	267+123	9.8 : 9.8%	1	11	0	0.7	64.4	1.0
C1 - Cycle 1 PRC for Signalled Lanes (%): 25.4 PRC Over All Lanes (%): 25.4 Total Delay for Signalled Lanes (pcuHr): 19.90 Total Delay Over All Lanes(pcuHr): 20.32 Cycle Time (s): 158																		

Basic Results Summary
Phase Diagram



Phase Intergreens Matrix

	Starting Phase											
		A	B	C	D	E	F	G	H	I	J	K
Terminating Phase	A		-	5	5	-	-	-	-	-	-	-
	B	-		5	-	5	-	-	-	-	-	5
	C	-	-		-	5	-	-	-	-	-	-
	D	-	-	-		-	-	-	-	-	-	-
	E	-	-	-	-		-	-	-	7	7	7
	F	-	-	-	-	-		-	-	5	5	-
	G	-	5	-	-	-	-		-	-	-	-
	H	-	-	-	-	-	-	-		-	-	-
	I	-	-	-	-	-	15	15	15		-	-
	J	-	-	-	-	-	15	15	15	-		-
	K	-	-	-	-	-	-	15	15	-	-	

Stage Diagram

Scenario 1: 'DN OY_AM' (FG1: 'DN OY_AM', Plan 1: 'Network Control Plan 1')

Bonus Green Times

No Bonus Greens are defined For Scenario 1

Basic Results Summary

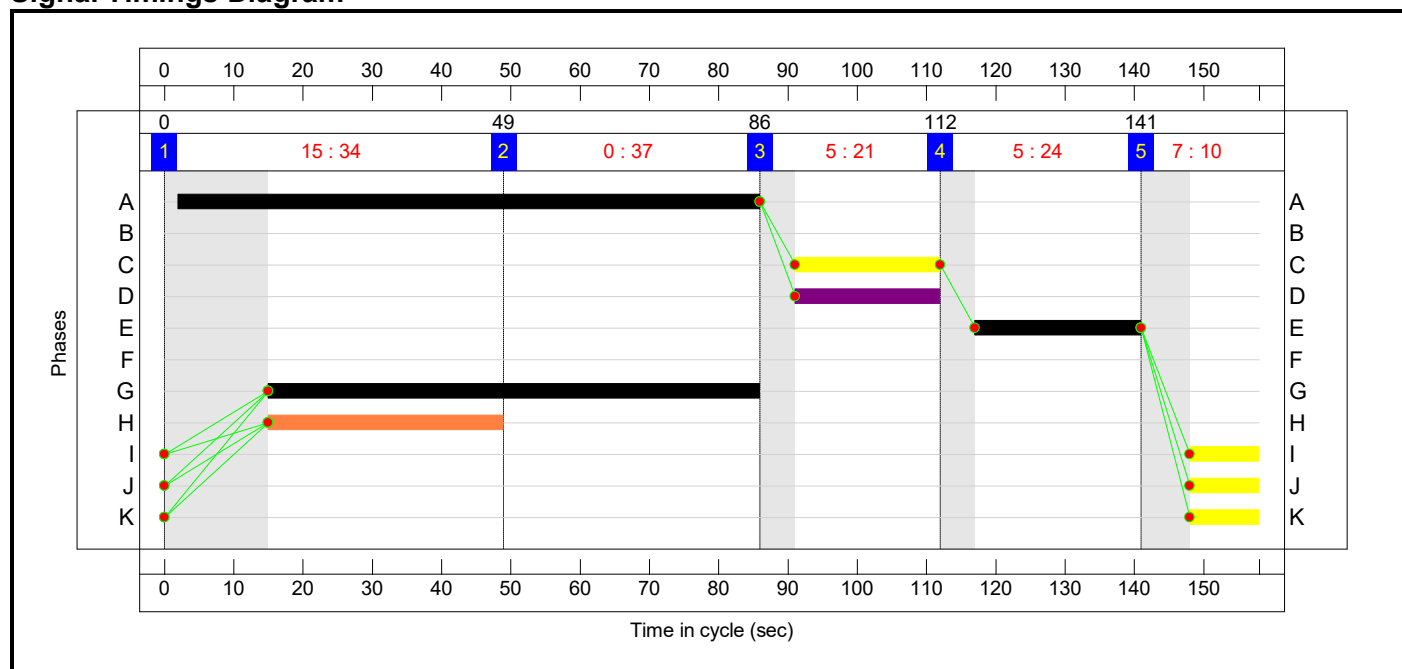
Network Summary

Total Network Delay: 31.67 pcuHr

Worst PRC: -0.57 % (On Lane 7/1)

Basic Results Summary

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road N SB Ahead Right Left	Traffic	84	2	86
B	Dublin Road N SB Right IGA	Ind. Arrow			
C	Old Connaught Avenue EB Right Left Ahead	Traffic	21	91	112
D	Old Connaught Avenue EB Right IGA	Ind. Arrow	21	91	112
E	Cork Abbey Road WB Left Ahead Right	Traffic	24	117	141
F	Cork Abbey Road WB Left Ahead Right	Traffic			
G	Dublin Road S NB Left Ahead Right	Traffic	71	15	86
H	Dublin Road S NB Right Filter Cl/Amb	Filter with Closing Amber (Not UK)	34	15	49
I	Pedestrians across AL1	Pedestrian	10	148	0
J	Pedestrians across	Pedestrian	10	148	0
K	Pedestrians across	Traffic	10	148	0

Scenario 2: 'DN_CT_AM' (FG3: 'DN+CT OY_AM', Plan 1: 'Network Control Plan 1')

Bonus Green Times

No Bonus Greens are defined For Scenario 2

Basic Results Summary

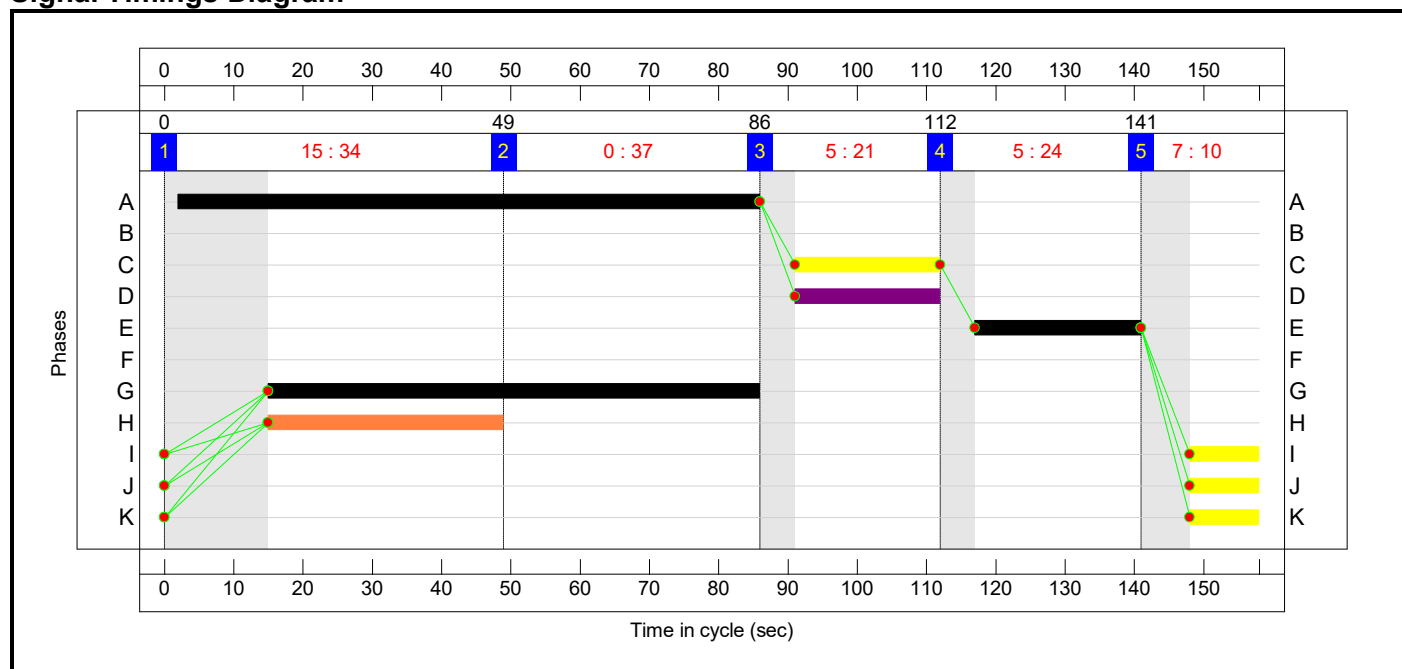
Network Summary

Total Network Delay: 32.50 pcuHr

Worst PRC: -0.67 % (On Lane 4/1)

Basic Results Summary

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road N SB Ahead Right Left	Traffic	84	2	86
B	Dublin Road N SB Right IGA	Ind. Arrow			
C	Old Connaught Avenue EB Right Left Ahead	Traffic	21	91	112
D	Old Connaught Avenue EB Right IGA	Ind. Arrow	21	91	112
E	Cork Abbey Road WB Left Ahead Right	Traffic	24	117	141
F	Cork Abbey Road WB Left Ahead Right	Traffic			
G	Dublin Road S NB Left Ahead Right	Traffic	71	15	86
H	Dublin Road S NB Right Filter Cl/Amb	Filter with Closing Amber (Not UK)	34	15	49
I	Pedestrians across AL1	Pedestrian	10	148	0
J	Pedestrians across	Pedestrian	10	148	0
K	Pedestrians across	Traffic	10	148	0

Scenario 3: 'DN_AT_AM' (FG5: 'DN+AT OY_AM', Plan 1: 'Network Control Plan 1')

Bonus Green Times

No Bonus Greens are defined For Scenario 3

Basic Results Summary

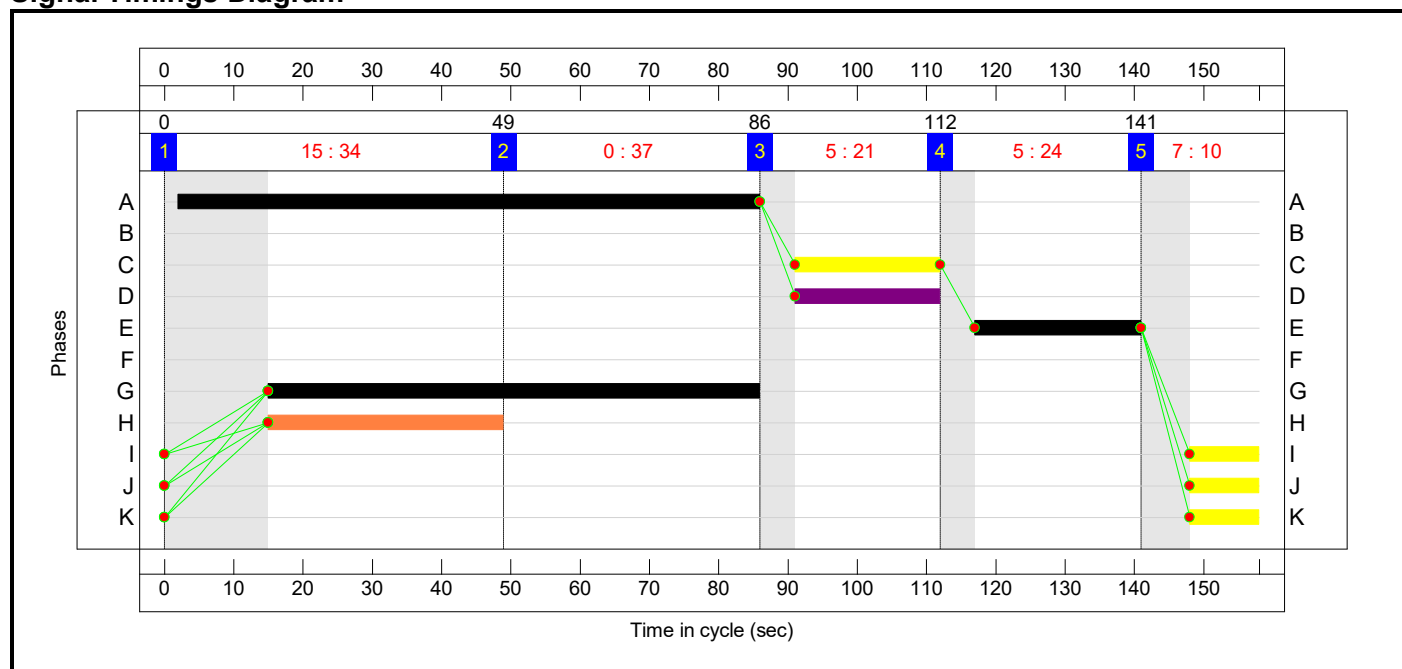
Network Summary

Total Network Delay: 32.50 pcuHr

Worst PRC: -0.67 % (On Lane 4/1)

Basic Results Summary

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road N SB Ahead Right Left	Traffic	84	2	86
B	Dublin Road N SB Right IGA	Ind. Arrow			
C	Old Connaught Avenue EB Right Left Ahead	Traffic	21	91	112
D	Old Connaught Avenue EB Right IGA	Ind. Arrow	21	91	112
E	Cork Abbey Road WB Left Ahead Right	Traffic	24	117	141
F	Cork Abbey Road WB Left Ahead Right	Traffic			
G	Dublin Road S NB Left Ahead Right	Traffic	71	15	86
H	Dublin Road S NB Right Filter Cl/Amb	Filter with Closing Amber (Not UK)	34	15	49
I	Pedestrians across AL1	Pedestrian	10	148	0
J	Pedestrians across	Pedestrian	10	148	0
K		Traffic	10	148	0

Basic Results Summary

Scenario 4: 'DN_OY_PM' (FG2: 'DN OY_PM', Plan 1: 'Network Control Plan 1')

Bonus Green Times

Junction: Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue					
Lane	Description	Stage Change	Type	Usage	Value (s)
4/1	Dublin Road S NB Left Ahead	2 -> 3	End	Demand Dependency	10
4/2	Dublin Road S NB Right	2 -> 3	End	Demand Dependency	10
7/1	Cork Abbey Road WB Left Ahead Right	3 -> 4	Start	Demand Dependency	10
8/1	Old Connaught Avenue EB Left Ahead	3 -> 4	Start	Demand Dependency	10
8/2	Old Connaught Avenue EB Right	3 -> 4	Start	Demand Dependency	10

Basic Results Summary

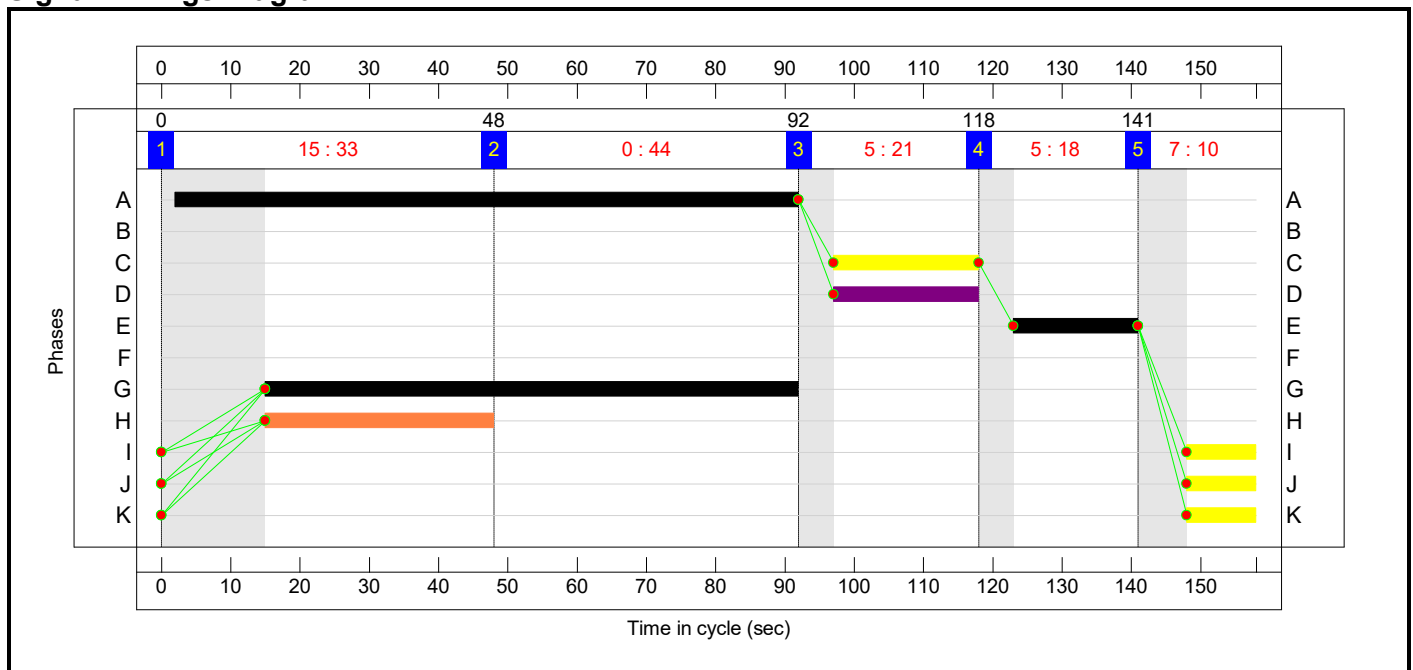
Network Summary

Total Network Delay: 19.99 pcuHr

Worst PRC: 25.91 % (On Lane 1/1)

Basic Results Summary

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road N SB Ahead Right Left	Traffic	90	2	92
B	Dublin Road N SB Right IGA	Ind. Arrow			
C	Old Connaught Avenue EB Right Left Ahead	Traffic	21	97	118
D	Old Connaught Avenue EB Right IGA	Ind. Arrow	21	97	118
E	Cork Abbey Road WB Left Ahead Right	Traffic	18	123	141
F		Traffic			
G	Dublin Road S NB Left Ahead Right	Traffic	77	15	92
H	Dublin Road S NB Right Filter Cl/Amb	Filter with Closing Amber (Not UK)	33	15	48
I	Pedestrians across AL1	Pedestrian	10	148	0
J	Pedestrians across	Pedestrian	10	148	0
K		Traffic	10	148	0

Basic Results Summary

Scenario 5: 'DN OY_CT_PM' (FG4: 'DN+CT OY_PM', Plan 1: 'Network Control Plan 1')

Bonus Green Times

Junction: Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue					
Lane	Description	Stage Change	Type	Usage	Value (s)
4/1	Dublin Road S NB Left Ahead	2 -> 3	End	Demand Dependency	10
4/2	Dublin Road S NB Right	2 -> 3	End	Demand Dependency	10
7/1	Cork Abbey Road WB Left Ahead Right	3 -> 4	Start	Demand Dependency	10
8/1	Old Connaught Avenue EB Left Ahead	3 -> 4	Start	Demand Dependency	10
8/2	Old Connaught Avenue EB Right	3 -> 4	Start	Demand Dependency	10

Basic Results Summary

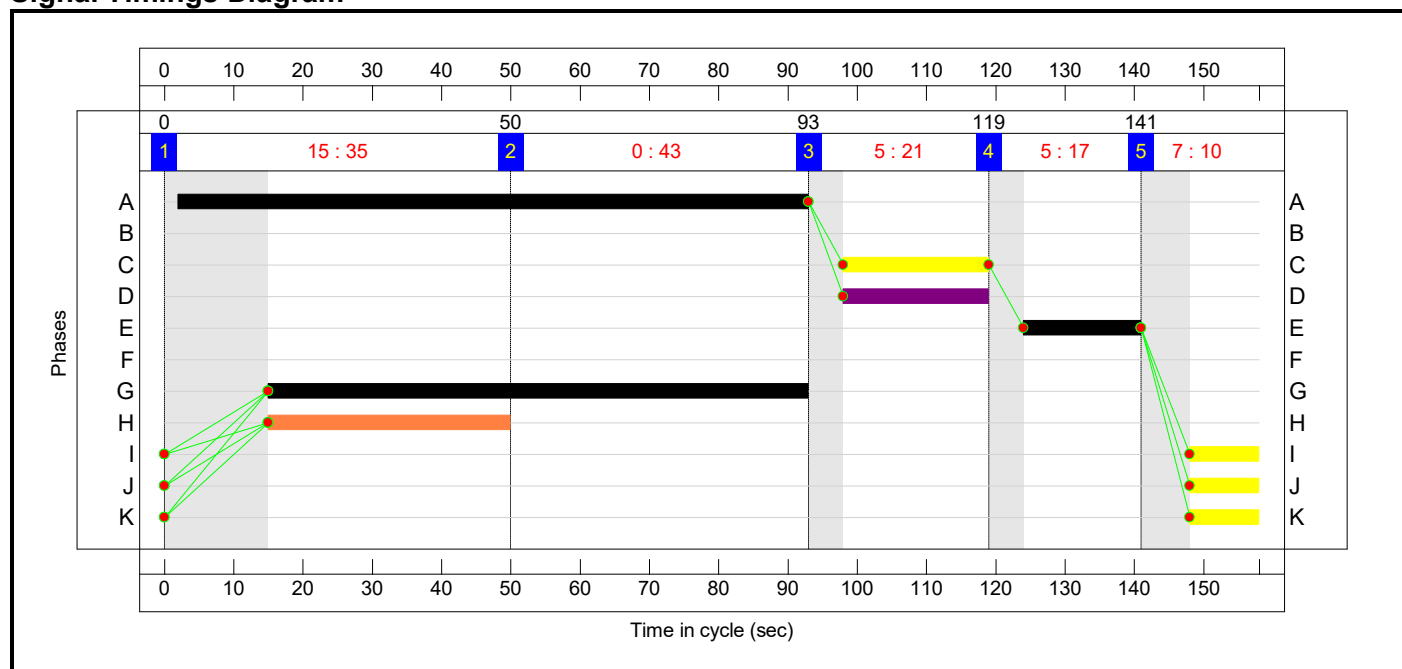
Network Summary

Total Network Delay: 20.32 pcuHr

Worst PRC: 25.41 % (On Lane 1/1)

Basic Results Summary

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road N SB Ahead Right Left	Traffic	91	2	93
B	Dublin Road N SB Right IGA	Ind. Arrow			
C	Old Connaught Avenue EB Right Left Ahead	Traffic	21	98	119
D	Old Connaught Avenue EB Right IGA	Ind. Arrow	21	98	119
E	Cork Abbey Road WB Left Ahead Right	Traffic	17	124	141
F		Traffic			
G	Dublin Road S NB Left Ahead Right	Traffic	78	15	93
H	Dublin Road S NB Right Filter Cl/Amb	Filter with Closing Amber (Not UK)	35	15	50
I	Pedestrians across AL1	Pedestrian	10	148	0
J	Pedestrians across	Pedestrian	10	148	0
K		Traffic	10	148	0

Basic Results Summary

Scenario 6: 'DN OY AT PM' (FG6: 'DN+AT OY_PM', Plan 1: 'Network Control Plan 1')

Bonus Green Times

Junction: Dublin Road/ Cork Abbey Avenue/ Old Connaught Avenue					
Lane	Description	Stage Change	Type	Usage	Value (s)
4/1	Dublin Road S NB Left Ahead	2 -> 3	End	Demand Dependency	10
4/2	Dublin Road S NB Right	2 -> 3	End	Demand Dependency	10
7/1	Cork Abbey Road WB Left Ahead Right	3 -> 4	Start	Demand Dependency	10
8/1	Old Connaught Avenue EB Left Ahead	3 -> 4	Start	Demand Dependency	10
8/2	Old Connaught Avenue EB Right	3 -> 4	Start	Demand Dependency	10

Basic Results Summary

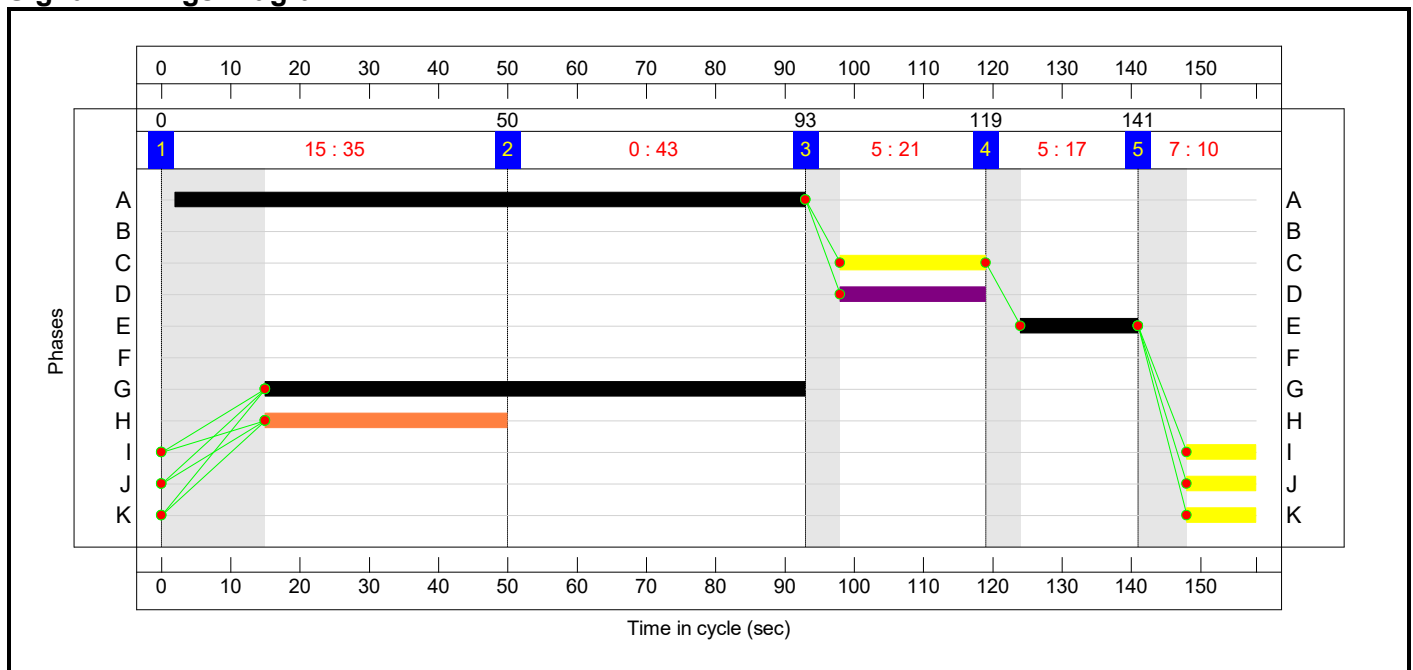
Network Summary

Total Network Delay: 20.32 pcuHr

Worst PRC: 25.41 % (On Lane 1/1)

Basic Results Summary

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road N SB Ahead Right Left	Traffic	91	2	93
B	Dublin Road N SB Right IGA	Ind. Arrow			
C	Old Connaught Avenue EB Right Left Ahead	Traffic	21	98	119
D	Old Connaught Avenue EB Right IGA	Ind. Arrow	21	98	119
E	Cork Abbey Road WB Left Ahead Right	Traffic	17	124	141
F		Traffic			
G	Dublin Road S NB Left Ahead Right	Traffic	78	15	93
H	Dublin Road S NB Right Filter Cl/Amb	Filter with Closing Amber (Not UK)	35	15	50
I	Pedestrians across AL1	Pedestrian	10	148	0
J	Pedestrians across	Pedestrian	10	148	0
K		Traffic	10	148	0

Basic Results Summary
Basic Results Summary

User and Project Details

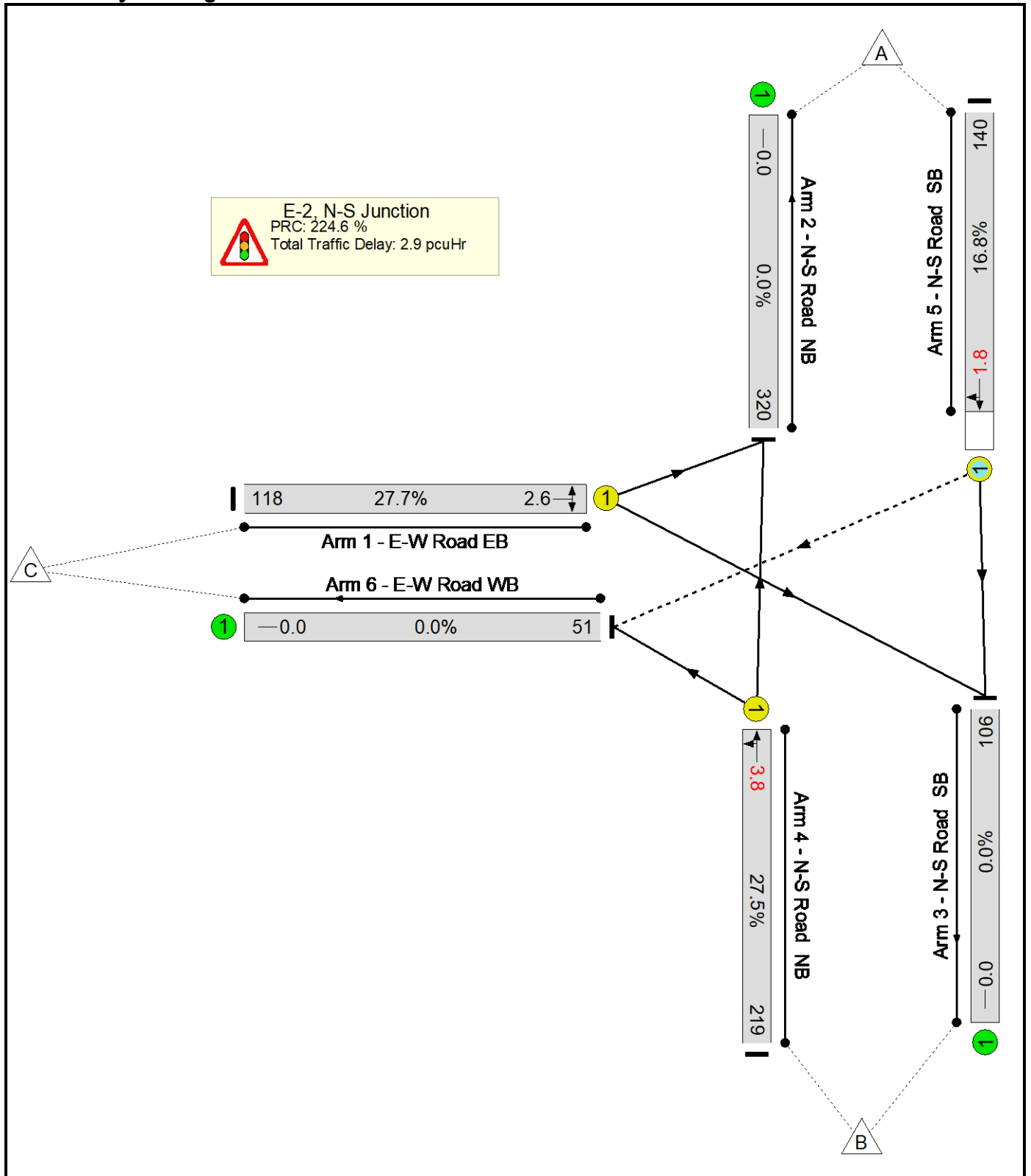
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Title:	
Location:	
Additional detail:	
File name:	J2 E-W, N-S Junction.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	DN+CT OY+5_AM	DN+CT OY+5_AM	Network Control Plan 1	08:00 - 09:00	90	224.6	2.95
2	DN+CT OY+5_PM	DN+CT OY+5_PM	Network Control Plan 1	16:00 - 17:00	90	199.1	3.39
3	DN+AT OY+5_AM	DN+AT OY+5_AM	Network Control Plan 1	08:00 - 09:00	90	224.6	2.95
4	DN+AT OY+5_PM	DN+AT OY+5_PM	Network Control Plan 1	16:00 - 17:00	90	199.1	3.39
5	DN+CT OY+15_AM	DN+CT OY+15_AM	Network Control Plan 1	08:00 - 09:00	90	46.3	9.32
6	DN+CT OY+15_PM	DN+CT OY+15_PM	Network Control Plan 1	16:00 - 17:00	90	62.0	8.55
7	DN+AT OY+15_AM	DN+AT OY+15_AM	Network Control Plan 1	08:00 - 09:00	90	46.3	9.32
8	DN+AT OY+15_PM	DN+AT OY+15_PM	Network Control Plan 1	16:00 - 17:00	90	62.0	8.55

Scenario 1: 'DN+CT OY+5_AM' (FG3: 'DN+CT OY+5_AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

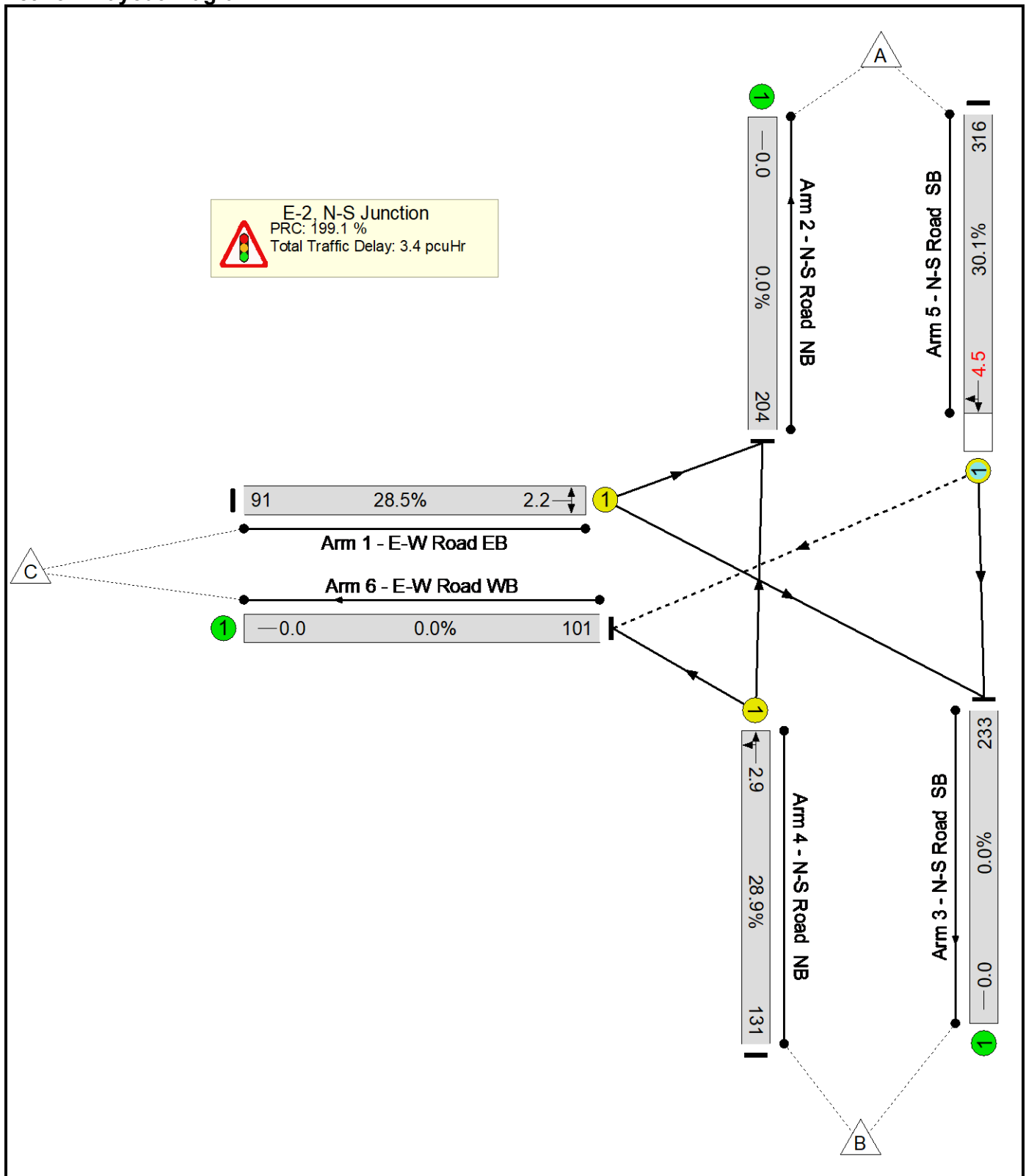


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	27.7%	41	5	1	2.9	-	-
E-2, N-S Junction	-	-	-		-	-	-	-	-	-	-	27.7%	41	5	1	2.9	-	-
1/1	E-W Road EB Left Right	U	D		1	19	-	-	118	1915	426	27.7%	-	-	-	1.1	34.9	2.6
4/1	N-S Road NB Ahead Left	U	C		1	36	-	-	219	1940	798	27.5%	-	-	-	1.3	20.7	3.8
5/1	N-S Road SB Ahead Right	O	A	B	1	48	7	-	140	1940	831	16.8%	41	5	1	0.5	14.0	1.8
C1 PRC for Signalled Lanes (%): 224.6 PRC Over All Lanes (%): 224.6 Total Delay for Signalled Lanes (pcuHr): 2.95 Total Delay Over All Lanes(pcuHr): 2.95 Cycle Time (s): 90																		

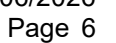
Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	30.1%	57	31	2	3.4	-	-
E-2, N-S Junction	-	-	-		-	-	-	-	-	-	-	30.1%	57	31	2	3.4	-	-
1/1	E-W Road EB Left Right	U	D		1	14	-	-	91	1915	319	28.5%	-	-	-	1.0	40.7	2.2
4/1	N-S Road NB Ahead Left	U	C		1	20	-	-	131	1940	453	28.9%	-	-	-	1.2	34.0	2.9
5/1	N-S Road SB Ahead Right	O	A	B	1	53	28	-	316	1940	1050	30.1%	57	31	2	1.1	12.9	4.5
C1																		

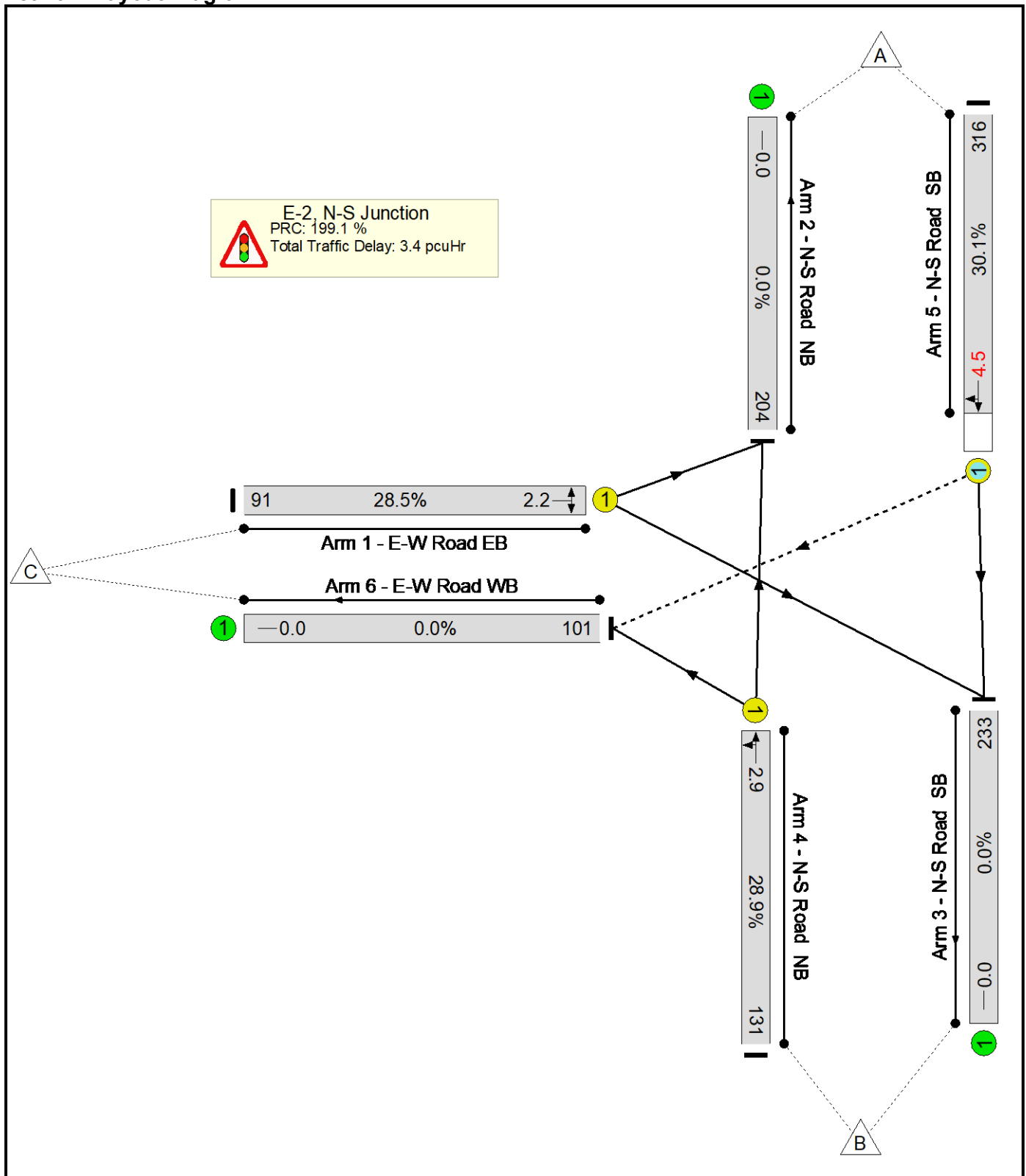


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	27.7%	41	5	1	2.9	-	-
E-2, N-S Junction	-	-	-		-	-	-	-	-	-	-	27.7%	41	5	1	2.9	-	-
1/1	E-W Road EB Left Right	U	D		1	19	-	-	118	1915	426	27.7%	-	-	-	1.1	34.9	2.6
4/1	N-S Road NB Ahead Left	U	C		1	36	-	-	219	1940	798	27.5%	-	-	-	1.3	20.7	3.8
5/1	N-S Road SB Ahead Right	O	A	B	1	48	7	-	140	1940	831	16.8%	41	5	1	0.5	14.0	1.8
C1 PRC for Signalled Lanes (%): 224.6 PRC Over All Lanes (%): 224.6 Total Delay for Signalled Lanes (pcuHr): 2.95 Total Delay Over All Lanes(pcuHr): 2.95 Cycle Time (s): 90																		

Network Layout Diagram

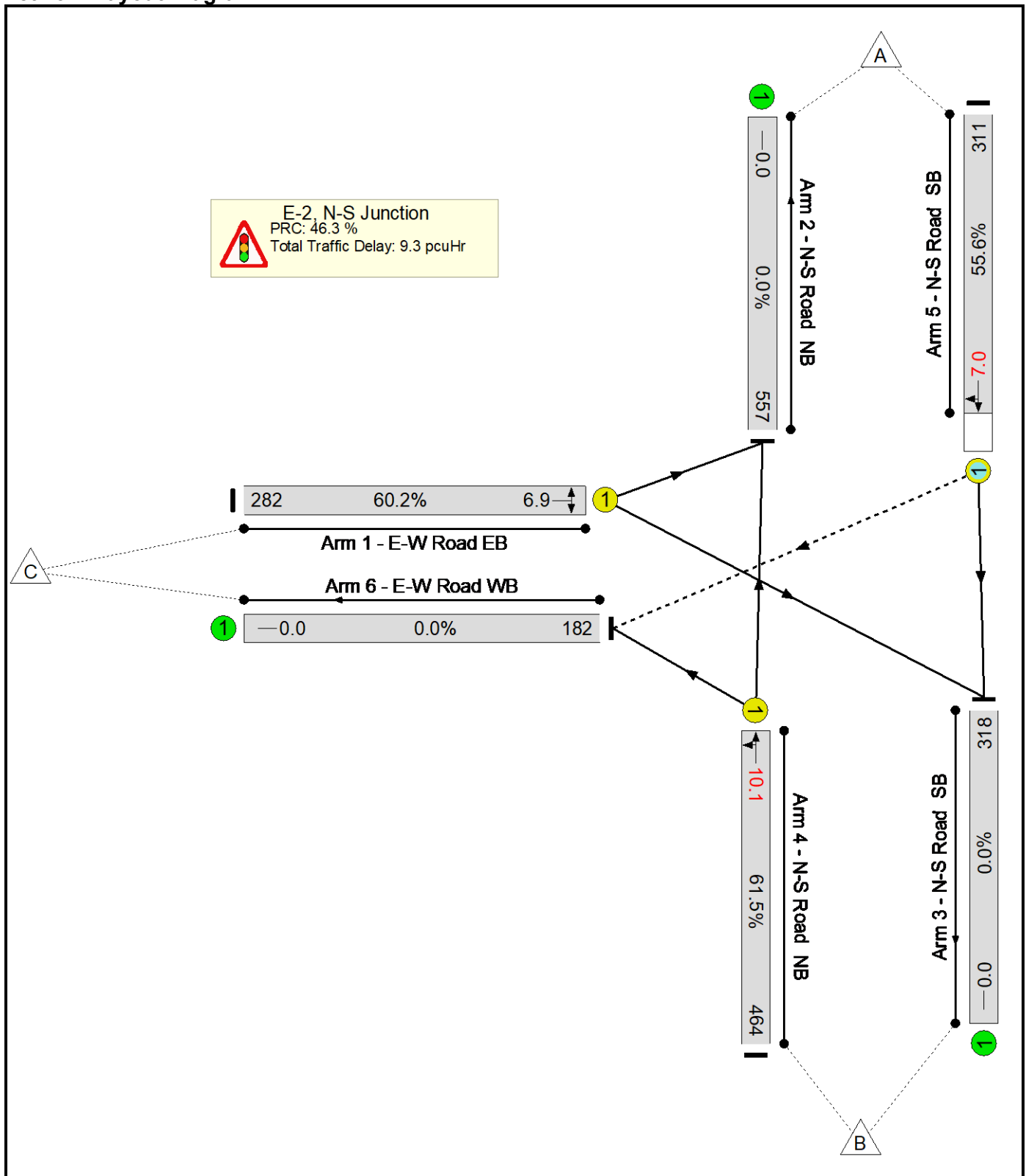


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	30.1%	57	31	2	3.4	-	-
E-2, N-S Junction	-	-	-		-	-	-	-	-	-	-	30.1%	57	31	2	3.4	-	-
1/1	E-W Road EB Left Right	U	D		1	14	-	-	91	1915	319	28.5%	-	-	-	1.0	40.7	2.2
4/1	N-S Road NB Ahead Left	U	C		1	20	-	-	131	1940	453	28.9%	-	-	-	1.2	34.0	2.9
5/1	N-S Road SB Ahead Right	O	A	B	1	53	28	-	316	1940	1050	30.1%	57	31	2	1.1	12.9	4.5
C1 PRC for Signalled Lanes (%): 199.1 PRC Over All Lanes (%): 199.1 Total Delay for Signalled Lanes (pcuHr): 3.39 Total Delay Over All Lanes(pcuHr): 3.39 Cycle Time (s): 90																		

Network Layout Diagram

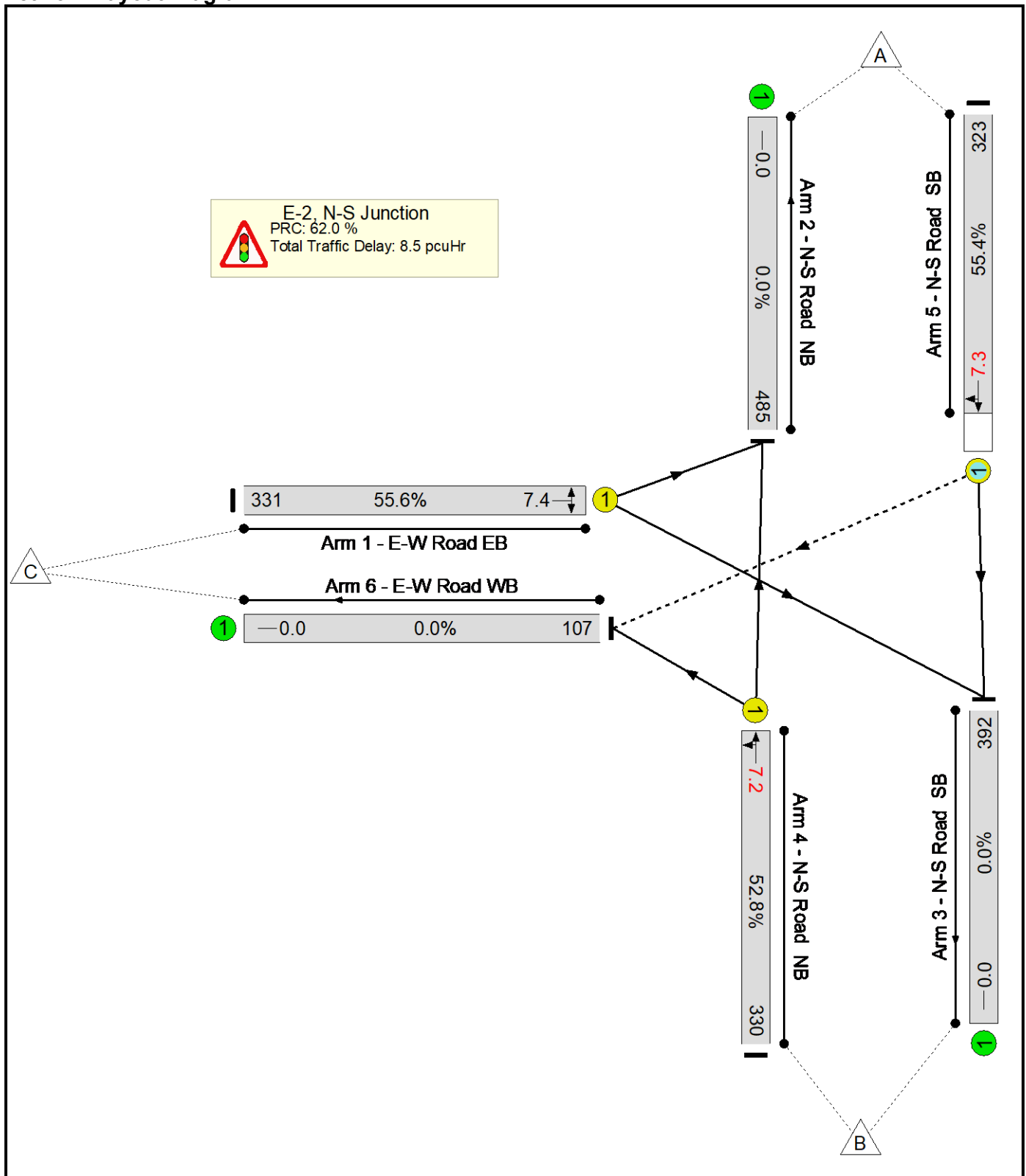


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	61.5%	108	16	3	9.3	-	-
E-2, N-S Junction	-	-	-		-	-	-	-	-	-	-	61.5%	108	16	3	9.3	-	-
1/1	E-W Road EB Left Right	U	D		1	21	-	-	282	1915	468	60.2%	-	-	-	3.1	39.7	6.9
4/1	N-S Road NB Ahead Left	U	C		1	34	-	-	464	1940	754	61.5%	-	-	-	3.6	28.3	10.1
5/1	N-S Road SB Ahead Right	O	A	B	1	46	7	-	311	1940	559	55.6%	108	16	3	2.6	29.7	7.0
			C1	PRC for Signalled Lanes (%):				46.3	Total Delay for Signalled Lanes (pcuHr):				9.32	Cycle Time (s): 90				
				PRC Over All Lanes (%):				46.3	Total Delay Over All Lanes(pcuHr):				9.32					

Network Layout Diagram

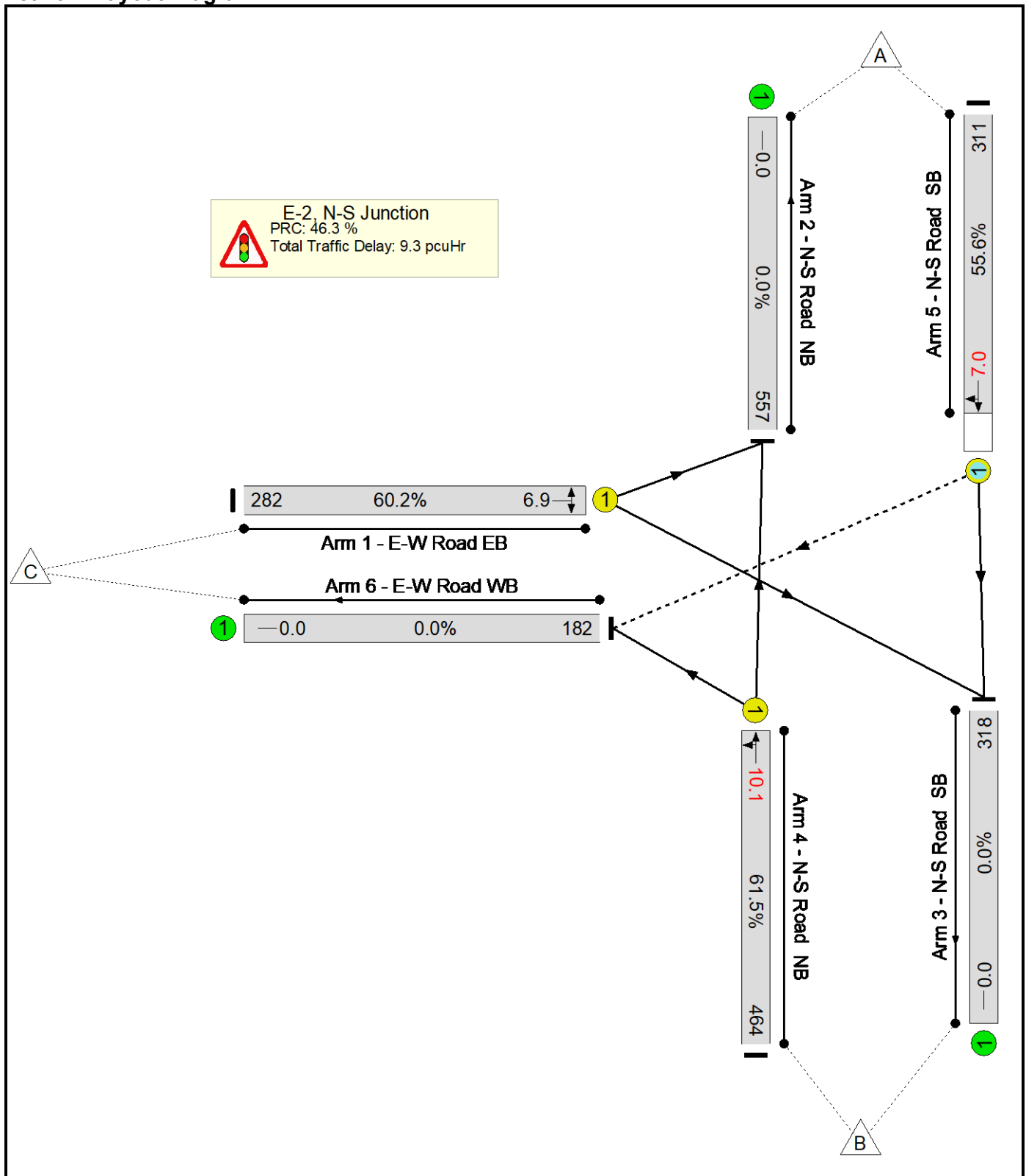


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	-		-	-	-	-	-	-	-	55.6%	80	10	2	8.5	-	-	
E-2, N-S Junction	-	-	-		-	-	-	-	-	-	-	55.6%	80	10	2	8.5	-	-	
1/1	E-W Road EB Left Right	U	D		1	27	-	-	331	1915	596	55.6%	-	-	-	3.0	32.6	7.4	
4/1	N-S Road NB Ahead Left	U	C		1	28	-	-	330	1940	625	52.8%	-	-	-	2.8	31.0	7.2	
5/1	N-S Road SB Ahead Right	O	A	B	1	40	7	-	323	1940	583	55.4%	80	10	2	2.7	30.2	7.3	
			C1	PRC for Signalled Lanes (%):				62.0	Total Delay for Signalled Lanes (pcuHr):				8.55	Cycle Time (s):		90			
				PRC Over All Lanes (%):				62.0	Total Delay Over All Lanes(pcuHr):				8.55						

Network Layout Diagram

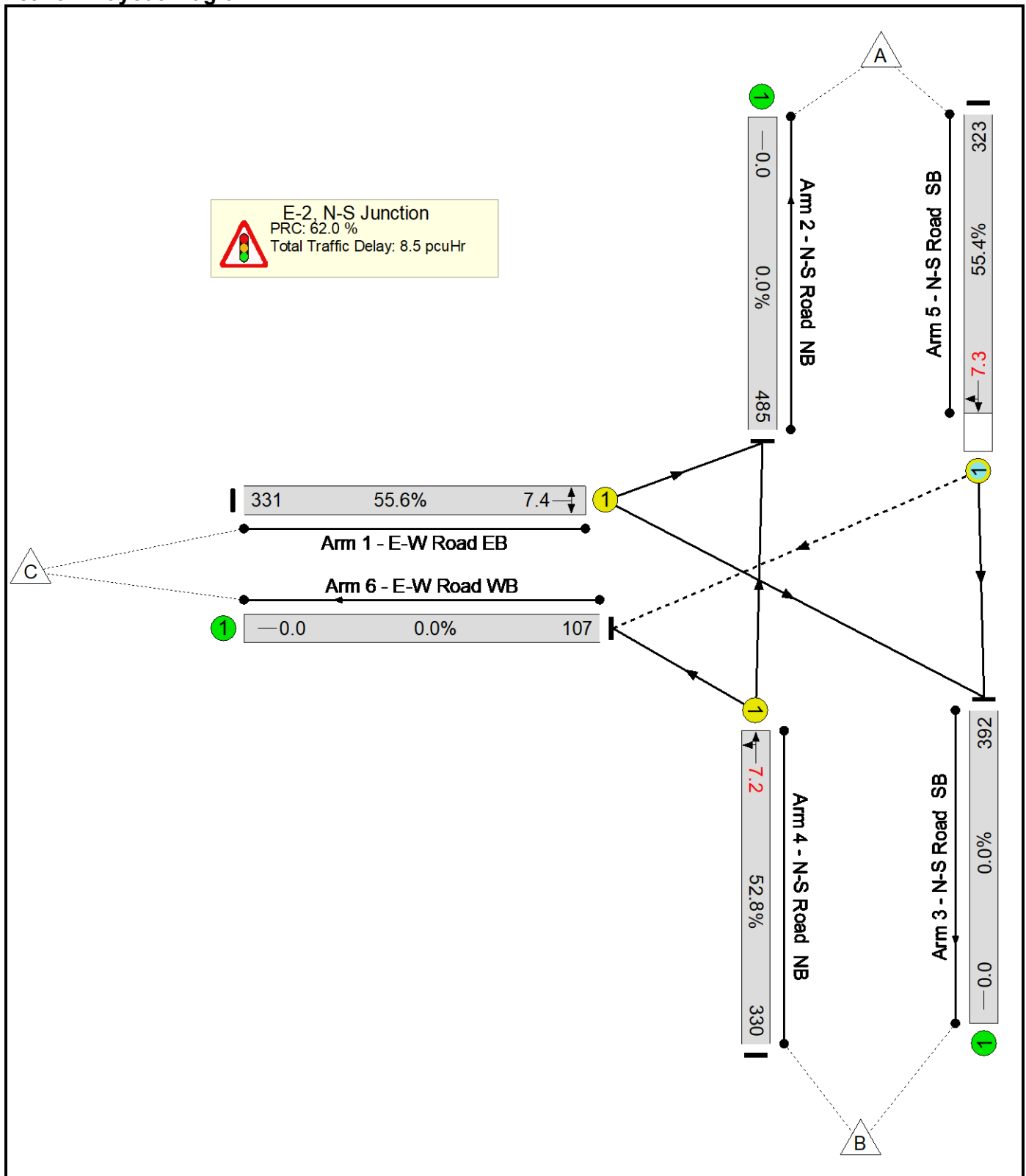


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	-		-	-	-	-	-	-	-	61.5%	108	16	3	9.3	-	-	
E-2, N-S Junction	-	-	-		-	-	-	-	-	-	-	61.5%	108	16	3	9.3	-	-	
1/1	E-W Road EB Left Right	U	D		1	21	-	-	282	1915	468	60.2%	-	-	-	3.1	39.7	6.9	
4/1	N-S Road NB Ahead Left	U	C		1	34	-	-	464	1940	754	61.5%	-	-	-	3.6	28.3	10.1	
5/1	N-S Road SB Ahead Right	O	A	B	1	46	7	-	311	1940	559	55.6%	108	16	3	2.6	29.7	7.0	
			C1	PRC for Signalled Lanes (%):				46.3	Total Delay for Signalled Lanes (pcuHr):				9.32	Cycle Time (s):		90			
				PRC Over All Lanes (%):				46.3	Total Delay Over All Lanes(pcuHr):				9.32						

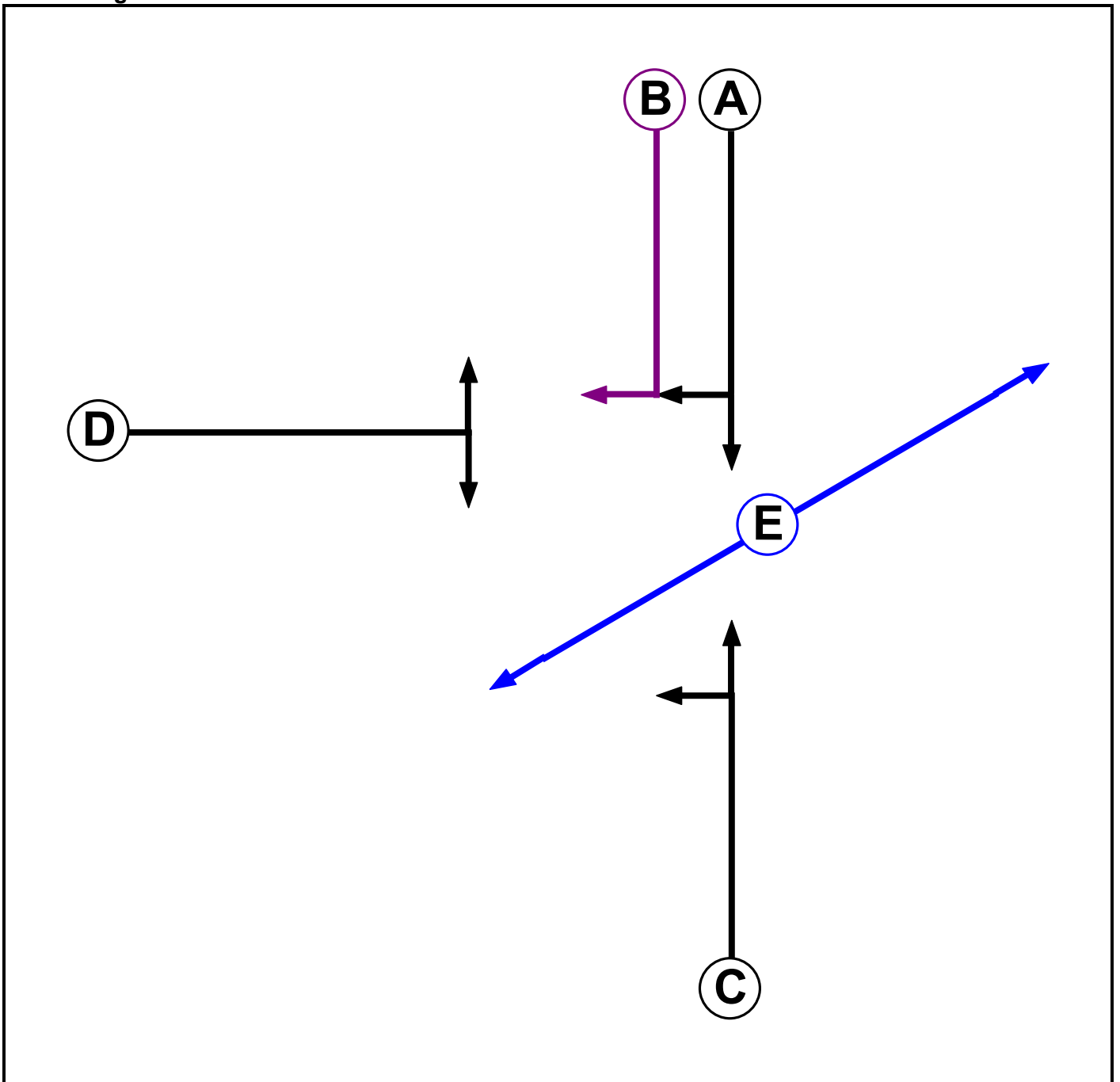
Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	55.6%	80	10	2	8.5	-	-
E-2, N-S Junction	-	-	-		-	-	-	-	-	-	-	55.6%	80	10	2	8.5	-	-
1/1	E-W Road EB Left Right	U	D		1	27	-	-	331	1915	596	55.6%	-	-	-	3.0	32.6	7.4
4/1	N-S Road NB Ahead Left	U	C		1	28	-	-	330	1940	625	52.8%	-	-	-	2.8	31.0	7.2
5/1	N-S Road SB Ahead Right	O	A	B	1	40	7	-	323	1940	583	55.4%	80	10	2	2.7	30.2	7.3
			C1	PRC for Signalled Lanes (%):				62.0	Total Delay for Signalled Lanes (pcuHr):				8.55	Cycle Time (s): 90				
				PRC Over All Lanes (%):				62.0	Total Delay Over All Lanes(pcuHr):				8.55					

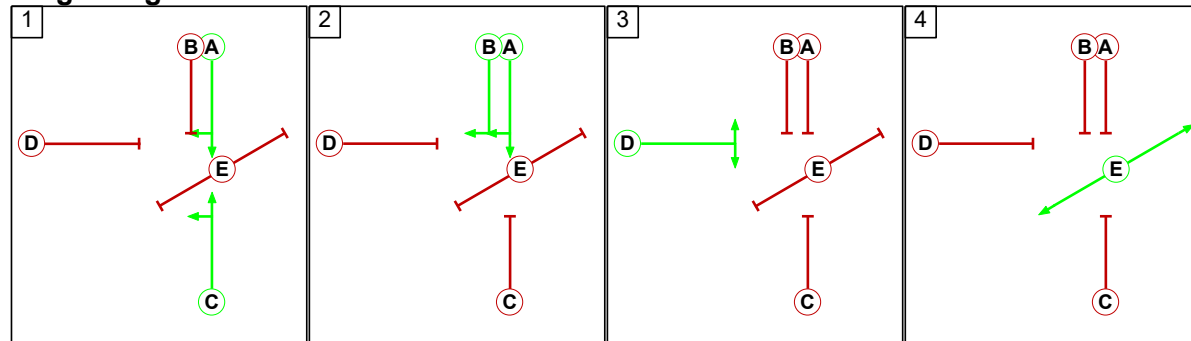


Basic Results Summary

Phase Intergreens Matrix

Terminating Phase	Starting Phase					
		A	B	C	D	E
	A		-	-	5	5
	B	-		5	5	5
	C	-	5		5	5
	D	5	5	5		6
	E	5	5	5	5	

Stage Diagram



Scenario 1: 'DN+CT OY+5_AM' (FG3: 'DN+CT OY+5_AM', Plan 1: 'Network Control Plan 1')

Phase Timings

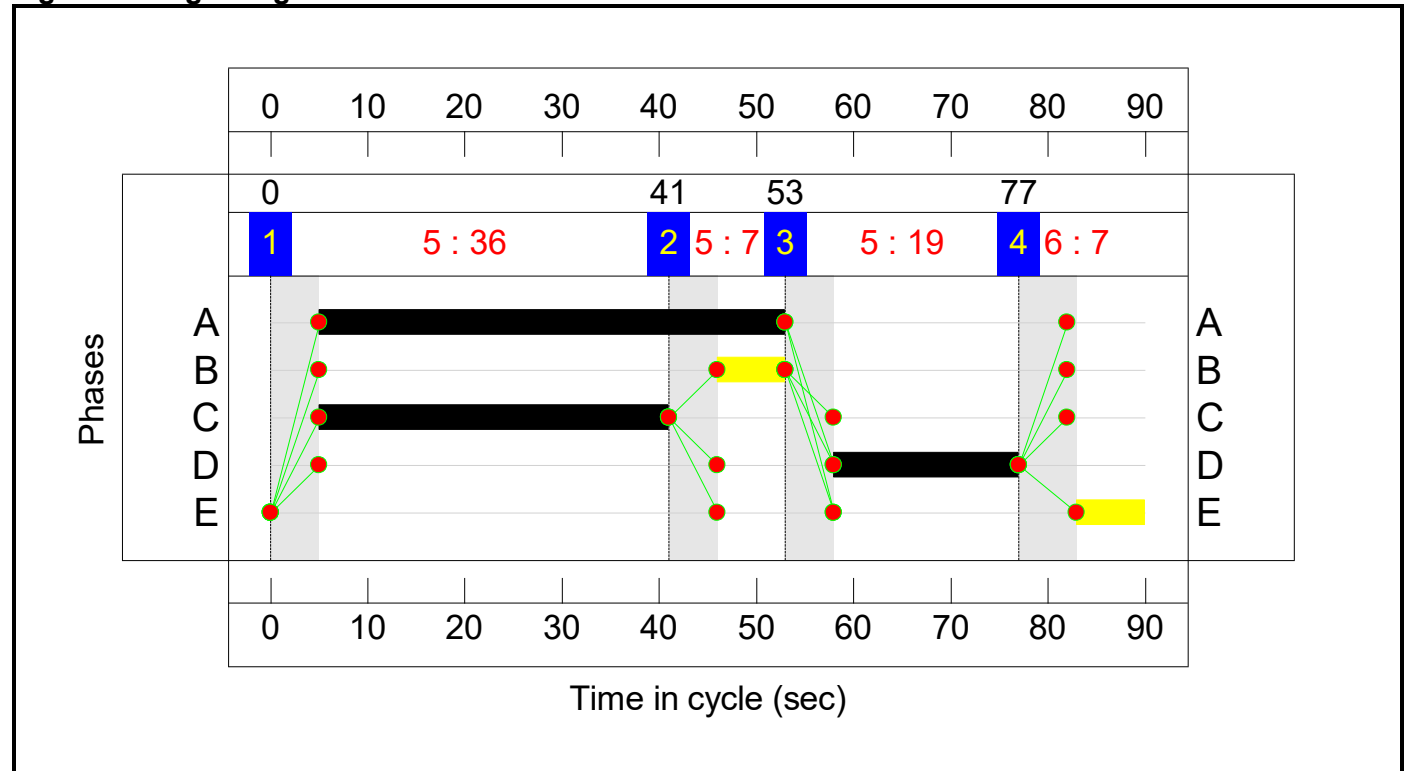
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	N-S Road SB Ahead Right	Traffic	48	5	53
B	N-S Road SB Right IGA	Ind. Arrow	7	46	53
C	N-S Road NB Ahead Left	Traffic	36	5	41
D	E-W Road EB Left Right	Traffic	19	58	77
E	Pedestrians across	Pedestrian	7	83	0

Basic Results Summary

Bonus Green Times

No Bonus Greens are defined For Scenario 1

Signal Timings Diagram



Scenario 2: 'DN+CT OY+5_PM' (FG4: 'DN+CT OY+5_PM', Plan 1: 'Network Control Plan 1')

Phase Timings

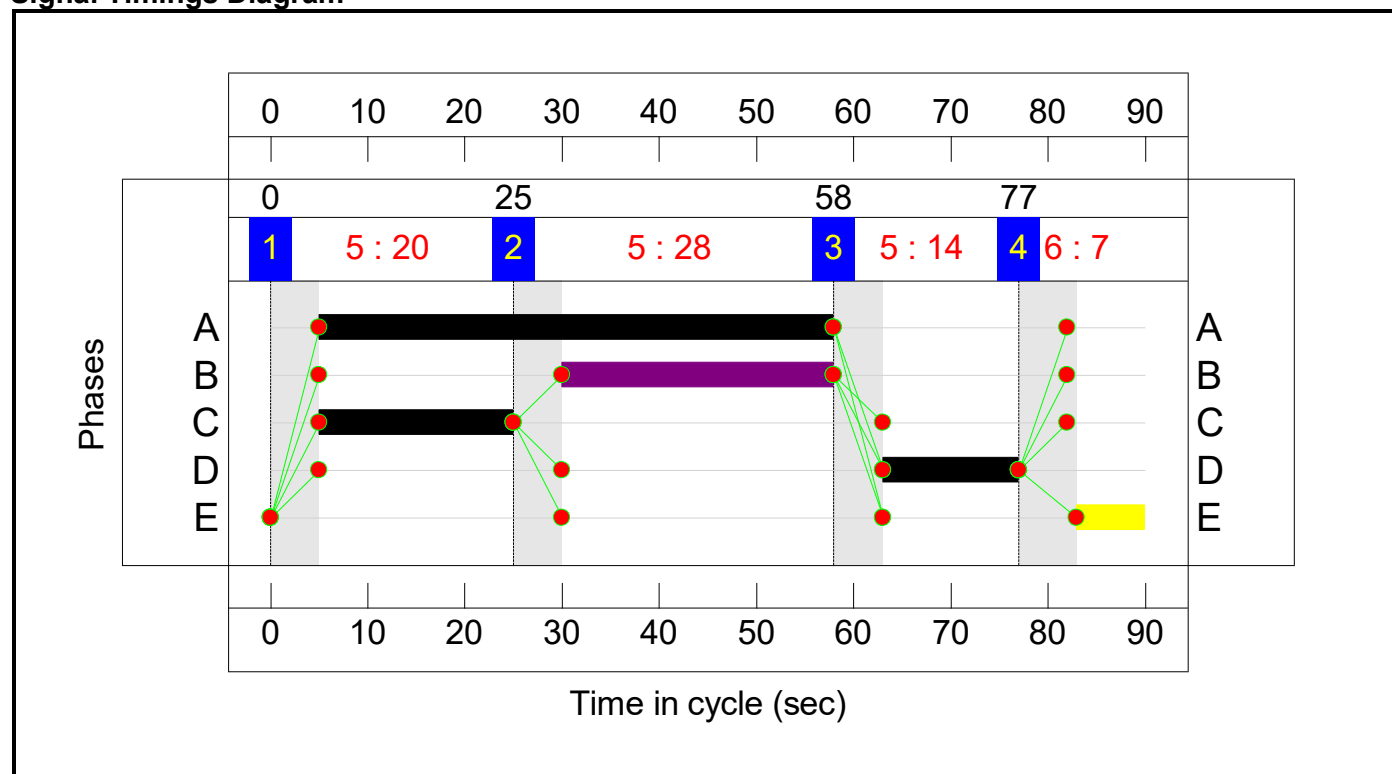
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	N-S Road SB Ahead Right	Traffic	53	5	58
B	N-S Road SB Right IGA	Ind. Arrow	28	30	58
C	N-S Road NB Ahead Left	Traffic	20	5	25
D	E-W Road EB Left Right	Traffic	14	63	77
E	Pedestrians across	Pedestrian	7	83	0

Basic Results Summary

Bonus Green Times

No Bonus Greens are defined For Scenario 2

Signal Timings Diagram



Scenario 3: 'DN+AT OY+5_AM' (FG5: 'DN+AT OY+5_AM', Plan 1: 'Network Control Plan 1')

Phase Timings

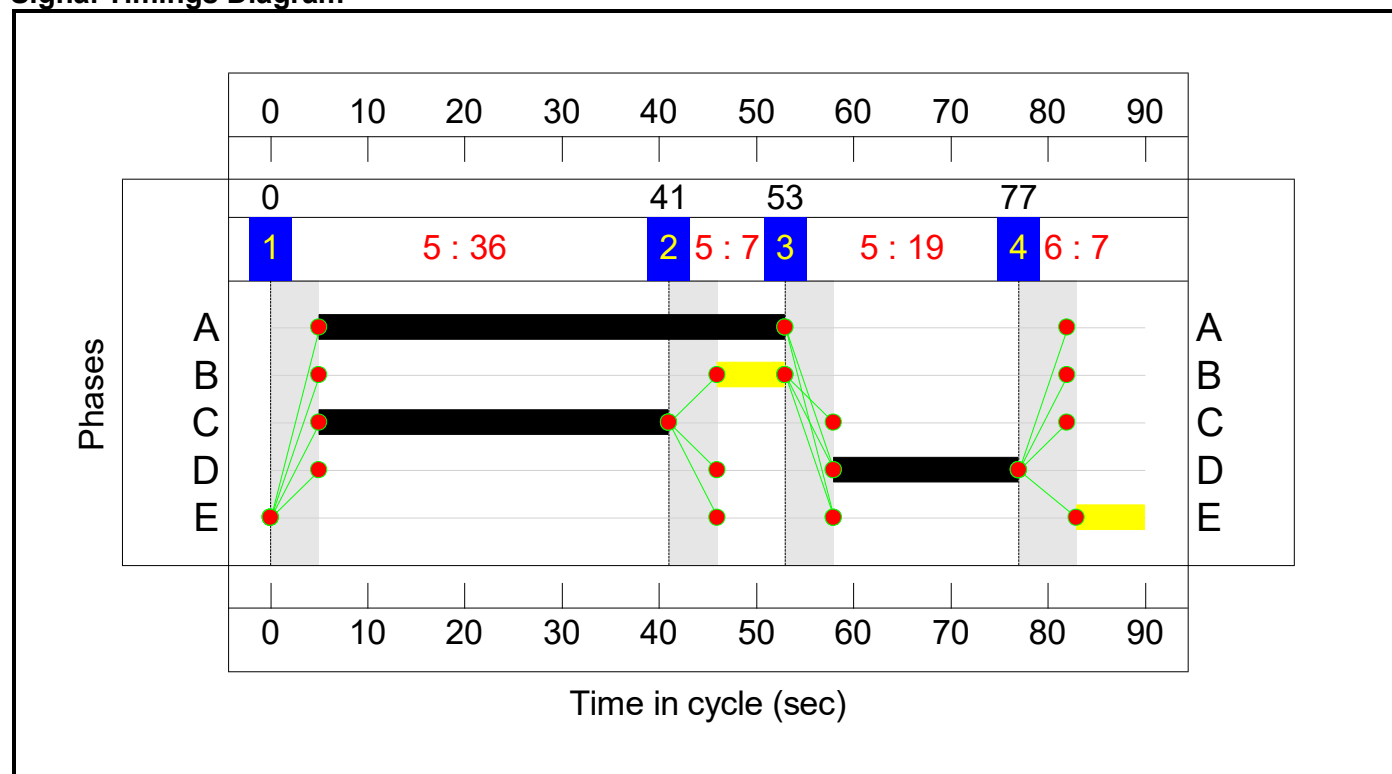
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	N-S Road SB Ahead Right	Traffic	48	5	53
B	N-S Road SB Right IGA	Ind. Arrow	7	46	53
C	N-S Road NB Ahead Left	Traffic	36	5	41
D	E-W Road EB Left Right	Traffic	19	58	77
E	Pedestrians across	Pedestrian	7	83	0

Basic Results Summary

Bonus Green Times

No Bonus Greens are defined For Scenario 3

Signal Timings Diagram



Scenario 4: 'DN+AT OY+5_PM' (FG6: 'DN+AT OY+5_PM', Plan 1: 'Network Control Plan 1')

Phase Timings

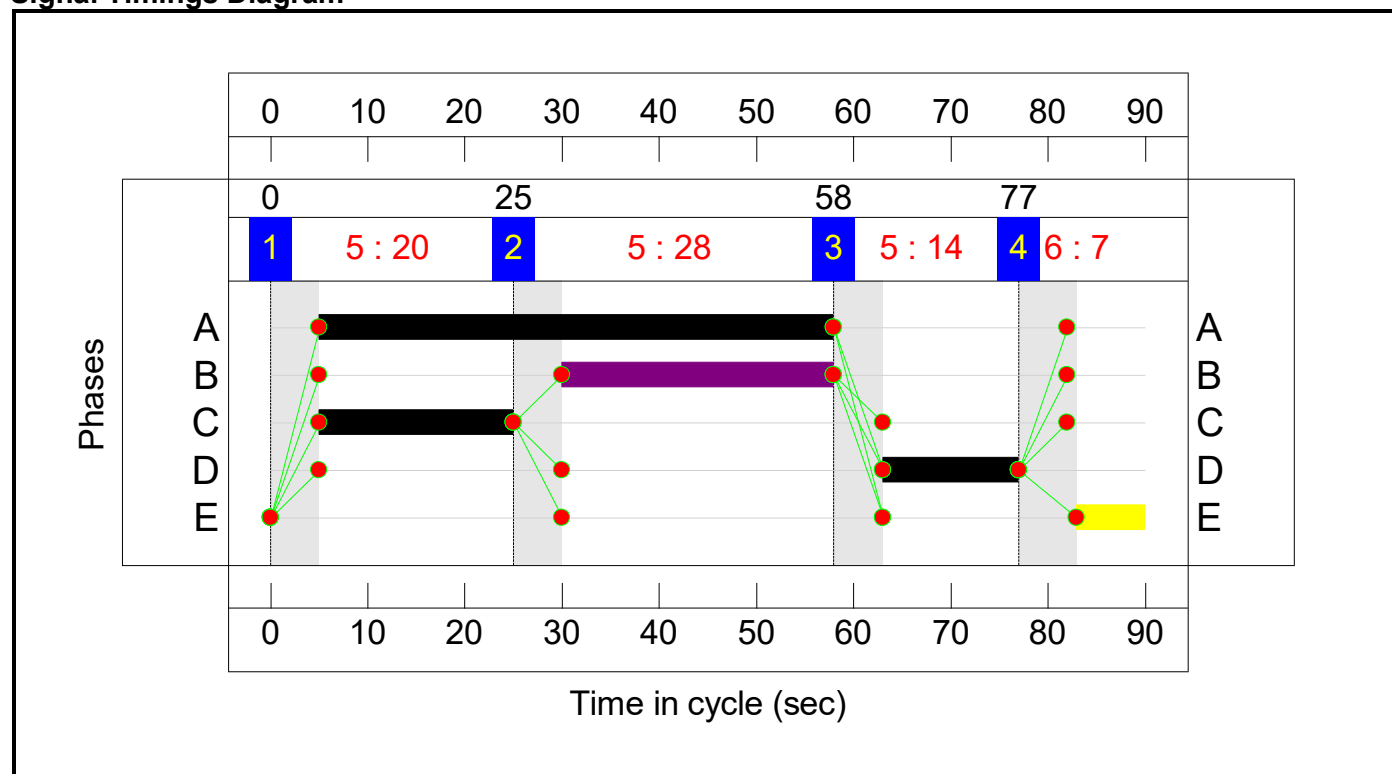
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	N-S Road SB Ahead Right	Traffic	53	5	58
B	N-S Road SB Right IGA	Ind. Arrow	28	30	58
C	N-S Road NB Ahead Left	Traffic	20	5	25
D	E-W Road EB Left Right	Traffic	14	63	77
E	Pedestrians across	Pedestrian	7	83	0

Basic Results Summary

Bonus Green Times

No Bonus Greens are defined For Scenario 4

Signal Timings Diagram



Scenario 5: 'DN+CT OY+15_AM' (FG9: 'DN+CT OY+15_AM', Plan 1: 'Network Control Plan 1')

Phase Timings

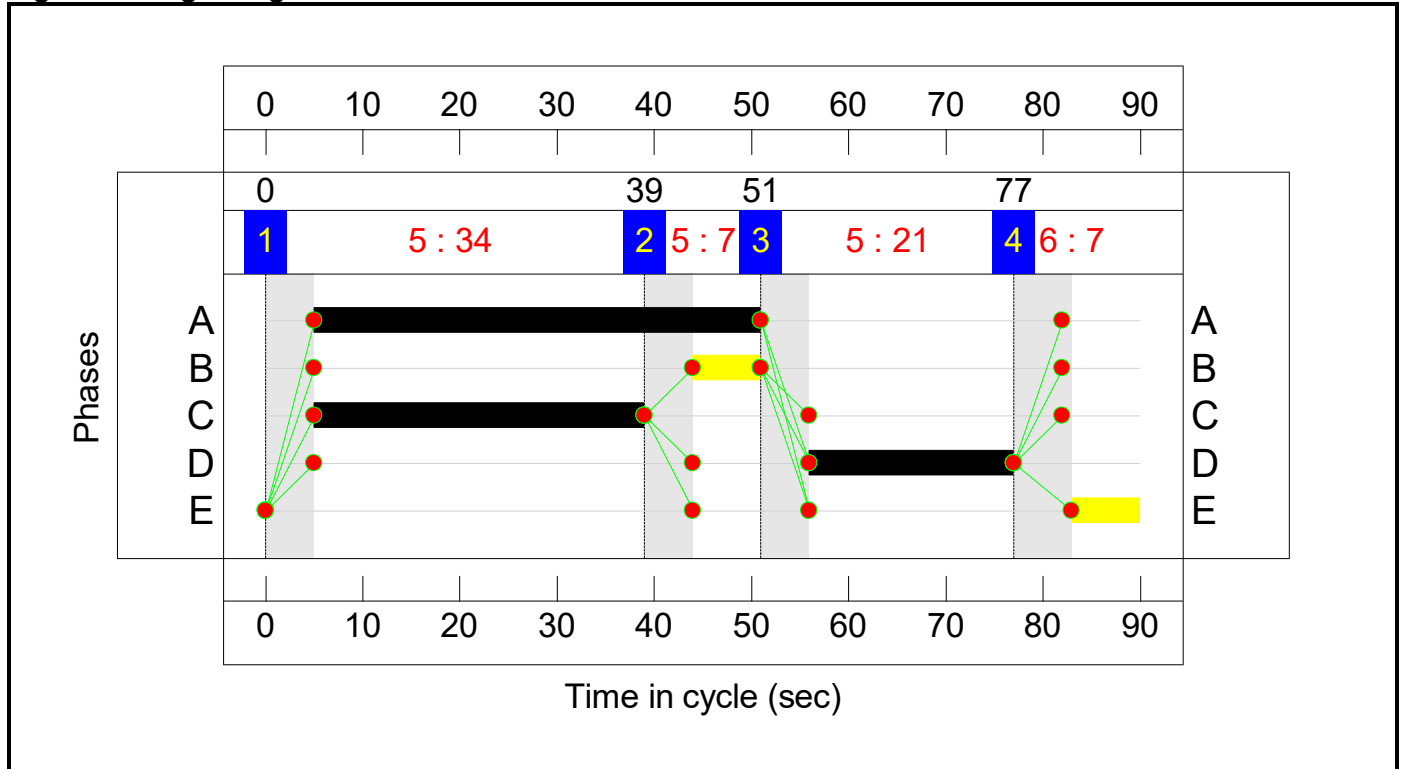
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	N-S Road SB Ahead Right	Traffic	46	5	51
B	N-S Road SB Right IGA	Ind. Arrow	7	44	51
C	N-S Road NB Ahead Left	Traffic	34	5	39
D	E-W Road EB Left Right	Traffic	21	56	77
E	Pedestrians across	Pedestrian	7	83	0

Basic Results Summary

Bonus Green Times

No Bonus Greens are defined For Scenario 5

Signal Timings Diagram



Scenario 6: 'DN+CT OY+15_PM' (FG10: 'DN+CT OY+15_PM', Plan 1: 'Network Control Plan 1')

Phase Timings

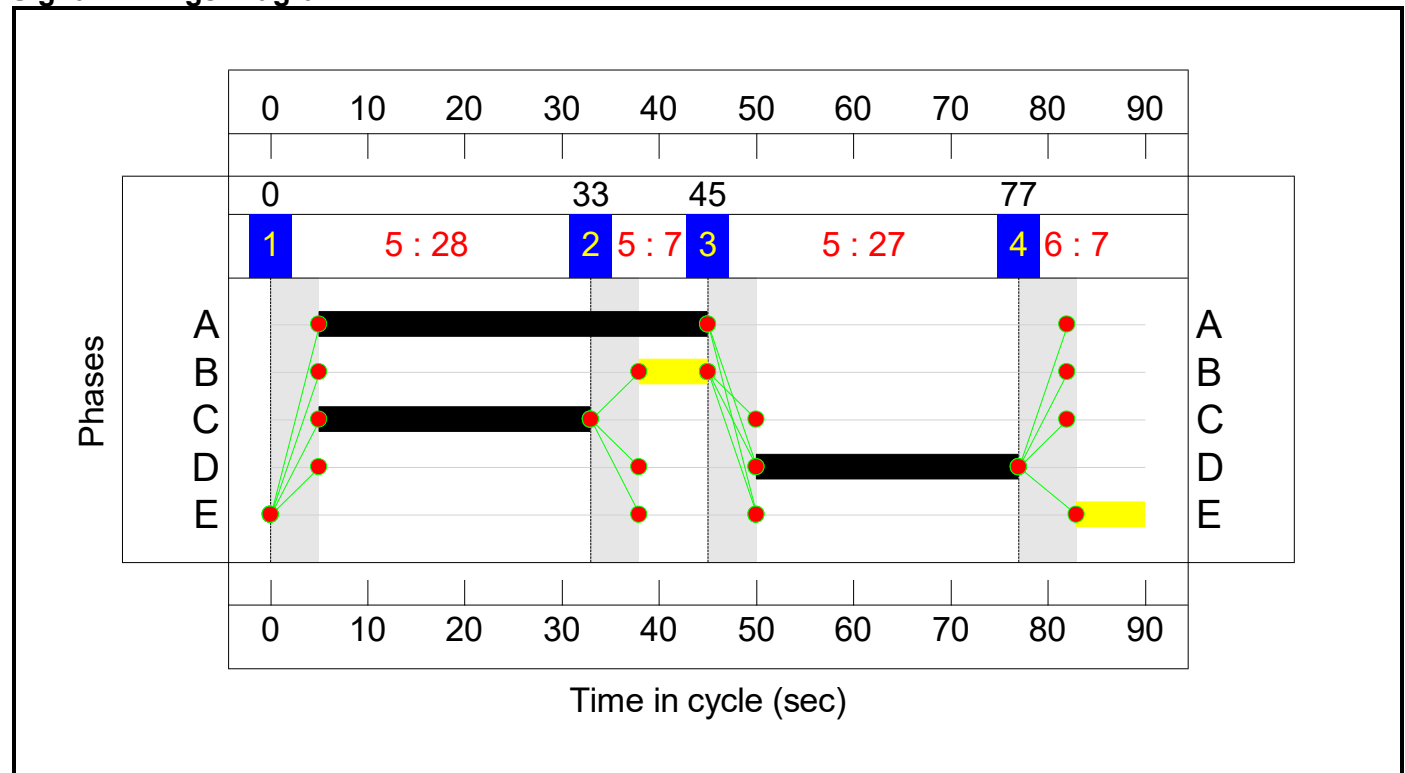
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	N-S Road SB Ahead Right	Traffic	40	5	45
B	N-S Road SB Right IGA	Ind. Arrow	7	38	45
C	N-S Road NB Ahead Left	Traffic	28	5	33
D	E-W Road EB Left Right	Traffic	27	50	77
E	Pedestrians across	Pedestrian	7	83	0

Basic Results Summary

Bonus Green Times

No Bonus Greens are defined For Scenario 6

Signal Timings Diagram



Scenario 7: 'DN+AT OY+15_AM' (FG11: 'DN+AT OY+15_AM', Plan 1: 'Network Control Plan 1')

Phase Timings

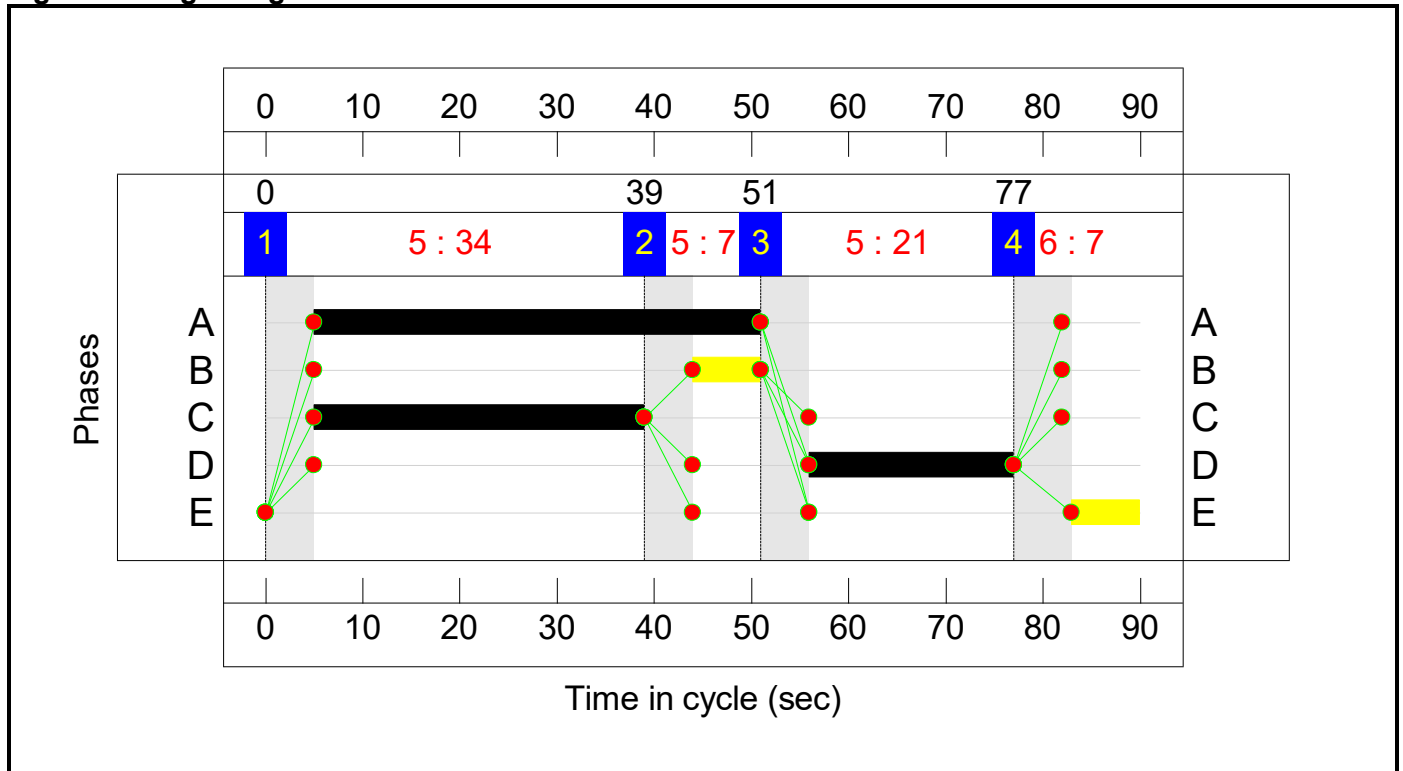
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	N-S Road SB Ahead Right	Traffic	46	5	51
B	N-S Road SB Right IGA	Ind. Arrow	7	44	51
C	N-S Road NB Ahead Left	Traffic	34	5	39
D	E-W Road EB Left Right	Traffic	21	56	77
E	Pedestrians across	Pedestrian	7	83	0

Basic Results Summary

Bonus Green Times

No Bonus Greens are defined For Scenario 7

Signal Timings Diagram



Scenario 8: 'DN+AT OY+15_PM' (FG12: 'DN+AT OY+15_PM', Plan 1: 'Network Control Plan 1')

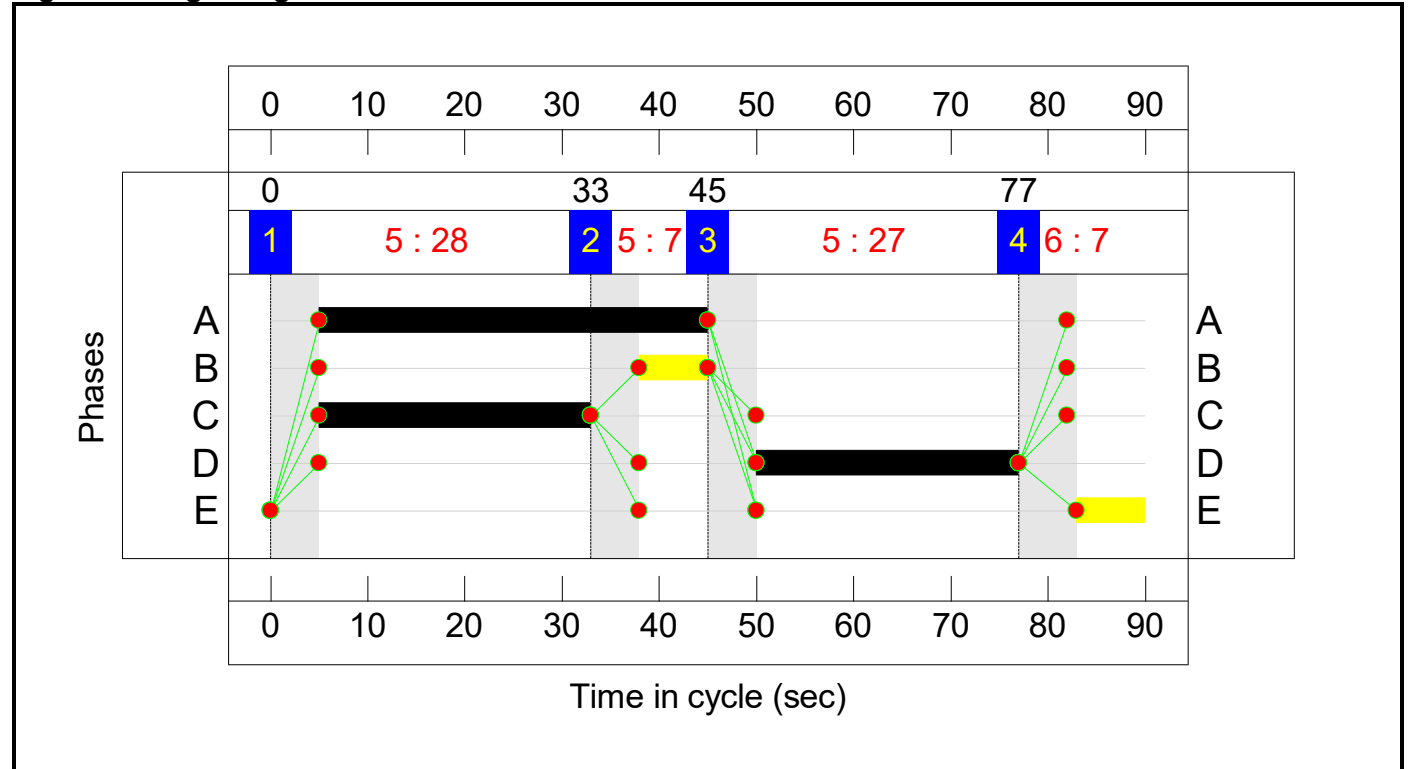
Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	N-S Road SB Ahead Right	Traffic	40	5	45
B	N-S Road SB Right IGA	Ind. Arrow	7	38	45
C	N-S Road NB Ahead Left	Traffic	28	5	33
D	E-W Road EB Left Right	Traffic	27	50	77
E	Pedestrians across	Pedestrian	7	83	0

Bonus Green Times

No Bonus Greens are defined For Scenario 8

Signal Timings Diagram



Basic Results Summary
Basic Results Summary

User and Project Details

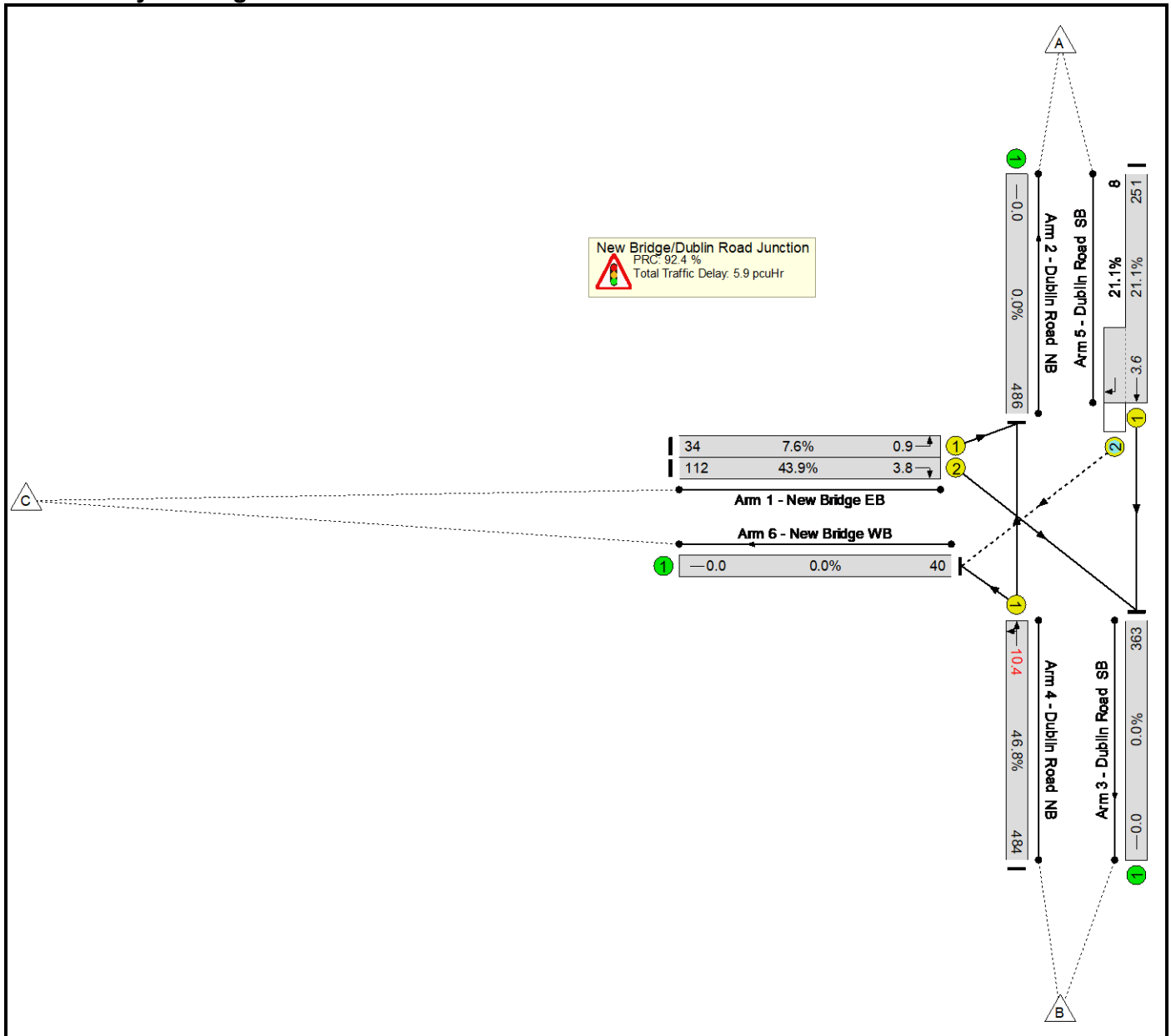
Project:	
Title:	
Location:	
Additional detail:	
File name:	J3 M11 Bridge - Dublin Road N.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	DN+CT OY+5_AM	DN+CT OY+5_AM	Network Control Plan 1	08:00 - 09:00	120	92.4	5.86
2	DN+CT OY+5_PM	DN+CT OY+5_PM	Network Control Plan 1	16:00 - 17:00	120	149.0	3.76
3	DN+AT OY+5_AM	DN+AT OY+5_AM	Network Control Plan 1	08:00 - 09:00	120	92.4	5.86
4	DN+AT OY+5_PM	DN+AT OY+5_PM	Network Control Plan 1	16:00 - 17:00	120	149.0	3.76
5	DN+CT OY+15_AM	DN+CT OY+15_AM	Network Control Plan 1	08:00 - 09:00	120	16.9	16.58
6	DN+CT OY+15_PM	DN+CT OY+15_PM	Network Control Plan 1	16:00 - 17:00	120	42.8	12.91
7	DN+AT OY+15_AM	DN+AT OY+15_AM	Network Control Plan 1	08:00 - 09:00	120	16.9	16.58
8	DN+AT OY+15_PM	DN+AT OY+15_PM	Network Control Plan 1	16:00 - 17:00	120	42.8	12.91

Scenario 1: 'DN+CT OY+5_AM' (FG3: 'DN+CT OY+5_AM', Plan 1: 'Network Control Plan 1')

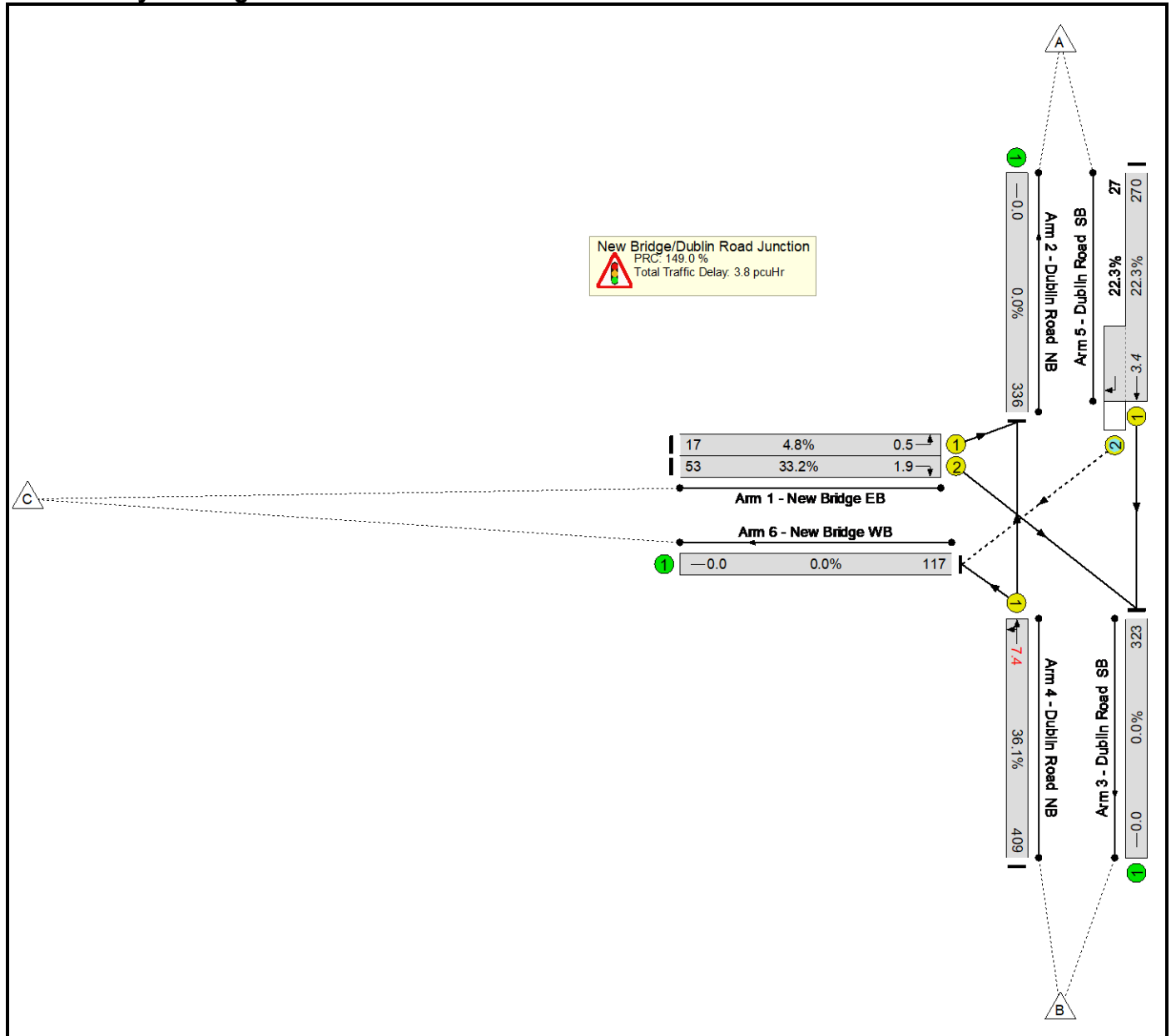
Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	46.8%	7	1	0	5.9	-	-
New Bridge/Dublin Road Junction	-	-	-		-	-	-	-	-	-	-	46.8%	7	1	0	5.9	-	-
1/1	New Bridge EB Left	U	E		1	27	-	-	34	1915	447	7.6%	-	-	-	0.4	40.3	0.9
1/2	New Bridge EB Right	U	F		1	15	-	-	112	1915	255	43.9%	-	-	-	1.9	60.4	3.8
4/1	Dublin Road NB Ahead Left	U	C		1	63	-	-	484	1940	1035	46.8%	-	-	-	2.8	20.7	10.4
5/1+5/2	Dublin Road SB Ahead Right	U+O	A	B	1	75	7:7	-	259	1915:1915	1189+38	21.1 : 21.1%	7	1	0	0.8	11.4	3.6
C1 PRC for Signalled Lanes (%): 92.4 Total Delay for Signalled Lanes (pcuHr): 5.86 Cycle Time (s): 120 PRC Over All Lanes (%): 92.4 Total Delay Over All Lanes(pcuHr): 5.86																		

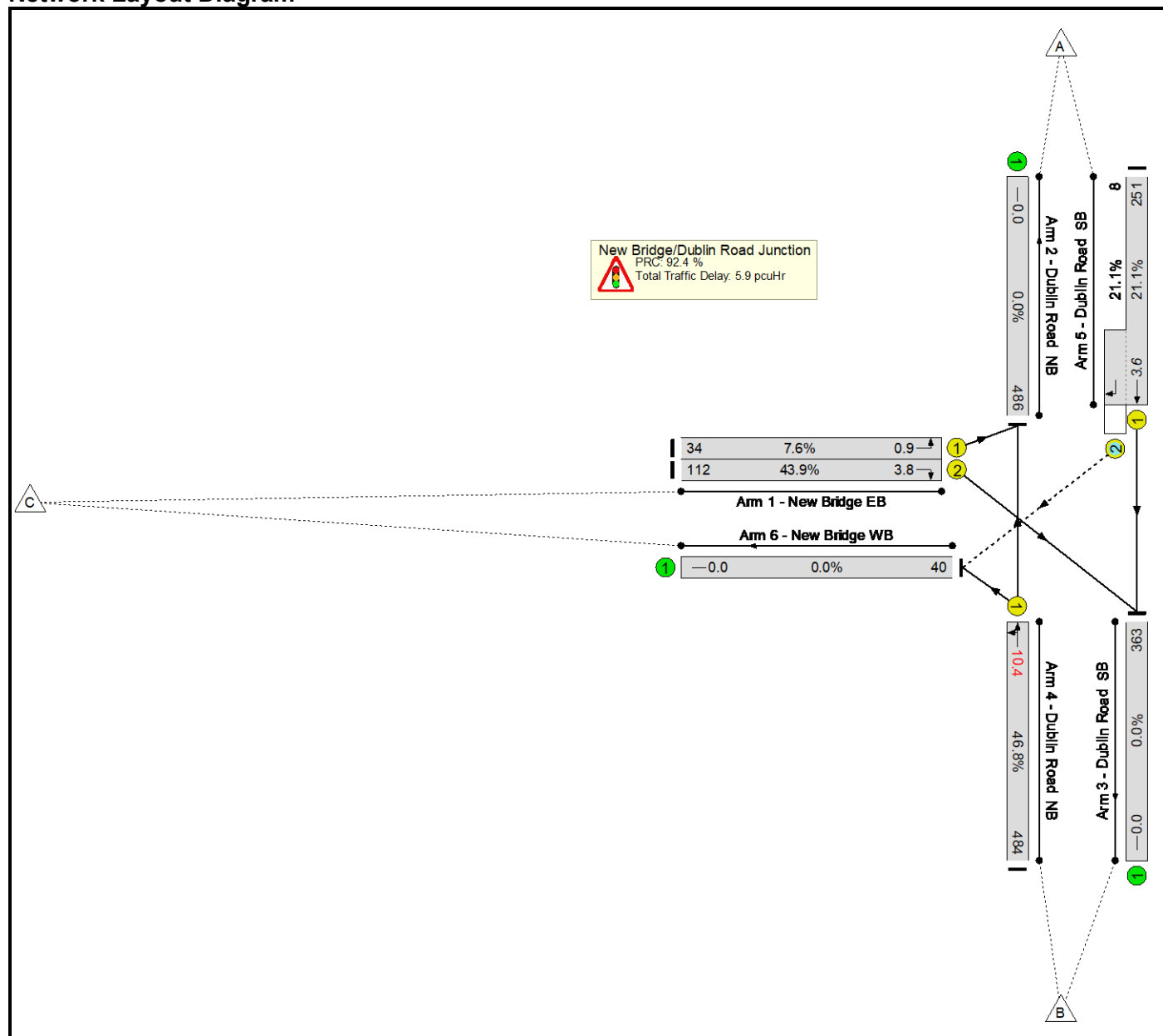
Network Layout Diagram

Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	36.1%	24	2	0	3.8	-	-
New Bridge/Dublin Road Junction	-	-	-		-	-	-	-	-	-	-	36.1%	24	2	0	3.8	-	-
1/1	New Bridge EB Left	U	E		1	21	-	-	17	1915	351	4.8%	-	-	-	0.2	45.8	0.5
1/2	New Bridge EB Right	U	F		1	9	-	-	53	1915	160	33.2%	-	-	-	1.0	68.7	1.9
4/1	Dublin Road NB Ahead Left	U	C		1	69	-	-	409	1940	1132	36.1%	-	-	-	1.8	15.7	7.4
5/1+5/2	Dublin Road SB Ahead Right	U+O	A	B	1	81	7:7	-	297	1915:1915	1212+121	22.3 : 22.3%	24	2	0	0.8	9.1	3.4
C1 PRC for Signalled Lanes (%): 149.0 PRC Over All Lanes (%): 149.0 Total Delay for Signalled Lanes (pcuHr): 3.76 Total Delay Over All Lanes(pcuHr): 3.76 Cycle Time (s): 120																		

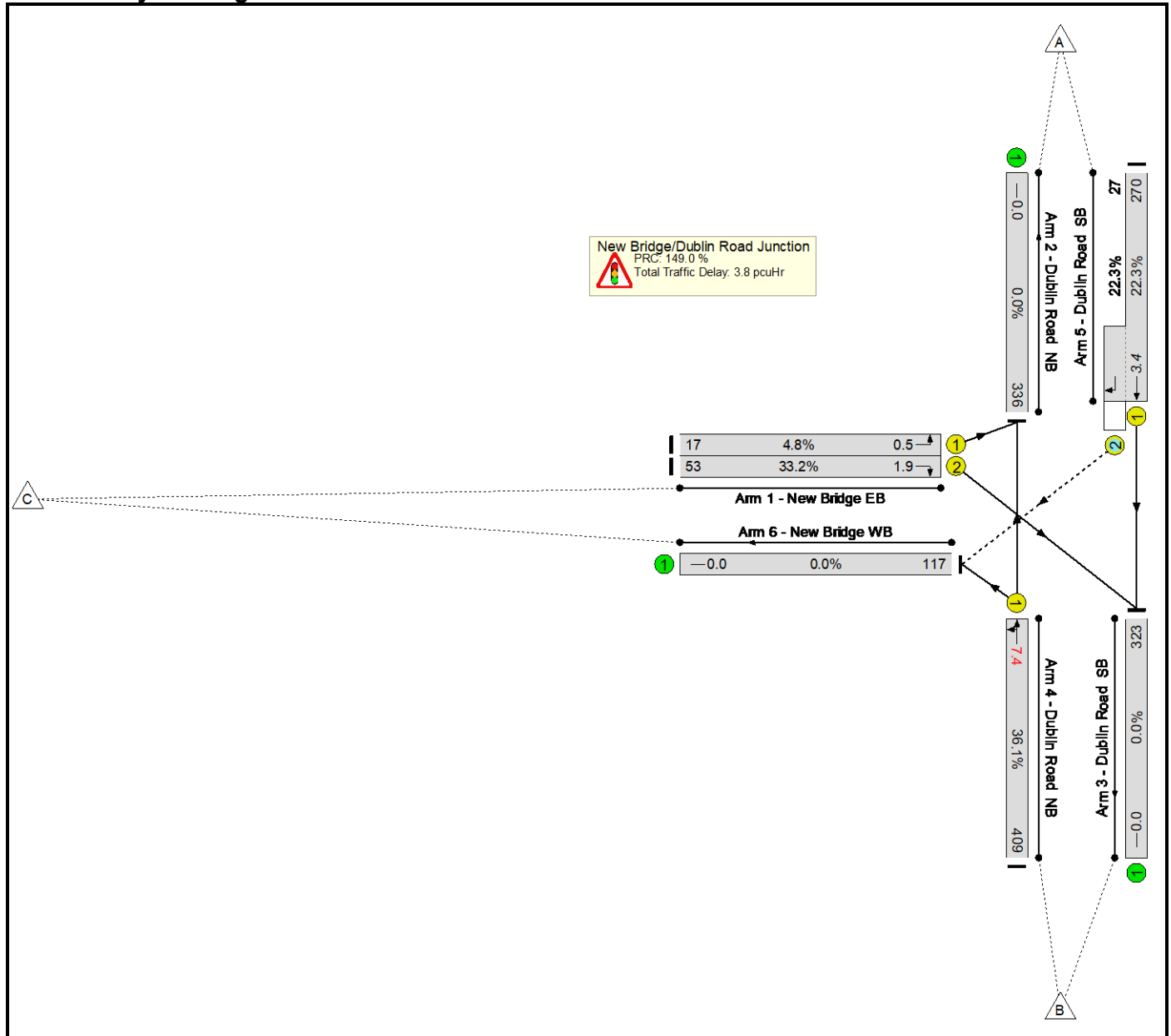
Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	46.8%	7	1	0	5.9	-	-
New Bridge/Dublin Road Junction	-	-	-		-	-	-	-	-	-	-	46.8%	7	1	0	5.9	-	-
1/1	New Bridge EB Left	U	E		1	27	-	-	34	1915	447	7.6%	-	-	-	0.4	40.3	0.9
1/2	New Bridge EB Right	U	F		1	15	-	-	112	1915	255	43.9%	-	-	-	1.9	60.4	3.8
4/1	Dublin Road NB Ahead Left	U	C		1	63	-	-	484	1940	1035	46.8%	-	-	-	2.8	20.7	10.4
5/1+5/2	Dublin Road SB Ahead Right	U+O	A	B	1	75	7:7	-	259	1915:1915	1189+38	21.1 : 21.1%	7	1	0	0.8	11.4	3.6
C1 PRC for Signalled Lanes (%): 92.4 Total Delay for Signalled Lanes (pcuHr): 5.86 Cycle Time (s): 120 PRC Over All Lanes (%): 92.4 Total Delay Over All Lanes(pcuHr): 5.86																		

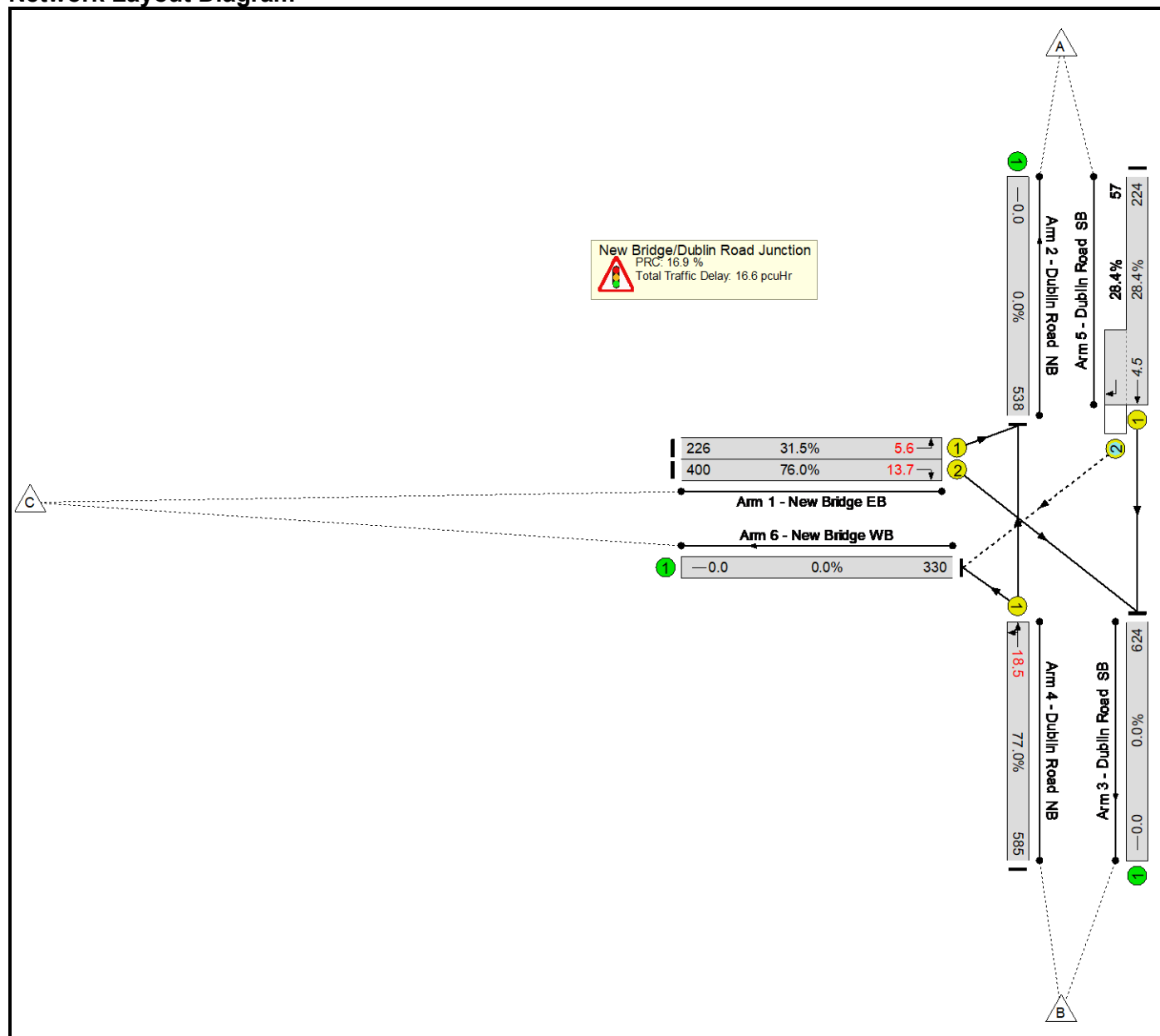
Network Layout Diagram

Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	36.1%	24	2	0	3.8	-	-
New Bridge/Dublin Road Junction	-	-	-		-	-	-	-	-	-	-	36.1%	24	2	0	3.8	-	-
1/1	New Bridge EB Left	U	E		1	21	-	-	17	1915	351	4.8%	-	-	-	0.2	45.8	0.5
1/2	New Bridge EB Right	U	F		1	9	-	-	53	1915	160	33.2%	-	-	-	1.0	68.7	1.9
4/1	Dublin Road NB Ahead Left	U	C		1	69	-	-	409	1940	1132	36.1%	-	-	-	1.8	15.7	7.4
5/1+5/2	Dublin Road SB Ahead Right	U+O	A	B	1	81	7:7	-	297	1915:1915	1212+121	22.3 : 22.3%	24	2	0	0.8	9.1	3.4
C1 PRC for Signalled Lanes (%): 149.0 PRC Over All Lanes (%): 149.0 Total Delay for Signalled Lanes (pcuHr): 3.76 Total Delay Over All Lanes(pcuHr): 3.76 Cycle Time (s): 120																		

Network Layout Diagram

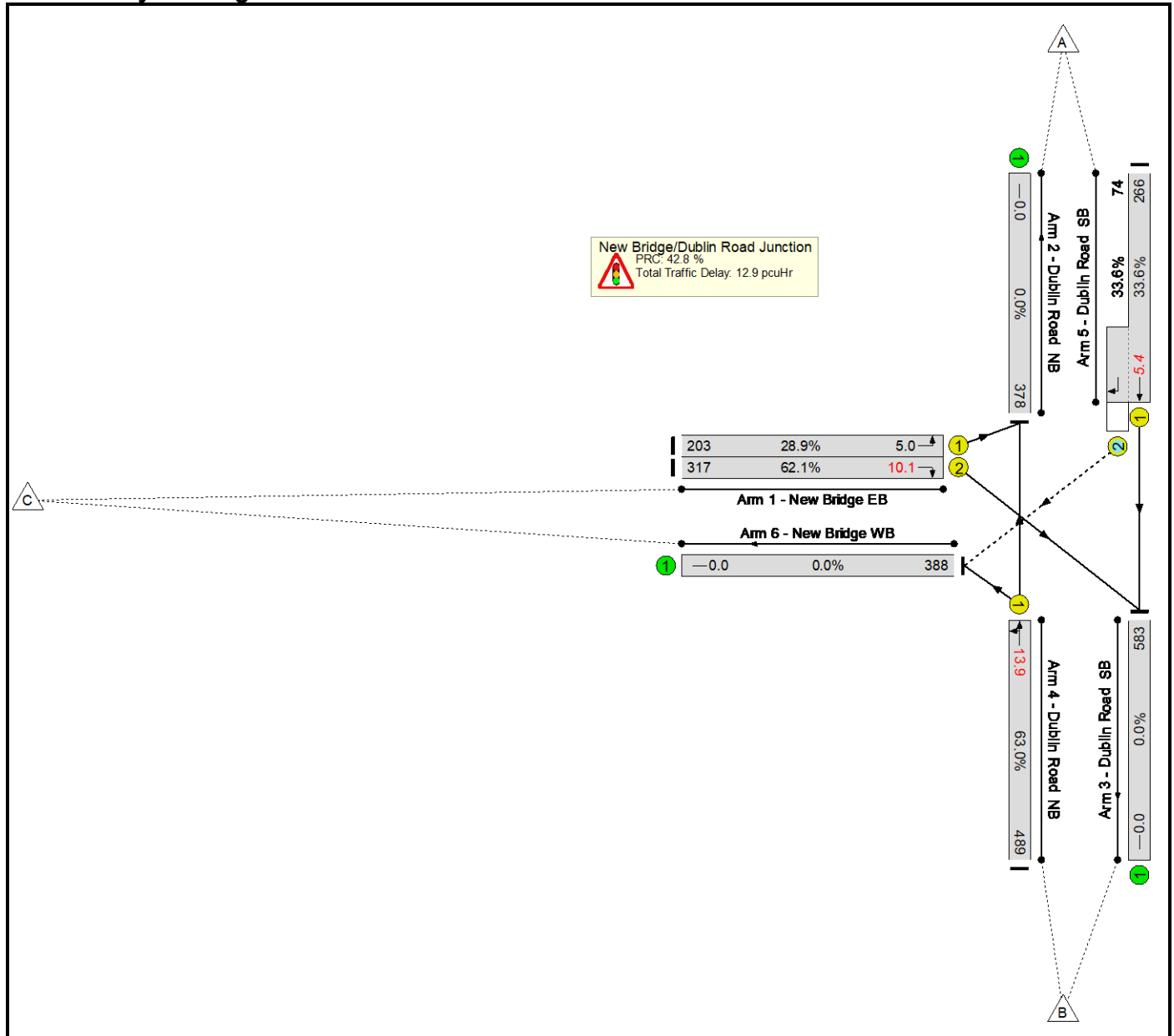


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	77.0%	51	5	1	16.6	-	-
New Bridge/Dublin Road Junction	-	-	-		-	-	-	-	-	-	-	77.0%	51	5	1	16.6	-	-
1/1	New Bridge EB Left	U	E		1	44	-	-	226	1915	718	31.5%	-	-	-	1.9	30.2	5.6
1/2	New Bridge EB Right	U	F		1	32	-	-	400	1915	527	76.0%	-	-	-	6.0	53.7	13.7
4/1	Dublin Road NB Ahead Left	U	C		1	46	-	-	585	1940	760	77.0%	-	-	-	6.8	41.9	18.5
5/1+5/2	Dublin Road SB Ahead Right	U+O	A	B	1	58	7:7	-	281	1915:1915	790+201	28.4 : 28.4%	51	5	1	1.9	24.4	4.5
C1 PRC for Signalled Lanes (%): 16.9 PRC Over All Lanes (%): 16.9 Total Delay for Signalled Lanes (pcuHr): 16.58 Total Delay Over All Lanes(pcuHr): 16.58 Cycle Time (s): 120																		

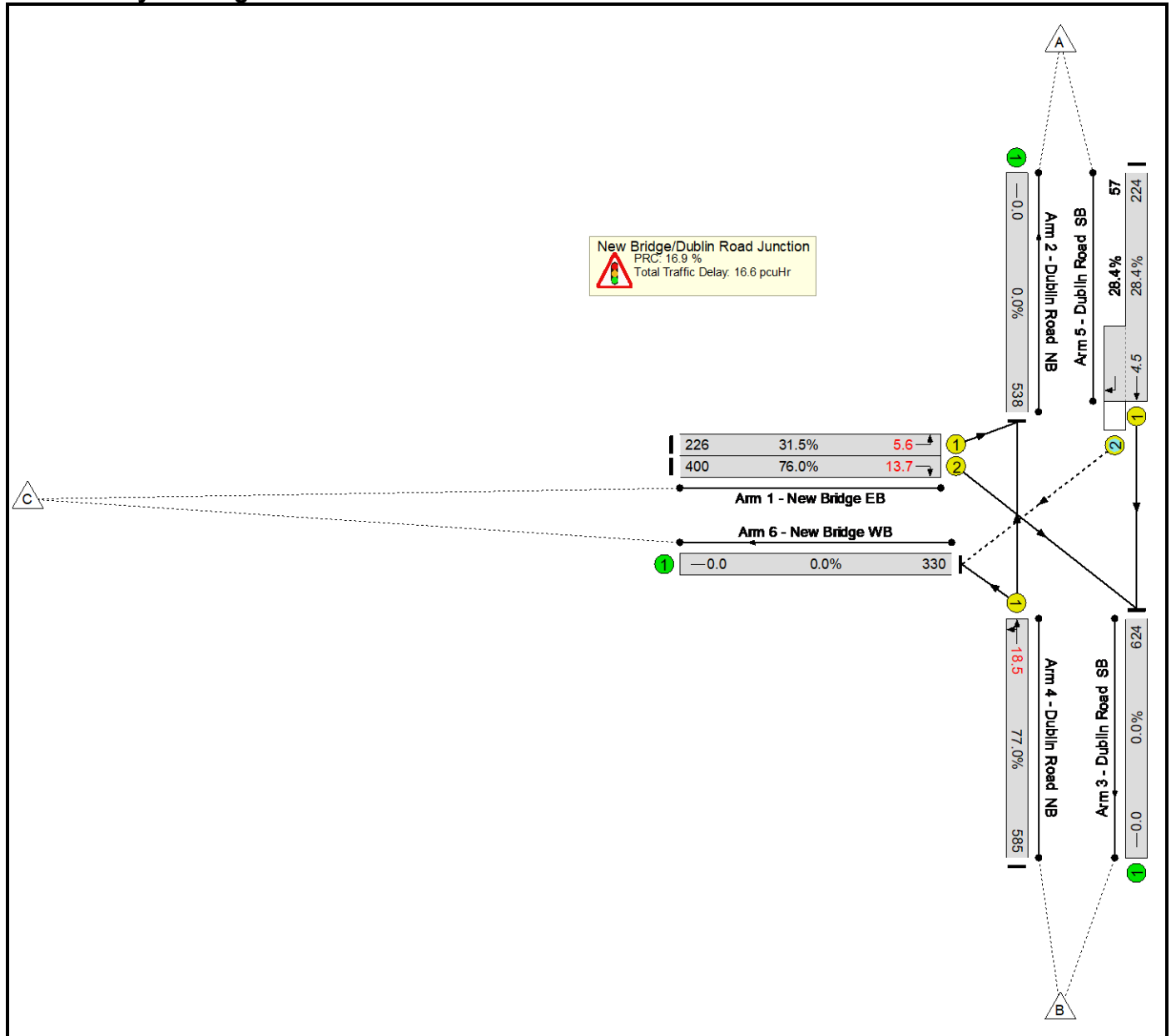
Network Layout Diagram



Basic Results Summary

Network Results

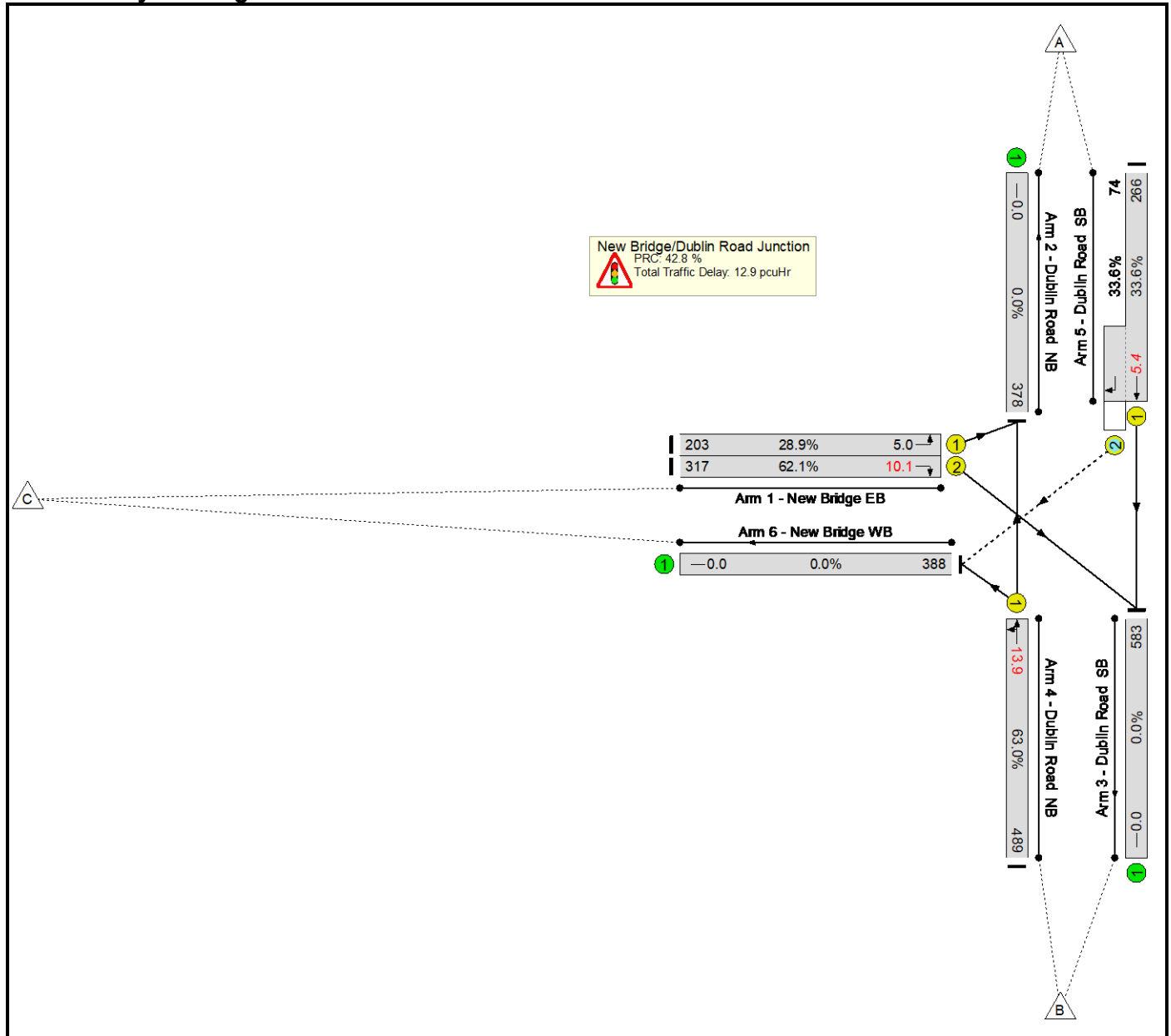
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	63.0%	67	6	1	12.9	-	-
New Bridge/Dublin Road Junction	-	-	-		-	-	-	-	-	-	-	63.0%	67	6	1	12.9	-	-
1/1	New Bridge EB Left	U	E		1	43	-	-	203	1915	702	28.9%	-	-	-	1.7	30.5	5.0
1/2	New Bridge EB Right	U	F		1	31	-	-	317	1915	511	62.1%	-	-	-	4.2	47.9	10.1
4/1	Dublin Road NB Ahead Left	U	C		1	47	-	-	489	1940	776	63.0%	-	-	-	4.8	35.1	13.9
5/1+5/2	Dublin Road SB Ahead Right	U+O	A	B	1	59	7:7	-	340	1915:1915	791+220	33.6 : 33.6%	67	6	1	2.2	23.4	5.4
C1 PRC for Signalled Lanes (%): 42.8 PRC Over All Lanes (%): 42.8 Total Delay for Signalled Lanes (pcuHr): 12.91 Total Delay Over All Lanes(pcuHr): 12.91 Cycle Time (s): 120																		

Network Layout Diagram

Basic Results Summary

Network Results

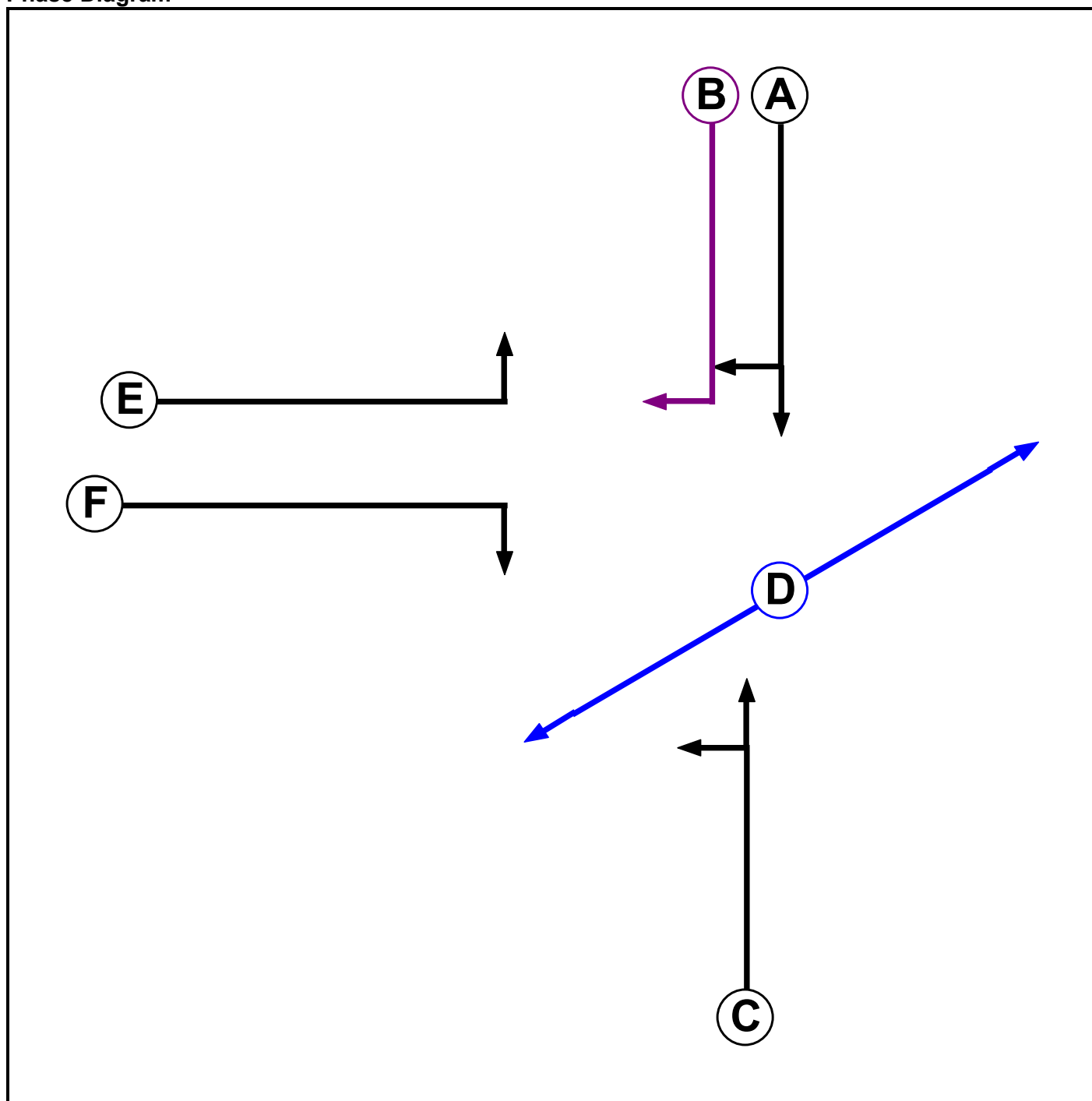
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	77.0%	51	5	1	16.6	-	-
New Bridge/Dublin Road Junction	-	-	-		-	-	-	-	-	-	-	77.0%	51	5	1	16.6	-	-
1/1	New Bridge EB Left	U	E		1	44	-	-	226	1915	718	31.5%	-	-	-	1.9	30.2	5.6
1/2	New Bridge EB Right	U	F		1	32	-	-	400	1915	527	76.0%	-	-	-	6.0	53.7	13.7
4/1	Dublin Road NB Ahead Left	U	C		1	46	-	-	585	1940	760	77.0%	-	-	-	6.8	41.9	18.5
5/1+5/2	Dublin Road SB Ahead Right	U+O	A	B	1	58	7:7	-	281	1915:1915	790+201	28.4 : 28.4%	51	5	1	1.9	24.4	4.5
C1 PRC for Signalled Lanes (%): 16.9 PRC Over All Lanes (%): 16.9 Total Delay for Signalled Lanes (pcuHr): 16.58 Total Delay Over All Lanes(pcuHr): 16.58 Cycle Time (s): 120																		

Network Layout Diagram

Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	63.0%	67	6	1	12.9	-	-
New Bridge/Dublin Road Junction	-	-	-		-	-	-	-	-	-	-	63.0%	67	6	1	12.9	-	-
1/1	New Bridge EB Left	U	E		1	43	-	-	203	1915	702	28.9%	-	-	-	1.7	30.5	5.0
1/2	New Bridge EB Right	U	F		1	31	-	-	317	1915	511	62.1%	-	-	-	4.2	47.9	10.1
4/1	Dublin Road NB Ahead Left	U	C		1	47	-	-	489	1940	776	63.0%	-	-	-	4.8	35.1	13.9
5/1+5/2	Dublin Road SB Ahead Right	U+O	A	B	1	59	7:7	-	340	1915:1915	791+220	33.6 : 33.6%	67	6	1	2.2	23.4	5.4
C1 PRC for Signalled Lanes (%): 42.8 PRC Over All Lanes (%): 42.8 Total Delay for Signalled Lanes (pcuHr): 12.91 Total Delay Over All Lanes(pcuHr): 12.91 Cycle Time (s): 120																		

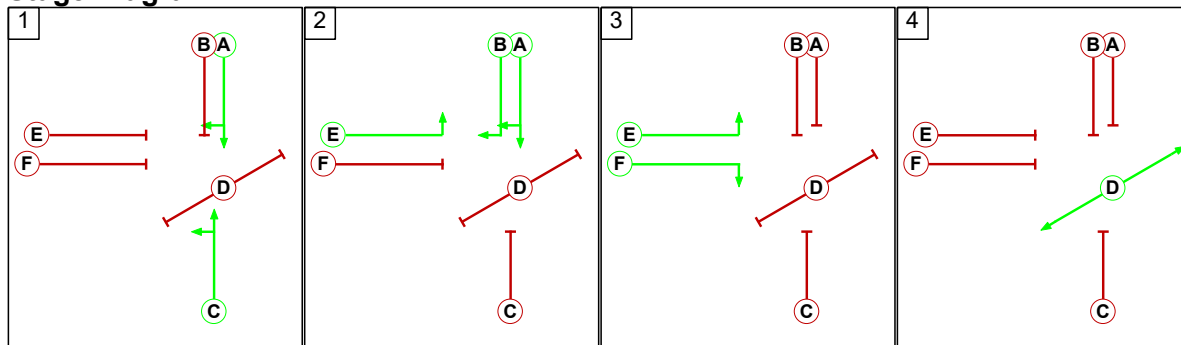


Basic Results Summary

Phase Intergreens Matrix

Terminating Phase	Starting Phase						
		A	B	C	D	E	F
	A		-	-	5	-	5
	B	-		5	5	-	5
	C	-	5		5	5	5
	D	7	7	7		7	7
	E	-	-	5	11		-
	F	5	5	5	11	-	

Stage Diagram



Scenario 1: 'DN+CT OY+5_AM' (FG3: 'DN+CT OY+5_AM', Plan 1: 'Network Control Plan 1')

Phase Timings

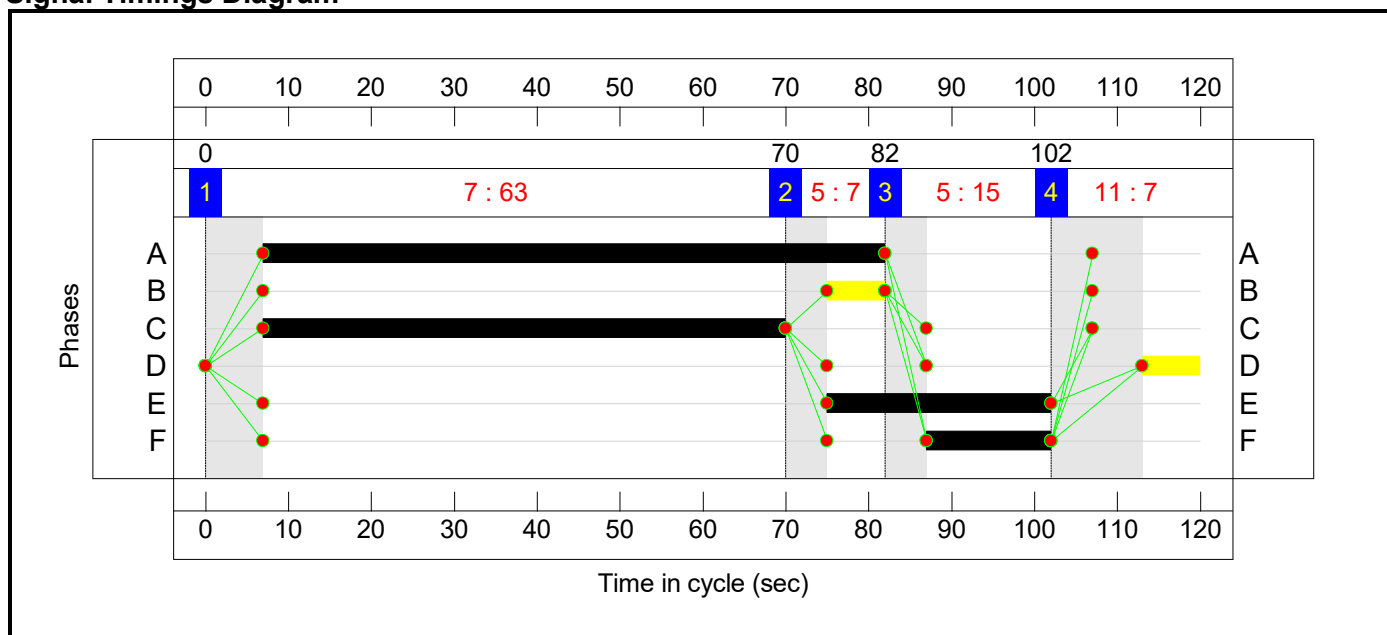
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road SB Ahead Right	Traffic	75	7	82
B	Dublin Road SB Right IGA	Ind. Arrow	7	75	82
C	Dublin Road NB Ahead Left	Traffic	63	7	70
D	Pedestrians across	Pedestrian	7	113	0
E	New Bridge EB Left	Traffic	27	75	102
F	New Bridge EB Right	Traffic	15	87	102

Basic Results Summary

Bonus Green Times

No Bonus Greens are defined For Scenario 1

Signal Timings Diagram



Scenario 2: 'DN+CT OY+5_PM' (FG4: 'DN+CT OY+5_PM', Plan 1: 'Network Control Plan 1')

Phase Timings

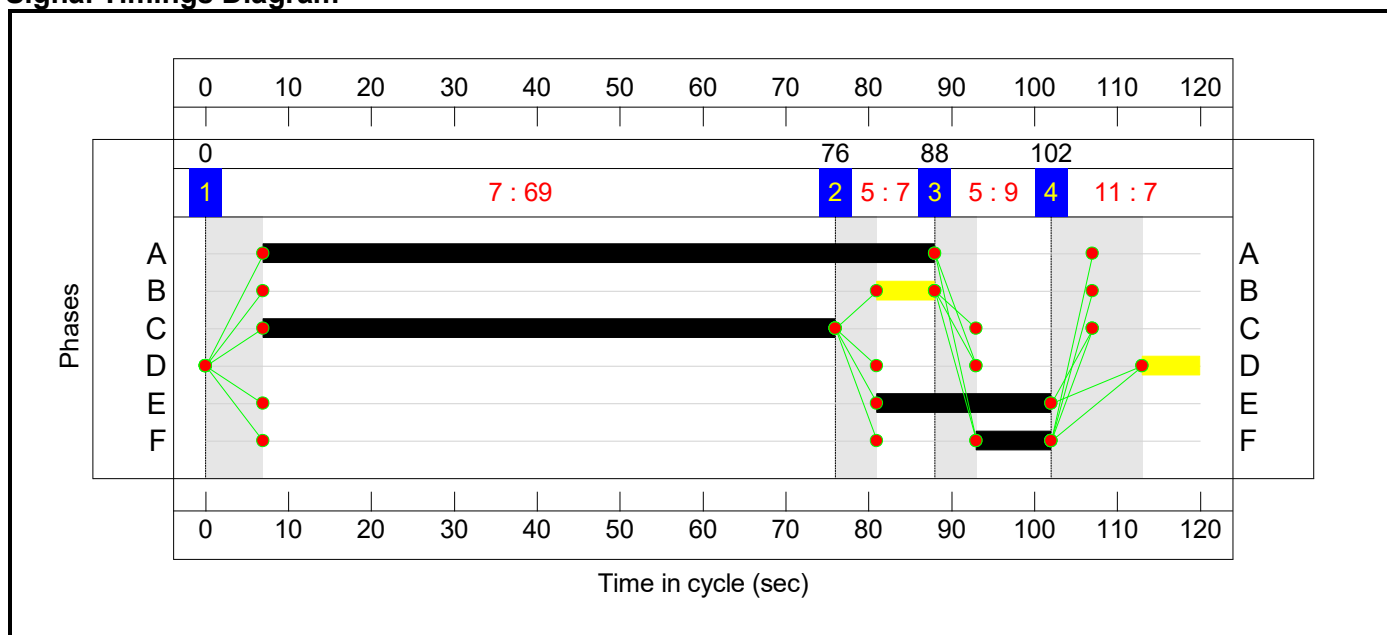
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road SB Ahead Right	Traffic	81	7	88
B	Dublin Road SB Right IGA	Ind. Arrow	7	81	88
C	Dublin Road NB Ahead Left	Traffic	69	7	76
D	Pedestrians across	Pedestrian	7	113	0
E	New Bridge EB Left	Traffic	21	81	102
F	New Bridge EB Right	Traffic	9	93	102

Basic Results Summary

Bonus Green Times

No Bonus Greens are defined For Scenario 2

Signal Timings Diagram



Scenario 3: 'DN+AT OY+5_AM' (FG5: 'DN+AT OY+5_AM', Plan 1: 'Network Control Plan 1')

Phase Timings

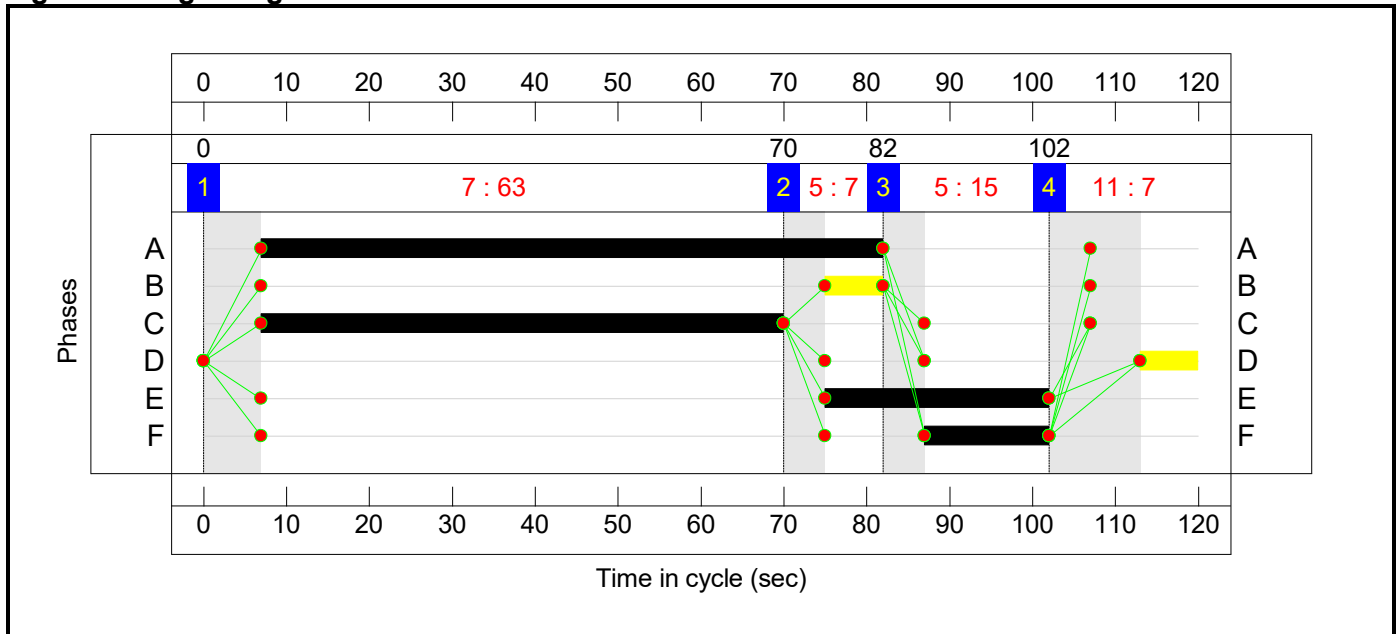
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road SB Ahead Right	Traffic	75	7	82
B	Dublin Road SB Right IGA	Ind. Arrow	7	75	82
C	Dublin Road NB Ahead Left	Traffic	63	7	70
D	Pedestrians across	Pedestrian	7	113	0
E	New Bridge EB Left	Traffic	27	75	102
F	New Bridge EB Right	Traffic	15	87	102

Basic Results Summary

Bonus Green Times

No Bonus Greens are defined For Scenario 3

Signal Timings Diagram



Scenario 4: 'DN+AT OY+5_PM' (FG6: 'DN+AT OY+5_PM', Plan 1: 'Network Control Plan 1')

Phase Timings

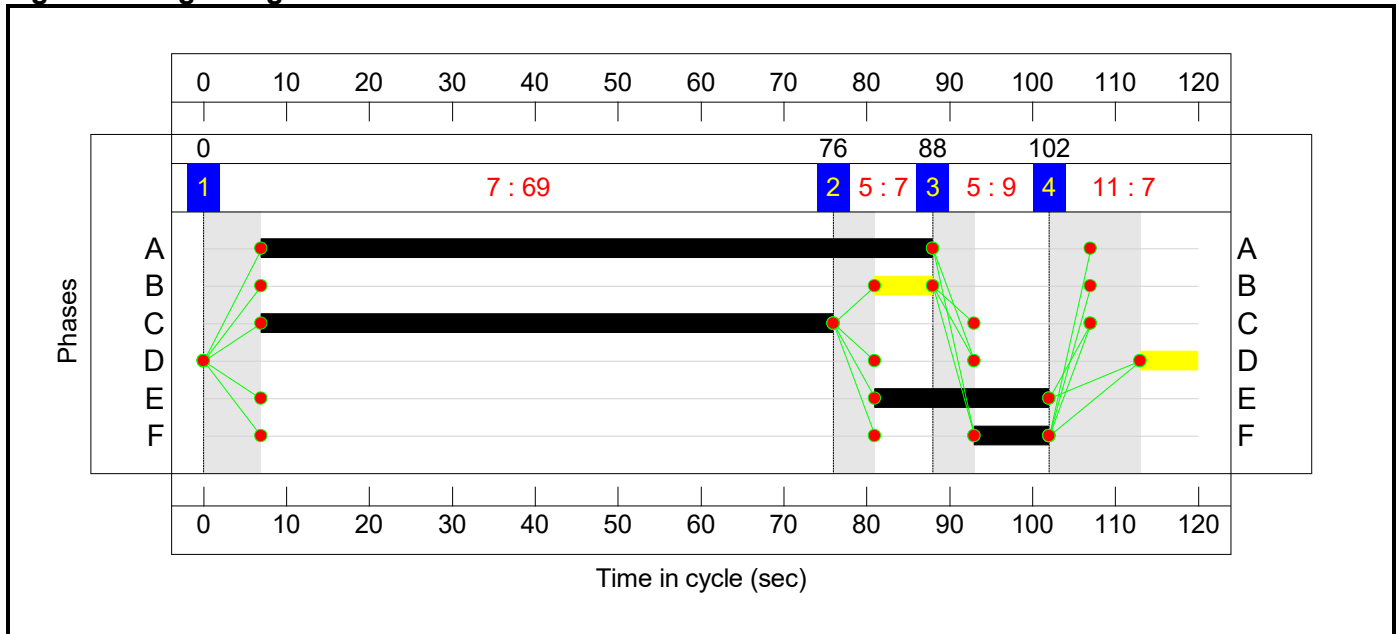
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road SB Ahead Right	Traffic	81	7	88
B	Dublin Road SB Right IGA	Ind. Arrow	7	81	88
C	Dublin Road NB Ahead Left	Traffic	69	7	76
D	Pedestrians across	Pedestrian	7	113	0
E	New Bridge EB Left	Traffic	21	81	102
F	New Bridge EB Right	Traffic	9	93	102

Basic Results Summary

Bonus Green Times

No Bonus Greens are defined For Scenario 4

Signal Timings Diagram



Scenario 5: 'DN+CT OY+15_AM' (FG9: 'DN+CT OY+15_AM', Plan 1: 'Network Control Plan 1')

Phase Timings

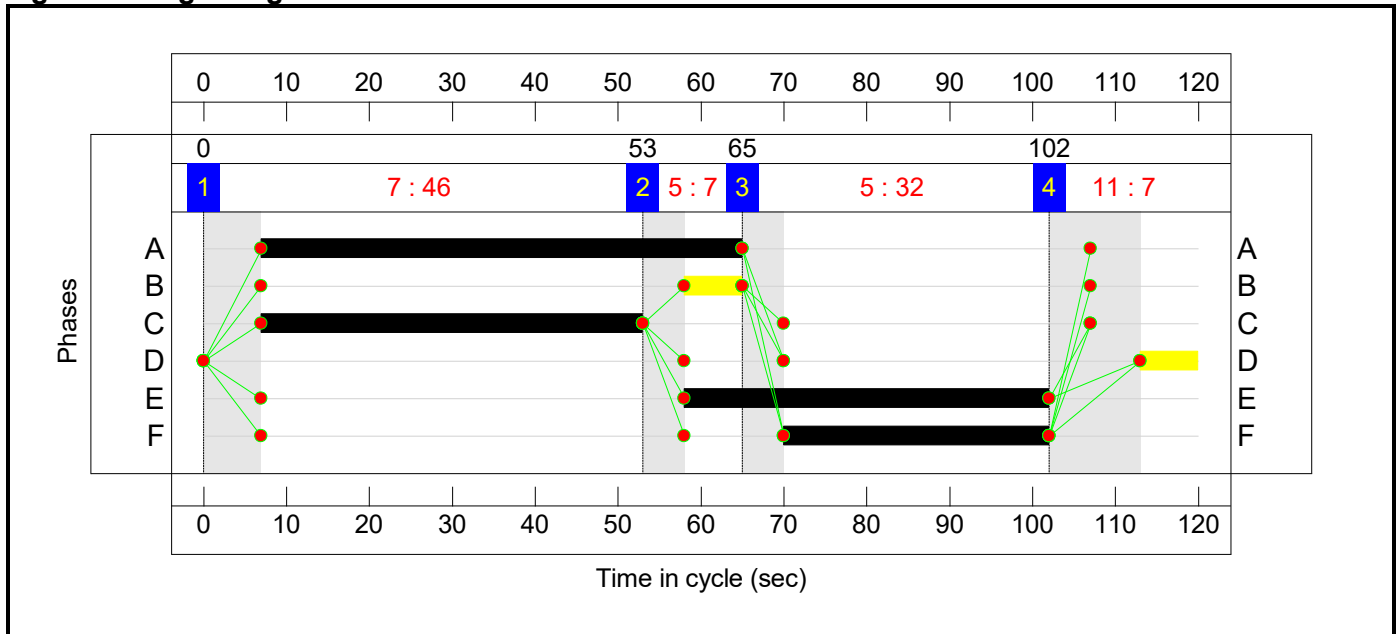
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road SB Ahead Right	Traffic	58	7	65
B	Dublin Road SB Right IGA	Ind. Arrow	7	58	65
C	Dublin Road NB Ahead Left	Traffic	46	7	53
D	Pedestrians across	Pedestrian	7	113	0
E	New Bridge EB Left	Traffic	44	58	102
F	New Bridge EB Right	Traffic	32	70	102

Basic Results Summary

Bonus Green Times

No Bonus Greens are defined For Scenario 5

Signal Timings Diagram



Scenario 6: 'DN+CT OY+15_PM' (FG10: 'DN+CT OY+15_PM', Plan 1: 'Network Control Plan 1')

Phase Timings

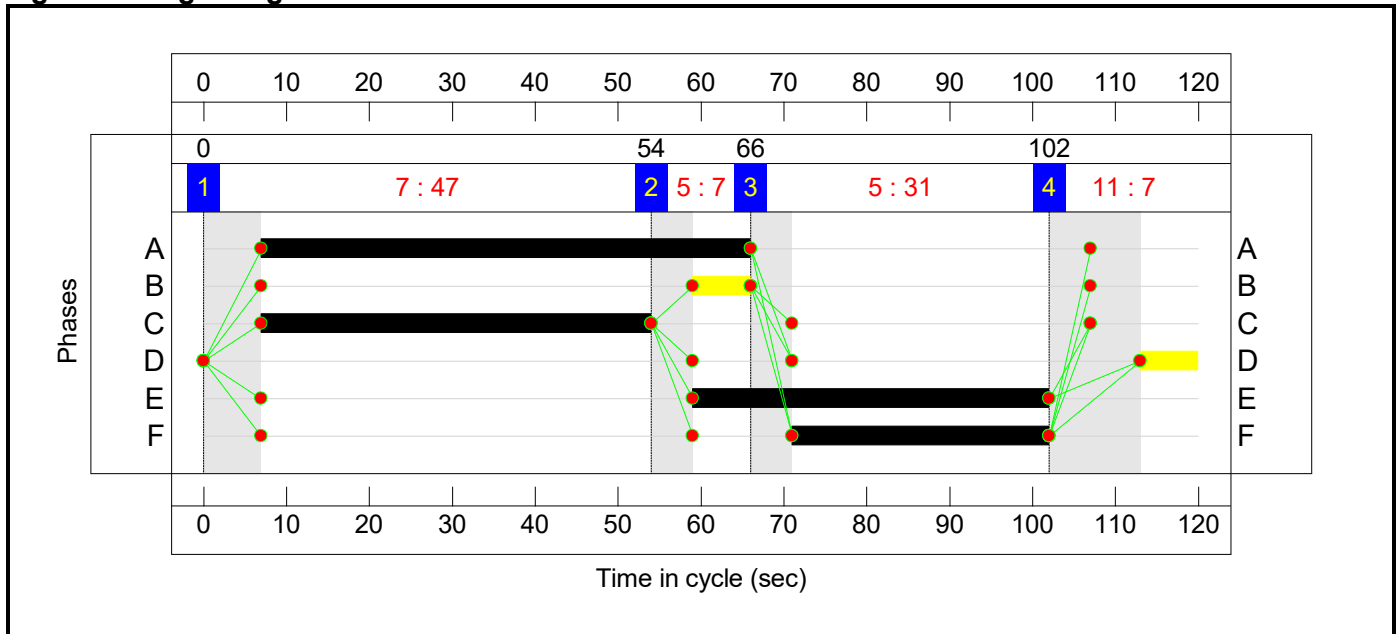
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road SB Ahead Right	Traffic	59	7	66
B	Dublin Road SB Right IGA	Ind. Arrow	7	59	66
C	Dublin Road NB Ahead Left	Traffic	47	7	54
D	Pedestrians across	Pedestrian	7	113	0
E	New Bridge EB Left	Traffic	43	59	102
F	New Bridge EB Right	Traffic	31	71	102

Basic Results Summary

Bonus Green Times

No Bonus Greens are defined For Scenario 6

Signal Timings Diagram



Scenario 7: 'DN+AT OY+15_AM' (FG11: 'DN+AT OY+15_AM', Plan 1: 'Network Control Plan 1')

Phase Timings

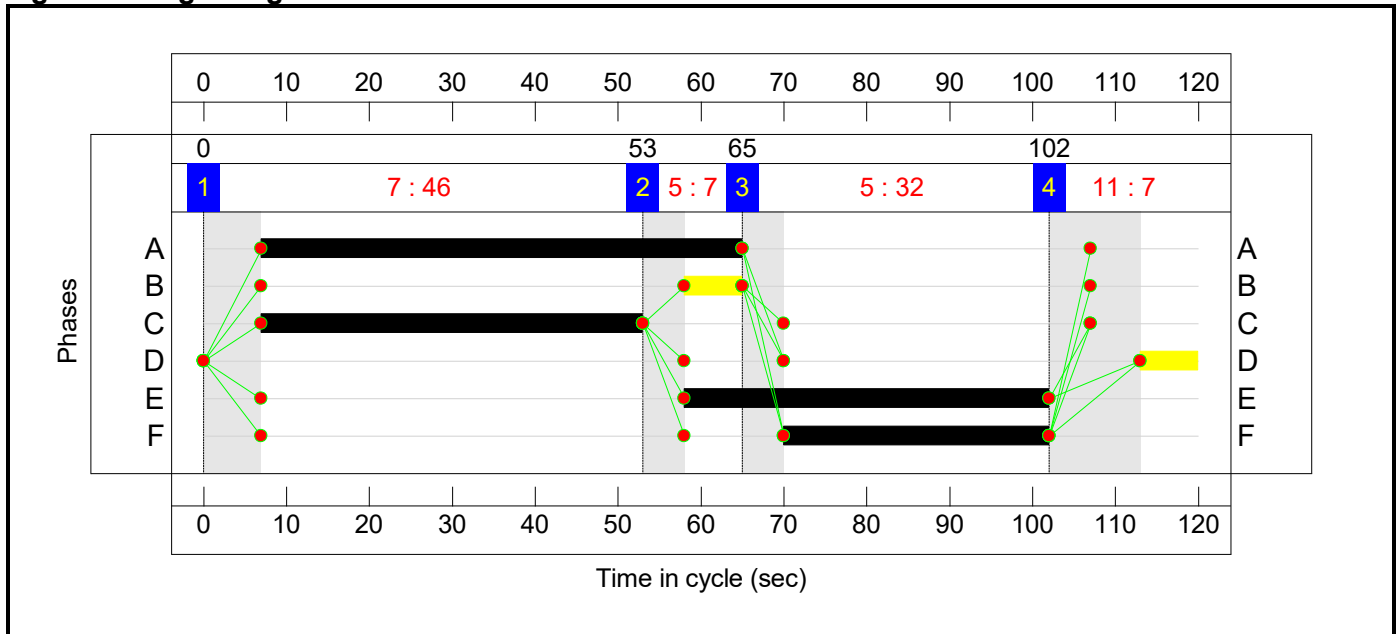
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road SB Ahead Right	Traffic	58	7	65
B	Dublin Road SB Right IGA	Ind. Arrow	7	58	65
C	Dublin Road NB Ahead Left	Traffic	46	7	53
D	Pedestrians across	Pedestrian	7	113	0
E	New Bridge EB Left	Traffic	44	58	102
F	New Bridge EB Right	Traffic	32	70	102

Basic Results Summary

Bonus Green Times

No Bonus Greens are defined For Scenario 7

Signal Timings Diagram



Scenario 8: 'DN+AT OY+15_PM' (FG12: 'DN+AT OY+15_PM', Plan 1: 'Network Control Plan 1')

Phase Timings

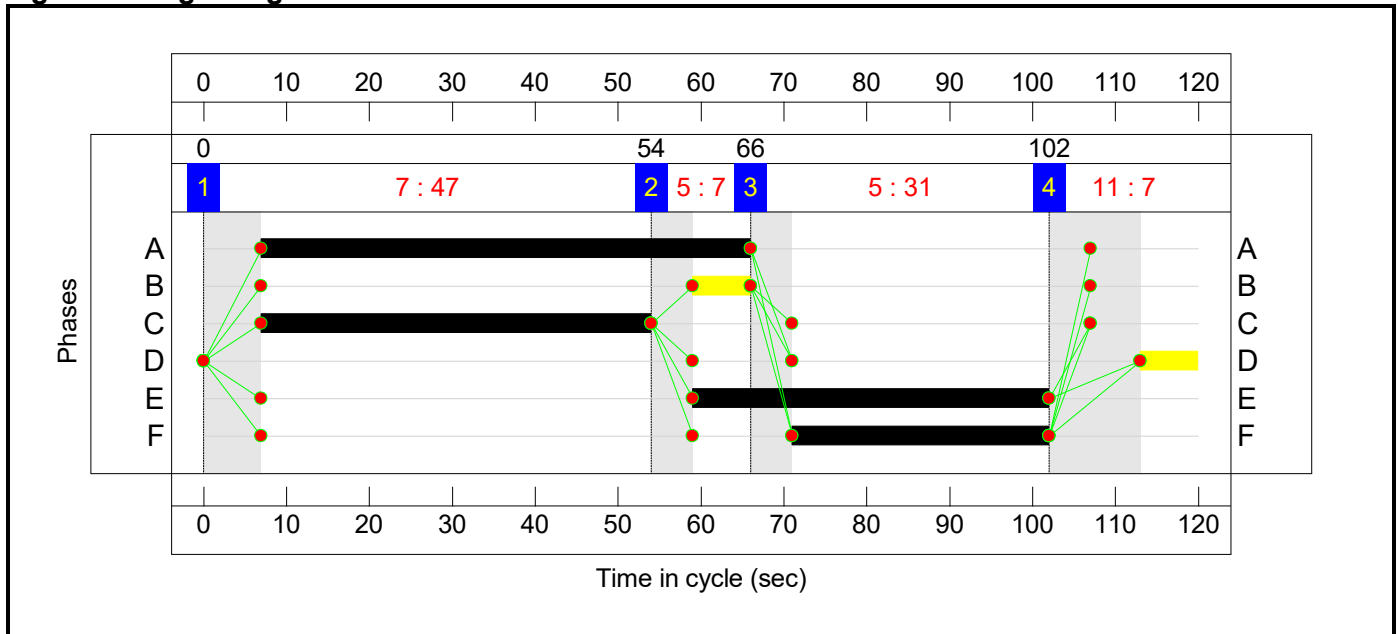
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Dublin Road SB Ahead Right	Traffic	59	7	66
B	Dublin Road SB Right IGA	Ind. Arrow	7	59	66
C	Dublin Road NB Ahead Left	Traffic	47	7	54
D	Pedestrians across	Pedestrian	7	113	0
E	New Bridge EB Left	Traffic	43	59	102
F	New Bridge EB Right	Traffic	31	71	102

Basic Results Summary

Bonus Green Times

No Bonus Greens are defined For Scenario 8

Signal Timings Diagram



Basic Results Summary
Basic Results Summary

User and Project Details

Project:	Old Conna
Title:	
Location:	
Additional detail:	
File name:	J4 Wilford Roundabout.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

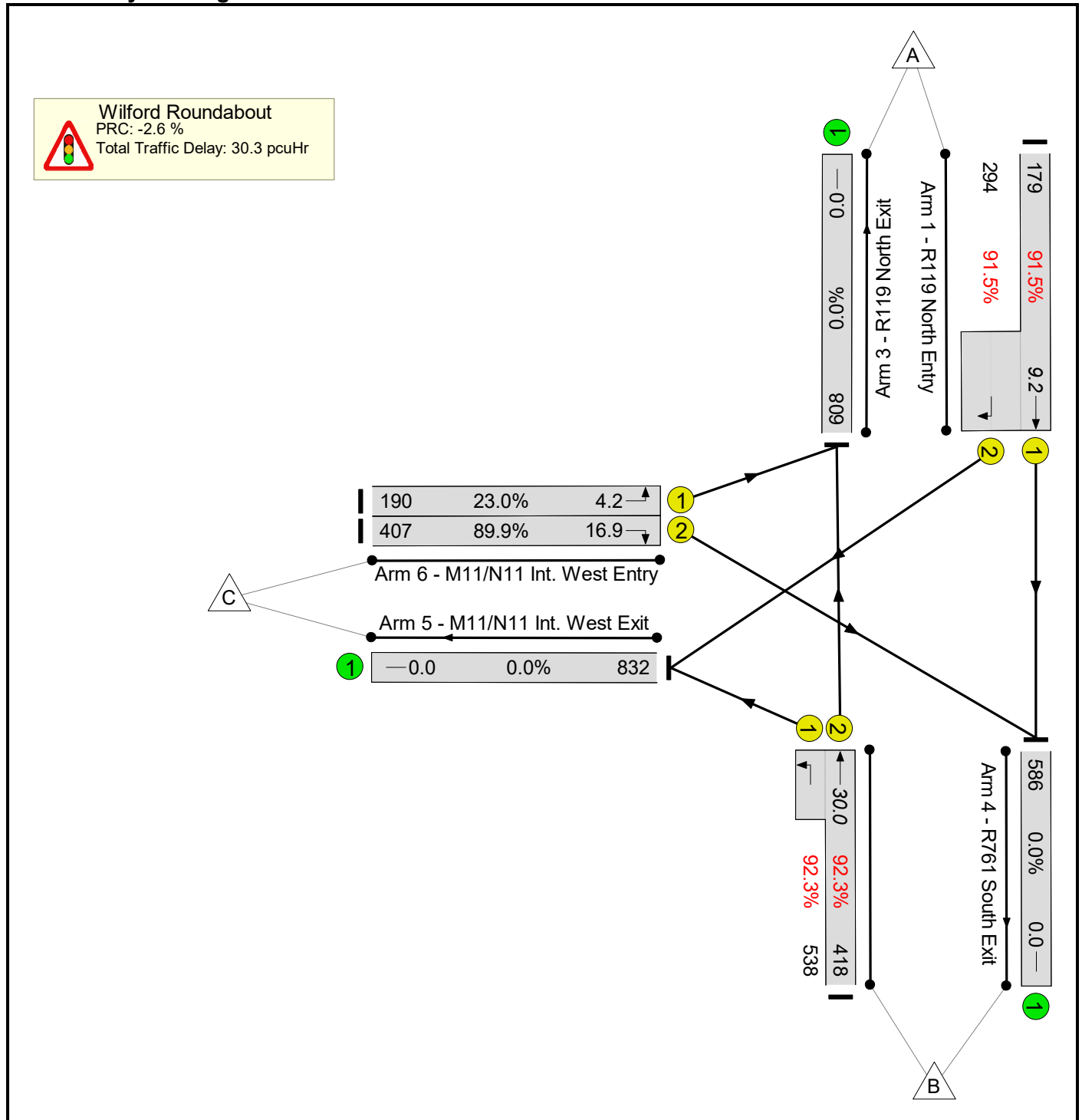
Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	DN OY +5_AM	DN OY +5_AM	Do No Scenario	08:00 - 09:00	120	-2.6	30.32
2	DN OY +5_PM	DN OY +5_PM	Do No Scenario	16:00 - 17:00	120	-10.2	47.11
3	DN OY CT +5_AM	DN OY CT +5_AM	Do No Scenario	08:00 - 09:00	120	-23.1	138.51
4	DN OY CT +5_PM	DN OY CT +5_PM	Do No Scenario	16:00 - 17:00	120	-20.3	110.32
5	DN OY AT +5_AM	DN OY AT +5_AM	Do No Scenario	08:00 - 09:00	120	-23.1	138.51
6	DN OY AT +5_PM	DN OY AT +5_PM	Do No Scenario	16:00 - 17:00	120	-20.3	110.32
7	DN OY +15_AM	DN OY +15_AM	Do No Scenario	08:00 - 09:00	120	-13.2	67.92
8	DN OY +15_PM	DN OY +15_PM	Do No Scenario	16:00 - 17:00	120	-34.9	167.10
9	DN OY CT +15_AM	DN OY CT+15_AM	Do No Scenario	08:00 - 09:00	120	-34.3	256.82
10	DN OY CT +15_PM	DN OY CT+15_PM	Do No Scenario	16:00 - 17:00	120	-48.6	255.63
11	DN OY AT +15_AM	DN OY AT+15_AM	Do No Scenario	08:00 - 09:00	120	-34.3	256.82
12	DN OY AT +15_PM	DN OY AT+15_PM	Do No Scenario	16:00 - 17:00	120	-48.6	255.63

Basic Results Summary

Scenario 1: 'DN OY +5_AM' (FG1: 'DN OY +5_AM', Plan 1: 'Do No Scenario')

Network Layout Diagram

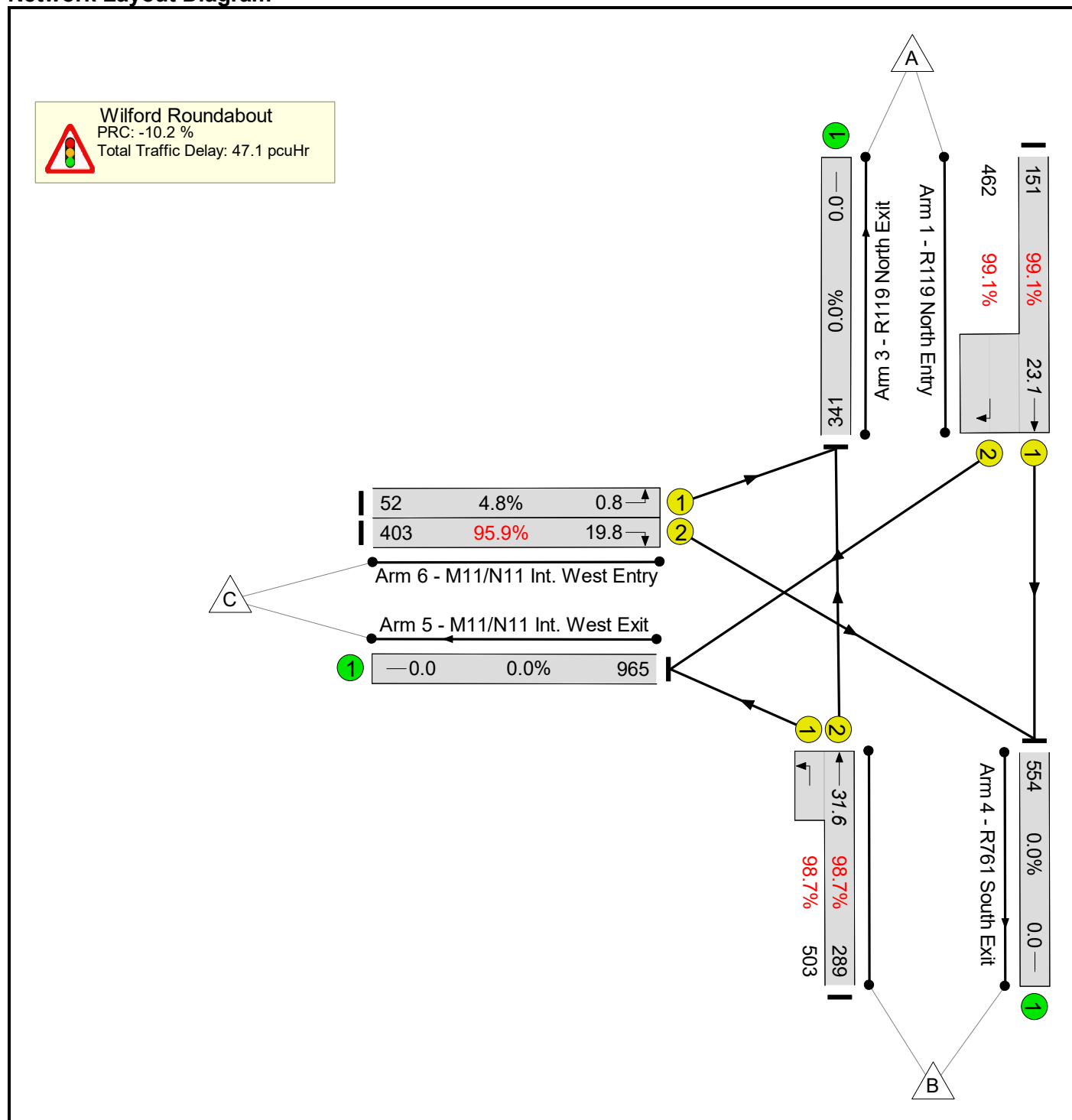


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	92.3%	0	0	0	30.3	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	92.3%	0	0	0	30.3	-	-
1/1+1/2	R119 North Entry Ahead Right	U	A B		1	60:18	-	-	473	2255:2200	196+321	91.5 : 91.5%	-	-	-	9.3	70.6	9.2
2/2+2/1	R761 South Entry Ahead Left	U	C G		1:2	60:70	-	-	956	1940:1940	453+583	92.3 : 92.3%	-	-	-	10.9	40.9	30.0
6/1	M11/N11 Int. West Entry Left	U	F		1	50	-	-	190	1940	825	23.0%	-	-	-	1.3	24.8	4.2
6/2	M11/N11 Int. West Entry Right	U	D		1	27	-	-	407	1940	453	89.9%	-	-	-	8.9	78.4	16.9
C1 PRC for Signalled Lanes (%): -2.6 Total Delay for Signalled Lanes (pcuHr): 30.32 Cycle Time (s): 120 PRC Over All Lanes (%): -2.6 Total Delay Over All Lanes(pcuHr): 30.32																		

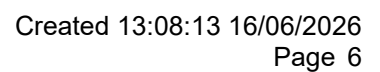
Network Layout Diagram



Basic Results Summary

Network Results

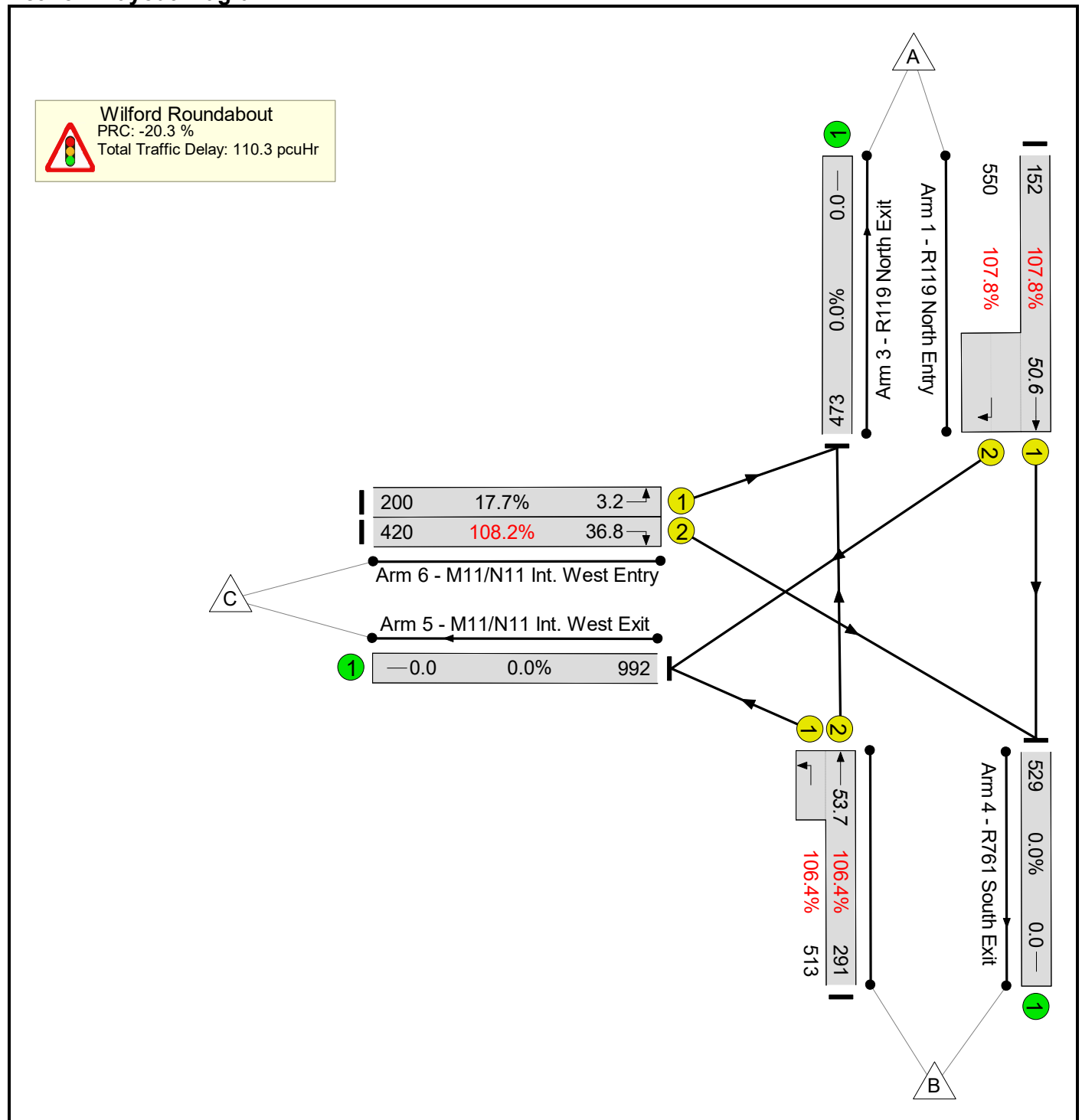
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	99.1%	0	0	0	47.1	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	99.1%	0	0	0	47.1	-	-
1/1+1/2	R119 North Entry Ahead Right	U	A B		1	44:36	-	-	613	2255:2200	152+466	99.1 : 99.1%	-	-	-	17.3	101.3	23.1
2/2+2/1	R761 South Entry Ahead Left	U	C G		1:2	44:52	-	-	792	1940:1940	293+510	98.7 : 98.7%	-	-	-	17.9	81.2	31.6
6/1	M11/N11 Int. West Entry Left	U	F		1	66	-	-	52	1940	1083	4.8%	-	-	-	0.2	13.8	0.8
6/2	M11/N11 Int. West Entry Right	U	D		1	25	-	-	403	1940	420	95.9%	-	-	-	11.8	105.4	19.8
C1 PRC for Signalled Lanes (%): -10.2 PRC Over All Lanes (%): -10.2 Total Delay for Signalled Lanes (pcuHr): 47.11 Total Delay Over All Lanes(pcuHr): 47.11 Cycle Time (s): 120																		



Basic Results Summary

Network Results

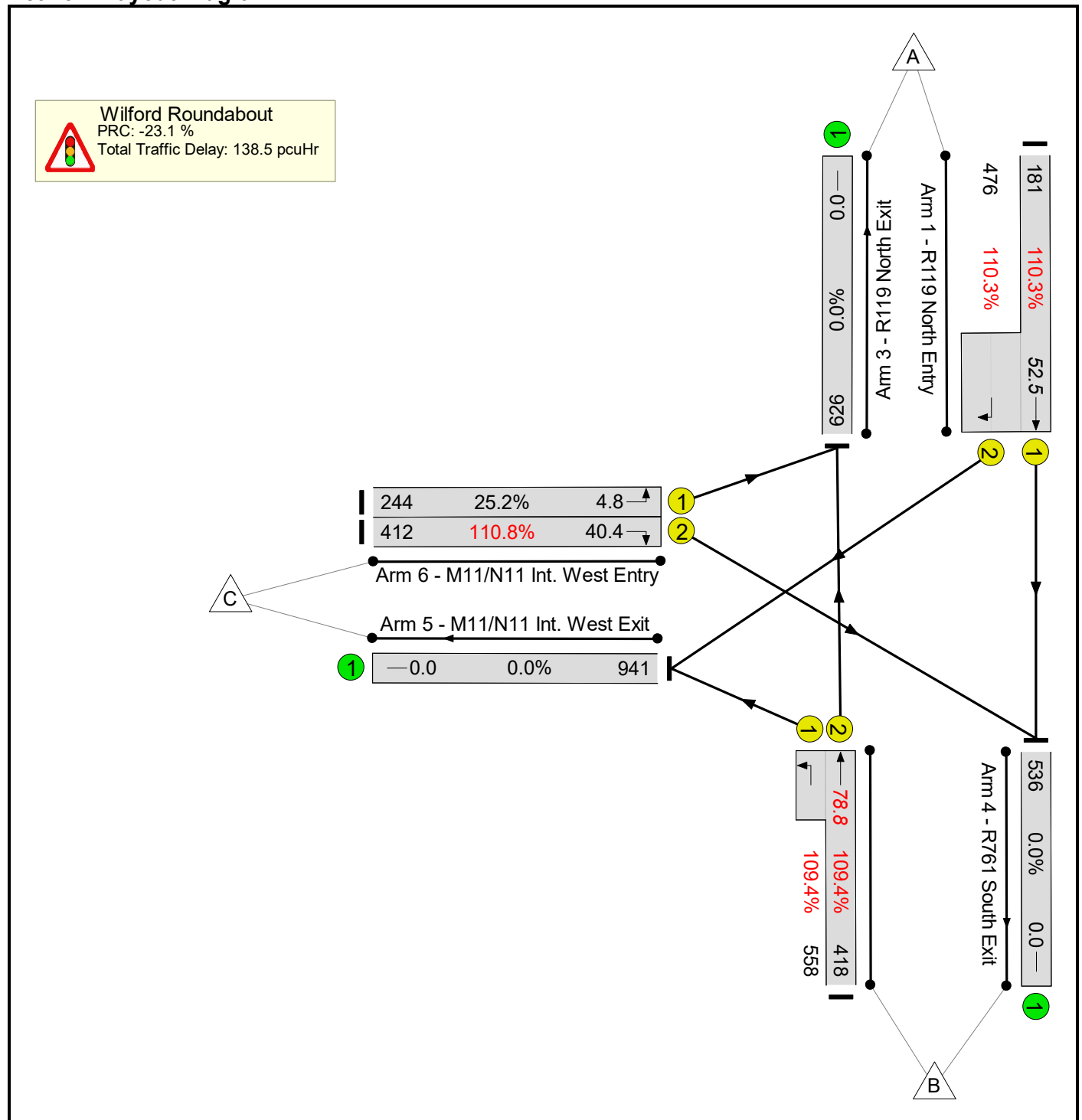
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	110.8%	0	0	0	138.5	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	110.8%	0	0	0	138.5	-	-
1/1+1/2	R119 North Entry Ahead Right	U	A B		1	51:32	-	-	657	2255:2200	164+431	110.3 : 110.3%	-	-	-	44.7	244.9	52.5
2/2+2/1	R761 South Entry Ahead Left	U	C G		1:2	51:56	-	-	976	1940:1940	382+510	109.4 : 109.4%	-	-	-	59.8	220.7	78.8
6/1	M11/N11 Int. West Entry Left	U	F		1	59	-	-	244	1940	970	25.2%	-	-	-	1.3	19.6	4.8
6/2	M11/N11 Int. West Entry Right	U	D		1	22	-	-	412	1940	372	110.8%	-	-	-	32.6	285.3	40.4
C1 PRC for Signalled Lanes (%): -23.1 Total Delay for Signalled Lanes (pcuHr): 138.51 Cycle Time (s): 120 PRC Over All Lanes (%): -23.1 Total Delay Over All Lanes(pcuHr): 138.51																		

Network Layout Diagram

Basic Results Summary

Network Results

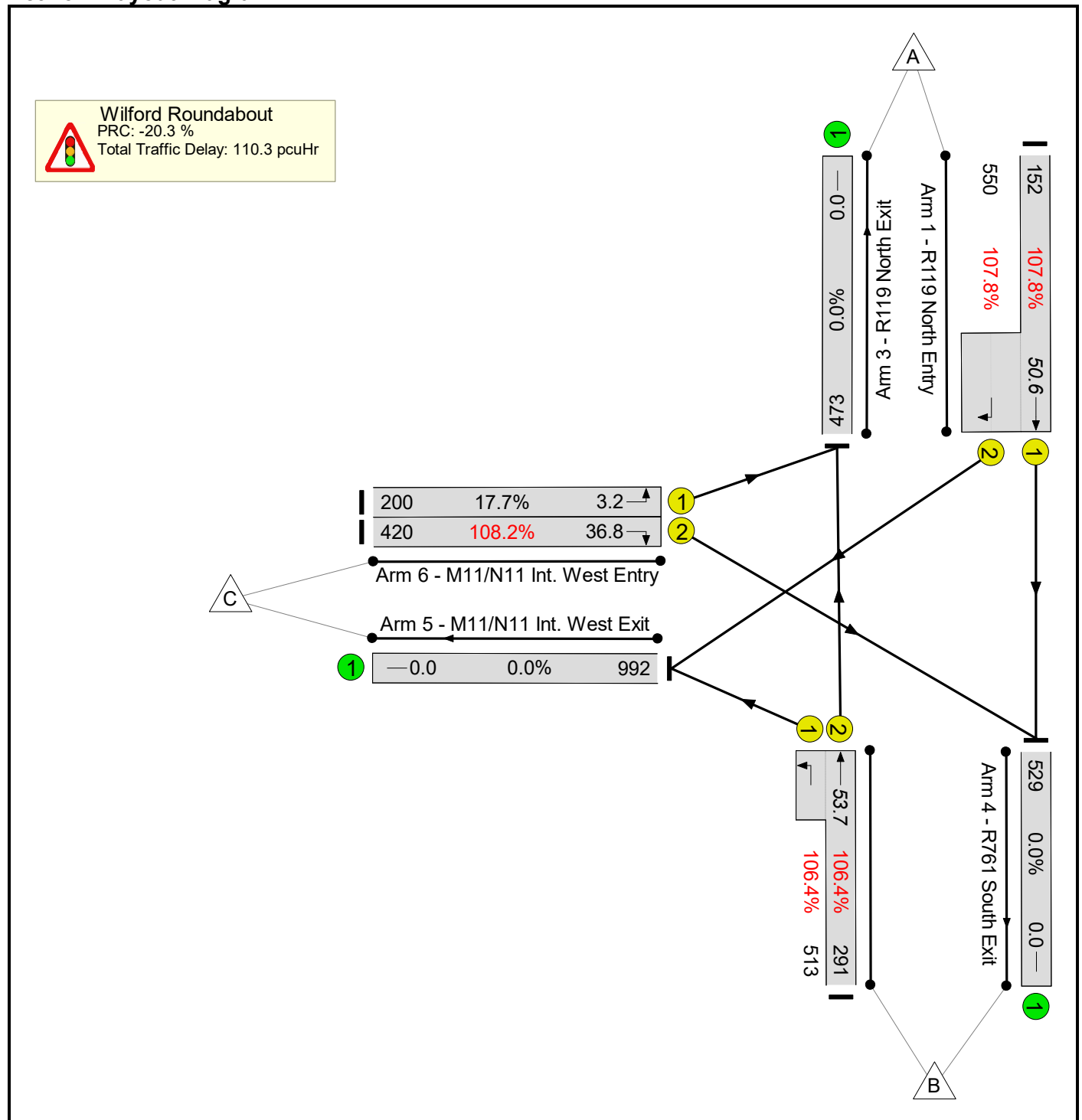
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	108.2%	0	0	0	110.3	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	108.2%	0	0	0	110.3	-	-
1/1+1/2	R119 North Entry Ahead Right	U	A B		1	41	-	-	702	2255:2200	141+510	107.8 : 107.8%	-	-	-	40.3	206.8	50.6
2/2+2/1	R761 South Entry Ahead Left	U	C G		1:2	41:47	-	-	804	1940:1940	273+482	106.4 : 106.4%	-	-	-	40.4	181.0	53.7
6/1	M11/N11 Int. West Entry Left	U	F		1	69	-	-	200	1940	1132	17.7%	-	-	-	0.8	13.6	3.2
6/2	M11/N11 Int. West Entry Right	U	D		1	23	-	-	420	1940	388	108.2%	-	-	-	28.8	247.0	36.8
C1 PRC for Signalled Lanes (%): -20.3 Total Delay for Signalled Lanes (pcuHr): 110.32 Cycle Time (s): 120 PRC Over All Lanes (%): -20.3 Total Delay Over All Lanes(pcuHr): 110.32																		

Network Layout Diagram

Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	110.8%	0	0	0	138.5	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	110.8%	0	0	0	138.5	-	-
1/1+1/2	R119 North Entry Ahead Right	U	A B		1	51:32	-	-	657	2255:2200	164+431	110.3 : 110.3%	-	-	-	44.7	244.9	52.5
2/2+2/1	R761 South Entry Ahead Left	U	C G		1:2	51:56	-	-	976	1940:1940	382+510	109.4 : 109.4%	-	-	-	59.8	220.7	78.8
6/1	M11/N11 Int. West Entry Left	U	F		1	59	-	-	244	1940	970	25.2%	-	-	-	1.3	19.6	4.8
6/2	M11/N11 Int. West Entry Right	U	D		1	22	-	-	412	1940	372	110.8%	-	-	-	32.6	285.3	40.4
C1 PRC for Signalled Lanes (%): -23.1 Total Delay for Signalled Lanes (pcuHr): 138.51 Cycle Time (s): 120 PRC Over All Lanes (%): -23.1 Total Delay Over All Lanes(pcuHr): 138.51																		

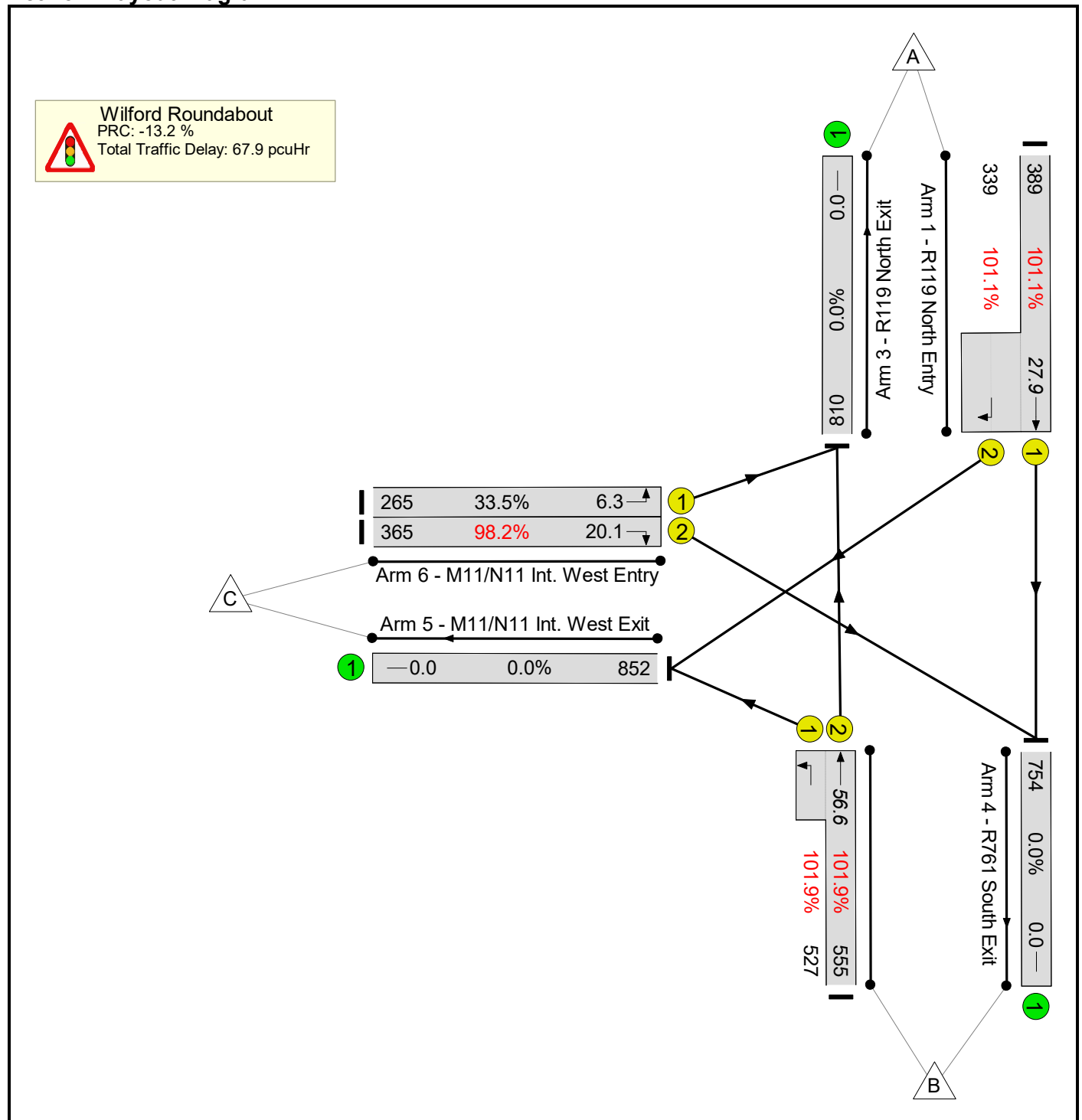
Network Layout Diagram

Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	108.2%	0	0	0	110.3	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	108.2%	0	0	0	110.3	-	-
1/1+1/2	R119 North Entry Ahead Right	U	A B		1	41	-	-	702	2255:2200	141+510	107.8 : 107.8%	-	-	-	40.3	206.8	50.6
2/2+2/1	R761 South Entry Ahead Left	U	C G		1:2	41:47	-	-	804	1940:1940	273+482	106.4 : 106.4%	-	-	-	40.4	181.0	53.7
6/1	M11/N11 Int. West Entry Left	U	F		1	69	-	-	200	1940	1132	17.7%	-	-	-	0.8	13.6	3.2
6/2	M11/N11 Int. West Entry Right	U	D		1	23	-	-	420	1940	388	108.2%	-	-	-	28.8	247.0	36.8
C1 PRC for Signalled Lanes (%): -20.3 Total Delay for Signalled Lanes (pcuHr): 110.32 Cycle Time (s): 120 PRC Over All Lanes (%): -20.3 Total Delay Over All Lanes(pcuHr): 110.32																		

Network Layout Diagram

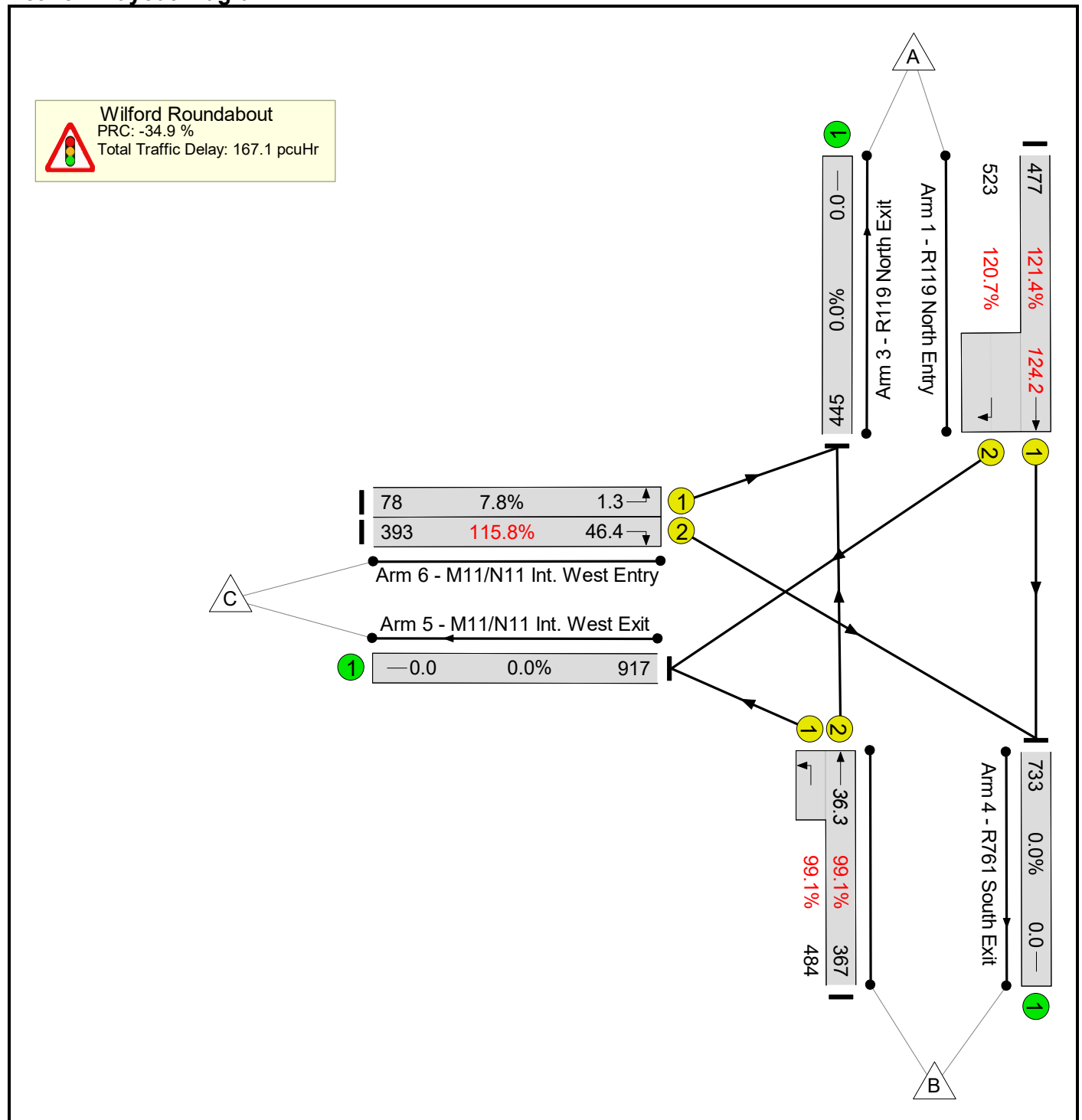


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	101.9%	0	0	0	67.9	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	101.9%	0	0	0	67.9	-	-
1/1+1/2	R119 North Entry Ahead Right	U	A B		1	62:21	-	-	728	2255:2200	385+335	101.1 : 101.1%	-	-	-	22.1	109.5	27.9
2/2+2/1	R761 South Entry Ahead Left	U	C G		1:2	62:67	-	-	1082	1940:1940	545+517	101.9 : 101.9%	-	-	-	30.8	102.6	56.6
6/1	M11/N11 Int. West Entry Left	U	F		1	48	-	-	265	1940	792	33.5%	-	-	-	2.0	27.7	6.3
6/2	M11/N11 Int. West Entry Right	U	D		1	22	-	-	365	1940	372	98.2%	-	-	-	12.9	127.2	20.1
C1 PRC for Signalled Lanes (%): -13.2 Total Delay for Signalled Lanes (pcuHr): 67.92 Cycle Time (s): 120 PRC Over All Lanes (%): -13.2 Total Delay Over All Lanes(pcuHr): 67.92																		

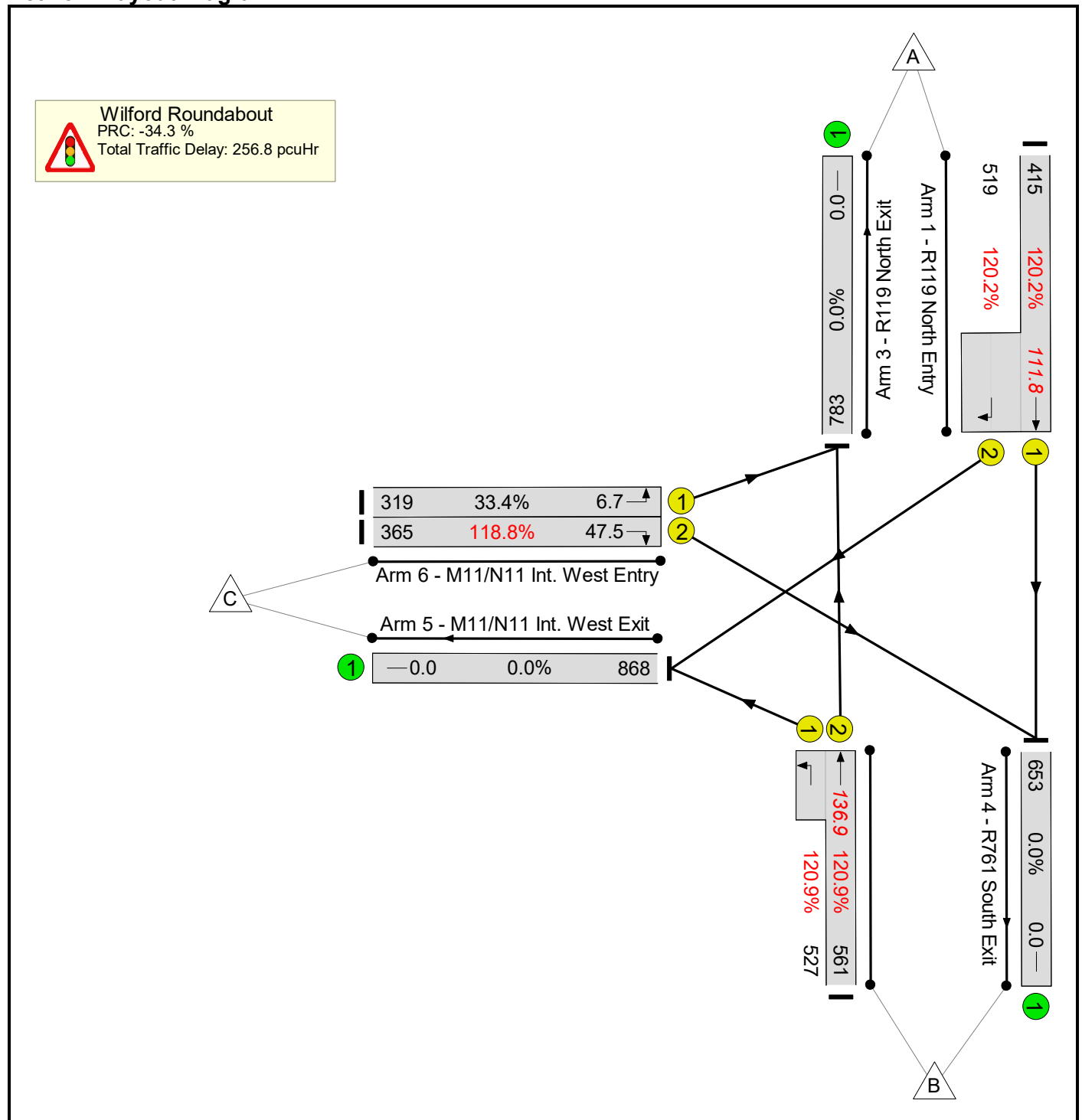
Network Layout Diagram



Basic Results Summary

Network Results

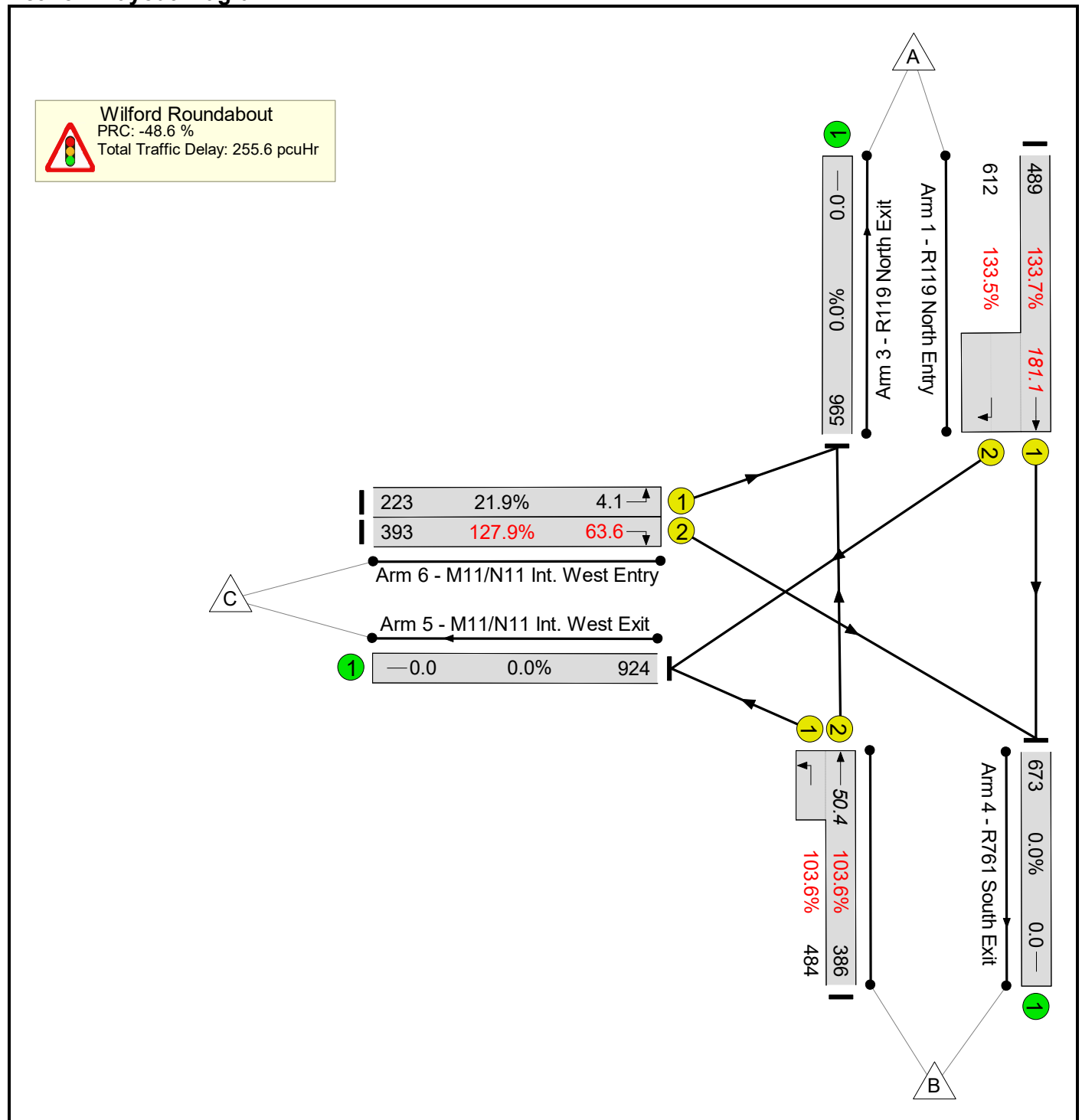
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	121.4%	0	0	0	167.1	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	121.4%	0	0	0	167.1	-	-
1/1+1/2	R119 North Entry Ahead Right	U	A B		1	49:36	-	-	1000	2255:2200	393+433	121.4 : 120.7%	-	-	-	108.0	389.0	124.2
2/2+2/1	R761 South Entry Ahead Left	U	C G		1:2	49:52	-	-	851	1940:1940	370+488	99.1 : 99.1%	-	-	-	19.6	82.9	36.3
6/1	M11/N11 Int. West Entry Left	U	F		1	61	-	-	78	1940	1002	7.8%	-	-	-	0.4	16.6	1.3
6/2	M11/N11 Int. West Entry Right	U	D		1	20	-	-	393	1940	340	115.8%	-	-	-	39.1	358.3	46.4
C1 PRC for Signalled Lanes (%): -34.9 Total Delay for Signalled Lanes (pcuHr): 167.10 Cycle Time (s): 120 PRC Over All Lanes (%): -34.9 Total Delay Over All Lanes(pcuHr): 167.10																		

Network Layout Diagram

Basic Results Summary

Network Results

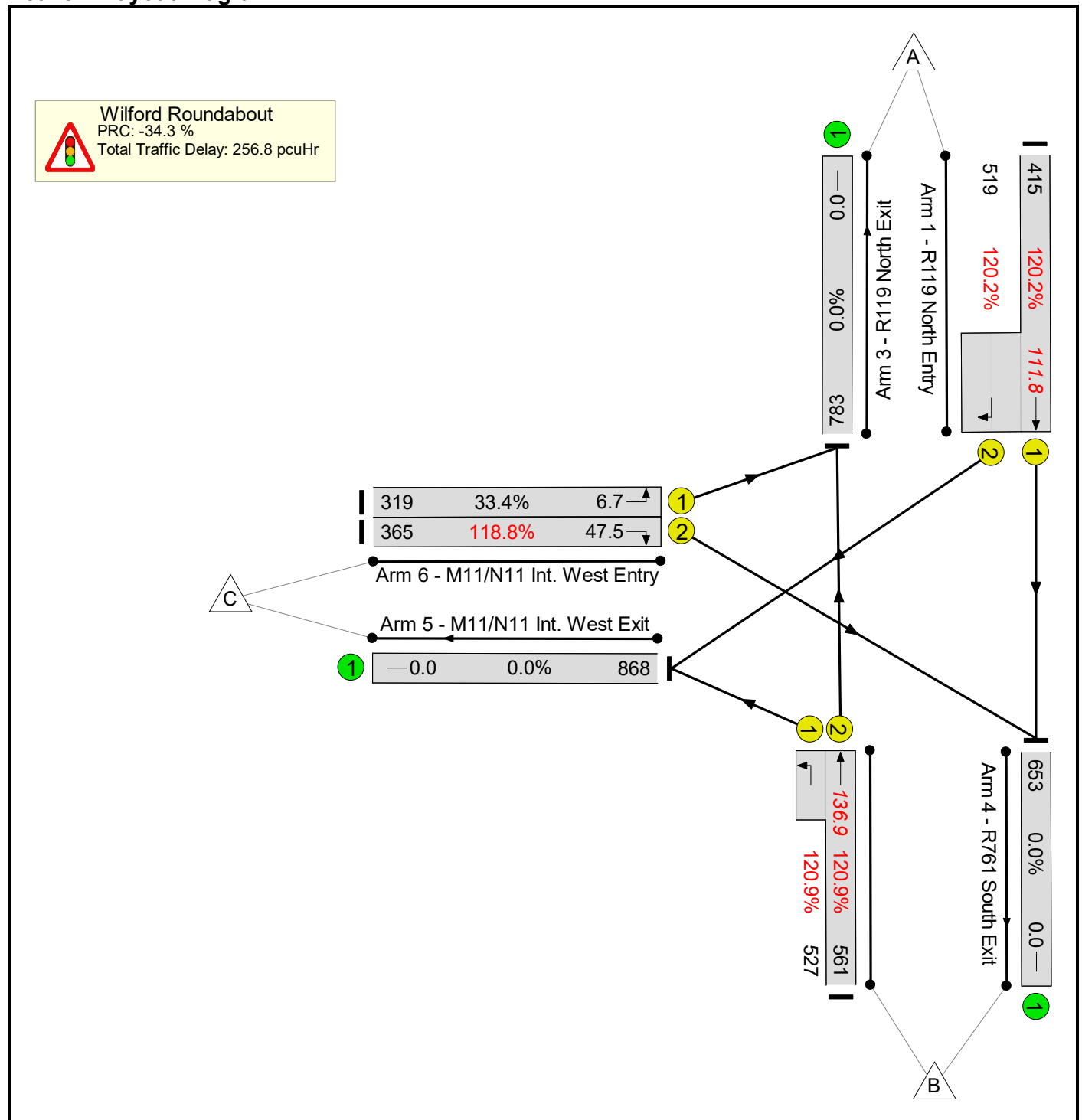
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	120.9%	0	0	0	256.8	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	120.9%	0	0	0	256.8	-	-
1/1+1/2	R119 North Entry Ahead Right	U	A B		1	52:35	-	-	934	2255:2200	345+432	120.2 : 120.2%	-	-	-	97.4	375.3	111.8
2/2+2/1	R761 South Entry Ahead Left	U	C G		1:2	52:53	-	-	1088	1940:1940	464+436	120.9 : 120.9%	-	-	-	116.7	386.0	136.9
6/1	M11/N11 Int. West Entry Left	U	F		1	58	-	-	319	1940	954	33.4%	-	-	-	1.9	21.4	6.7
6/2	M11/N11 Int. West Entry Right	U	D		1	18	-	-	365	1940	307	118.8%	-	-	-	40.9	403.2	47.5
C1 PRC for Signalled Lanes (%): -34.3 Total Delay for Signalled Lanes (pcuHr): 256.82 Cycle Time (s): 120 PRC Over All Lanes (%): -34.3 Total Delay Over All Lanes(pcuHr): 256.82																		

Network Layout Diagram

Basic Results Summary

Network Results

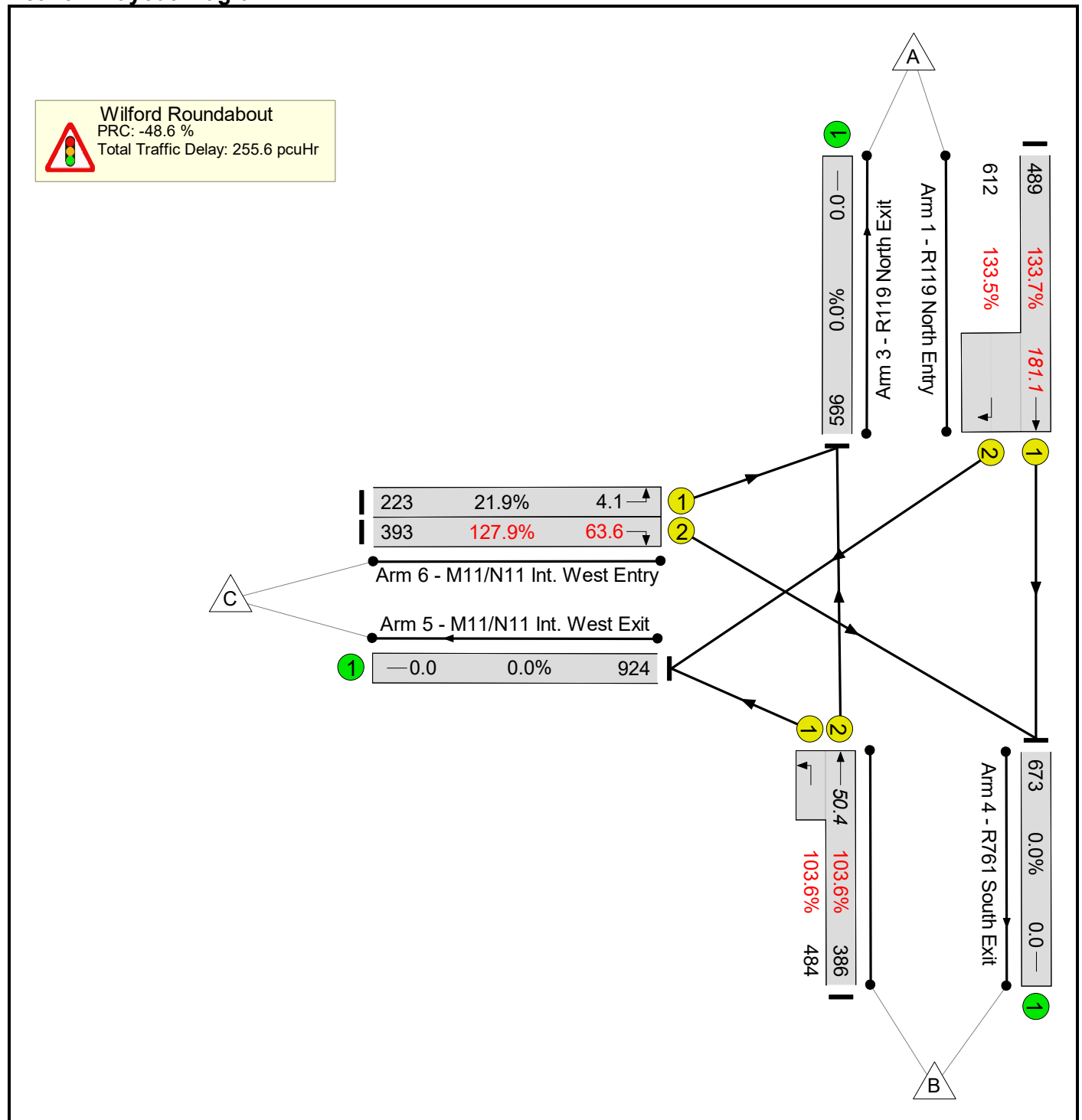
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	133.7%	0	0	0	255.6	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	133.7%	0	0	0	255.6	-	-
1/1+1/2	R119 North Entry Ahead Right	U	A B		1	48:39	-	-	1101	2255:2200	366+458	133.7 : 133.5%	-	-	-	164.9	539.3	181.1
2/2+2/1	R761 South Entry Ahead Left	U	C G		1:2	48:49	-	-	870	1940:1940	373+467	103.6 : 103.6%	-	-	-	33.1	137.0	50.4
6/1	M11/N11 Int. West Entry Left	U	F		1	62	-	-	223	1940	1019	21.9%	-	-	-	1.1	17.6	4.1
6/2	M11/N11 Int. West Entry Right	U	D		1	18	-	-	393	1940	307	127.9%	-	-	-	56.5	517.5	63.6
C1 PRC for Signalled Lanes (%): -48.6 Total Delay for Signalled Lanes (pcuHr): 255.63 Cycle Time (s): 120 PRC Over All Lanes (%): -48.6 Total Delay Over All Lanes(pcuHr): 255.63																		

Network Layout Diagram

Basic Results Summary

Network Results

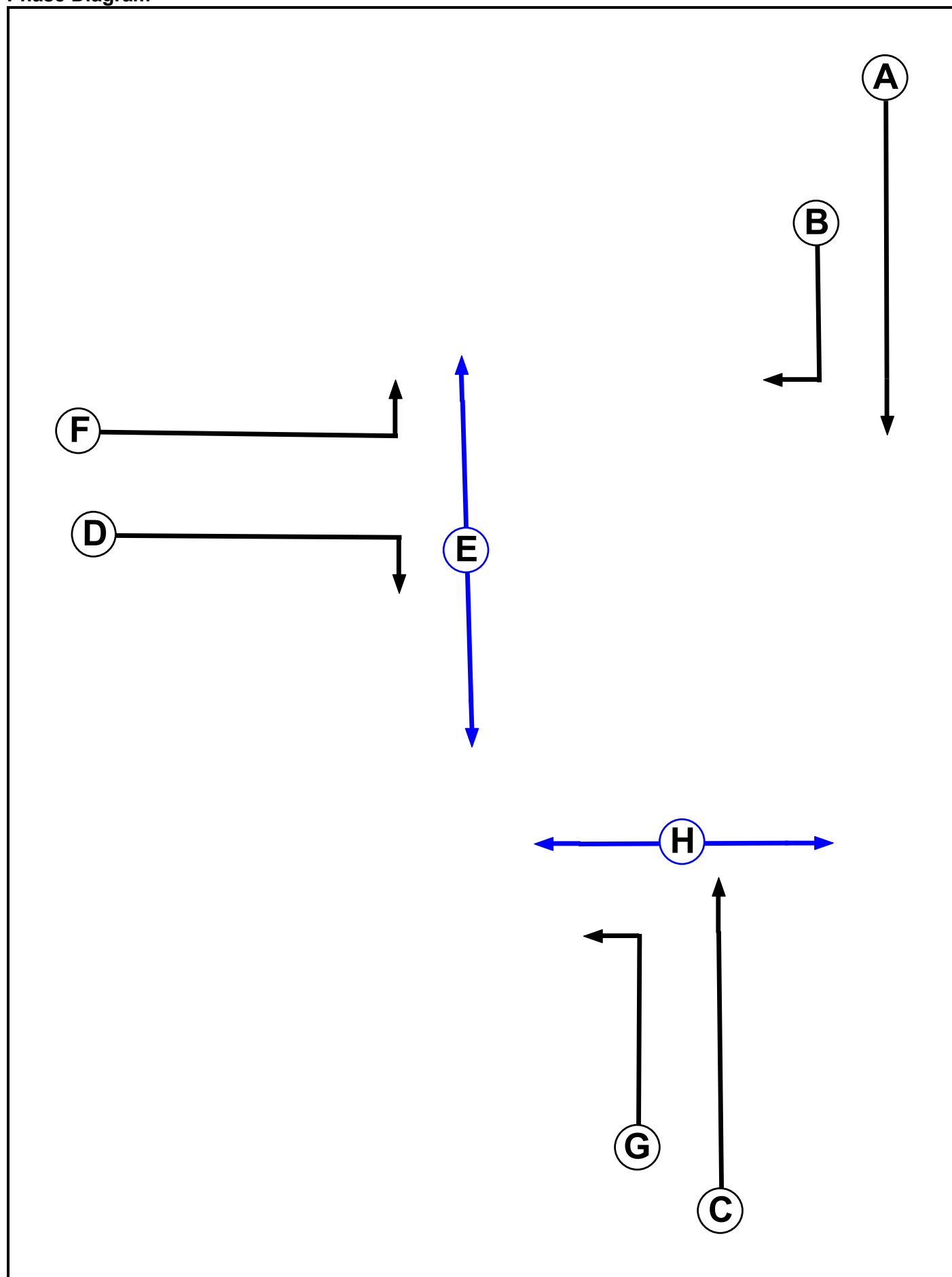
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	120.9%	0	0	0	256.8	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	120.9%	0	0	0	256.8	-	-
1/1+1/2	R119 North Entry Ahead Right	U	A B		1	52:35	-	-	934	2255:2200	345+432	120.2 : 120.2%	-	-	-	97.4	375.3	111.8
2/2+2/1	R761 South Entry Ahead Left	U	C G		1:2	52:53	-	-	1088	1940:1940	464+436	120.9 : 120.9%	-	-	-	116.7	386.0	136.9
6/1	M11/N11 Int. West Entry Left	U	F		1	58	-	-	319	1940	954	33.4%	-	-	-	1.9	21.4	6.7
6/2	M11/N11 Int. West Entry Right	U	D		1	18	-	-	365	1940	307	118.8%	-	-	-	40.9	403.2	47.5
C1 PRC for Signalled Lanes (%): -34.3 PRC Over All Lanes (%): -34.3 Total Delay for Signalled Lanes (pcuHr): 256.82 Total Delay Over All Lanes (pcuHr): 256.82 Cycle Time (s): 120																		

Network Layout Diagram

Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	133.7%	0	0	0	255.6	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	133.7%	0	0	0	255.6	-	-
1/1+1/2	R119 North Entry Ahead Right	U	A B		1	48:39	-	-	1101	2255:2200	366+458	133.7 : 133.5%	-	-	-	164.9	539.3	181.1
2/2+2/1	R761 South Entry Ahead Left	U	C G		1:2	48:49	-	-	870	1940:1940	373+467	103.6 : 103.6%	-	-	-	33.1	137.0	50.4
6/1	M11/N11 Int. West Entry Left	U	F		1	62	-	-	223	1940	1019	21.9%	-	-	-	1.1	17.6	4.1
6/2	M11/N11 Int. West Entry Right	U	D		1	18	-	-	393	1940	307	127.9%	-	-	-	56.5	517.5	63.6
C1 PRC for Signalled Lanes (%): -48.6 Total Delay for Signalled Lanes (pcuHr): 255.63 Cycle Time (s): 120 PRC Over All Lanes (%): -48.6 Total Delay Over All Lanes(pcuHr): 255.63																		

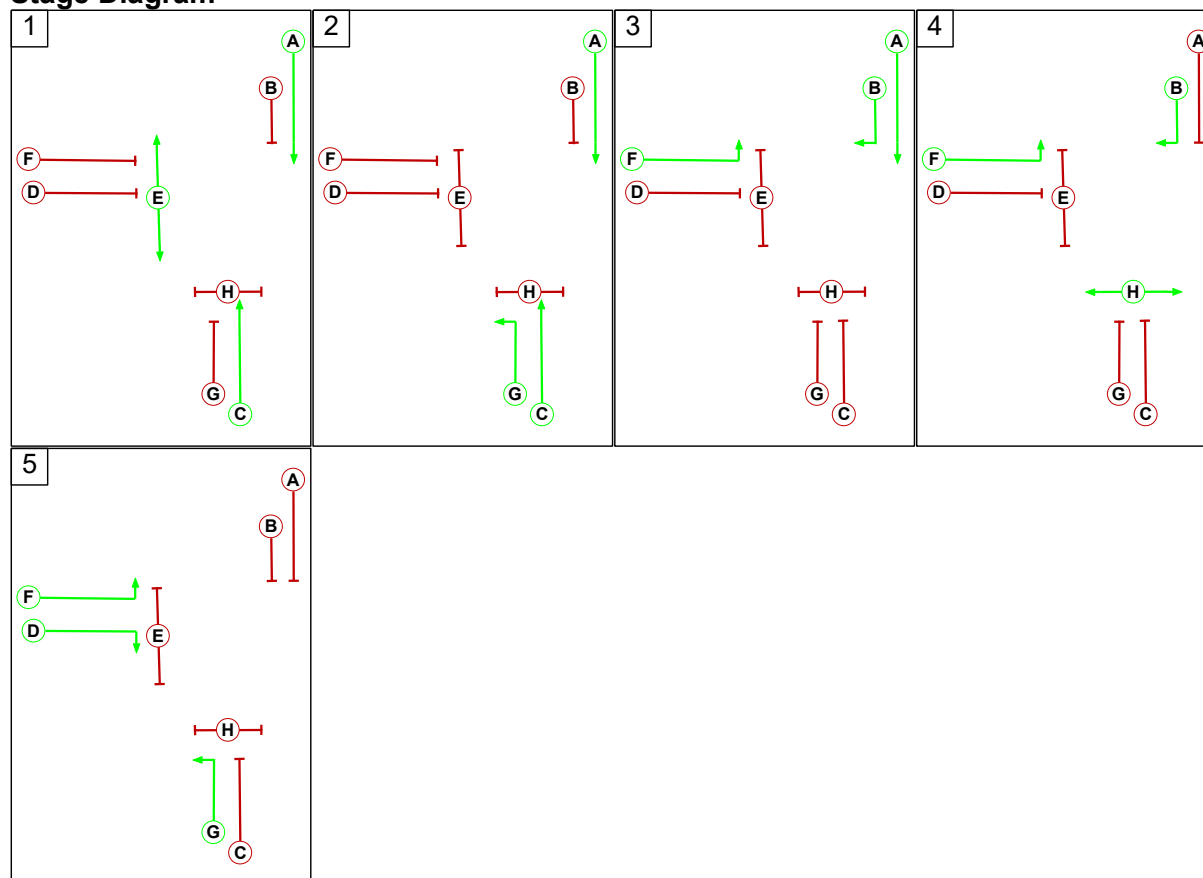


Phase Intergreens Matrix

Terminating Phase	Starting Phase								
		A	B	C	D	E	F	G	H
	A		-	-	5	-	-	-	10
	B	-		5	5	5	-	5	-
	C	-	5		5	-	5	-	5
	D	5	5	5		10	-	-	5
	E	-	5	-	5		5	5	5
	F	-	-	5	-	10		-	-
	G	-	5	-	-	10	-		5
	H	5	-	5	5	5	-	5	

Phases in Stage

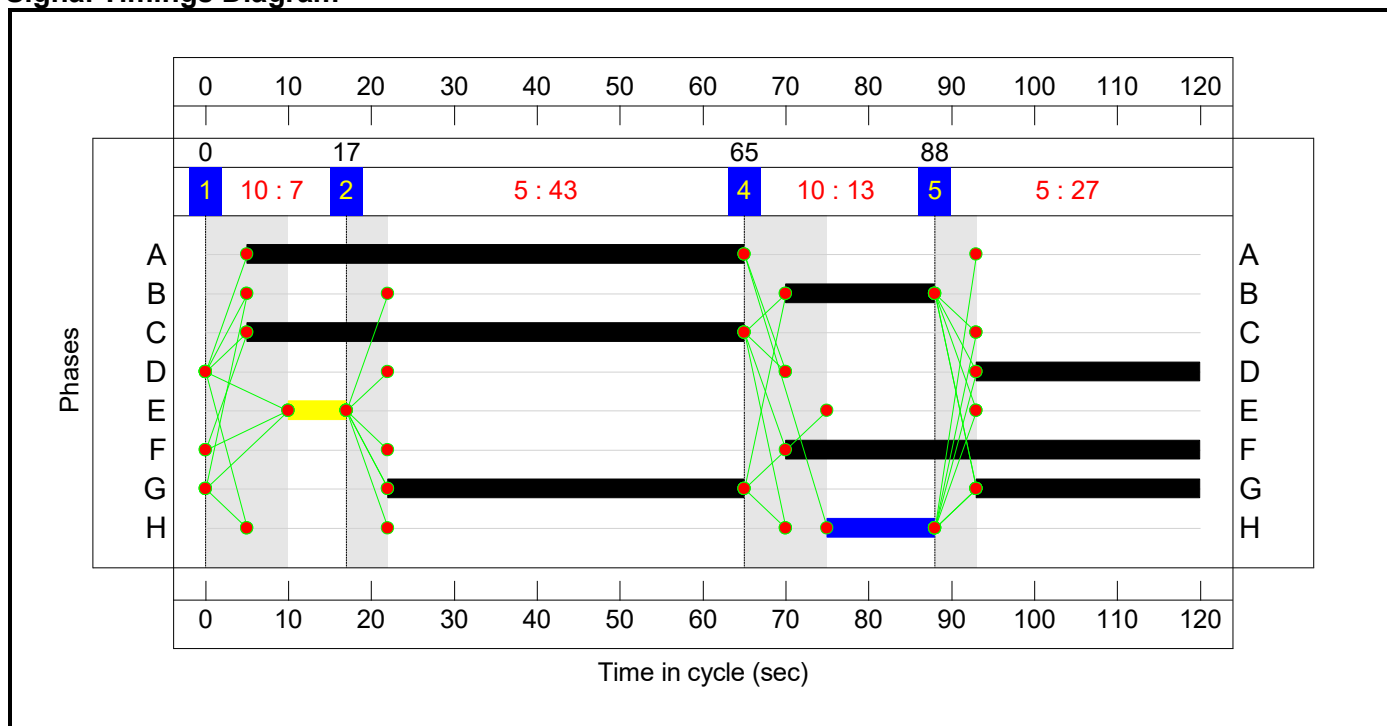
Stage No.	Phases in Stage
1	A C E
2	A C G
3	A B F
4	B F H
5	D F G

Stage Diagram

Basic Results Summary

Scenario 1: 'DN OY +5_AM' (FG1: 'DN OY +5_AM', Plan 1: 'Do No Scenario')

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	R119 North Entry Ahead	Traffic	60	5	65			
B	R119 North Entry Right	Traffic	18	70	88			
C	R761 South Entry Ahead	Traffic	60	5	65			
D	M11/N11 Int. West Entry Right	Traffic	27	93	0			
E	Pedestrians across	Pedestrian	7	10	17			
F	M11/N11 Int. West Entry Left	Traffic	50	70	0			
G	R761 South Entry Left	Traffic	43	22	65	27	93	0
H	Pedestrians across	Pedestrian	13	75	88			

Basic Results Summary

Lane Green Times

Junction: Wilford Roundabout					
Lane	Description	Type	Phases	Start Green	End Green
1/1	R119 North Entry Ahead	U	A	5	65
1/2	R119 North Entry Right	U	B	70	88
2/1	R761 South Entry Left	U	G	22	65
				93	0
2/2	R761 South Entry Ahead	U	C	5	65
6/1	M11/N11 Int. West Entry Left	U	F	70	0
6/2	M11/N11 Int. West Entry Right	U	D	93	0

Network Summary

Total Network Delay: 30.32 pcuHr
Worst PRC: -2.61 % (On Lane 2/2)

Basic Results Summary

Network Results

Item	Lane Description	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)
Network	-	-	-		-	-	-	-	-	-	-	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	-	-
1/1+1/2	R119 North Entry Ahead Right	N/A	A B		1	60:18	5:70	65:88	-	-	473	2255:2200	196+321
2/2+2/1	R761 South Entry Ahead Left	N/A	C G		1:2	60:70	5:22(93)	65:65(0)	-	-	956	1940:1940	453+583
3/1	R119 North Exit	N/A	-		-	-	-	-	-	-	608	Inf	Inf
4/1	R761 South Exit	N/A	-		-	-	-	-	-	-	586	Inf	Inf
5/1	M11/N11 Int. West Exit	N/A	-		-	-	-	-	-	-	832	Inf	Inf
6/1	M11/N11 Int. West Entry Left	N/A	F		1	50	70	0	-	-	190	1940	825
6/2	M11/N11 Int. West Entry Right	N/A	D		1	27	93	0	-	-	407	1940	453

Basic Results Summary

Item	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Mean Max Queue (pcu)	Mean Modulus of Error	Ignoring Random Delay ?	
Network	92.3%	-	-	0	0	0	-	1901.5	-	-	0.42	-	
Wilford Roundabout	92.3%	-	-	0	0	0	-	1901.5	-	-	0.42	-	
1/1+1/2	91.5 : 91.5%	473	473	-	-	-	70.6	379.7	0.8	9.2	0.00	-	
2/2+2/1	92.3 : 92.3%	956	956	-	-	-	40.9	1008.1	1.1	30.0	0.00	-	
3/1	0.0%	608	608	-	-	-	0.0	0.0	0.0	0.0	0.69	-	
4/1	0.0%	586	586	-	-	-	0.0	0.0	0.0	0.0	1.07	-	
5/1	0.0%	832	832	-	-	-	0.0	0.0	0.0	0.0	0.81	-	
6/1	23.0%	190	190	-	-	-	24.8	120.3	0.6	4.2	0.00	-	
6/2	89.9%	407	407	-	-	-	78.4	393.4	1.0	16.9	0.00	-	
C1 PRC for Signalled Lanes (%): -2.6 PRC Over All Lanes (%): -2.6 Total Delay for Signalled Lanes (pcuHr): 30.32 Total Delay Over All Lanes(pcuHr): 30.32 Cycle Time (s): 120													

Basic Results Summary

Zone Totals Data

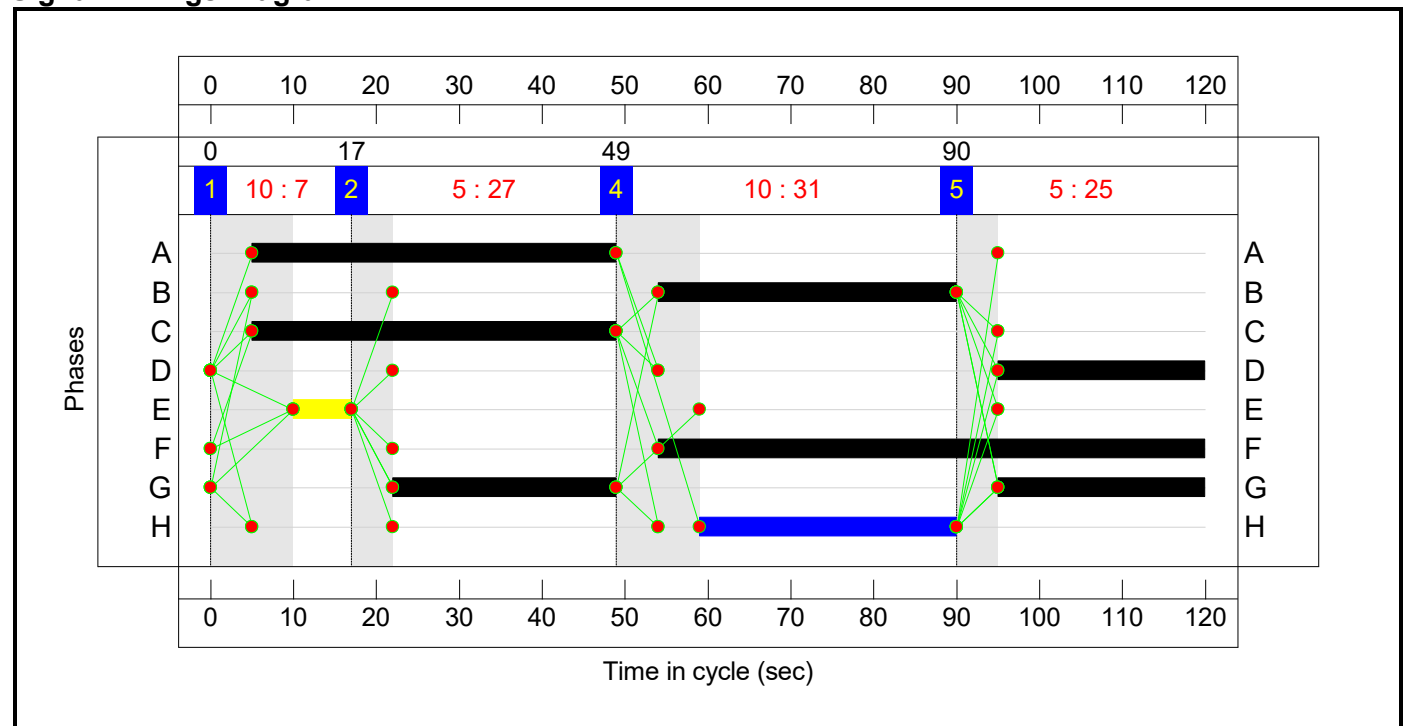
Zone	Org Tot	Dest Tot
A	-	-
B	-	-
C	-	-

Bonus Green Times

No Bonus Greens are defined For Scenario 1

Scenario 2: 'DN OY +5_PM' (FG2: 'DN OY +5_PM', Plan 1: 'Do No Scenario')

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	R119 North Entry Ahead	Traffic	44	5	49			
B	R119 North Entry Right	Traffic	36	54	90			
C	R761 South Entry Ahead	Traffic	44	5	49			
D	M11/N11 Int. West Entry Right	Traffic	25	95	0			
E	Pedestrians across	Pedestrian	7	10	17			
F	M11/N11 Int. West Entry Left	Traffic	66	54	0			
G	R761 South Entry Left	Traffic	27	22	49	25	95	0
H	Pedestrians across	Pedestrian	31	59	90			

Basic Results Summary

Lane Green Times

Junction: Wilford Roundabout					
Lane	Description	Type	Phases	Start Green	End Green
1/1	R119 North Entry Ahead	U	A	5	49
1/2	R119 North Entry Right	U	B	54	90
2/1	R761 South Entry Left	U	G	22	49
				95	0
2/2	R761 South Entry Ahead	U	C	5	49
6/1	M11/N11 Int. West Entry Left	U	F	54	0
6/2	M11/N11 Int. West Entry Right	U	D	95	0

Network Summary

Total Network Delay: 47.11 pcuHr
Worst PRC: -10.15 % (On Lane 1/1)

Basic Results Summary

Network Results

Item	Lane Description	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)
Network	-	-	-		-	-	-	-	-	-	-	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	-	-
1/1+1/2	R119 North Entry Ahead Right	N/A	A B		1	44:36	5:54	49:90	-	-	613	2255:2200	152+466
2/2+2/1	R761 South Entry Ahead Left	N/A	C G		1:2	44:52	5:22(95)	49:49(0)	-	-	792	1940:1940	293+510
3/1	R119 North Exit	N/A	-		-	-	-	-	-	-	341	Inf	Inf
4/1	R761 South Exit	N/A	-		-	-	-	-	-	-	554	Inf	Inf
5/1	M11/N11 Int. West Exit	N/A	-		-	-	-	-	-	-	965	Inf	Inf
6/1	M11/N11 Int. West Entry Left	N/A	F		1	66	54	0	-	-	52	1940	1083
6/2	M11/N11 Int. West Entry Right	N/A	D		1	25	95	0	-	-	403	1940	420

Basic Results Summary

Item	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Mean Max Queue (pcu)	Mean Modulus of Error	Ignoring Random Delay ?	
Network	99.1%	-	-	0	0	0	-	1983.0	-	-	0.45	-	
Wilford Roundabout	99.1%	-	-	0	0	0	-	1983.0	-	-	0.45	-	
1/1+1/2	99.1 : 99.1%	613	613	-	-	-	101.3	627.9	1.0	23.1	0.00	-	
2/2+2/1	98.7 : 98.7%	792	792	-	-	-	81.2	935.4	1.2	31.6	0.00	-	
3/1	0.0%	341	341	-	-	-	0.0	0.0	0.0	0.0	1.06	-	
4/1	0.0%	554	554	-	-	-	0.0	0.0	0.0	0.0	1.22	-	
5/1	0.0%	965	965	-	-	-	0.0	0.0	0.0	0.0	0.67	-	
6/1	4.8%	52	52	-	-	-	13.8	23.4	0.5	0.8	0.00	-	
6/2	95.9%	403	403	-	-	-	105.4	396.3	1.0	19.8	0.00	-	
C1 PRC for Signalled Lanes (%): -10.2 PRC Over All Lanes (%): -10.2 Total Delay for Signalled Lanes (pcuHr): 47.11 Total Delay Over All Lanes(pcuHr): 47.11 Cycle Time (s): 120													

Basic Results Summary

Zone Totals Data

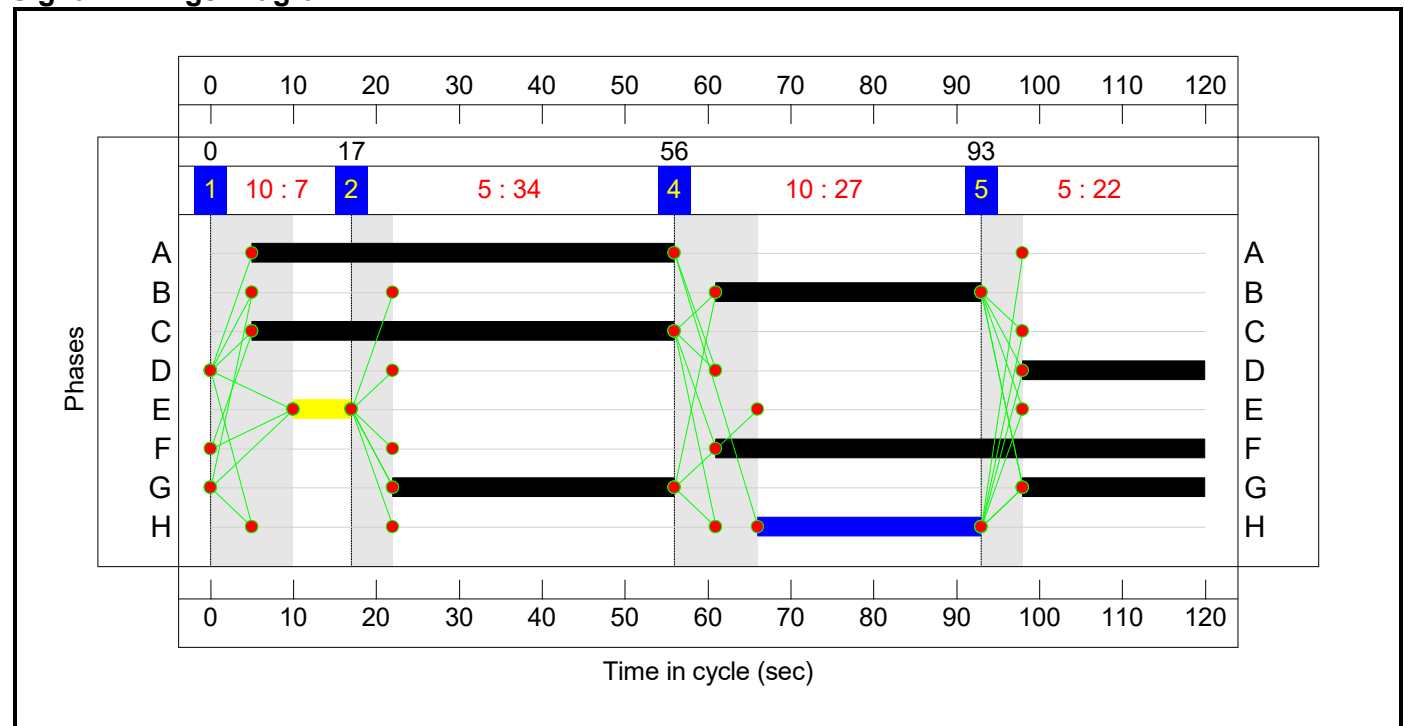
Zone	Org Tot	Dest Tot
A	-	-
B	-	-
C	-	-

Bonus Green Times

No Bonus Greens are defined For Scenario 2

Scenario 3: 'DN OY CT +5_AM' (FG3: 'DN OY CT +5_AM', Plan 1: 'Do No Scenario')

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	R119 North Entry Ahead	Traffic	51	5	56			
B	R119 North Entry Right	Traffic	32	61	93			
C	R761 South Entry Ahead	Traffic	51	5	56			
D	M11/N11 Int. West Entry Right	Traffic	22	98	0			
E	Pedestrians across	Pedestrian	7	10	17			
F	M11/N11 Int. West Entry Left	Traffic	59	61	0			
G	R761 South Entry Left	Traffic	34	22	56	22	98	0
H	Pedestrians across	Pedestrian	27	66	93			

Basic Results Summary

Lane Green Times

Junction: Wilford Roundabout					
Lane	Description	Type	Phases	Start Green	End Green
1/1	R119 North Entry Ahead	U	A	5	56
1/2	R119 North Entry Right	U	B	61	93
2/1	R761 South Entry Left	U	G	22	56
				98	0
2/2	R761 South Entry Ahead	U	C	5	56
6/1	M11/N11 Int. West Entry Left	U	F	61	0
6/2	M11/N11 Int. West Entry Right	U	D	98	0

Network Summary

Total Network Delay: 138.51 pcuHr
Worst PRC: -23.11 % (On Lane 6/2)

Basic Results Summary

Network Results

Item	Lane Description	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)
Network	-	-	-		-	-	-	-	-	-	-	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	-	-
1/1+1/2	R119 North Entry Ahead Right	N/A	A B		1	51:32	5:61	56:93	-	-	657	2255:2200	164+431
2/2+2/1	R761 South Entry Ahead Left	N/A	C G		1:2	51:56	5:22(98)	56:56(0)	-	-	976	1940:1940	382+510
3/1	R119 North Exit	N/A	-		-	-	-	-	-	-	662	Inf	Inf
4/1	R761 South Exit	N/A	-		-	-	-	-	-	-	593	Inf	Inf
5/1	M11/N11 Int. West Exit	N/A	-		-	-	-	-	-	-	1034	Inf	Inf
6/1	M11/N11 Int. West Entry Left	N/A	F		1	59	61	0	-	-	244	1940	970
6/2	M11/N11 Int. West Entry Right	N/A	D		1	22	98	0	-	-	412	1940	372

Basic Results Summary

Item	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Mean Max Queue (pcu)	Mean Modulus of Error	Ignoring Random Delay ?	
Network	110.8%	-	-	0	0	0	-	2771.6	-	-	0.39	-	
Wilford Roundabout	110.8%	-	-	0	0	0	-	2771.6	-	-	0.39	-	
1/1+1/2	110.3 : 110.3%	657	596	-	-	-	244.9	930.3	1.4	52.5	0.00	-	
2/2+2/1	109.4 : 109.4%	976	892	-	-	-	220.7	1291.0	1.3	78.8	0.00	-	
3/1	0.0%	626	626	-	-	-	0.0	0.0	0.0	0.0	0.68	-	
4/1	0.0%	536	536	-	-	-	0.0	0.0	0.0	0.0	1.27	-	
5/1	0.0%	941	941	-	-	-	0.0	0.0	0.0	0.0	0.67	-	
6/1	25.2%	244	244	-	-	-	19.6	138.3	0.6	4.8	0.00	-	
6/2	110.8%	412	372	-	-	-	285.3	412.0	1.0	40.4	0.00	-	
C1 PRC for Signalled Lanes (%): -23.1 PRC Over All Lanes (%): -23.1 Total Delay for Signalled Lanes (pcuHr): 138.51 Total Delay Over All Lanes(pcuHr): 138.51 Cycle Time (s): 120													

Basic Results Summary

Zone Totals Data

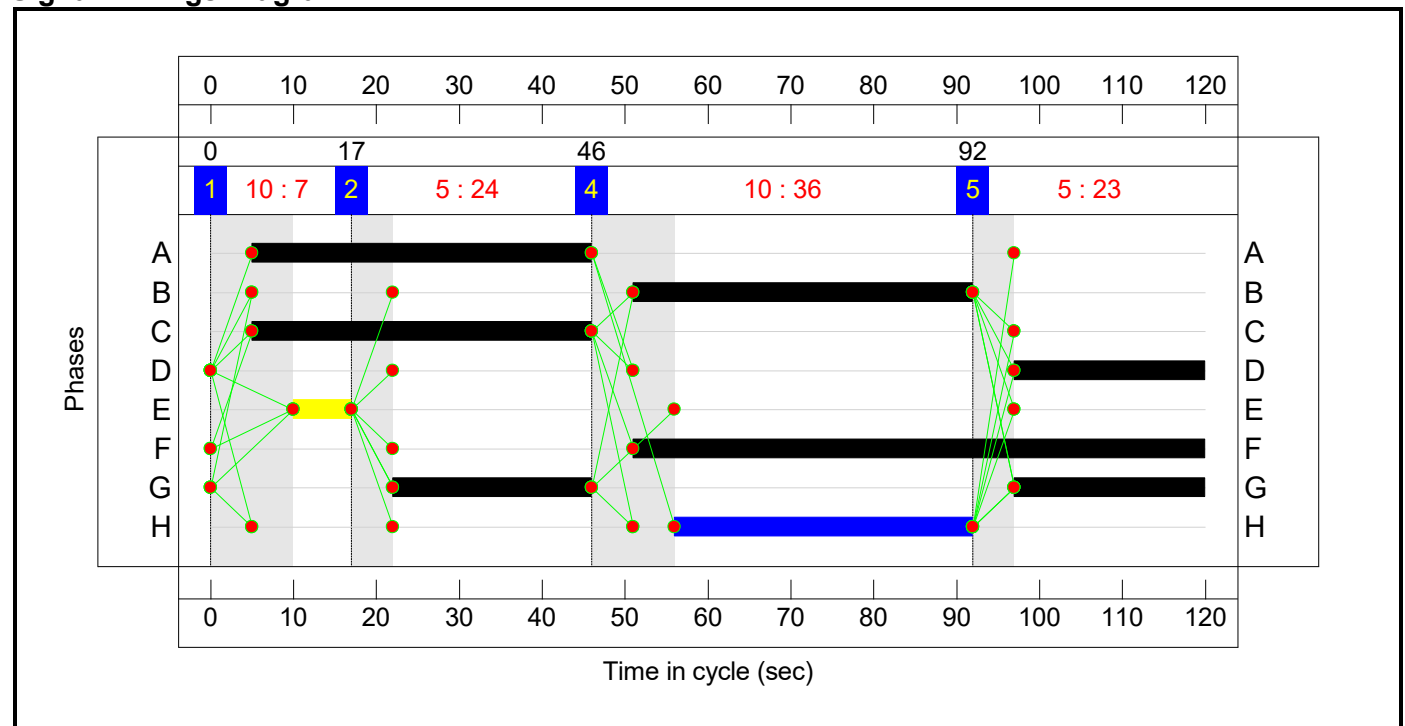
Zone	Org Tot	Dest Tot
A	-	-
B	-	-
C	-	-

Bonus Green Times

No Bonus Greens are defined For Scenario 3

Scenario 4: 'DN OY CT +5_PM' (FG4: 'DN OY CT +5_PM', Plan 1: 'Do No Scenario')

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	R119 North Entry Ahead	Traffic	41	5	46			
B	R119 North Entry Right	Traffic	41	51	92			
C	R761 South Entry Ahead	Traffic	41	5	46			
D	M11/N11 Int. West Entry Right	Traffic	23	97	0			
E	Pedestrians across	Pedestrian	7	10	17			
F	M11/N11 Int. West Entry Left	Traffic	69	51	0			
G	R761 South Entry Left	Traffic	24	22	46	23	97	0
H	Pedestrians across	Pedestrian	36	56	92			

Basic Results Summary

Lane Green Times

Junction: Wilford Roundabout					
Lane	Description	Type	Phases	Start Green	End Green
1/1	R119 North Entry Ahead	U	A	5	46
1/2	R119 North Entry Right	U	B	51	92
2/1	R761 South Entry Left	U	G	22	46
				97	0
2/2	R761 South Entry Ahead	U	C	5	46
6/1	M11/N11 Int. West Entry Left	U	F	51	0
6/2	M11/N11 Int. West Entry Right	U	D	97	0

Network Summary

Total Network Delay: 110.32 pcuHr
Worst PRC: -20.27 % (On Lane 6/2)

Basic Results Summary

Network Results

Item	Lane Description	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)
Network	-	-	-		-	-	-	-	-	-	-	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	-	-
1/1+1/2	R119 North Entry Ahead Right	N/A	A B		1	41	5:51	46:92	-	-	702	2255:2200	141+510
2/2+2/1	R761 South Entry Ahead Left	N/A	C G		1:2	41:47	5:22(97)	46:46(0)	-	-	804	1940:1940	273+482
3/1	R119 North Exit	N/A	-		-	-	-	-	-	-	491	Inf	Inf
4/1	R761 South Exit	N/A	-		-	-	-	-	-	-	572	Inf	Inf
5/1	M11/N11 Int. West Exit	N/A	-		-	-	-	-	-	-	1063	Inf	Inf
6/1	M11/N11 Int. West Entry Left	N/A	F		1	69	51	0	-	-	200	1940	1132
6/2	M11/N11 Int. West Entry Right	N/A	D		1	23	97	0	-	-	420	1940	388

Basic Results Summary

Item	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Mean Max Queue (pcu)	Mean Modulus of Error	Ignoring Random Delay ?	
Network	108.2%	-	-	0	0	0	-	2612.2	-	-	0.41	-	
Wilford Roundabout	108.2%	-	-	0	0	0	-	2612.2	-	-	0.41	-	
1/1+1/2	107.8 : 107.8%	702	651	-	-	-	206.8	981.5	1.4	50.6	0.00	-	
2/2+2/1	106.4 : 106.4%	804	756	-	-	-	181.0	1119.0	1.4	53.7	0.00	-	
3/1	0.0%	473	473	-	-	-	0.0	0.0	0.0	0.0	0.78	-	
4/1	0.0%	529	529	-	-	-	0.0	0.0	0.0	0.0	1.31	-	
5/1	0.0%	992	992	-	-	-	0.0	0.0	0.0	0.0	0.62	-	
6/1	17.7%	200	200	-	-	-	13.6	91.7	0.5	3.2	0.00	-	
6/2	108.2%	420	388	-	-	-	247.0	420.0	1.0	36.8	0.00	-	
C1 PRC for Signalled Lanes (%): -20.3 PRC Over All Lanes (%): -20.3 Total Delay for Signalled Lanes (pcuHr): 110.32 Total Delay Over All Lanes(pcuHr): 110.32 Cycle Time (s): 120													

Basic Results Summary

Zone Totals Data

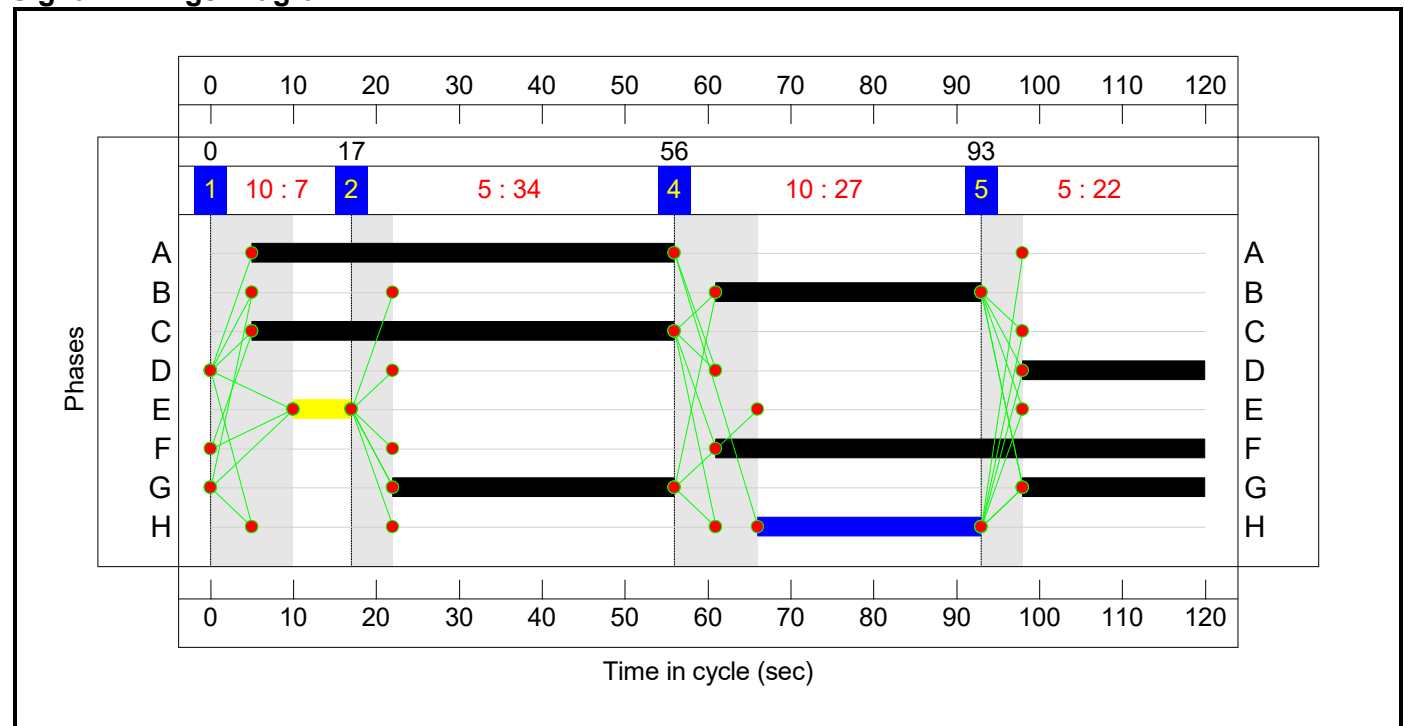
Zone	Org Tot	Dest Tot
A	-	-
B	-	-
C	-	-

Bonus Green Times

No Bonus Greens are defined For Scenario 4

Scenario 5: 'DN OY AT +5_AM' (FG5: 'DN OY AT +5_AM', Plan 1: 'Do No Scenario')

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	R119 North Entry Ahead	Traffic	51	5	56			
B	R119 North Entry Right	Traffic	32	61	93			
C	R761 South Entry Ahead	Traffic	51	5	56			
D	M11/N11 Int. West Entry Right	Traffic	22	98	0			
E	Pedestrians across	Pedestrian	7	10	17			
F	M11/N11 Int. West Entry Left	Traffic	59	61	0			
G	R761 South Entry Left	Traffic	34	22	56	22	98	0
H	Pedestrians across	Pedestrian	27	66	93			

Basic Results Summary

Lane Green Times

Junction: Wilford Roundabout					
Lane	Description	Type	Phases	Start Green	End Green
1/1	R119 North Entry Ahead	U	A	5	56
1/2	R119 North Entry Right	U	B	61	93
2/1	R761 South Entry Left	U	G	22	56
				98	0
2/2	R761 South Entry Ahead	U	C	5	56
6/1	M11/N11 Int. West Entry Left	U	F	61	0
6/2	M11/N11 Int. West Entry Right	U	D	98	0

Network Summary

Total Network Delay: 138.51 pcuHr
Worst PRC: -23.11 % (On Lane 6/2)

Basic Results Summary

Network Results

Item	Lane Description	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)
Network	-	-	-		-	-	-	-	-	-	-	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	-	-
1/1+1/2	R119 North Entry Ahead Right	N/A	A B		1	51:32	5:61	56:93	-	-	657	2255:2200	164+431
2/2+2/1	R761 South Entry Ahead Left	N/A	C G		1:2	51:56	5:22(98)	56:56(0)	-	-	976	1940:1940	382+510
3/1	R119 North Exit	N/A	-		-	-	-	-	-	-	662	Inf	Inf
4/1	R761 South Exit	N/A	-		-	-	-	-	-	-	593	Inf	Inf
5/1	M11/N11 Int. West Exit	N/A	-		-	-	-	-	-	-	1034	Inf	Inf
6/1	M11/N11 Int. West Entry Left	N/A	F		1	59	61	0	-	-	244	1940	970
6/2	M11/N11 Int. West Entry Right	N/A	D		1	22	98	0	-	-	412	1940	372

Basic Results Summary

Item	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Mean Max Queue (pcu)	Mean Modulus of Error	Ignoring Random Delay ?	
Network	110.8%	-	-	0	0	0	-	2771.6	-	-	0.39	-	
Wilford Roundabout	110.8%	-	-	0	0	0	-	2771.6	-	-	0.39	-	
1/1+1/2	110.3 : 110.3%	657	596	-	-	-	244.9	930.3	1.4	52.5	0.00	-	
2/2+2/1	109.4 : 109.4%	976	892	-	-	-	220.7	1291.0	1.3	78.8	0.00	-	
3/1	0.0%	626	626	-	-	-	0.0	0.0	0.0	0.0	0.68	-	
4/1	0.0%	536	536	-	-	-	0.0	0.0	0.0	0.0	1.27	-	
5/1	0.0%	941	941	-	-	-	0.0	0.0	0.0	0.0	0.67	-	
6/1	25.2%	244	244	-	-	-	19.6	138.3	0.6	4.8	0.00	-	
6/2	110.8%	412	372	-	-	-	285.3	412.0	1.0	40.4	0.00	-	
C1 PRC for Signalled Lanes (%): -23.1 PRC Over All Lanes (%): -23.1 Total Delay for Signalled Lanes (pcuHr): 138.51 Total Delay Over All Lanes(pcuHr): 138.51 Cycle Time (s): 120													

Basic Results Summary

Zone Totals Data

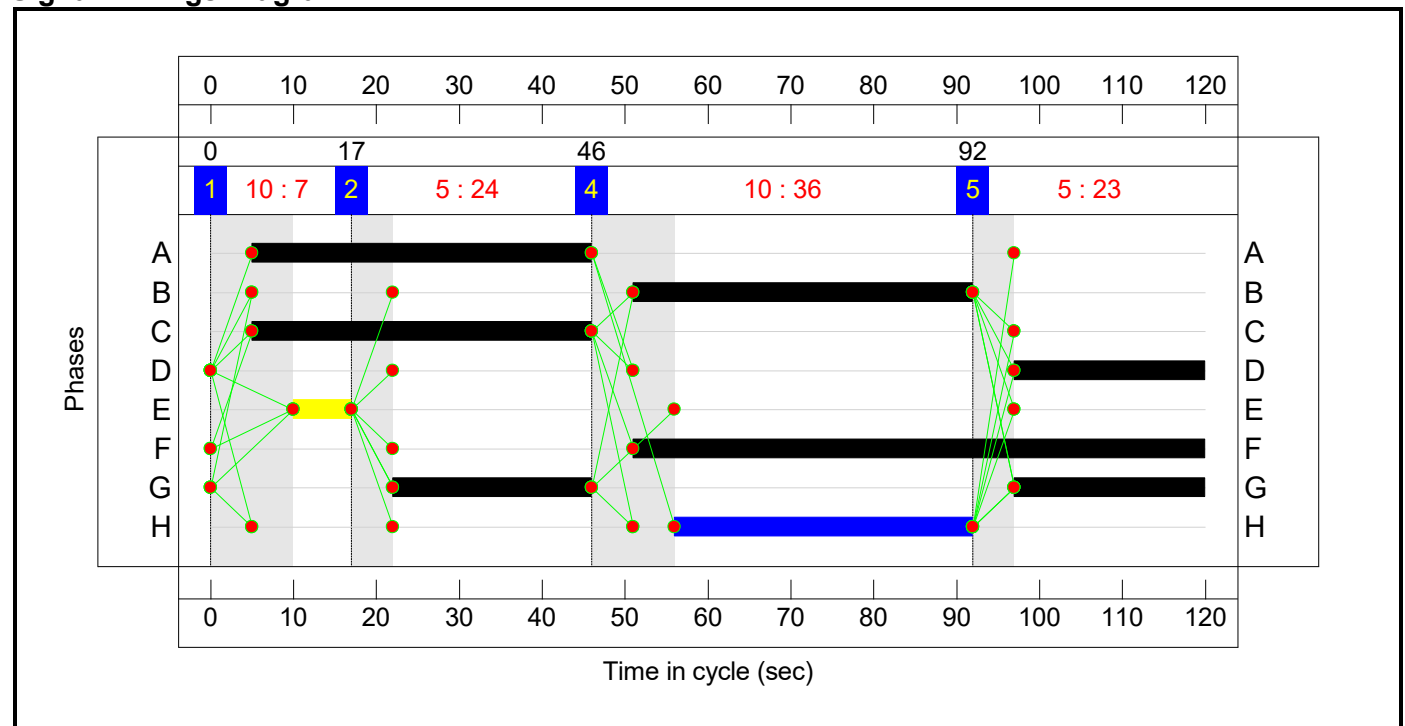
Zone	Org Tot	Dest Tot
A	-	-
B	-	-
C	-	-

Bonus Green Times

No Bonus Greens are defined For Scenario 5

Scenario 6: 'DN OY AT +5_PM' (FG6: 'DN OY AT +5_PM', Plan 1: 'Do No Scenario')

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	R119 North Entry Ahead	Traffic	41	5	46			
B	R119 North Entry Right	Traffic	41	51	92			
C	R761 South Entry Ahead	Traffic	41	5	46			
D	M11/N11 Int. West Entry Right	Traffic	23	97	0			
E	Pedestrians across	Pedestrian	7	10	17			
F	M11/N11 Int. West Entry Left	Traffic	69	51	0			
G	R761 South Entry Left	Traffic	24	22	46	23	97	0
H	Pedestrians across	Pedestrian	36	56	92			

Basic Results Summary

Lane Green Times

Junction: Wilford Roundabout					
Lane	Description	Type	Phases	Start Green	End Green
1/1	R119 North Entry Ahead	U	A	5	46
1/2	R119 North Entry Right	U	B	51	92
2/1	R761 South Entry Left	U	G	22	46
				97	0
2/2	R761 South Entry Ahead	U	C	5	46
6/1	M11/N11 Int. West Entry Left	U	F	51	0
6/2	M11/N11 Int. West Entry Right	U	D	97	0

Network Summary

Total Network Delay: 110.32 pcuHr
Worst PRC: -20.27 % (On Lane 6/2)

Basic Results Summary

Network Results

Item	Lane Description	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)
Network	-	-	-		-	-	-	-	-	-	-	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	-	-
1/1+1/2	R119 North Entry Ahead Right	N/A	A B		1	41	5:51	46:92	-	-	702	2255:2200	141+510
2/2+2/1	R761 South Entry Ahead Left	N/A	C G		1:2	41:47	5:22(97)	46:46(0)	-	-	804	1940:1940	273+482
3/1	R119 North Exit	N/A	-		-	-	-	-	-	-	491	Inf	Inf
4/1	R761 South Exit	N/A	-		-	-	-	-	-	-	572	Inf	Inf
5/1	M11/N11 Int. West Exit	N/A	-		-	-	-	-	-	-	1063	Inf	Inf
6/1	M11/N11 Int. West Entry Left	N/A	F		1	69	51	0	-	-	200	1940	1132
6/2	M11/N11 Int. West Entry Right	N/A	D		1	23	97	0	-	-	420	1940	388

Basic Results Summary

Item	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Mean Max Queue (pcu)	Mean Modulus of Error	Ignoring Random Delay ?	
Network	108.2%	-	-	0	0	0	-	2612.2	-	-	0.41	-	
Wilford Roundabout	108.2%	-	-	0	0	0	-	2612.2	-	-	0.41	-	
1/1+1/2	107.8 : 107.8%	702	651	-	-	-	206.8	981.5	1.4	50.6	0.00	-	
2/2+2/1	106.4 : 106.4%	804	756	-	-	-	181.0	1119.0	1.4	53.7	0.00	-	
3/1	0.0%	473	473	-	-	-	0.0	0.0	0.0	0.0	0.78	-	
4/1	0.0%	529	529	-	-	-	0.0	0.0	0.0	0.0	1.31	-	
5/1	0.0%	992	992	-	-	-	0.0	0.0	0.0	0.0	0.62	-	
6/1	17.7%	200	200	-	-	-	13.6	91.7	0.5	3.2	0.00	-	
6/2	108.2%	420	388	-	-	-	247.0	420.0	1.0	36.8	0.00	-	
C1 PRC for Signalled Lanes (%): -20.3 PRC Over All Lanes (%): -20.3 Total Delay for Signalled Lanes (pcuHr): 110.32 Total Delay Over All Lanes(pcuHr): 110.32 Cycle Time (s): 120													

Basic Results Summary

Zone Totals Data

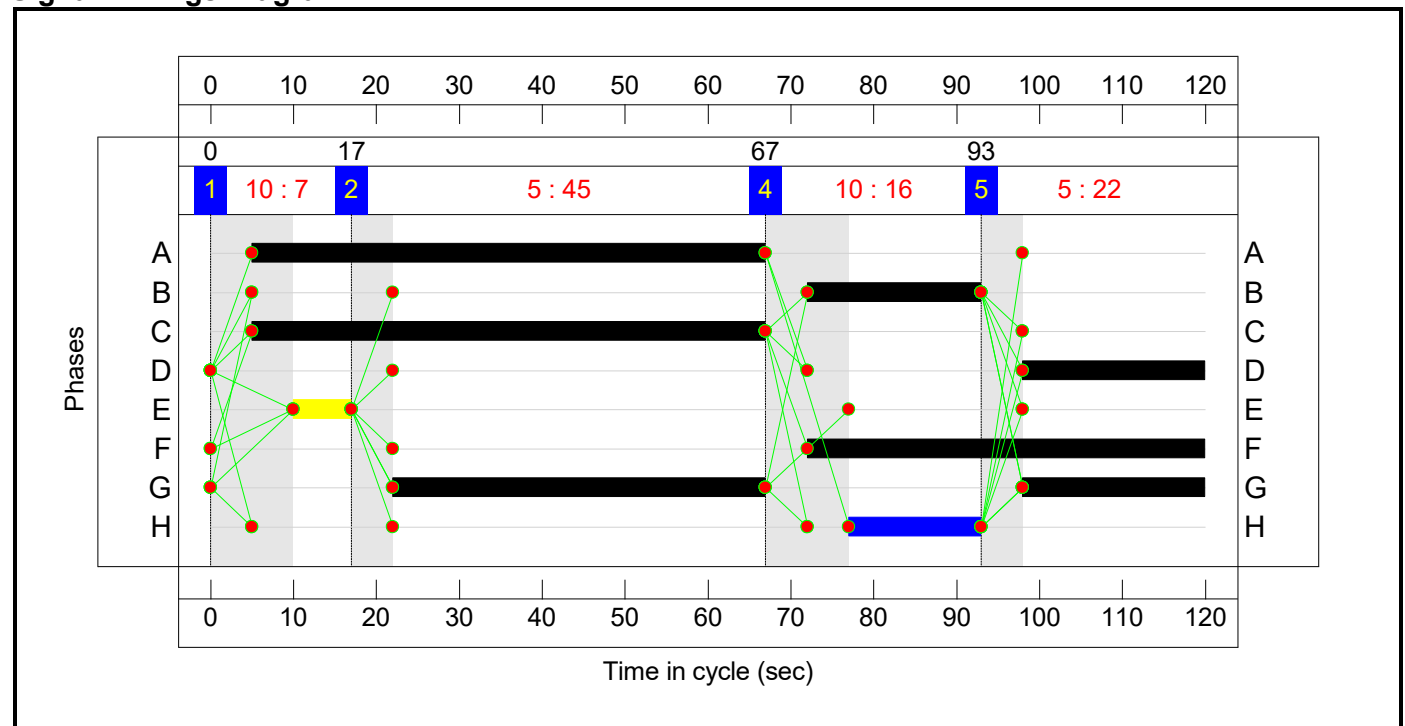
Zone	Org Tot	Dest Tot
A	-	-
B	-	-
C	-	-

Bonus Green Times

No Bonus Greens are defined For Scenario 6

Scenario 7: 'DN OY +15_AM' (FG7: 'DN OY +15_AM', Plan 1: 'Do No Scenario')

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	R119 North Entry Ahead	Traffic	62	5	67			
B	R119 North Entry Right	Traffic	21	72	93			
C	R761 South Entry Ahead	Traffic	62	5	67			
D	M11/N11 Int. West Entry Right	Traffic	22	98	0			
E	Pedestrians across	Pedestrian	7	10	17			
F	M11/N11 Int. West Entry Left	Traffic	48	72	0			
G	R761 South Entry Left	Traffic	45	22	67	22	98	0
H	Pedestrians across	Pedestrian	16	77	93			

Basic Results Summary

Lane Green Times

Junction: Wilford Roundabout					
Lane	Description	Type	Phases	Start Green	End Green
1/1	R119 North Entry Ahead	U	A	5	67
1/2	R119 North Entry Right	U	B	72	93
2/1	R761 South Entry Left	U	G	22	67
				98	0
2/2	R761 South Entry Ahead	U	C	5	67
6/1	M11/N11 Int. West Entry Left	U	F	72	0
6/2	M11/N11 Int. West Entry Right	U	D	98	0

Network Summary

Total Network Delay: 67.92 pcuHr
Worst PRC: -13.24 % (On Lane 2/2)

Basic Results Summary

Network Results

Item	Lane Description	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)
Network	-	-	-		-	-	-	-	-	-	-	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	-	-
1/1+1/2	R119 North Entry Ahead Right	N/A	A B		1	62:21	5:72	67:93	-	-	728	2255:2200	385+335
2/2+2/1	R761 South Entry Ahead Left	N/A	C G		1:2	62:67	5:22(98)	67:67(0)	-	-	1082	1940:1940	545+517
3/1	R119 North Exit	N/A	-		-	-	-	-	-	-	820	Inf	Inf
4/1	R761 South Exit	N/A	-		-	-	-	-	-	-	754	Inf	Inf
5/1	M11/N11 Int. West Exit	N/A	-		-	-	-	-	-	-	866	Inf	Inf
6/1	M11/N11 Int. West Entry Left	N/A	F		1	48	72	0	-	-	265	1940	792
6/2	M11/N11 Int. West Entry Right	N/A	D		1	22	98	0	-	-	365	1940	372

Basic Results Summary

Item	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Mean Max Queue (pcu)	Mean Modulus of Error	Ignoring Random Delay ?	
Network	101.9%	-	-	0	0	0	-	2613.9	-	-	0.34	-	
Wilford Roundabout	101.9%	-	-	0	0	0	-	2613.9	-	-	0.34	-	
1/1+1/2	101.1 : 101.1%	728	724	-	-	-	109.5	787.4	1.1	27.9	0.00	-	
2/2+2/1	101.9 : 101.9%	1082	1062	-	-	-	102.6	1283.5	1.2	56.6	0.00	-	
3/1	0.0%	810	810	-	-	-	0.0	0.0	0.0	0.0	0.56	-	
4/1	0.0%	754	754	-	-	-	0.0	0.0	0.0	0.0	0.80	-	
5/1	0.0%	852	852	-	-	-	0.0	0.0	0.0	0.0	0.72	-	
6/1	33.5%	265	265	-	-	-	27.7	181.1	0.7	6.3	0.00	-	
6/2	98.2%	365	365	-	-	-	127.2	362.0	1.0	20.1	0.00	-	
C1 PRC for Signalled Lanes (%): -13.2 PRC Over All Lanes (%): -13.2 Total Delay for Signalled Lanes (pcuHr): 67.92 Total Delay Over All Lanes(pcuHr): 67.92 Cycle Time (s): 120													

Basic Results Summary

Zone Totals Data

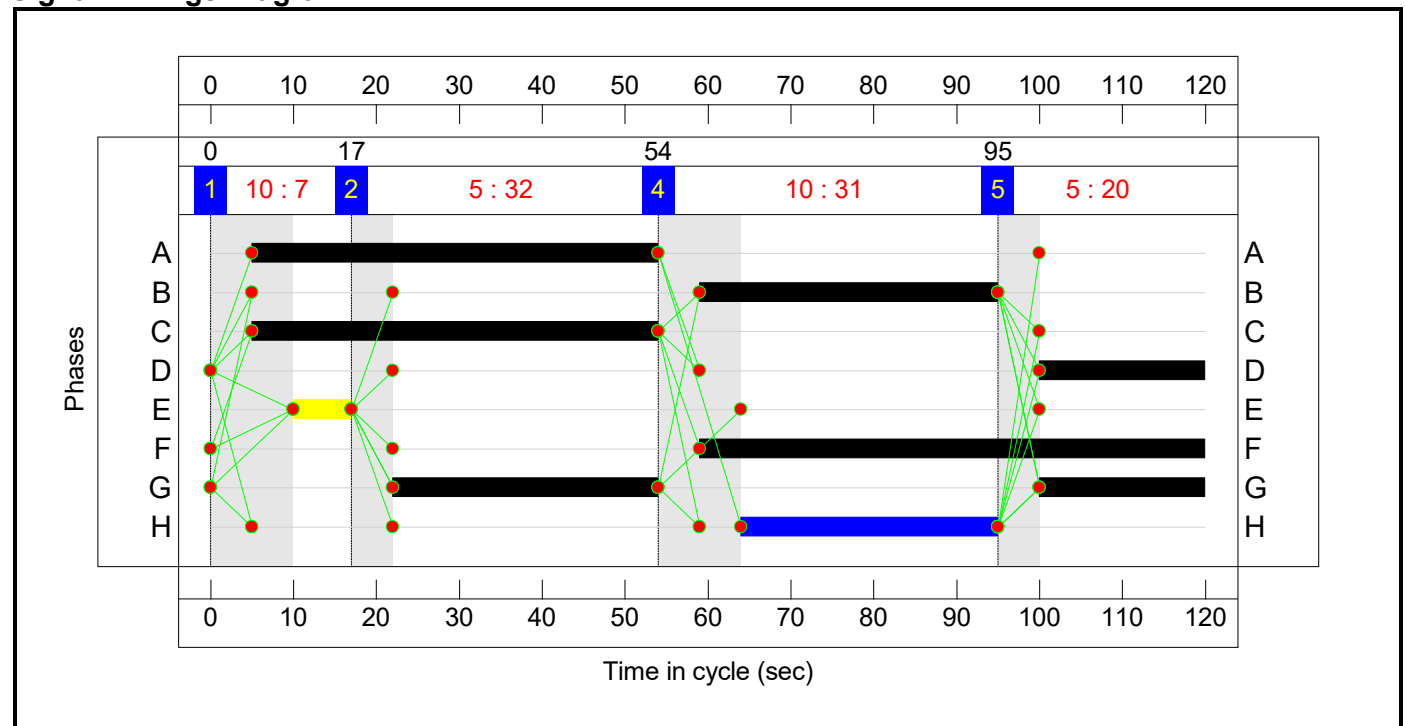
Zone	Org Tot	Dest Tot
A	-	-
B	-	-
C	-	-

Bonus Green Times

No Bonus Greens are defined For Scenario 7

Scenario 8: 'DN OY +15_PM' (FG8: 'DN OY +15_PM', Plan 1: 'Do No Scenario')

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	R119 North Entry Ahead	Traffic	49	5	54			
B	R119 North Entry Right	Traffic	36	59	95			
C	R761 South Entry Ahead	Traffic	49	5	54			
D	M11/N11 Int. West Entry Right	Traffic	20	100	0			
E	Pedestrians across	Pedestrian	7	10	17			
F	M11/N11 Int. West Entry Left	Traffic	61	59	0			
G	R761 South Entry Left	Traffic	32	22	54	20	100	0
H	Pedestrians across	Pedestrian	31	64	95			

Basic Results Summary

Lane Green Times

Junction: Wilford Roundabout					
Lane	Description	Type	Phases	Start Green	End Green
1/1	R119 North Entry Ahead	U	A	5	54
1/2	R119 North Entry Right	U	B	59	95
2/1	R761 South Entry Left	U	G	22	54
				100	0
2/2	R761 South Entry Ahead	U	C	5	54
6/1	M11/N11 Int. West Entry Left	U	F	59	0
6/2	M11/N11 Int. West Entry Right	U	D	100	0

Network Summary

Total Network Delay: 167.10 pcuHr
Worst PRC: -34.85 % (On Lane 1/1)

Basic Results Summary

Network Results

Item	Lane Description	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)
Network	-	-	-		-	-	-	-	-	-	-	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	-	-
1/1+1/2	R119 North Entry Ahead Right	N/A	A B		1	49:36	5:59	54:95	-	-	1000	2255:2200	393+433
2/2+2/1	R761 South Entry Ahead Left	N/A	C G		1:2	49:52	5:22(100)	54:54(0)	-	-	851	1940:1940	370+488
3/1	R119 North Exit	N/A	-		-	-	-	-	-	-	445	Inf	Inf
4/1	R761 South Exit	N/A	-		-	-	-	-	-	-	870	Inf	Inf
5/1	M11/N11 Int. West Exit	N/A	-		-	-	-	-	-	-	1007	Inf	Inf
6/1	M11/N11 Int. West Entry Left	N/A	F		1	61	59	0	-	-	78	1940	1002
6/2	M11/N11 Int. West Entry Right	N/A	D		1	20	100	0	-	-	393	1940	340

Basic Results Summary

Item	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Mean Max Queue (pcu)	Mean Modulus of Error	Ignoring Random Delay ?	
Network	121.4%	-	-	0	0	0	-	2861.3	-	-	0.36	-	
Wilford Roundabout	121.4%	-	-	0	0	0	-	2861.3	-	-	0.36	-	
1/1+1/2	121.4 : 120.7%	1000	826	-	-	-	389.0	1447.7	1.4	124.2	0.00	-	
2/2+2/1	99.1 : 99.1%	851	851	-	-	-	82.9	981.6	1.2	36.3	0.00	-	
3/1	0.0%	445	445	-	-	-	0.0	0.0	0.0	0.0	0.94	-	
4/1	0.0%	733	733	-	-	-	0.0	0.0	0.0	0.0	0.77	-	
5/1	0.0%	917	917	-	-	-	0.0	0.0	0.0	0.0	0.68	-	
6/1	7.8%	78	78	-	-	-	16.6	39.0	0.5	1.3	0.00	-	
6/2	115.8%	393	340	-	-	-	358.3	393.0	1.0	46.4	0.00	-	
C1 PRC for Signalled Lanes (%): -34.9 PRC Over All Lanes (%): -34.9 Total Delay for Signalled Lanes (pcuHr): 167.10 Total Delay Over All Lanes(pcuHr): 167.10 Cycle Time (s): 120													

Basic Results Summary

Zone Totals Data

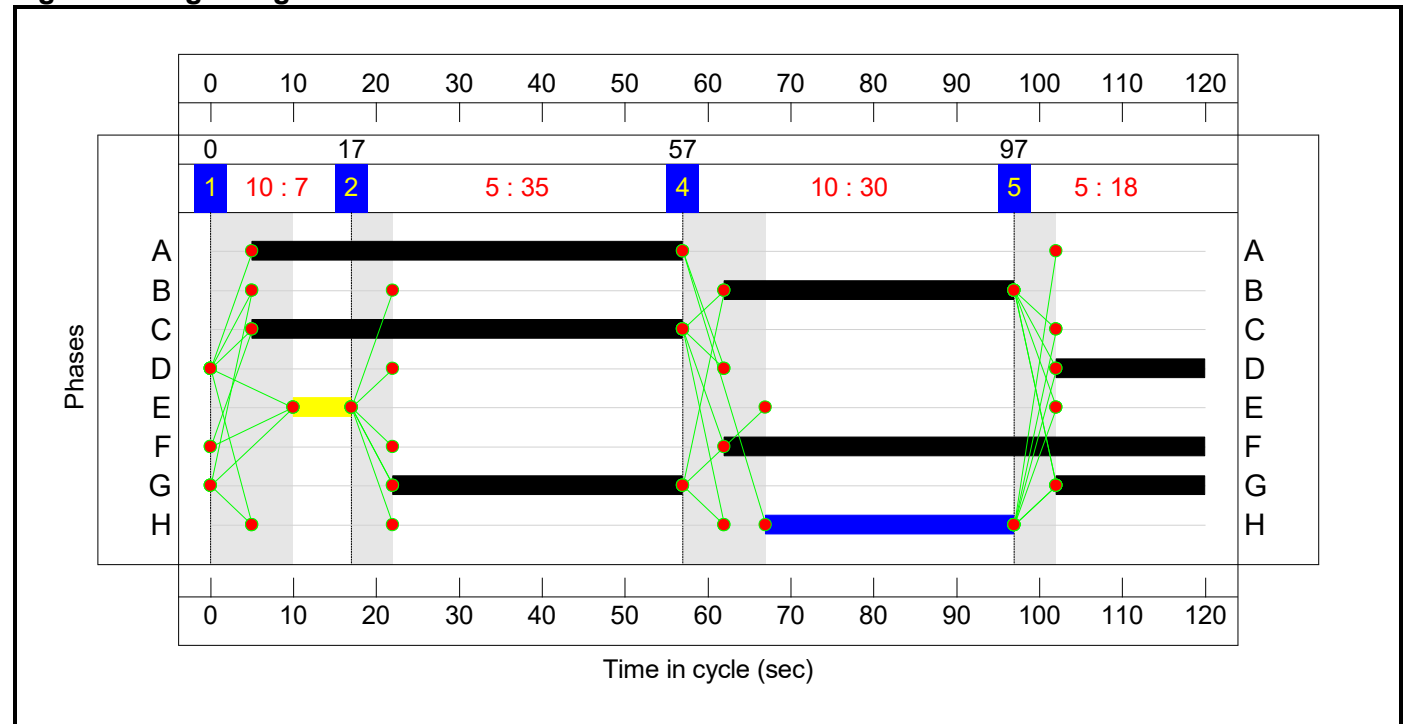
Zone	Org Tot	Dest Tot
A	-	-
B	-	-
C	-	-

Bonus Green Times

No Bonus Greens are defined For Scenario 8

Scenario 9: 'DN OY CT +15_AM' (FG9: 'DN OY CT+15_AM', Plan 1: 'Do No Scenario')

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	R119 North Entry Ahead	Traffic	52	5	57			
B	R119 North Entry Right	Traffic	35	62	97			
C	R761 South Entry Ahead	Traffic	52	5	57			
D	M11/N11 Int. West Entry Right	Traffic	18	102	0			
E	Pedestrians across	Pedestrian	7	10	17			
F	M11/N11 Int. West Entry Left	Traffic	58	62	0			
G	R761 South Entry Left	Traffic	35	22	57	18	102	0
H	Pedestrians across	Pedestrian	30	67	97			

Basic Results Summary

Lane Green Times

Junction: Wilford Roundabout					
Lane	Description	Type	Phases	Start Green	End Green
1/1	R119 North Entry Ahead	U	A	5	57
1/2	R119 North Entry Right	U	B	62	97
2/1	R761 South Entry Left	U	G	22	57
				102	0
2/2	R761 South Entry Ahead	U	C	5	57
6/1	M11/N11 Int. West Entry Left	U	F	62	0
6/2	M11/N11 Int. West Entry Right	U	D	102	0

Network Summary

Total Network Delay: 256.82 pcuHr
Worst PRC: -34.30 % (On Lane 2/2)

Basic Results Summary

Network Results

Item	Lane Description	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)
Network	-	-	-		-	-	-	-	-	-	-	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	-	-
1/1+1/2	R119 North Entry Ahead Right	N/A	A B		1	52:35	5:62	57:97	-	-	934	2255:2200	345+432
2/2+2/1	R761 South Entry Ahead Left	N/A	C G		1:2	52:53	5:22(102)	57:57(0)	-	-	1088	1940:1940	464+436
3/1	R119 North Exit	N/A	-		-	-	-	-	-	-	880	Inf	Inf
4/1	R761 South Exit	N/A	-		-	-	-	-	-	-	780	Inf	Inf
5/1	M11/N11 Int. West Exit	N/A	-		-	-	-	-	-	-	1046	Inf	Inf
6/1	M11/N11 Int. West Entry Left	N/A	F		1	58	62	0	-	-	319	1940	954
6/2	M11/N11 Int. West Entry Right	N/A	D		1	18	102	0	-	-	365	1940	307

Basic Results Summary

Item	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Mean Max Queue (pcu)	Mean Modulus of Error	Ignoring Random Delay ?	
Network	120.9%	-	-	0	0	0	-	3339.7	-	-	0.32	-	
Wilford Roundabout	120.9%	-	-	0	0	0	-	3339.7	-	-	0.32	-	
1/1+1/2	120.2 : 120.2%	934	777	-	-	-	375.3	1384.0	1.5	111.8	0.00	-	
2/2+2/1	120.9 : 120.9%	1088	900	-	-	-	386.0	1396.6	1.3	136.9	0.00	-	
3/1	0.0%	783	783	-	-	-	0.0	0.0	0.0	0.0	0.60	-	
4/1	0.0%	653	653	-	-	-	0.0	0.0	0.0	0.0	0.86	-	
5/1	0.0%	868	868	-	-	-	0.0	0.0	0.0	0.0	0.67	-	
6/1	33.4%	319	319	-	-	-	21.4	194.1	0.6	6.7	0.00	-	
6/2	118.8%	365	307	-	-	-	403.2	365.0	1.0	47.5	0.00	-	
C1 PRC for Signalled Lanes (%): -34.3 PRC Over All Lanes (%): -34.3 Total Delay for Signalled Lanes (pcuHr): 256.82 Total Delay Over All Lanes(pcuHr): 256.82 Cycle Time (s): 120													

Basic Results Summary

Zone Totals Data

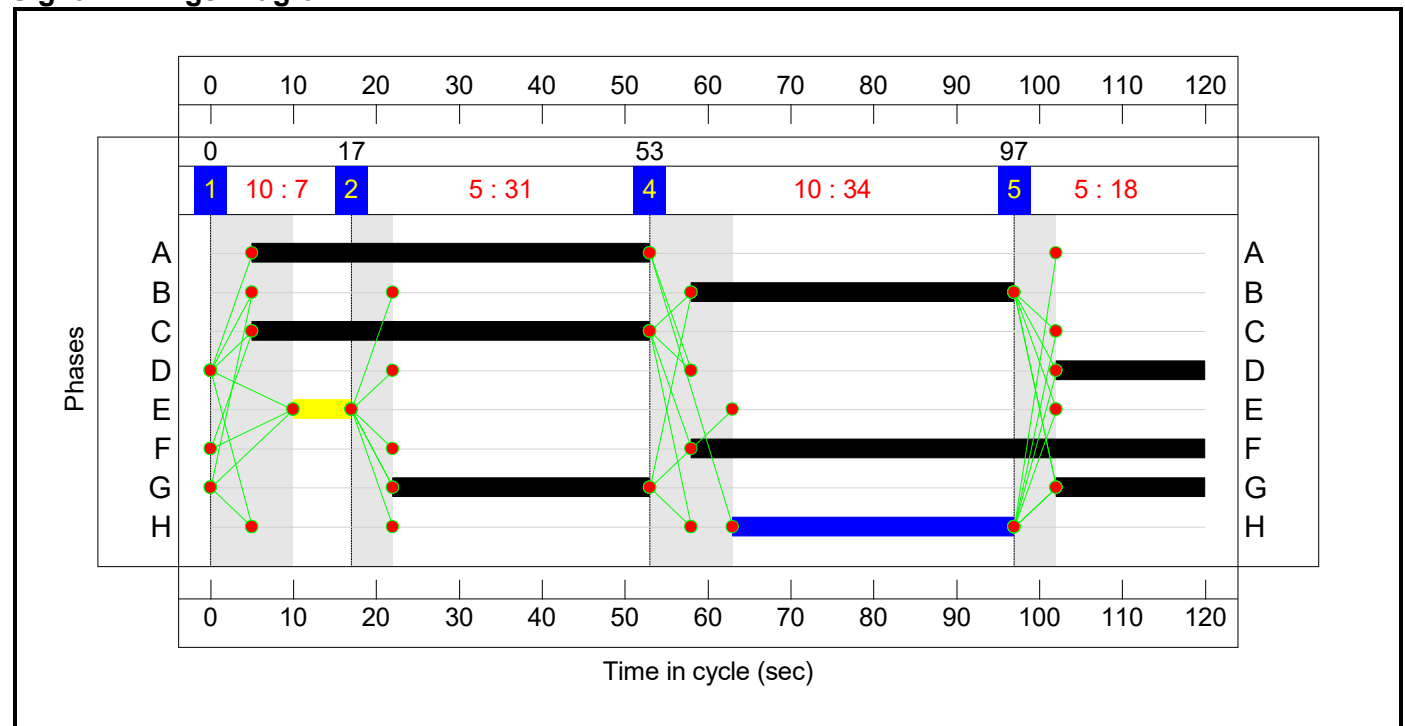
Zone	Org Tot	Dest Tot
A	-	-
B	-	-
C	-	-

Bonus Green Times

No Bonus Greens are defined For Scenario 9

Scenario 10: 'DN OY CT +15_PM' (FG10: 'DN OY CT+15_PM', Plan 1: 'Do No Scenario')

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	R119 North Entry Ahead	Traffic	48	5	53			
B	R119 North Entry Right	Traffic	39	58	97			
C	R761 South Entry Ahead	Traffic	48	5	53			
D	M11/N11 Int. West Entry Right	Traffic	18	102	0			
E	Pedestrians across	Pedestrian	7	10	17			
F	M11/N11 Int. West Entry Left	Traffic	62	58	0			
G	R761 South Entry Left	Traffic	31	22	53	18	102	0
H	Pedestrians across	Pedestrian	34	63	97			

Basic Results Summary

Lane Green Times

Junction: Wilford Roundabout					
Lane	Description	Type	Phases	Start Green	End Green
1/1	R119 North Entry Ahead	U	A	5	53
1/2	R119 North Entry Right	U	B	58	97
2/1	R761 South Entry Left	U	G	22	53
				102	0
2/2	R761 South Entry Ahead	U	C	5	53
6/1	M11/N11 Int. West Entry Left	U	F	58	0
6/2	M11/N11 Int. West Entry Right	U	D	102	0

Network Summary

Total Network Delay: 255.63 pcuHr
Worst PRC: -48.58 % (On Lane 1/1)

Basic Results Summary

Network Results

Item	Lane Description	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)
Network	-	-	-		-	-	-	-	-	-	-	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	-	-
1/1+1/2	R119 North Entry Ahead Right	N/A	A B		1	48:39	5:58	53:97	-	-	1101	2255:2200	366+458
2/2+2/1	R761 South Entry Ahead Left	N/A	C G		1:2	48:49	5:22(102)	53:53(0)	-	-	870	1940:1940	373+467
3/1	R119 North Exit	N/A	-		-	-	-	-	-	-	609	Inf	Inf
4/1	R761 South Exit	N/A	-		-	-	-	-	-	-	882	Inf	Inf
5/1	M11/N11 Int. West Exit	N/A	-		-	-	-	-	-	-	1096	Inf	Inf
6/1	M11/N11 Int. West Entry Left	N/A	F		1	62	58	0	-	-	223	1940	1019
6/2	M11/N11 Int. West Entry Right	N/A	D		1	18	102	0	-	-	393	1940	307

Basic Results Summary

Item	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Mean Max Queue (pcu)	Mean Modulus of Error	Ignoring Random Delay ?	
Network	133.7%	-	-	0	0	0	-	3169.6	-	-	0.33	-	
Wilford Roundabout	133.7%	-	-	0	0	0	-	3169.6	-	-	0.33	-	
1/1+1/2	133.7 : 133.5%	1101	823	-	-	-	539.3	1552.4	1.4	181.1	0.00	-	
2/2+2/1	103.6 : 103.6%	870	840	-	-	-	137.0	1105.2	1.3	50.4	0.00	-	
3/1	0.0%	596	596	-	-	-	0.0	0.0	0.0	0.0	0.72	-	
4/1	0.0%	673	673	-	-	-	0.0	0.0	0.0	0.0	0.82	-	
5/1	0.0%	924	924	-	-	-	0.0	0.0	0.0	0.0	0.65	-	
6/1	21.9%	223	223	-	-	-	17.6	118.9	0.5	4.1	0.00	-	
6/2	127.9%	393	307	-	-	-	517.5	393.0	1.0	63.6	0.00	-	
C1 PRC for Signalled Lanes (%): -48.6 PRC Over All Lanes (%): -48.6 Total Delay for Signalled Lanes (pcuHr): 255.63 Total Delay Over All Lanes(pcuHr): 255.63 Cycle Time (s): 120													

Basic Results Summary

Zone Totals Data

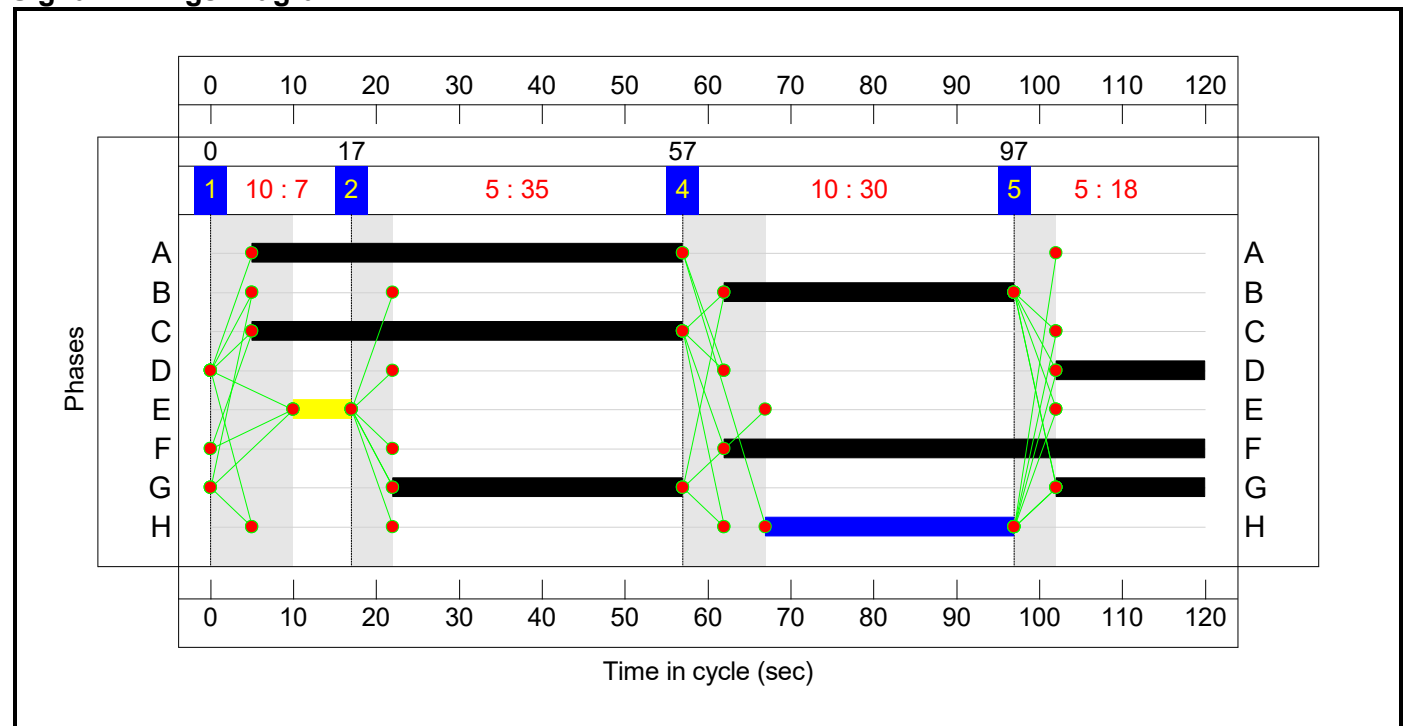
Zone	Org Tot	Dest Tot
A	-	-
B	-	-
C	-	-

Bonus Green Times

No Bonus Greens are defined For Scenario 10

Scenario 11: 'DN OY AT +15_AM' (FG11: 'DN OY AT+15_AM', Plan 1: 'Do No Scenario')

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	R119 North Entry Ahead	Traffic	52	5	57			
B	R119 North Entry Right	Traffic	35	62	97			
C	R761 South Entry Ahead	Traffic	52	5	57			
D	M11/N11 Int. West Entry Right	Traffic	18	102	0			
E	Pedestrians across	Pedestrian	7	10	17			
F	M11/N11 Int. West Entry Left	Traffic	58	62	0			
G	R761 South Entry Left	Traffic	35	22	57	18	102	0
H	Pedestrians across	Pedestrian	30	67	97			

Basic Results Summary

Lane Green Times

Junction: Wilford Roundabout					
Lane	Description	Type	Phases	Start Green	End Green
1/1	R119 North Entry Ahead	U	A	5	57
1/2	R119 North Entry Right	U	B	62	97
2/1	R761 South Entry Left	U	G	22	57
				102	0
2/2	R761 South Entry Ahead	U	C	5	57
6/1	M11/N11 Int. West Entry Left	U	F	62	0
6/2	M11/N11 Int. West Entry Right	U	D	102	0

Network Summary

Total Network Delay: 256.82 pcuHr
Worst PRC: -34.30 % (On Lane 2/2)

Basic Results Summary

Network Results

Item	Lane Description	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)
Network	-	-	-		-	-	-	-	-	-	-	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	-	-
1/1+1/2	R119 North Entry Ahead Right	N/A	A B		1	52:35	5:62	57:97	-	-	934	2255:2200	345+432
2/2+2/1	R761 South Entry Ahead Left	N/A	C G		1:2	52:53	5:22(102)	57:57(0)	-	-	1088	1940:1940	464+436
3/1	R119 North Exit	N/A	-		-	-	-	-	-	-	880	Inf	Inf
4/1	R761 South Exit	N/A	-		-	-	-	-	-	-	780	Inf	Inf
5/1	M11/N11 Int. West Exit	N/A	-		-	-	-	-	-	-	1046	Inf	Inf
6/1	M11/N11 Int. West Entry Left	N/A	F		1	58	62	0	-	-	319	1940	954
6/2	M11/N11 Int. West Entry Right	N/A	D		1	18	102	0	-	-	365	1940	307

Basic Results Summary

Item	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Mean Max Queue (pcu)	Mean Modulus of Error	Ignoring Random Delay ?	
Network	120.9%	-	-	0	0	0	-	3339.7	-	-	0.32	-	
Wilford Roundabout	120.9%	-	-	0	0	0	-	3339.7	-	-	0.32	-	
1/1+1/2	120.2 : 120.2%	934	777	-	-	-	375.3	1384.0	1.5	111.8	0.00	-	
2/2+2/1	120.9 : 120.9%	1088	900	-	-	-	386.0	1396.6	1.3	136.9	0.00	-	
3/1	0.0%	783	783	-	-	-	0.0	0.0	0.0	0.0	0.60	-	
4/1	0.0%	653	653	-	-	-	0.0	0.0	0.0	0.0	0.86	-	
5/1	0.0%	868	868	-	-	-	0.0	0.0	0.0	0.0	0.67	-	
6/1	33.4%	319	319	-	-	-	21.4	194.1	0.6	6.7	0.00	-	
6/2	118.8%	365	307	-	-	-	403.2	365.0	1.0	47.5	0.00	-	
C1 PRC for Signalled Lanes (%): -34.3 PRC Over All Lanes (%): -34.3 Total Delay for Signalled Lanes (pcuHr): 256.82 Total Delay Over All Lanes(pcuHr): 256.82 Cycle Time (s): 120													

Basic Results Summary

Zone Totals Data

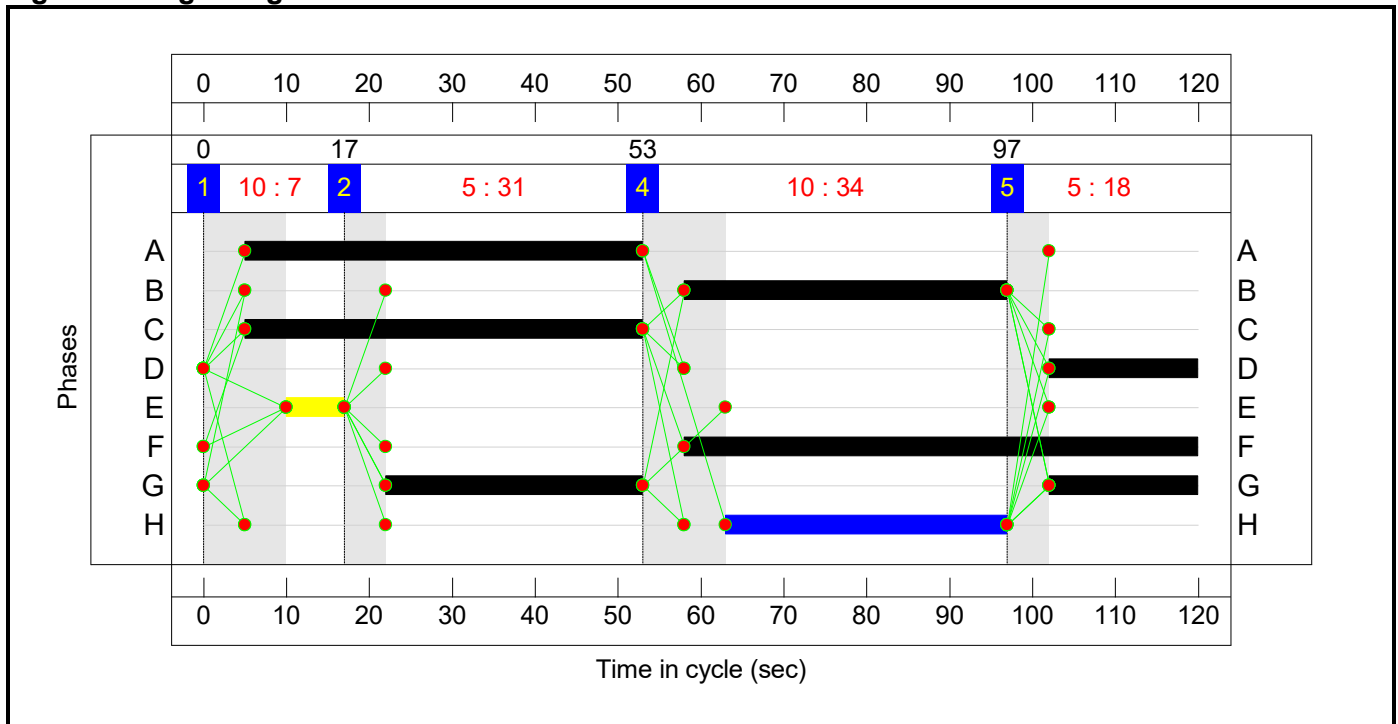
Zone	Org Tot	Dest Tot
A	-	-
B	-	-
C	-	-

Bonus Green Times

No Bonus Greens are defined For Scenario 11

Scenario 12: 'DN OY AT +15_PM' (FG12: 'DN OY AT+15_PM', Plan 1: 'Do No Scenario')

Signal Timings Diagram



Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	R119 North Entry Ahead	Traffic	48	5	53			
B	R119 North Entry Right	Traffic	39	58	97			
C	R761 South Entry Ahead	Traffic	48	5	53			
D	M11/N11 Int. West Entry Right	Traffic	18	102	0			
E	Pedestrians across	Pedestrian	7	10	17			
F	M11/N11 Int. West Entry Left	Traffic	62	58	0			
G	R761 South Entry Left	Traffic	31	22	53	18	102	0
H	Pedestrians across	Pedestrian	34	63	97			

Basic Results Summary

Lane Green Times

Junction: Wilford Roundabout					
Lane	Description	Type	Phases	Start Green	End Green
1/1	R119 North Entry Ahead	U	A	5	53
1/2	R119 North Entry Right	U	B	58	97
2/1	R761 South Entry Left	U	G	22	53
				102	0
2/2	R761 South Entry Ahead	U	C	5	53
6/1	M11/N11 Int. West Entry Left	U	F	58	0
6/2	M11/N11 Int. West Entry Right	U	D	102	0

Network Summary

Total Network Delay: 255.63 pcuHr
Worst PRC: -48.58 % (On Lane 1/1)

Basic Results Summary

Network Results

Item	Lane Description	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Start Green (s)	End Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)
Network	-	-	-		-	-	-	-	-	-	-	-	-
Wilford Roundabout	-	-	-		-	-	-	-	-	-	-	-	-
1/1+1/2	R119 North Entry Ahead Right	N/A	A B		1	48:39	5:58	53:97	-	-	1101	2255:2200	366+458
2/2+2/1	R761 South Entry Ahead Left	N/A	C G		1:2	48:49	5:22(102)	53:53(0)	-	-	870	1940:1940	373+467
3/1	R119 North Exit	N/A	-		-	-	-	-	-	-	609	Inf	Inf
4/1	R761 South Exit	N/A	-		-	-	-	-	-	-	882	Inf	Inf
5/1	M11/N11 Int. West Exit	N/A	-		-	-	-	-	-	-	1096	Inf	Inf
6/1	M11/N11 Int. West Entry Left	N/A	F		1	62	58	0	-	-	223	1940	1019
6/2	M11/N11 Int. West Entry Right	N/A	D		1	18	102	0	-	-	393	1940	307

Basic Results Summary

Item	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Av. Delay Per PCU (s/pcu)	Uniform Stops (stops)	Av. Uniform Stops Per PCU (stops/pcu)	Mean Max Queue (pcu)	Mean Modulus of Error	Ignoring Random Delay ?	
Network	133.7%	-	-	0	0	0	-	3169.6	-	-	0.33	-	
Wilford Roundabout	133.7%	-	-	0	0	0	-	3169.6	-	-	0.33	-	
1/1+1/2	133.7 : 133.5%	1101	823	-	-	-	539.3	1552.4	1.4	181.1	0.00	-	
2/2+2/1	103.6 : 103.6%	870	840	-	-	-	137.0	1105.2	1.3	50.4	0.00	-	
3/1	0.0%	596	596	-	-	-	0.0	0.0	0.0	0.0	0.72	-	
4/1	0.0%	673	673	-	-	-	0.0	0.0	0.0	0.0	0.82	-	
5/1	0.0%	924	924	-	-	-	0.0	0.0	0.0	0.0	0.65	-	
6/1	21.9%	223	223	-	-	-	17.6	118.9	0.5	4.1	0.00	-	
6/2	127.9%	393	307	-	-	-	517.5	393.0	1.0	63.6	0.00	-	
C1 PRC for Signalled Lanes (%): -48.6 PRC Over All Lanes (%): -48.6 Total Delay for Signalled Lanes (pcuHr): 255.63 Total Delay Over All Lanes(pcuHr): 255.63 Cycle Time (s): 120													

Basic Results Summary

Zone Totals Data

Zone	Org Tot	Dest Tot
A	-	-
B	-	-
C	-	-

Bonus Green Times

No Bonus Greens are defined For Scenario 12

Junctions 11																		
ARCADY 11 - Roundabout Module																		
Version: 11.0.0.2177																		
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Filename: Wilford Roundabout.j11
Path: C:\Users\SCAN4276\Downloads
Report generation date: 16/06/2026 13:13:23

»2028 | OY DN | AM
 »2028 | OY DN | PM
 »2028 | OY DN_CT | AM
 »2028 | OY DN_CT | PM
 »2028 | OY DN_AT | AM
 »2028 | OY DN_AT | PM

Summary of junction performance

	AM									PM								
	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2028 - OY DN																	
Arm A	D1	0.6	2.7	3.95	0.35	A	6.78	A	8 % [Arm B]	D2	1.0	1.9	4.83	0.48	A	5.85	A	15 % [Arm B]
Arm B		2.9	8.8	9.52	0.74	A					2.0	3.0	7.94	0.67	A			
Arm C		0.8	2.9	4.35	0.42	A					0.4	1.8	3.30	0.30	A			
	2028 - OY DN_AT																	
Arm A	D5	0.6	2.7	4.00	0.36	A	8.26	A	1 % [Arm B]	D6	1.0	1.7	5.11	0.50	A	6.28	A	11 % [Arm B]
Arm B		3.9	17.8	12.23	0.80	B					2.3	4.9	8.68	0.70	A			
Arm C		0.8	2.7	4.46	0.43	A					0.5	2.4	3.49	0.34	A			
	2028 - OY DN_CT																	
Arm A	D3	0.6	2.7	4.00	0.36	A	8.26	A	1 % [Arm B]	D4	1.0	1.7	5.11	0.50	A	6.28	A	11 % [Arm B]
Arm B		3.9	17.8	12.23	0.80	B					2.3	4.9	8.68	0.70	A			
Arm C		0.8	2.7	4.46	0.43	A					0.5	2.4	3.49	0.34	A			

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

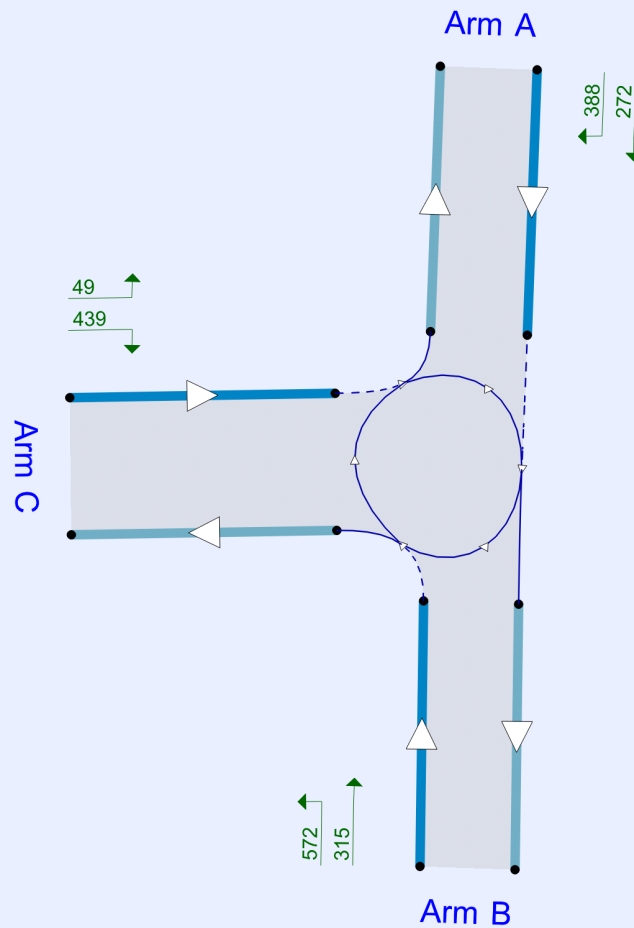
File summary

File Description

Title	
Location	
Site number	
Date	16/02/2026
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	WSATKINSIMONE8618
Description	

Units

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



Flows show original traffic demand (PCU/hr)

The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	0.85	13.00	20.00

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028	OY DN	AM	ONE HOUR	08:00	09:30	15
D2	2028	OY DN	PM	ONE HOUR	16:00	17:30	15
D3	2028	OY DN_CT	AM	ONE HOUR	08:00	09:30	15
D4	2028	OY DN_CT	PM	ONE HOUR	16:00	17:30	15
D5	2028	OY DN_AT	AM	ONE HOUR	08:00	09:30	15
D6	2028	OY DN_AT	PM	ONE HOUR	16:00	17:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2028 | OY DN | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wilford Roundabout	Standard Roundabout		A, B, C	6.78	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	8	Arm B	6.78	A

Arms

Arms

Arm	Name	Description	No give-way line
A	R119 North		
B	R761 South		
C	M11/N11 Int. West		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
A	4.75	7.13	13.7	9.2	60.1	42.0		
B	3.53	7.58	16.9	8.4	60.1	33.0		
C	5.02	7.52	14.5	9.3	60.1	48.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.533	1713
B	0.523	1627
C	0.538	1771

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028	OY DN	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	476	100.000
B		✓	998	100.000
C		✓	572	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	239	237
	B	434	0	564
	C	181	391	0

Vehicle Mix

Heavy Vehicle %

	To			
	A	B	C	
From	A	0	8	3
	B	6	0	2
	C	14	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
A	0.35	3.95	0.6	2.7	A
B	0.74	9.52	2.9	8.8	A
C	0.42	4.35	0.8	2.9	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	358	293	1557	0.230	357	0.3	3.160	A
B	751	178	1534	0.490	747	1.0	4.724	A
C	431	325	1597	0.270	429	0.4	3.294	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	428	351	1526	0.280	428	0.4	3.455	A
B	897	213	1515	0.592	895	1.5	5.999	A
C	514	389	1562	0.329	514	0.5	3.671	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	524	430	1484	0.353	523	0.6	3.948	A
B	1099	261	1490	0.737	1094	2.8	9.282	A
C	630	476	1516	0.416	629	0.8	4.338	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	524	430	1484	0.353	524	0.6	3.954	A
B	1099	261	1490	0.737	1099	2.9	9.517	A
C	630	478	1514	0.416	630	0.8	4.352	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	428	352	1526	0.280	429	0.4	3.460	A
B	897	213	1515	0.592	902	1.5	6.143	A
C	514	392	1560	0.330	515	0.5	3.686	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	358	295	1556	0.230	359	0.3	3.172	A
B	751	179	1533	0.490	753	1.0	4.799	A
C	431	328	1595	0.270	431	0.4	3.309	A

Queue Variation Results for each time segment

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.31	0.00	0.00	0.31	0.31			N/A	N/A
B	0.99	0.57	1.04	1.45	1.50			N/A	N/A
C	0.39	0.00	0.00	0.39	0.39			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B	1.48	0.06	0.75	3.52	5.13			N/A	N/A
C	0.52	0.00	0.00	0.52	0.52			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.57	0.03	0.27	0.57	0.57			N/A	N/A
B	2.80	0.03	0.29	2.80	8.84			N/A	N/A
C	0.75	0.03	0.27	0.75	0.75			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.57	0.03	0.31	1.42	2.69			N/A	N/A
B	2.85	0.03	0.28	2.85	2.85			N/A	N/A
C	0.76	0.03	0.30	0.82	2.86			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B	1.53	0.07	0.98	3.38	4.78			N/A	N/A
C	0.53	0.00	0.00	0.53	0.53			N/A	N/A

09:15 - 09:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B	1.01	0.05	0.45	2.37	3.72			N/A	N/A
C	0.40	0.00	0.00	0.40	0.40			N/A	N/A

2028 | OY DN | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wilford Roundabout	Standard Roundabout		A, B, C	5.85	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	15	Arm B	5.85	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2028	OY DN	PM	ONE HOUR	16:00	17:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	647	100.000
B		✓	848	100.000
C		✓	439	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	259	388
	B	306	0	542
	C	49	390	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	6	2
	B	5	0	3
	C	7	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
A	0.48	4.83	1.0	1.9	A
B	0.67	7.94	2.0	3.0	A
C	0.30	3.30	0.4	1.8	A

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	487	293	1557	0.313	485	0.5	3.471	A
B	638	291	1475	0.433	635	0.8	4.433	A
C	331	229	1648	0.201	329	0.3	2.774	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	582	350	1527	0.381	581	0.6	3.939	A
B	762	348	1445	0.528	761	1.1	5.451	A
C	395	275	1624	0.243	394	0.3	2.976	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	712	429	1485	0.480	711	0.9	4.810	A
B	934	426	1404	0.665	930	2.0	7.828	A
C	483	336	1591	0.304	483	0.4	3.300	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	712	429	1485	0.480	712	1.0	4.827	A
B	934	427	1403	0.665	934	2.0	7.943	A
C	483	337	1590	0.304	483	0.4	3.305	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	582	351	1526	0.381	583	0.6	3.956	A
B	762	350	1444	0.528	766	1.2	5.534	A
C	395	276	1623	0.243	395	0.3	2.980	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	487	294	1557	0.313	488	0.5	3.488	A
B	638	293	1474	0.433	640	0.8	4.487	A
C	331	231	1647	0.201	331	0.3	2.779	A

Queue Variation Results for each time segment

16:00 - 16:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.47	0.00	0.00	0.47	0.47			N/A	N/A
B	0.79	0.57	1.04	1.45	1.50			N/A	N/A
C	0.25	0.00	0.00	0.25	0.25			N/A	N/A

16:15 - 16:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.63	0.10	0.85	1.41	1.48			N/A	N/A
B	1.14	0.07	0.87	2.19	3.03			N/A	N/A
C	0.32	0.00	0.00	0.32	0.32			N/A	N/A

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.95	0.03	0.26	0.95	0.95			N/A	N/A
B	2.01	0.03	0.28	2.01	2.68			N/A	N/A
C	0.44	0.03	0.26	0.46	0.49			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.95	0.03	0.28	0.95	1.86			N/A	N/A
B	2.04	0.03	0.28	2.04	2.04			N/A	N/A
C	0.44	0.03	0.32	1.39	1.77			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.64	0.57	1.04	1.45	1.50			N/A	N/A
B	1.17	0.10	1.04	1.96	2.62			N/A	N/A
C	0.33	0.00	0.00	0.33	0.33			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.47	0.00	0.00	0.47	0.47			N/A	N/A
B	0.80	0.05	0.56	1.50	2.00			N/A	N/A
C	0.26	0.00	0.00	0.26	0.26			N/A	N/A

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wilford Roundabout	Standard Roundabout		A, B, C	8.26	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	1	Arm B	8.26	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2028	OY DN_CT	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	481	100.000
B		✓	1078	100.000
C		✓	589	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	244	237
	B	451	0	627
	C	181	408	0

Vehicle Mix

Heavy Vehicle %

	To			
		A	B	C
From	A	0	7	3
	B	6	0	2
	C	14	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
A	0.36	4.00	0.6	2.7	A
B	0.80	12.23	3.9	17.8	B
C	0.43	4.46	0.8	2.7	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	362	306	1550	0.234	361	0.3	3.175	A
B	812	178	1534	0.529	807	1.2	5.102	A
C	443	338	1590	0.279	442	0.4	3.324	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	432	366	1518	0.285	432	0.4	3.480	A
B	969	213	1515	0.639	966	1.8	6.763	A
C	529	404	1554	0.341	529	0.5	3.726	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	530	449	1474	0.359	529	0.6	3.995	A
B	1187	261	1490	0.796	1179	3.8	11.677	B
C	649	493	1506	0.431	647	0.8	4.444	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	530	449	1474	0.359	530	0.6	4.001	A
B	1187	261	1490	0.796	1186	3.9	12.229	B
C	649	496	1504	0.431	648	0.8	4.464	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	432	367	1518	0.285	433	0.4	3.486	A
B	969	213	1515	0.640	977	1.9	7.040	A
C	529	409	1551	0.341	530	0.6	3.748	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	362	308	1550	0.234	363	0.3	3.184	A
B	812	179	1533	0.529	814	1.2	5.208	A
C	443	341	1588	0.279	444	0.4	3.340	A

Queue Variation Results for each time segment

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B	1.15	0.57	1.04	1.45	1.50			N/A	N/A
C	0.41	0.00	0.00	0.41	0.41			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B	1.80	0.05	0.63	4.64	7.10			N/A	N/A
C	0.55	0.55	1.06	1.49	1.54			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.58	0.03	0.27	0.58	0.58			N/A	N/A
B	3.82	0.03	0.32	4.19	17.77			N/A	N/A
C	0.80	0.03	0.27	0.80	0.80			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.59	0.03	0.31	1.39	2.75			N/A	N/A
B	3.93	0.03	0.29	3.93	8.62			N/A	N/A
C	0.80	0.03	0.30	0.80	2.71			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B	1.88	0.06	0.70	4.82	7.30			N/A	N/A
C	0.55	0.55	1.06	1.49	1.54			N/A	N/A

09:15 - 09:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B	1.18	0.04	0.39	2.97	5.32			N/A	N/A
C	0.41	0.00	0.00	0.41	0.41			N/A	N/A

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wilford Roundabout	Standard Roundabout		A, B, C	6.28	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	11	Arm B	6.28	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2028	OY DN_CT	PM	ONE HOUR	16:00	17:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	660	100.000
B		✓	887	100.000
C		✓	488	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	272	388
	B	315	0	572
	C	49	439	0

Vehicle Mix

Heavy Vehicle %

	To			
		A	B	C
From	A	0	6	2
	B	5	0	2
	C	7	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
A	0.50	5.11	1.0	1.7	A
B	0.70	8.68	2.3	4.9	A
C	0.34	3.49	0.5	2.4	A

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	497	329	1538	0.323	495	0.5	3.570	A
B	668	291	1475	0.453	664	0.8	4.559	A
C	367	236	1644	0.223	366	0.3	2.858	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	593	394	1503	0.395	593	0.7	4.092	A
B	797	348	1445	0.552	796	1.3	5.702	A
C	439	283	1619	0.271	438	0.4	3.096	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	727	483	1456	0.499	725	1.0	5.094	A
B	977	426	1404	0.696	972	2.3	8.520	A
C	537	345	1586	0.339	537	0.5	3.484	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	727	483	1456	0.499	727	1.0	5.114	A
B	977	427	1403	0.696	976	2.3	8.683	A
C	537	347	1585	0.339	537	0.5	3.489	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	593	395	1503	0.395	595	0.7	4.113	A
B	797	350	1444	0.552	802	1.3	5.813	A
C	439	285	1618	0.271	439	0.4	3.102	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	497	331	1537	0.323	498	0.5	3.589	A
B	668	293	1474	0.453	669	0.9	4.621	A
C	367	238	1643	0.224	368	0.3	2.868	A

Queue Variation Results for each time segment

16:00 - 16:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.49	0.00	0.00	0.49	0.49			N/A	N/A
B	0.85	0.57	1.03	1.44	1.49			N/A	N/A
C	0.29	0.00	0.00	0.29	0.29			N/A	N/A

16:15 - 16:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.67	0.10	0.86	1.42	1.49			N/A	N/A
B	1.25	0.06	0.83	2.70	3.79			N/A	N/A
C	0.38	0.00	0.00	0.38	0.38			N/A	N/A

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	1.02	0.03	0.27	1.02	1.02			N/A	N/A
B	2.29	0.03	0.28	2.29	4.90			N/A	N/A
C	0.52	0.03	0.26	0.52	0.52			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	1.03	0.03	0.28	1.03	1.66			N/A	N/A
B	2.32	0.03	0.28	2.32	2.32			N/A	N/A
C	0.52	0.03	0.31	1.41	2.37			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.68	0.34	0.99	1.44	1.50			N/A	N/A
B	1.29	0.08	1.02	2.48	3.28			N/A	N/A
C	0.38	0.00	0.00	0.38	0.38			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.50	0.04	0.43	1.29	1.42			N/A	N/A
B	0.86	0.05	0.49	1.81	2.65			N/A	N/A
C	0.29	0.00	0.00	0.29	0.29			N/A	N/A

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wilford Roundabout	Standard Roundabout		A, B, C	8.26	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	1	Arm B	8.26	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2028	OY DN_AT	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	481	100.000
B		✓	1078	100.000
C		✓	589	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	244	237
	B	451	0	627
	C	181	408	0

Vehicle Mix

Heavy Vehicle %

	To			
		A	B	C
From	A	0	7	3
	B	6	0	2
	C	14	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
A	0.36	4.00	0.6	2.7	A
B	0.80	12.23	3.9	17.8	B
C	0.43	4.46	0.8	2.7	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	362	306	1550	0.234	361	0.3	3.175	A
B	812	178	1534	0.529	807	1.2	5.102	A
C	443	338	1590	0.279	442	0.4	3.324	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	432	366	1518	0.285	432	0.4	3.480	A
B	969	213	1515	0.639	966	1.8	6.763	A
C	529	404	1554	0.341	529	0.5	3.726	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	530	449	1474	0.359	529	0.6	3.995	A
B	1187	261	1490	0.796	1179	3.8	11.677	B
C	649	493	1506	0.431	647	0.8	4.444	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	530	449	1474	0.359	530	0.6	4.001	A
B	1187	261	1490	0.796	1186	3.9	12.229	B
C	649	496	1504	0.431	648	0.8	4.464	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	432	367	1518	0.285	433	0.4	3.486	A
B	969	213	1515	0.640	977	1.9	7.040	A
C	529	409	1551	0.341	530	0.6	3.748	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	362	308	1550	0.234	363	0.3	3.184	A
B	812	179	1533	0.529	814	1.2	5.208	A
C	443	341	1588	0.279	444	0.4	3.340	A

Queue Variation Results for each time segment

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B	1.15	0.57	1.04	1.45	1.50			N/A	N/A
C	0.41	0.00	0.00	0.41	0.41			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B	1.80	0.05	0.63	4.64	7.10			N/A	N/A
C	0.55	0.55	1.06	1.49	1.54			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.58	0.03	0.27	0.58	0.58			N/A	N/A
B	3.82	0.03	0.32	4.19	17.77			N/A	N/A
C	0.80	0.03	0.27	0.80	0.80			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.59	0.03	0.31	1.39	2.75			N/A	N/A
B	3.93	0.03	0.29	3.93	8.62			N/A	N/A
C	0.80	0.03	0.30	0.80	2.71			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B	1.88	0.06	0.70	4.82	7.30			N/A	N/A
C	0.55	0.55	1.06	1.49	1.54			N/A	N/A

09:15 - 09:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B	1.18	0.04	0.39	2.97	5.32			N/A	N/A
C	0.41	0.00	0.00	0.41	0.41			N/A	N/A

2028 | OY DN_AT | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Wilford Roundabout	Standard Roundabout		A, B, C	6.28	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	11	Arm B	6.28	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2028	OY DN_AT	PM	ONE HOUR	16:00	17:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	660	100.000
B		✓	887	100.000
C		✓	488	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	272	388
	B	315	0	572
	C	49	439	0

Vehicle Mix

Heavy Vehicle %

	To			
		A	B	C
From	A	0	6	2
	B	5	0	2
	C	7	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
A	0.50	5.11	1.0	1.7	A
B	0.70	8.68	2.3	4.9	A
C	0.34	3.49	0.5	2.4	A

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	497	329	1538	0.323	495	0.5	3.570	A
B	668	291	1475	0.453	664	0.8	4.559	A
C	367	236	1644	0.223	366	0.3	2.858	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	593	394	1503	0.395	593	0.7	4.092	A
B	797	348	1445	0.552	796	1.3	5.702	A
C	439	283	1619	0.271	438	0.4	3.096	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	727	483	1456	0.499	725	1.0	5.094	A
B	977	426	1404	0.696	972	2.3	8.520	A
C	537	345	1586	0.339	537	0.5	3.484	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	727	483	1456	0.499	727	1.0	5.114	A
B	977	427	1403	0.696	976	2.3	8.683	A
C	537	347	1585	0.339	537	0.5	3.489	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	593	395	1503	0.395	595	0.7	4.113	A
B	797	350	1444	0.552	802	1.3	5.813	A
C	439	285	1618	0.271	439	0.4	3.102	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	497	331	1537	0.323	498	0.5	3.589	A
B	668	293	1474	0.453	669	0.9	4.621	A
C	367	238	1643	0.224	368	0.3	2.868	A

Queue Variation Results for each time segment

16:00 - 16:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.49	0.00	0.00	0.49	0.49			N/A	N/A
B	0.85	0.57	1.03	1.44	1.49			N/A	N/A
C	0.29	0.00	0.00	0.29	0.29			N/A	N/A

16:15 - 16:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.67	0.10	0.86	1.42	1.49			N/A	N/A
B	1.25	0.06	0.83	2.70	3.79			N/A	N/A
C	0.38	0.00	0.00	0.38	0.38			N/A	N/A

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	1.02	0.03	0.27	1.02	1.02			N/A	N/A
B	2.29	0.03	0.28	2.29	4.90			N/A	N/A
C	0.52	0.03	0.26	0.52	0.52			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	1.03	0.03	0.28	1.03	1.66			N/A	N/A
B	2.32	0.03	0.28	2.32	2.32			N/A	N/A
C	0.52	0.03	0.31	1.41	2.37			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.68	0.34	0.99	1.44	1.50			N/A	N/A
B	1.29	0.08	1.02	2.48	3.28			N/A	N/A
C	0.38	0.00	0.00	0.38	0.38			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A	0.50	0.04	0.43	1.29	1.42			N/A	N/A
B	0.86	0.05	0.49	1.81	2.65			N/A	N/A
C	0.29	0.00	0.00	0.29	0.29			N/A	N/A

Junctions 11		
PICADY 11 - Priority Intersection Module		
Version: 11.0.0.2177		
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Path: C:\Users\SCAN4276\Downloads
Report generation date: 16/06/2026 13:12:09

»2028 | OY DN_CT | AM
 »2028 | OY DN_CT | PM
 »2028 | OY DN_AT | AM
 »2028 | OY DN_AT | PM
 »2033 | OY DN_CT +5 | AM
 »2033 | OY DN_CT +5 | PM
 »2033 | OY DN_AT +5 | AM
 »2033 | OY DN_AT +5 | PM
 »2043 | OY DN_CT +15 | AM
 »2043 | OY DN_CT +15 | PM

Summary of junction performance

	AM									PM								
	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2028 - OY DN_AT																	
Stream B-AC	D3	0.2	0.5	6.89	0.16	A	0.97	A	185 %	D4	0.1	0.5	6.39	0.08	A	1.67	A	158 %
Stream C-B		0.0	0.5	6.94	0.05	A			[Stream B-AC]		0.2	0.5	7.84	0.14	A			[Stream C-B]
	2028 - OY DN_CT																	
Stream B-AC	D1	0.1	0.5	6.64	0.13	A	0.78	A	236 %	D2	0.1	0.5	6.27	0.06	A	1.35	A	198 %
Stream C-B		0.0	0.5	6.88	0.04	A			[Stream B-AC]		0.1	0.5	7.59	0.11	A			[Stream C-B]
	2033 - OY DN_AT +5																	
Stream B-AC	D7	0.2	0.7	8.92	0.17	A	1.03	A	80 %	D8	0.3	1.4	9.67	0.23	A	3.23	A	62 %
Stream C-B		0.0	0.5	6.63	0.01	A			[Stream B-AC]		0.1	0.5	6.96	0.05	A			[Stream C-B]
	2033 - OY DN_CT +5																	
Stream B-AC	D5	0.2	0.5	8.96	0.16	A	0.99	A	80 %	D6	0.3	1.3	9.66	0.22	A	3.17	A	64 %
Stream C-B		0.0	0.5	6.63	0.01	A			[Stream B-AC]		0.0	0.5	6.93	0.04	A			[Stream C-B]
	2043 - OY DN_CT +15																	
Stream B-AC	D9	2.7	13.7	35.05	0.74	E	12.04	B	-44 %	D10	1.7	7.9	23.55	0.64	C	11.09	B	-36 %
Stream C-B		0.5	2.5	10.43	0.35	B			[Stream B-AC]		0.4	1.8	9.80	0.29	A			[Stream C-B]

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. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

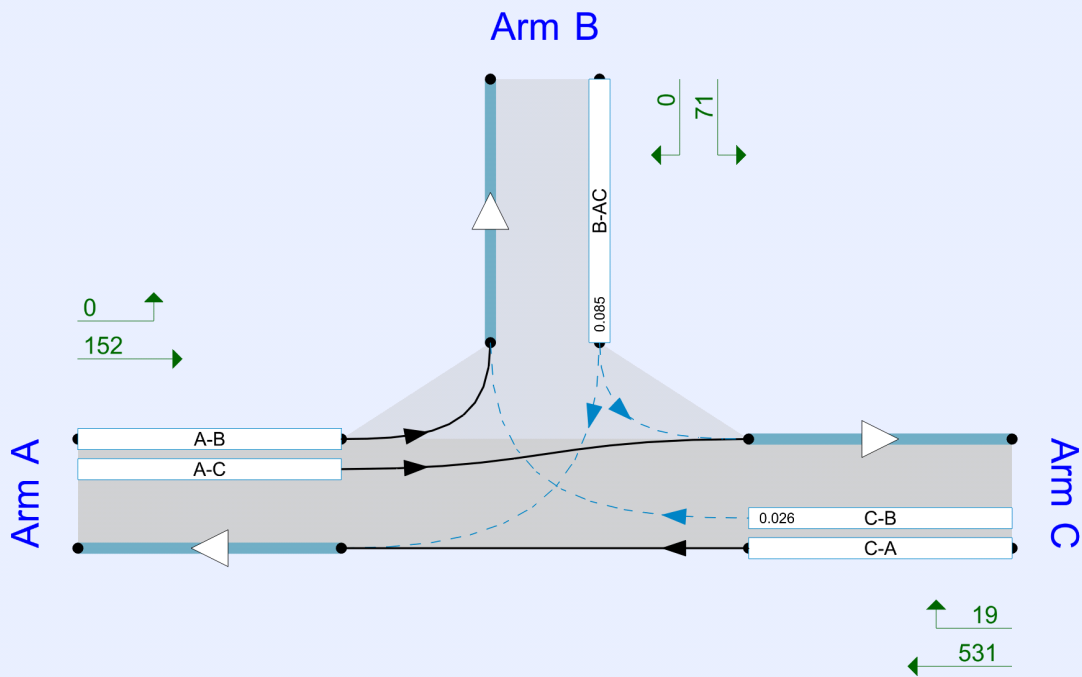
File summary

File Description

Title	
Location	
Site number	
Date	18/02/2026
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	WSATKINSIMONE8618
Description	

Units

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



Flows show original traffic demand (PCU/hr)
Streams (downstream end) show RFC ()

The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	0.85	13.00	20.00

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028	OY DN_CT	AM	ONE HOUR	08:00	09:30	15
D2	2028	OY DN_CT	PM	ONE HOUR	16:00	17:30	15
D3	2028	OY DN_AT	AM	ONE HOUR	08:00	09:30	15
D4	2028	OY DN_AT	PM	ONE HOUR	16:00	17:30	15
D5	2033	OY DN_CT +5	AM	ONE HOUR	08:00	09:30	15
D6	2033	OY DN_CT +5	PM	ONE HOUR	16:00	17:30	15
D7	2033	OY DN_AT +5	AM	ONE HOUR	08:00	09:30	15
D8	2033	OY DN_AT +5	PM	ONE HOUR	16:00	17:30	15
D9	2043	OY DN_CT +15	AM	ONE HOUR	08:00	09:30	15
D10	2043	OY DN_CT +15	PM	ONE HOUR	16:00	17:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2028 | OY DN_CT | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	N-S Old Conna Ave Access Junction	T-Junction	Two-way	Two-way	Two-way		0.78	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	236	Stream B-AC	0.78	A

Arms

Arms

Arm	Name	Description	Arm type
A	Old Conna Ave West		Major
B	N-S Access Road		Minor
C	Old Conna Ave East		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	10.50			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	One lane	3.25	23	23

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	509	0.075	0.188	0.119	0.269
B-C	654	0.081	0.204	-	-
C-B	574	0.179	0.179	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028	OY DN_CT	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	152	100.000
B		✓	71	100.000
C		✓	550	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	0	152
	B	0	0	71
	C	531	19	0

Vehicle Mix

Heavy Vehicle %

	To			
		A	B	C
From	A	0	0	2
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.13	6.64	0.1	0.5	A
C-A					
C-B	0.04	6.88	0.0	0.5	A
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	53	0.00	631	0.085	53	0.1	6.224	A
C-A	400	0.00			400			
C-B	14	0.00	553	0.026	14	0.0	6.675	A
A-B	0	0.00			0			
A-C	114	0.00			114			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	64	0.00	627	0.102	64	0.1	6.396	A
C-A	477	0.00			477			
C-B	17	0.00	550	0.031	17	0.0	6.760	A
A-B	0	0.00			0			
A-C	137	0.00			137			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	78	0.00	620	0.126	78	0.1	6.637	A
C-A	585	0.00			585			
C-B	21	0.00	544	0.038	21	0.0	6.881	A
A-B	0	0.00			0			
A-C	167	0.00			167			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	78	0.00	620	0.126	78	0.1	6.640	A
C-A	585	0.00			585			
C-B	21	0.00	544	0.038	21	0.0	6.881	A
A-B	0	0.00			0			
A-C	167	0.00			167			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	64	0.00	627	0.102	64	0.1	6.402	A
C-A	477	0.00			477			
C-B	17	0.00	550	0.031	17	0.0	6.761	A
A-B	0	0.00			0			
A-C	137	0.00			137			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	53	0.00	631	0.085	54	0.1	6.233	A
C-A	400	0.00			400			
C-B	14	0.00	553	0.026	14	0.0	6.679	A
A-B	0	0.00			0			
A-C	114	0.00			114			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-B	0.03	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.03	0.26	0.46	0.49			N/A	N/A
C-B	0.04	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.04	0.00	0.00	0.04	0.04			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

2028 | OY DN_CT | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	N-S Old Conna Ave Access Junction	T-Junction	Two-way	Two-way	Two-way		1.35	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	198	Stream C-B	1.35	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2028	OY DN_CT	PM	ONE HOUR	16:00	17:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	198	100.000
B		✓	33	100.000
C		✓	232	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	0	198
	B	0	0	33
From	C	177	55	0

Vehicle Mix

Heavy Vehicle %

	To			
		A	B	C
	A	0	0	2
	B	0	0	0
From	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.06	6.27	0.1	0.5	A
C-A					
C-B	0.11	7.59	0.1	0.5	A
A-B					
A-C					

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	25	0.00	624	0.040	25	0.0	6.005	A
C-A	133	0.00			133			
C-B	41	0.00	547	0.076	41	0.1	7.106	A
A-B	0	0.00			0			
A-C	149	0.00			149			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	30	0.00	618	0.048	30	0.1	6.117	A
C-A	159	0.00			159			
C-B	49	0.00	542	0.091	49	0.1	7.305	A
A-B	0	0.00			0			
A-C	178	0.00			178			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	0.00	610	0.060	36	0.1	6.275	A
C-A	195	0.00			195			
C-B	61	0.00	535	0.113	60	0.1	7.584	A
A-B	0	0.00			0			
A-C	218	0.00			218			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	0.00	610	0.060	36	0.1	6.275	A
C-A	195	0.00			195			
C-B	61	0.00	535	0.113	61	0.1	7.587	A
A-B	0	0.00			0			
A-C	218	0.00			218			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	30	0.00	618	0.048	30	0.1	6.118	A
C-A	159	0.00			159			
C-B	49	0.00	542	0.091	50	0.1	7.311	A
A-B	0	0.00			0			
A-C	178	0.00			178			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	25	0.00	624	0.040	25	0.0	6.010	A
C-A	133	0.00			133			
C-B	41	0.00	547	0.076	41	0.1	7.117	A
A-B	0	0.00			0			
A-C	149	0.00			149			

Queue Variation Results for each time segment

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-B	0.08	0.00	0.00	0.08	0.08			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.10	0.03	0.25	0.45	0.48			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.13	0.03	0.26	0.46	0.49			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-B	0.13	0.03	0.25	0.45	0.48			N/A	N/A

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-B	0.10	0.00	0.00	0.10	0.10			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-B	0.08	0.00	0.00	0.08	0.08			N/A	N/A

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	N-S Old Conna Ave Access Junction	T-Junction	Two-way	Two-way	Two-way		0.97	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	185	Stream B-AC	0.97	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2028	OY DN_AT	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	152	100.000
B		✓	89	100.000
C		✓	554	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	0	152
	B	0	0	89
From	C	531	23	0

Vehicle Mix

Heavy Vehicle %

	To			
		A	B	C
	A	0	0	2
	B	0	0	0
From	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.16	6.89	0.2	0.5	A
C-A					
C-B	0.05	6.94	0.0	0.5	A
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	67	0.00	631	0.106	67	0.1	6.371	A
C-A	400	0.00			400			
C-B	17	0.00	553	0.031	17	0.0	6.710	A
A-B	0	0.00			0			
A-C	114	0.00			114			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	80	0.00	627	0.128	80	0.1	6.583	A
C-A	477	0.00			477			
C-B	21	0.00	550	0.038	21	0.0	6.806	A
A-B	0	0.00			0			
A-C	137	0.00			137			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	98	0.00	620	0.158	98	0.2	6.889	A
C-A	585	0.00			585			
C-B	25	0.00	544	0.047	25	0.0	6.939	A
A-B	0	0.00			0			
A-C	167	0.00			167			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	98	0.00	620	0.158	98	0.2	6.892	A
C-A	585	0.00			585			
C-B	25	0.00	544	0.047	25	0.0	6.939	A
A-B	0	0.00			0			
A-C	167	0.00			167			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	80	0.00	627	0.128	80	0.1	6.592	A
C-A	477	0.00			477			
C-B	21	0.00	550	0.038	21	0.0	6.807	A
A-B	0	0.00			0			
A-C	137	0.00			137			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	67	0.00	631	0.106	67	0.1	6.386	A
C-A	400	0.00			400			
C-B	17	0.00	553	0.031	17	0.0	6.716	A
A-B	0	0.00			0			
A-C	114	0.00			114			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-B	0.04	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.03	0.26	0.46	0.49			N/A	N/A
C-B	0.05	0.03	0.26	0.46	0.49			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.03	0.26	0.46	0.49			N/A	N/A
C-B	0.05	0.00	0.00	0.05	0.05			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-B	0.04	0.00	0.00	0.04	0.04			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	N-S Old Conna Ave Access Junction	T-Junction	Two-way	Two-way	Two-way		1.67	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	158	Stream C-B	1.67	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2028	OY DN_AT	PM	ONE HOUR	16:00	17:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	198	100.000
B		✓	42	100.000
C		✓	246	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	0	198
	B	0	0	42
From	C	177	69	0

Vehicle Mix

Heavy Vehicle %

	To			
		A	B	C
	A	0	0	2
	B	0	0	0
From	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.08	6.39	0.1	0.5	A
C-A					
C-B	0.14	7.84	0.2	0.5	A
A-B					
A-C					

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	32	0.00	624	0.051	31	0.1	6.074	A
C-A	133	0.00			133			
C-B	52	0.00	547	0.095	52	0.1	7.255	A
A-B	0	0.00			0			
A-C	149	0.00			149			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	38	0.00	618	0.061	38	0.1	6.202	A
C-A	159	0.00			159			
C-B	62	0.00	542	0.114	62	0.1	7.494	A
A-B	0	0.00			0			
A-C	178	0.00			178			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	46	0.00	610	0.076	46	0.1	6.385	A
C-A	195	0.00			195			
C-B	76	0.00	535	0.142	76	0.2	7.838	A
A-B	0	0.00			0			
A-C	218	0.00			218			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	46	0.00	610	0.076	46	0.1	6.385	A
C-A	195	0.00			195			
C-B	76	0.00	535	0.142	76	0.2	7.842	A
A-B	0	0.00			0			
A-C	218	0.00			218			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	38	0.00	618	0.061	38	0.1	6.206	A
C-A	159	0.00			159			
C-B	62	0.00	542	0.114	62	0.1	7.504	A
A-B	0	0.00			0			
A-C	178	0.00			178			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	32	0.00	624	0.051	32	0.1	6.077	A
C-A	133	0.00			133			
C-B	52	0.00	547	0.095	52	0.1	7.272	A
A-B	0	0.00			0			
A-C	149	0.00			149			

Queue Variation Results for each time segment

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-B	0.10	0.00	0.00	0.10	0.10			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.13	0.00	0.00	0.13	0.13			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.16	0.03	0.26	0.46	0.49			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-B	0.16	0.03	0.25	0.45	0.48			N/A	N/A

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-B	0.13	0.00	0.00	0.13	0.13			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-B	0.11	0.00	0.00	0.11	0.11			N/A	N/A

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	N-S Old Conna Ave Access Junction	T-Junction	Two-way	Two-way	Two-way		0.99	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	80	Stream B-AC	0.99	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2033	OY DN_CT +5	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	125	100.000
B		✓	71	100.000
C		✓	484	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	46	79
	B	46	0	25
	C	478	6	0

Vehicle Mix

Heavy Vehicle %

	To			
		A	B	C
	A	0	0	2
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.16	8.96	0.2	0.5	A
C-A					
C-B	0.01	6.63	0.0	0.5	A
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	53	0.00	503	0.106	53	0.1	7.986	A
C-A	360	0.00			360			
C-B	5	0.00	557	0.008	4	0.0	6.513	A
A-B	35	0.00			35			
A-C	59	0.00			59			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	64	0.00	494	0.129	64	0.1	8.372	A
C-A	430	0.00			430			
C-B	5	0.00	554	0.010	5	0.0	6.562	A
A-B	41	0.00			41			
A-C	71	0.00			71			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	78	0.00	480	0.163	78	0.2	8.950	A
C-A	526	0.00			526			
C-B	7	0.00	549	0.012	7	0.0	6.632	A
A-B	51	0.00			51			
A-C	87	0.00			87			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	78	0.00	480	0.163	78	0.2	8.957	A
C-A	526	0.00			526			
C-B	7	0.00	549	0.012	7	0.0	6.632	A
A-B	51	0.00			51			
A-C	87	0.00			87			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	64	0.00	494	0.129	64	0.2	8.382	A
C-A	430	0.00			430			
C-B	5	0.00	554	0.010	5	0.0	6.565	A
A-B	41	0.00			41			
A-C	71	0.00			71			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	53	0.00	503	0.106	54	0.1	8.007	A
C-A	360	0.00			360			
C-B	5	0.00	557	0.008	5	0.0	6.516	A
A-B	35	0.00			35			
A-C	59	0.00			59			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-B	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-B	0.01	0.01	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.03	0.26	0.46	0.49			N/A	N/A
C-B	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.03	0.26	0.47	0.50			N/A	N/A
C-B	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-B	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-B	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2033 | OY DN_CT +5 | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	N-S Old Conna Ave Access Junction	T-Junction	Two-way	Two-way	Two-way		3.17	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	64	Stream B-AC	3.17	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2033	OY DN_CT +5	PM	ONE HOUR	16:00	17:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	155	100.000
B		✓	97	100.000
C		✓	92	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	37	118
	B	86	0	11
	C	70	22	0

Vehicle Mix

Heavy Vehicle %

	To			
		A	B	C
	A	0	0	2
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.22	9.66	0.3	1.3	A
C-A					
C-B	0.04	6.93	0.0	0.5	A
A-B					
A-C					

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	73	0.00	493	0.148	72	0.2	8.546	A
C-A	53	0.00			53			
C-B	17	0.00	553	0.030	16	0.0	6.706	A
A-B	28	0.00			28			
A-C	89	0.00			89			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	87	0.00	487	0.179	87	0.2	8.991	A
C-A	63	0.00			63			
C-B	20	0.00	549	0.036	20	0.0	6.801	A
A-B	33	0.00			33			
A-C	106	0.00			106			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	0.00	479	0.223	107	0.3	9.647	A
C-A	77	0.00			77			
C-B	24	0.00	543	0.045	24	0.0	6.932	A
A-B	41	0.00			41			
A-C	130	0.00			130			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	0.00	479	0.223	107	0.3	9.661	A
C-A	77	0.00			77			
C-B	24	0.00	543	0.045	24	0.0	6.932	A
A-B	41	0.00			41			
A-C	130	0.00			130			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	87	0.00	487	0.179	87	0.2	9.012	A
C-A	63	0.00			63			
C-B	20	0.00	549	0.036	20	0.0	6.804	A
A-B	33	0.00			33			
A-C	106	0.00			106			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	73	0.00	493	0.148	73	0.2	8.583	A
C-A	53	0.00			53			
C-B	17	0.00	553	0.030	17	0.0	6.712	A
A-B	28	0.00			28			
A-C	89	0.00			89			

Queue Variation Results for each time segment

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C-B	0.04	0.03	0.25	0.45	0.48			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.28	0.03	0.26	0.46	0.49			N/A	N/A
C-B	0.05	0.03	0.26	0.46	0.48			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.28	0.03	0.31	1.02	1.34			N/A	N/A
C-B	0.05	0.00	0.00	0.05	0.05			N/A	N/A

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C-B	0.04	0.00	0.00	0.04	0.04			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

2033 | OY DN_AT +5 | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	N-S Old Conna Ave Access Junction	T-Junction	Two-way	Two-way	Two-way		1.03	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	80	Stream B-AC	1.03	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2033	OY DN_AT +5	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	125	100.000
B		✓	74	100.000
C		✓	484	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	46	79
	B	46	0	28
	C	478	6	0

Vehicle Mix

Heavy Vehicle %

	To			
		A	B	C
	A	0	0	2
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.17	8.92	0.2	0.7	A
C-A					
C-B	0.01	6.63	0.0	0.5	A
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	56	0.00	508	0.110	55	0.1	7.948	A
C-A	360	0.00			360			
C-B	5	0.00	557	0.008	4	0.0	6.513	A
A-B	35	0.00			35			
A-C	59	0.00			59			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	67	0.00	498	0.134	66	0.2	8.336	A
C-A	430	0.00			430			
C-B	5	0.00	554	0.010	5	0.0	6.562	A
A-B	41	0.00			41			
A-C	71	0.00			71			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	81	0.00	485	0.168	81	0.2	8.918	A
C-A	526	0.00			526			
C-B	7	0.00	549	0.012	7	0.0	6.632	A
A-B	51	0.00			51			
A-C	87	0.00			87			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	81	0.00	485	0.168	81	0.2	8.925	A
C-A	526	0.00			526			
C-B	7	0.00	549	0.012	7	0.0	6.632	A
A-B	51	0.00			51			
A-C	87	0.00			87			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	67	0.00	498	0.134	67	0.2	8.347	A
C-A	430	0.00			430			
C-B	5	0.00	554	0.010	5	0.0	6.565	A
A-B	41	0.00			41			
A-C	71	0.00			71			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	56	0.00	508	0.110	56	0.1	7.968	A
C-A	360	0.00			360			
C-B	5	0.00	557	0.008	5	0.0	6.516	A
A-B	35	0.00			35			
A-C	59	0.00			59			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-B	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-B	0.01	0.01	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.20	0.03	0.26	0.46	0.49			N/A	N/A
C-B	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.20	0.03	0.27	0.48	0.67			N/A	N/A
C-B	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-B	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-B	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2033 | OY DN_AT +5 | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	N-S Old Conna Ave Access Junction	T-Junction	Two-way	Two-way	Two-way		3.23	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	62	Stream B-AC	3.23	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2033	OY DN_AT +5	PM	ONE HOUR	16:00	17:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	155	100.000
B		✓	99	100.000
C		✓	94	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	37	118
	B	86	0	13
	C	70	24	0

Vehicle Mix

Heavy Vehicle %

	To			
		A	B	C
	A	0	0	2
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.23	9.67	0.3	1.4	A
C-A					
C-B	0.05	6.96	0.1	0.5	A
A-B					
A-C					

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	0.00	495	0.151	74	0.2	8.539	A
C-A	53	0.00			53			
C-B	18	0.00	553	0.033	18	0.0	6.725	A
A-B	28	0.00			28			
A-C	89	0.00			89			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	89	0.00	489	0.182	89	0.2	8.991	A
C-A	63	0.00			63			
C-B	22	0.00	549	0.039	22	0.0	6.824	A
A-B	33	0.00			33			
A-C	106	0.00			106			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	109	0.00	481	0.227	109	0.3	9.660	A
C-A	77	0.00			77			
C-B	26	0.00	543	0.049	26	0.1	6.962	A
A-B	41	0.00			41			
A-C	130	0.00			130			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	109	0.00	481	0.227	109	0.3	9.673	A
C-A	77	0.00			77			
C-B	26	0.00	543	0.049	26	0.1	6.962	A
A-B	41	0.00			41			
A-C	130	0.00			130			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	89	0.00	489	0.182	89	0.2	9.011	A
C-A	63	0.00			63			
C-B	22	0.00	549	0.039	22	0.0	6.827	A
A-B	33	0.00			33			
A-C	106	0.00			106			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	75	0.00	495	0.151	75	0.2	8.574	A
C-A	53	0.00			53			
C-B	18	0.00	553	0.033	18	0.0	6.731	A
A-B	28	0.00			28			
A-C	89	0.00			89			

Queue Variation Results for each time segment

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C-B	0.04	0.03	0.25	0.45	0.48			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.29	0.03	0.26	0.46	0.49			N/A	N/A
C-B	0.05	0.03	0.26	0.46	0.49			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.29	0.03	0.31	1.04	1.36			N/A	N/A
C-B	0.05	0.00	0.00	0.05	0.05			N/A	N/A

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-B	0.04	0.00	0.00	0.04	0.04			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

2043 | OY DN_CT +15 | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	N-S Old Conna Ave Access Junction	T-Junction	Two-way	Two-way	Two-way		12.04	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-44	Stream B-AC	12.04	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2043	OY DN_CT +15	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	153	100.000
B		✓	268	100.000
C		✓	507	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	113	40
	B	267	0	1
	C	336	171	0

Vehicle Mix

Heavy Vehicle %

	To			
		A	B	C
	A	0	2	100
	B	1	0	0
	C	3	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.74	35.05	2.7	13.7	E
C-A					
C-B	0.35	10.43	0.5	2.5	B
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	202	0.00	433	0.466	198	0.9	15.305	C
C-A	253	0.00			253			
C-B	129	0.00	553	0.233	128	0.3	8.682	A
A-B	85	0.00			85			
A-C	30	0.00			30			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	241	0.00	417	0.577	239	1.3	20.162	C
C-A	302	0.00			302			
C-B	154	0.00	549	0.280	153	0.4	9.355	A
A-B	102	0.00			102			
A-C	36	0.00			36			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	295	0.00	397	0.744	290	2.6	32.509	D
C-A	370	0.00			370			
C-B	188	0.00	544	0.346	188	0.5	10.395	B
A-B	124	0.00			124			
A-C	44	0.00			44			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	295	0.00	397	0.744	294	2.7	35.053	E
C-A	370	0.00			370			
C-B	188	0.00	544	0.346	188	0.5	10.426	B
A-B	124	0.00			124			
A-C	44	0.00			44			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	241	0.00	417	0.577	246	1.4	21.829	C
C-A	302	0.00			302			
C-B	154	0.00	549	0.280	154	0.4	9.397	A
A-B	102	0.00			102			
A-C	36	0.00			36			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	202	0.00	432	0.467	204	0.9	16.070	C
C-A	253	0.00			253			
C-B	129	0.00	553	0.233	129	0.3	8.747	A
A-B	85	0.00			85			
A-C	30	0.00			30			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.85	0.56	1.01	1.41	1.46			N/A	N/A
C-B	0.31	0.00	0.00	0.31	0.31			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.31	0.13	1.15	2.16	2.82			N/A	N/A
C-B	0.39	0.00	0.00	0.39	0.39			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.59	0.04	0.36	6.28	13.72			N/A	N/A
C-B	0.54	0.03	0.26	0.54	0.54			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.74	0.03	0.31	3.81	13.50			N/A	N/A
C-B	0.54	0.03	0.30	1.32	2.51			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.45	0.05	0.45	3.75	6.02			N/A	N/A
C-B	0.41	0.00	0.00	0.41	0.41			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.91	0.04	0.36	2.20	4.08			N/A	N/A
C-B	0.32	0.00	0.00	0.32	0.32			N/A	N/A

2043 | OY DN_CT +15 | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	N-S Old Conna Ave Access Junction	T-Junction	Two-way	Two-way	Two-way		11.09	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-36	Stream B-AC	11.09	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2043	OY DN_CT +15	PM	ONE HOUR	16:00	17:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	194	100.000
B		✓	250	100.000
C		✓	213	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	98	96
	B	250	0	0
	C	70	143	0

Vehicle Mix

Heavy Vehicle %

	To			
		A	B	C
	A	0	2	0
	B	1	0	0
	C	1	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.64	23.55	1.7	7.9	C
C-A					
C-B	0.29	9.80	0.4	1.8	A
A-B					
A-C					

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	188	0.00	454	0.414	185	0.7	13.384	B
C-A	53	0.00			53			
C-B	108	0.00	548	0.197	107	0.2	8.387	A
A-B	74	0.00			74			
A-C	72	0.00			72			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	225	0.00	444	0.507	224	1.0	16.420	C
C-A	63	0.00			63			
C-B	129	0.00	543	0.237	128	0.3	8.940	A
A-B	88	0.00			88			
A-C	86	0.00			86			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	275	0.00	429	0.642	272	1.7	22.815	C
C-A	77	0.00			77			
C-B	157	0.00	536	0.294	157	0.4	9.779	A
A-B	108	0.00			108			
A-C	106	0.00			106			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	275	0.00	429	0.642	275	1.7	23.548	C
C-A	77	0.00			77			
C-B	157	0.00	536	0.294	157	0.4	9.800	A
A-B	108	0.00			108			
A-C	106	0.00			106			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	225	0.00	443	0.507	227	1.1	17.036	C
C-A	63	0.00			63			
C-B	129	0.00	543	0.237	129	0.3	8.969	A
A-B	88	0.00			88			
A-C	86	0.00			86			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	188	0.00	454	0.414	190	0.7	13.815	B
C-A	53	0.00			53			
C-B	108	0.00	548	0.197	108	0.3	8.434	A
A-B	74	0.00			74			
A-C	72	0.00			72			

Queue Variation Results for each time segment
16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.70	0.56	1.01	1.41	1.46			N/A	N/A
C-B	0.25	0.00	0.00	0.25	0.25			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.00	0.18	1.01	1.34	1.71			N/A	N/A
C-B	0.32	0.00	0.00	0.32	0.32			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.70	0.03	0.30	1.91	7.90			N/A	N/A
C-B	0.42	0.03	0.26	0.47	0.50			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.75	0.03	0.29	1.75	6.71			N/A	N/A
C-B	0.43	0.03	0.31	1.33	1.80			N/A	N/A

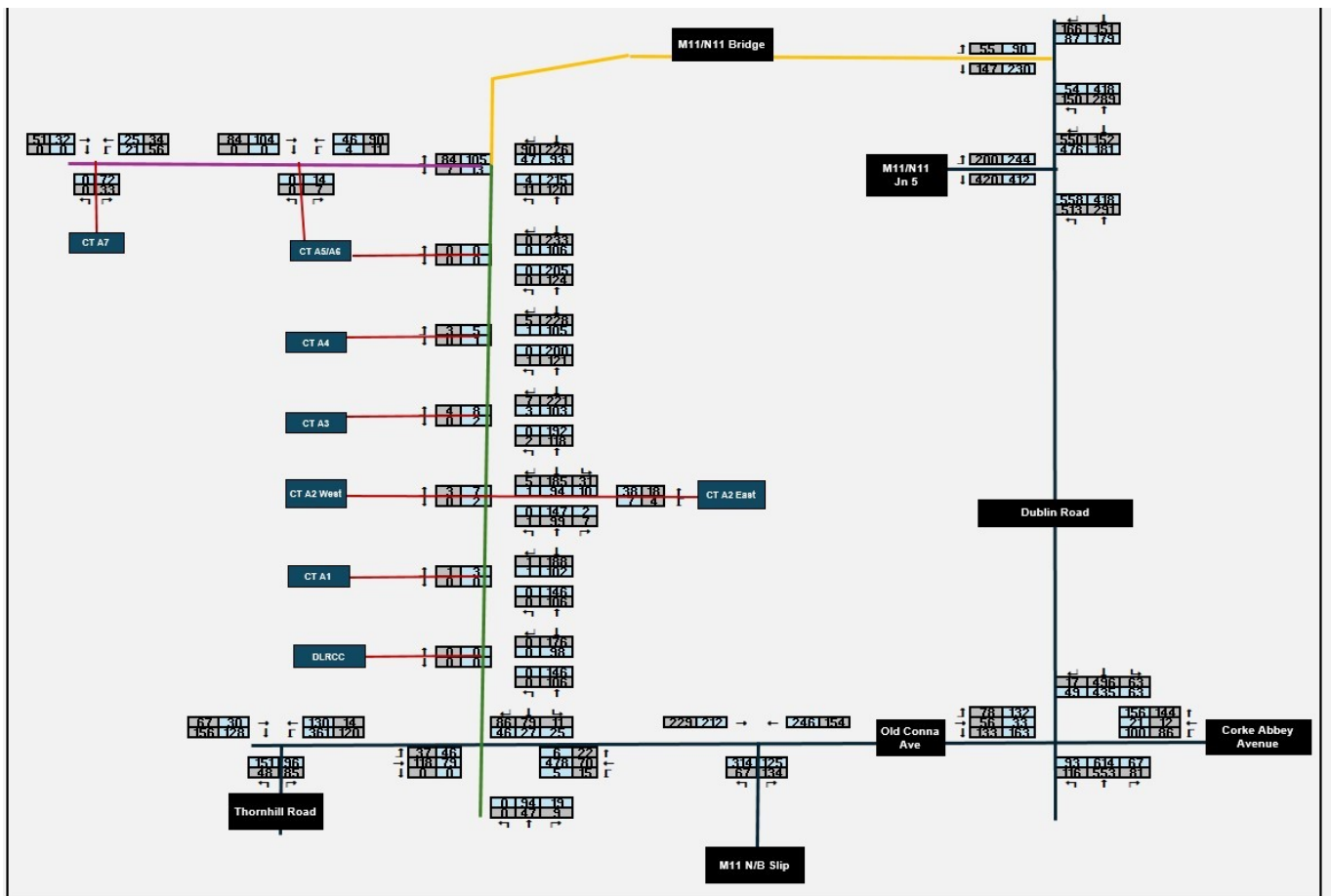
17:00 - 17:15

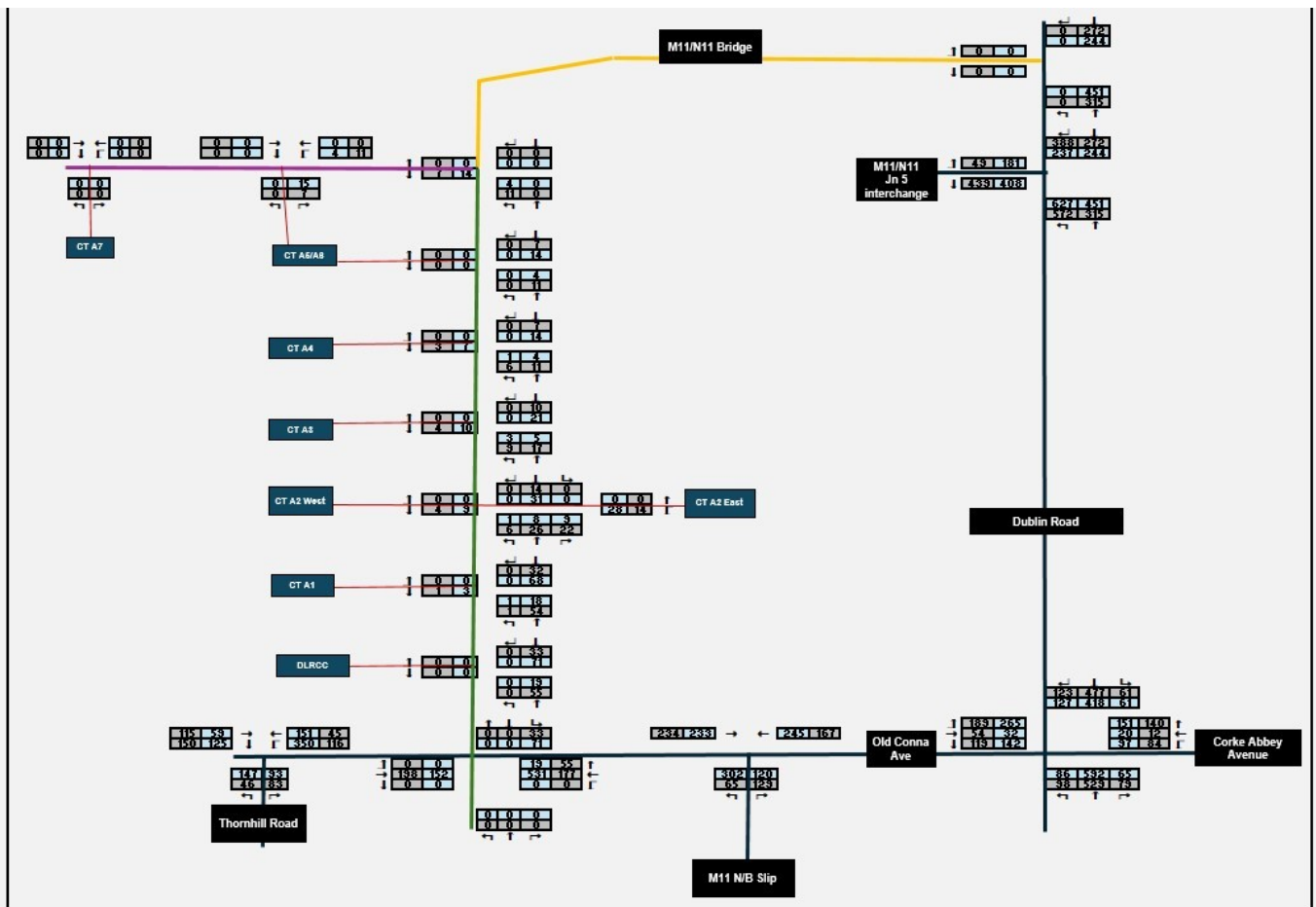
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.07	0.05	0.63	2.32	3.36			N/A	N/A
C-B	0.32	0.00	0.00	0.32	0.32			N/A	N/A

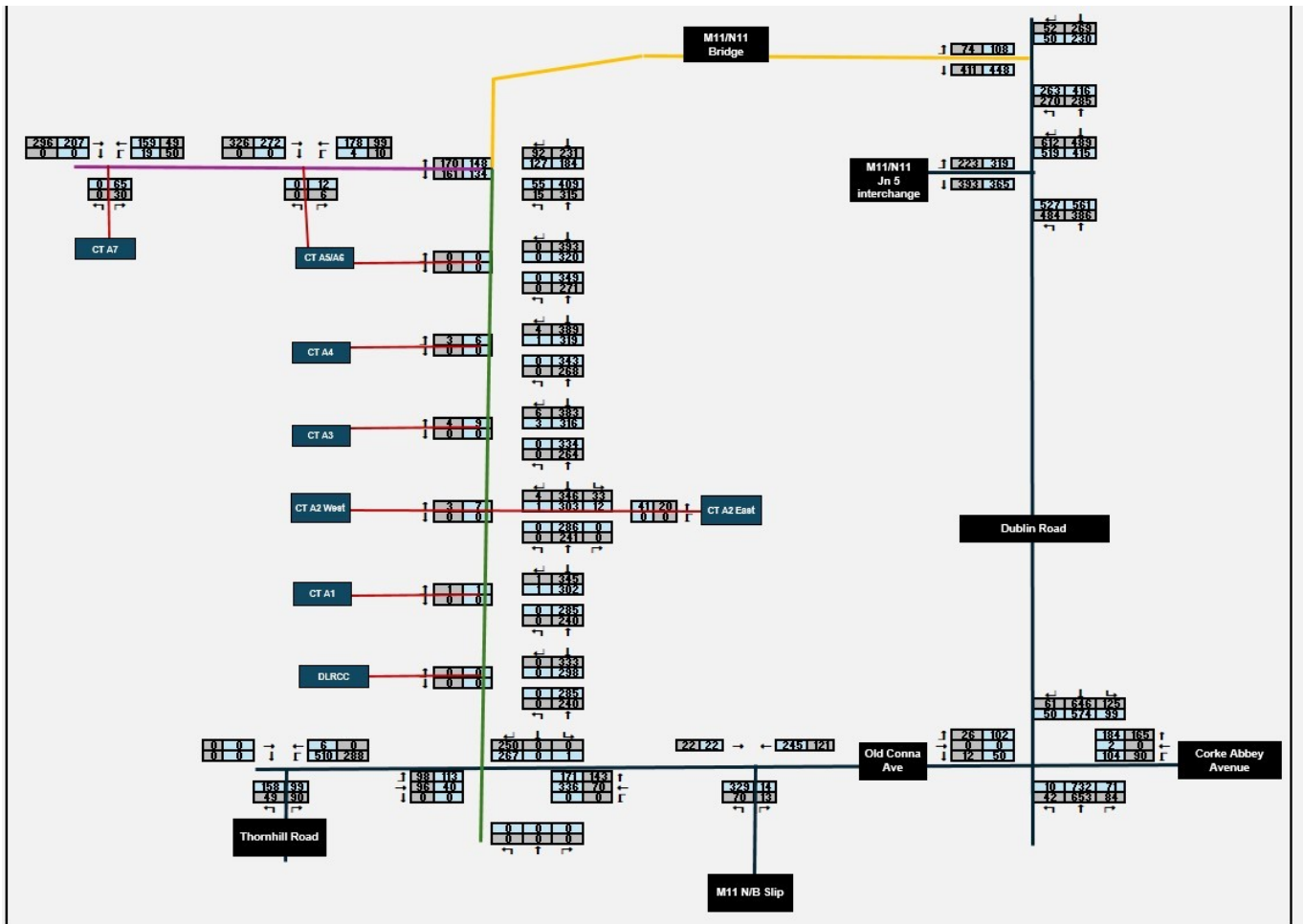
17:15 - 17:30

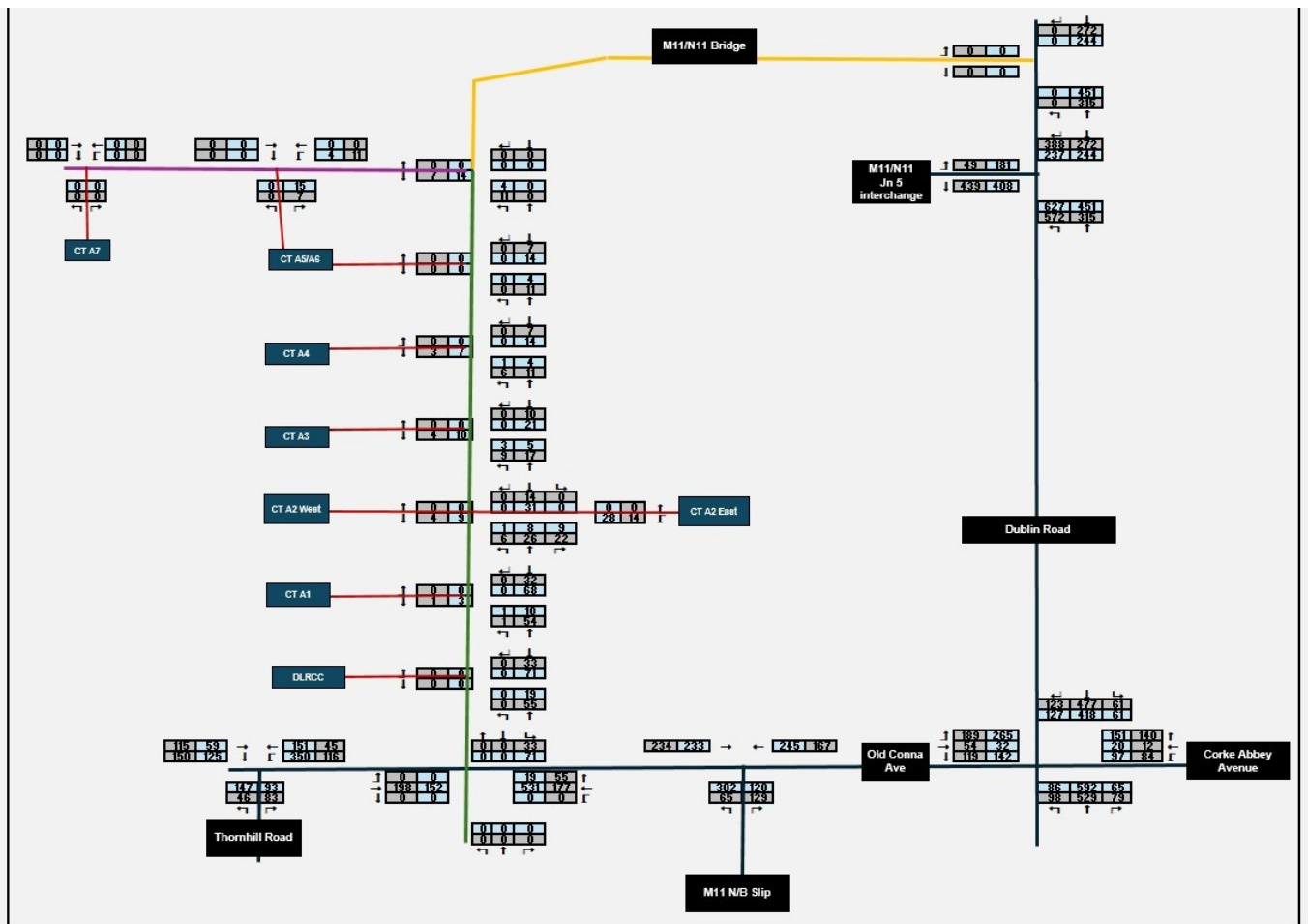
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.73	0.04	0.41	1.61	2.47			N/A	N/A
C-B	0.25	0.00	0.00	0.25	0.25			N/A	N/A

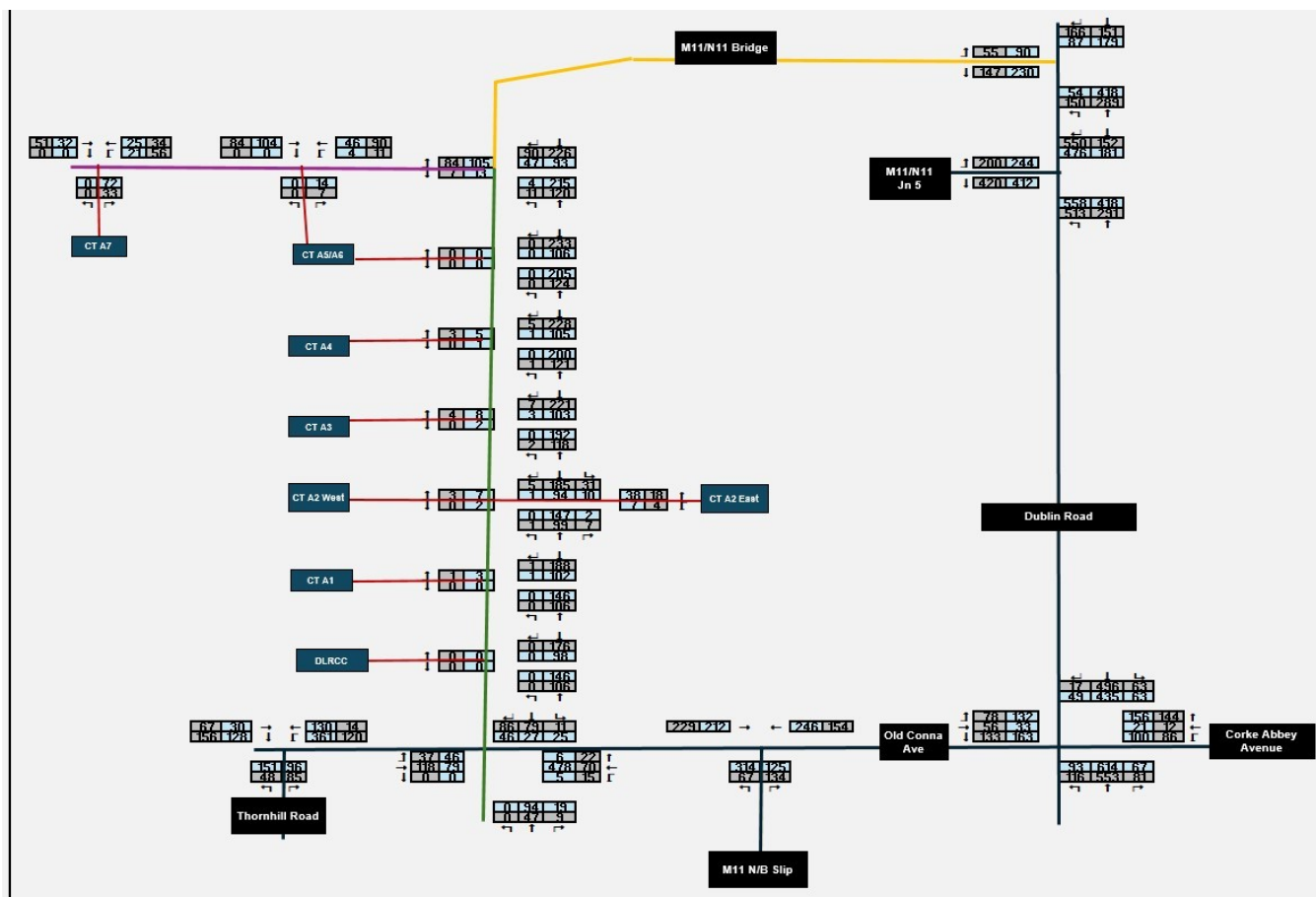
Appendix B. Network Diagrams

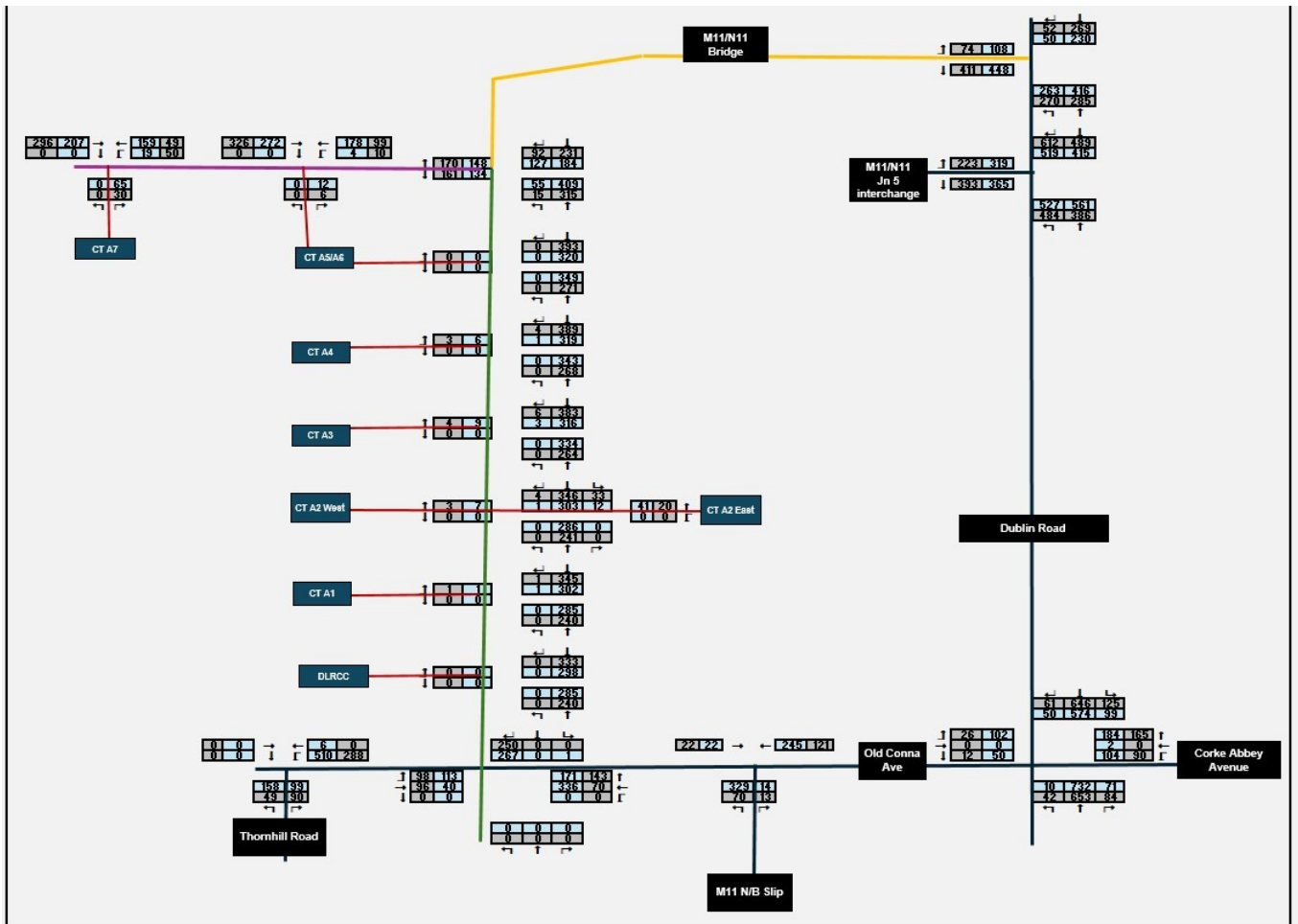


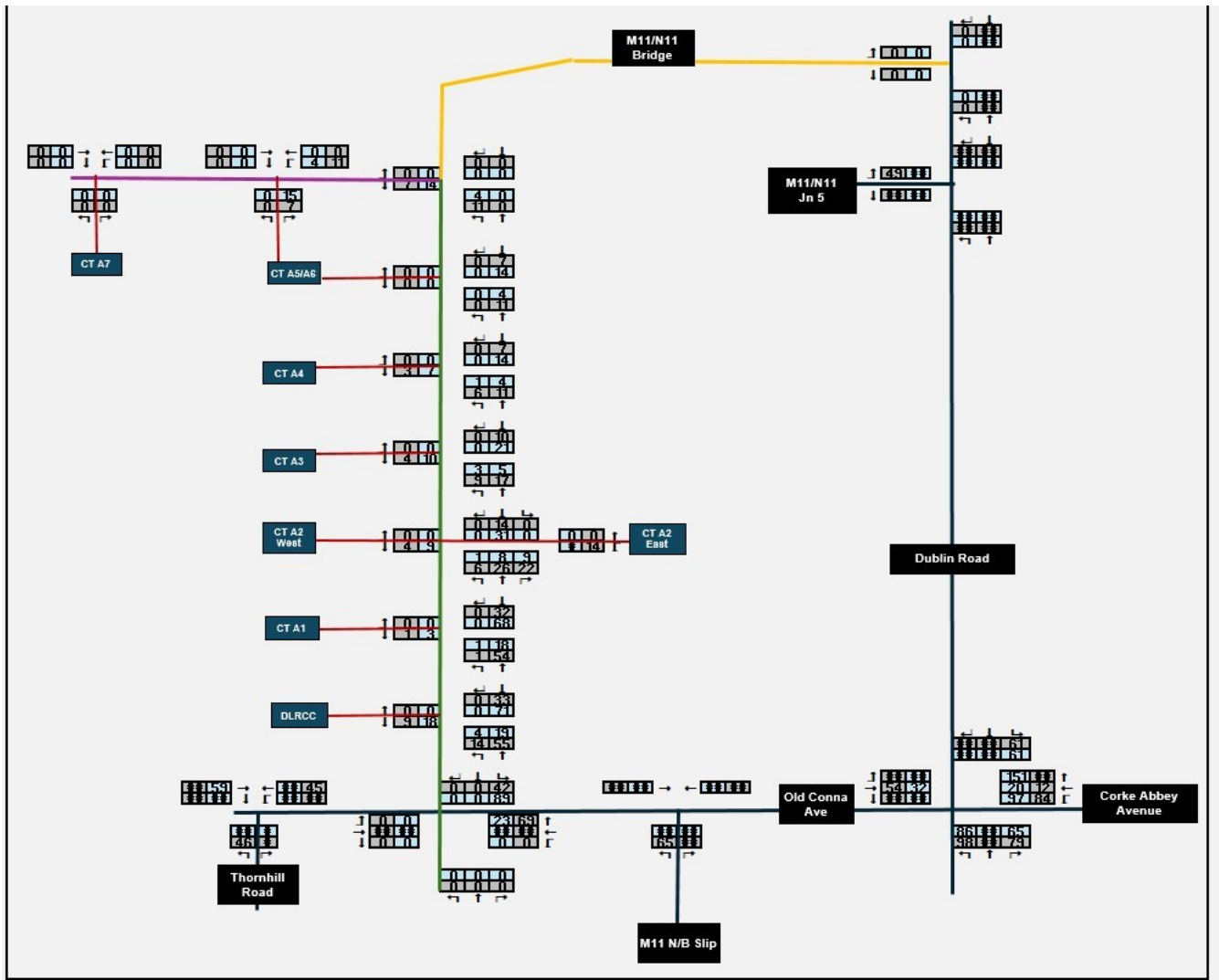


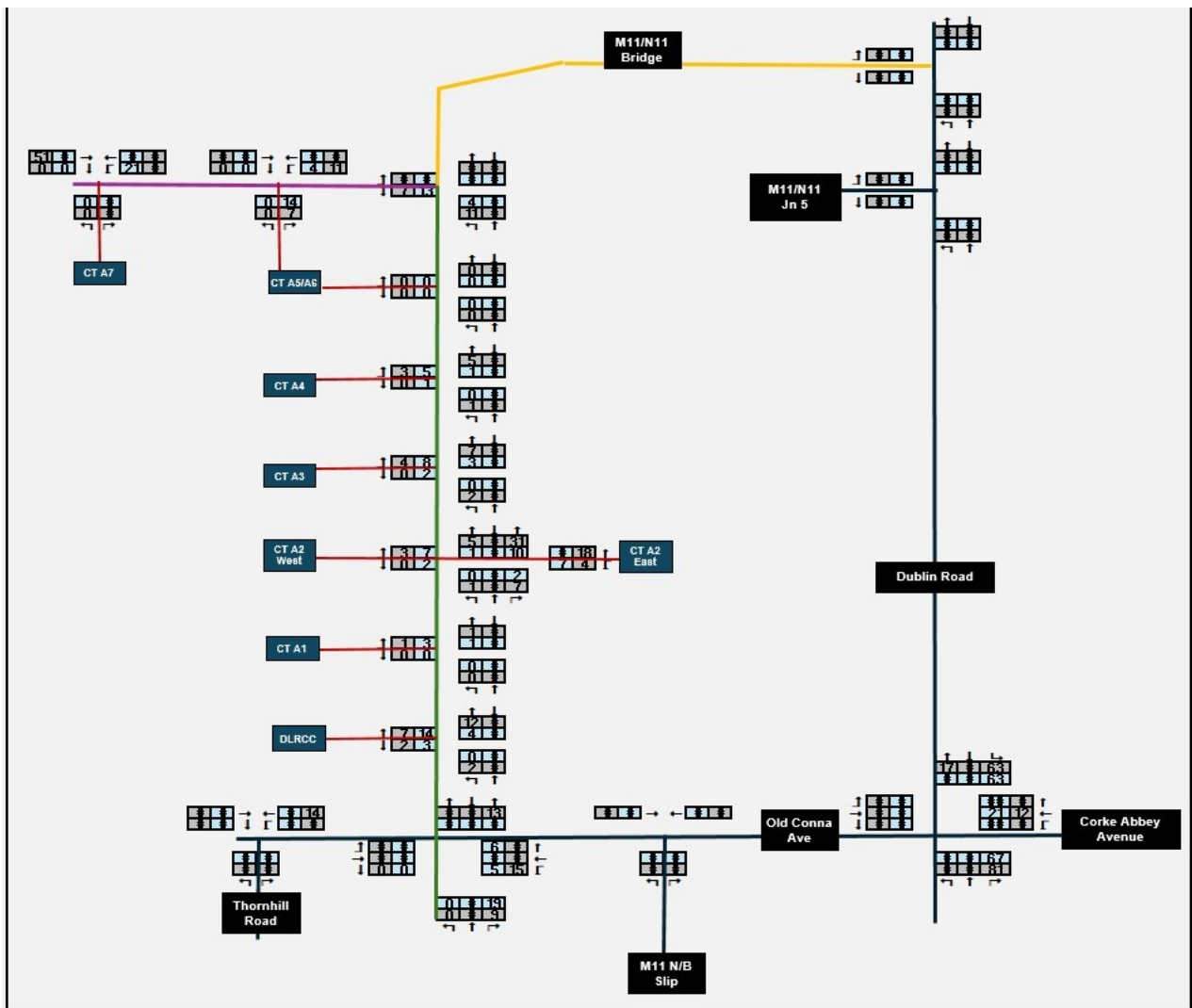


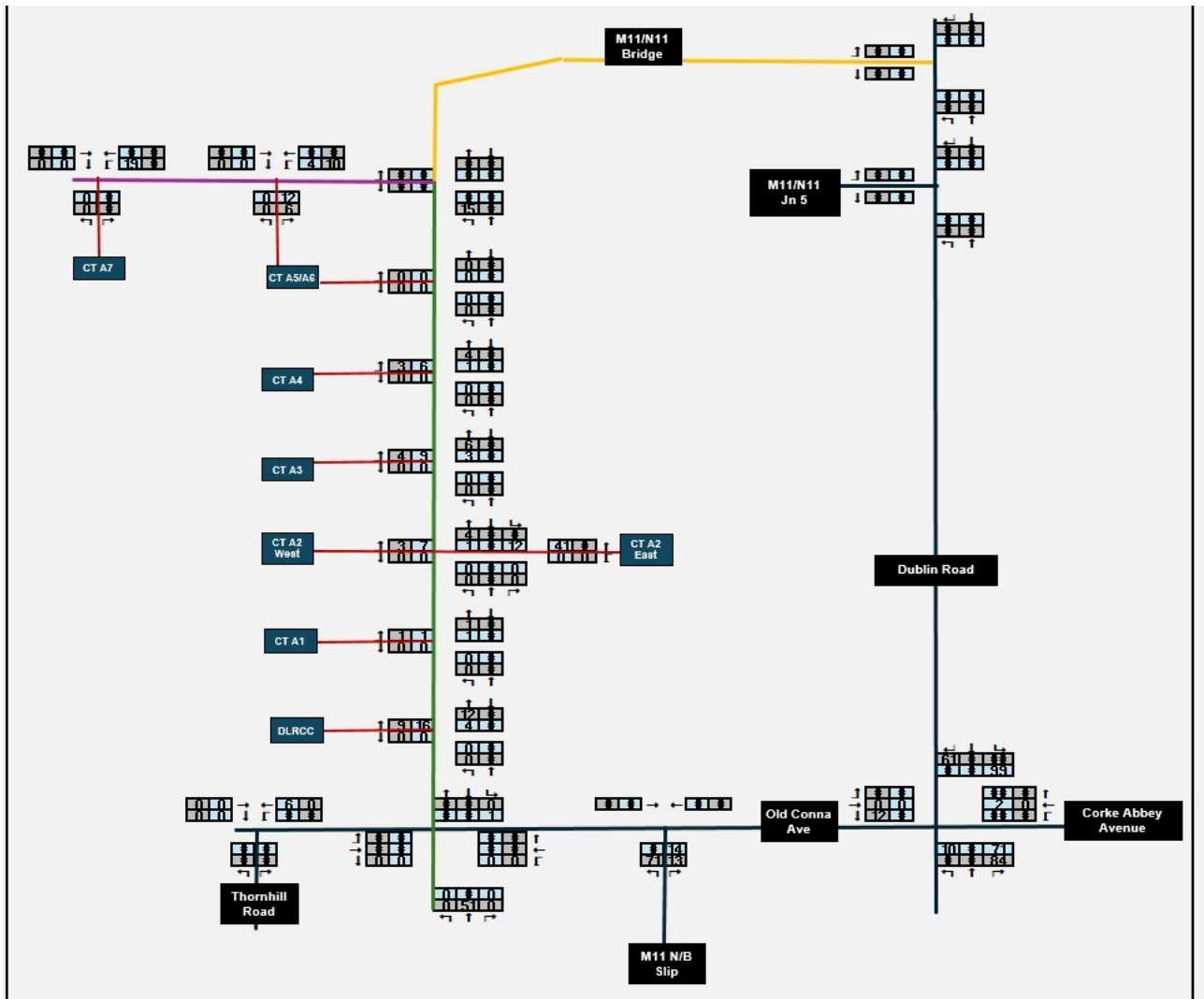












Appendix C. TRICS Data



Audit Code: afb98a45-50f2-4e51-a203-47445a1914d8

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 03 - RESIDENTIAL

Category: C - FLATS PRIVATELY OWNED

Selected Vehicle Type: Total People

Selected regions and areas:

03	SOUTH WEST		
	DC	DORSET	1 day
04	EAST ANGLIA		
	NF	NORFOLK	1 day
	SF	SUFFOLK	1 day
05	EAST MIDLANDS		
	NN	NORTH NORTHAMPTONSHIRE	1 day
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 day
	RI	EAST RIDING OF YORKSHIRE	1 day
09	NORTH		
	FU	WESTMORLAND & FURNESS	1 day
10	WALES		
	CO	CONWY	1 day
	DB	DENBIGHSHIRE	1 day
	FS	FLINTSHIRE	1 day
11	SCOTLAND		
	HI	HIGHLAND	1 day
	SA	SOUTH AYRSHIRE	1 day
12	CONNAUGHT		
	CS	SLIGO	1 day
	MA	MAYO	1 day
14	LEINSTER		
	KD	KILDARE	1 day
	LU	LOUTH	3 days
	WT	WESTMEATH	2 days
	WX	WEXFORD	1 day
16	ULSTER (REPUBLIC OF IRELAND)		
	MG	MONAGHAN	1 day

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

Audit Code: afb98a45-50f2-4e51-a203-47445a1914d8

Primary Filtering Selection:

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

Parameter:	Total Bedrooms
Actual Range:	10 to 1265 (units:Total Bedrooms)
Range Selected by User:	10 to 1265 (units:Total Bedrooms)
Parking Spaces Range:	0 - 550

Public Transport Provision:

Selection by:	All Surveys Included
Date Range:	19/07/91 to 24/06/25

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

Selected survey days:

Friday	6 days
Monday	5 days
Thursday	2 days
Tuesday	4 days
Wednesday	5 days

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

Selected survey types:

Manual count	22
Direction ATC Count	0

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

Selected Locations:

Edge of Town	2 days
Edge of Town Centre	12 days
Neighbourhood Centre	2 days
Suburban Area	4 days
Town Centre	2 days

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

Selected Location Sub Categories:

Built-Up Zone	3 days
No Sub Category	7 days
Residential Zone	12 days

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

Inclusion of Servicing Vehicle Counts:

Servicing vehicles Included	3 days
Servicing vehicles Unknown	19 days

Audit Code: afb98a45-50f2-4e51-a203-47445a1914d8

Secondary Filtering Selection:

Use Class:

C3	22 surveys
----	------------

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

Population within 500m Range:

597 - 14642

Population within 1 mile:

1,001 to 5,000	3 surveys
10,001 to 15,000	10 surveys
5,001 to 10,000	9 surveys

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

Population within 5 miles:

25,001 to 50,000	4 surveys
5,001 to 25,000	8 surveys
50,001 to 75,000	10 surveys

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

Car ownership within 5 miles:

0.6 to 1.0	4 surveys
1.1 to 1.5	18 surveys

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

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Petrol filling station:

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

Travel Plan:

No 22 surveys

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

PTAL Rating:

No PTAL Present 22 surveys

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

COVID-19 Restrictions:

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

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LIST OF SITES relevant to selection parameters:

Site 1:	CO-03-C-01	Site area:	0.44999998807907104 hect
Development Name:	BLOCKS OF FLATS	Number of dwellings:	37 DWELLS
Location:	LLANDUDNO	Housing density:	246.67
Postcode:	LL30 1YG	Total Bedrooms:	77.00
Main Location Type:	Edge of Town Centre	Survey Date:	
Sub Location Type:	Built-Up Zone	Survey Day:	
PTAL:	n/a		
Site 2:	CS-03-C-01	Site area:	0.10000000149011612 hect
Development Name:	FLATS	Number of dwellings:	21 DWELLS
Location:	SLIGO	Housing density:	420.00
Postcode:		Total Bedrooms:	45.00
Main Location Type:	Town Centre	Survey Date:	15/06/2007
Sub Location Type:	No Sub Category	Survey Day:	Friday
PTAL:	n/a		
Site 3:	DB-03-C-01	Site area:	0.20999999344348907 hect
Development Name:	FLATS IN HOUSES	Number of dwellings:	16 DWELLS
Location:	RHUDDLAN	Housing density:	200.00
Postcode:	LL18 2TQ	Total Bedrooms:	32.00
Main Location Type:	Neighbourhood Centre	Survey Date:	07/10/2011
Sub Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a		
Site 4:	DC-03-C-02	Site area:	0.14000000059604645 hect
Development Name:	FLATS IN BLOCKS	Number of dwellings:	14 DWELLS
Location:	WEYMOUTH	Housing density:	466.67
Postcode:	DT3 5DA	Total Bedrooms:	28.00
Main Location Type:	Suburban Area	Survey Date:	28/03/2014
Sub Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a		
Site 5:	FS-03-C-01	Site area:	0.20999999344348907 hect
Development Name:	BLOCK OF FLATS	Number of dwellings:	30 DWELLS
Location:	MOLD	Housing density:	428.57
Postcode:	CH7 1GA	Total Bedrooms:	60.00
Main Location Type:	Edge of Town Centre	Survey Date:	
Sub Location Type:	Built-Up Zone	Survey Day:	
PTAL:	n/a		
Site 6:	FU-03-C-01	Site area:	0.5600000023841858 hect
Development Name:	BLOCK OF FLATS	Number of dwellings:	35 DWELLS
Location:	PENRITH	Housing density:	109.38
Postcode:	CA11 8RH	Total Bedrooms:	70.00
Main Location Type:	Edge of Town	Survey Date:	11/06/2014
Sub Location Type:	No Sub Category	Survey Day:	Wednesday
PTAL:	n/a		
Site 7:	HI-03-C-02	Site area:	0.12999999523162842 hect
Development Name:	BLOCK OF FLATS	Number of dwellings:	16 DWELLS
Location:	NAIRN	Housing density:	123.08
Postcode:	IV12 4AZ	Total Bedrooms:	28.00
Main Location Type:	Edge of Town Centre	Survey Date:	19/04/2023
Sub Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a		
Site 8:	KD-03-C-01	Site area:	0.7599999904632568 hect
Development Name:	BLOCK OF FLATS	Number of dwellings:	32 DWELLS
Location:	KILDARE	Housing density:	42.11
Postcode:		Total Bedrooms:	68.00
Main Location Type:	Edge of Town Centre	Survey Date:	22/05/2009
Sub Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a		

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Site 9:	LU-03-C-02	Site area:	0.2199999988079071 hect
Development Name:	BLOCK OF FLATS	Number of dwellings:	33 DWELLS
Location:	DUNDALK	Housing density:	183.33
Postcode:		Total Bedrooms:	69.00
Main Location Type:	Edge of Town Centre	Survey Date:	
Sub Location Type:	Residential Zone	Survey Day:	
PTAL:	n/a		
Site 10:	LU-03-C-03	Site area:	0.1899999976158142 hect
Development Name:	BLOCK OF FLATS	Number of dwellings:	20 DWELLS
Location:	DUNDALK	Housing density:	133.33
Postcode:		Total Bedrooms:	40.00
Main Location Type:	Edge of Town Centre	Survey Date:	
Sub Location Type:	Residential Zone	Survey Day:	
PTAL:	n/a		
Site 11:	LU-03-C-04	Site area:	0.9300000071525574 hect
Development Name:	BLOCKS OF FLATS	Number of dwellings:	42 DWELLS
Location:	DROGHEDA	Housing density:	45.16
Postcode:		Total Bedrooms:	94.00
Main Location Type:	Neighbourhood Centre	Survey Date:	22/09/2021
Sub Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a		
Site 12:	MA-03-C-01	Site area:	0.5299999713897705 hect
Development Name:	BLOCKS OF FLATS	Number of dwellings:	22 DWELLS
Location:	CLAREMORRIS	Housing density:	84.62
Postcode:		Total Bedrooms:	44.00
Main Location Type:	Edge of Town Centre	Survey Date:	14/09/2021
Sub Location Type:	No Sub Category	Survey Day:	Tuesday
PTAL:	n/a		
Site 13:	MG-03-C-01	Site area:	0.25999999046325684 hect
Development Name:	BLOCK OF FLATS	Number of dwellings:	28 DWELLS
Location:	MONAGHAN	Housing density:	127.27
Postcode:		Total Bedrooms:	51.00
Main Location Type:	Edge of Town Centre	Survey Date:	06/09/2013
Sub Location Type:	No Sub Category	Survey Day:	Friday
PTAL:	n/a		
Site 14:	NF-03-C-01	Site area:	0.41999998688697815 hect
Development Name:	BLOCKS OF FLATS	Number of dwellings:	51 DWELLS
Location:	KING'S LYNN	Housing density:	231.82
Postcode:	PE30 1NQ	Total Bedrooms:	122.00
Main Location Type:	Edge of Town Centre	Survey Date:	11/12/2014
Sub Location Type:	Built-Up Zone	Survey Day:	Thursday
PTAL:	n/a		
Site 15:	NN-03-C-01	Site area:	0.20000000298023224 hect
Development Name:	BLOCK OF FLATS	Number of dwellings:	20 DWELLS
Location:	CORBY	Housing density:	400.00
Postcode:	NN17 1AH	Total Bedrooms:	48.00
Main Location Type:	Suburban Area	Survey Date:	21/11/2008
Sub Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a		
Site 16:	NY-03-C-01	Site area:	0.5 hect
Development Name:	BLOCKS OF FLATS	Number of dwellings:	30 DWELLS
Location:	NORTHALLERTON	Housing density:	
Postcode:	DL7 8XS	Total Bedrooms:	60.00
Main Location Type:	Suburban Area	Survey Date:	
Sub Location Type:	No Sub Category	Survey Day:	
PTAL:	n/a		

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Site 17:	RI-03-C-01	Site area:	0.7200000286102295 hect
Development Name:	FLATS	Number of dwellings:	20 DWELLS
Location:	HULL	Housing density:	166.67
Postcode:	HU5 5SB	Total Bedrooms:	44.00
Main Location Type:	Edge of Town	Survey Date:	13/05/2014
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 18:	SA-03-C-01	Site area:	1.5800000429153442 hect
Development Name:	BLOCK OF FLATS	Number of dwellings:	51 DWELLS
Location:	AYR	Housing density:	170.00
Postcode:	KA7 2AT	Total Bedrooms:	119.00
Main Location Type:	Edge of Town Centre	Survey Date:	16/09/2014
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 19:	SF-03-C-03	Site area:	0.6000000238418579 hect
Development Name:	BLOCKS OF FLATS	Number of dwellings:	30 DWELLS
Location:	BURY ST EDMUNDS	Housing density:	300.00
Postcode:	IP32 6BT	Total Bedrooms:	42.00
Main Location Type:	Suburban Area	Survey Date:	03/12/2014
Sub Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a		
Site 20:	WT-03-C-01	Site area:	0.4000000059604645 hect
Development Name:	FLATS	Number of dwellings:	86 DWELLS
Location:	ATHLONE	Housing density:	430.00
Postcode:		Total Bedrooms:	146.00
Main Location Type:	Edge of Town Centre	Survey Date:	20/06/2007
Sub Location Type:	No Sub Category	Survey Day:	Wednesday
PTAL:	n/a		
Site 21:	WT-03-C-02	Site area:	0.07000000029802322 hect
Development Name:	FLATS	Number of dwellings:	20 DWELLS
Location:	ATHLONE	Housing density:	285.71
Postcode:		Total Bedrooms:	41.00
Main Location Type:	Town Centre	Survey Date:	19/06/2007
Sub Location Type:	No Sub Category	Survey Day:	Tuesday
PTAL:	n/a		
Site 22:	WX-03-C-01	Site area:	0.4099999964237213 hect
Development Name:	BLOCKS OF FLATS	Number of dwellings:	28 DWELLS
Location:	WEXFORD	Housing density:	68.29
Postcode:	Y35 E3E5	Total Bedrooms:	57.00
Main Location Type:	Edge of Town Centre	Survey Date:	20/04/2023
Sub Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a		

Audit Code: afb98a45-50f2-4e51-a203-47445a1914d8

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

Total Vehicles

Calculation factor: 1 Total Bedrooms

Estimated TRIP rate value per 1 Total Bedrooms shown in shaded columns

*BOLD print indicates peak (busiest) period

Period	Trips per 1 Total Bedrooms Total Bedrooms		
	Inbound	Outbound	Total
08:00-09:00	0.031	0.088	0.119
17:00-18:00	0.093	0.058	0.151

Time Range	No. Days	Ave. Total Bedrooms	Arrivals	Estimated Trip Rate	Departures	Estimated Trip Rate	Totals	Estimated Trip Rate
00:00-01:00								
01:00-02:00								
02:00-03:00								
03:00-04:00								
04:00-05:00								
05:00-06:00								
06:00-07:00								
07:00-08:00	22	63	0.025	0.025	0.063	0.063	0.088	0.088
08:00-09:00	22	63	0.031	0.031	0.088	0.088	0.119	0.119
09:00-10:00	22	63	0.055	0.055	0.067	0.067	0.122	0.122
10:00-11:00	22	63	0.046	0.046	0.048	0.048	0.094	0.094
11:00-12:00	22	63	0.046	0.046	0.050	0.050	0.096	0.096
12:00-13:00	22	63	0.046	0.046	0.052	0.052	0.098	0.098
13:00-14:00	22	63	0.052	0.052	0.051	0.051	0.103	0.103
14:00-15:00	22	63	0.050	0.050	0.056	0.056	0.106	0.106
15:00-16:00	22	63	0.056	0.056	0.053	0.053	0.109	0.109
16:00-17:00	22	63	0.059	0.059	0.051	0.051	0.110	0.110
17:00-18:00	22	63	0.093	0.093	0.058	0.058	0.151	0.151
18:00-19:00	22	63	0.082	0.082	0.056	0.056	0.138	0.138
19:00-20:00								
20:00-21:00								
21:00-22:00								
22:00-23:00								
23:00-00:00								
Total Rates:			0.641	0.642	0.693	0.693	1.334	1.335

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

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

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Audit Code: afb98a45-50f2-4e51-a203-47445a1914d8

Parameter Summary:

Trip rate parameter range selected:	10 - 1265 (units: Total Bedrooms)
Survey date date range:	22/09/2003 - 20/04/2023
Number of weekdays (Monday-Friday):	22
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

Audit Code: afb98a45-50f2-4e51-a203-47445a1914d8

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

Total People

Calculation factor: 1 Total Bedrooms

Estimated TRIP rate value per 1 Total Bedrooms shown in shaded columns

*BOLD print indicates peak (busiest) period

Period	Trips per 1 Total Bedrooms Total Bedrooms		
	Inbound	Outbound	Total
08:00-09:00	0.066	0.217	0.283
17:00-18:00	0.199	0.125	0.324

Time Range	No. Days	Ave. Total Bedrooms	Arrivals	Estimated Trip Rate	Departures	Estimated Trip Rate	Totals	Estimated Trip Rate
00:00-01:00								
01:00-02:00								
02:00-03:00								
03:00-04:00								
04:00-05:00								
05:00-06:00								
06:00-07:00								
07:00-08:00	22	63	0.043	0.043	0.120	0.120	0.163	0.163
08:00-09:00	22	63	0.066	0.066	0.217	0.217	0.283	0.283
09:00-10:00	22	63	0.116	0.116	0.145	0.145	0.261	0.261
10:00-11:00	22	63	0.099	0.099	0.110	0.110	0.209	0.209
11:00-12:00	22	63	0.100	0.100	0.118	0.118	0.218	0.218
12:00-13:00	22	63	0.113	0.113	0.123	0.123	0.236	0.236
13:00-14:00	22	63	0.113	0.113	0.121	0.121	0.234	0.234
14:00-15:00	22	63	0.116	0.116	0.127	0.127	0.243	0.243
15:00-16:00	22	63	0.155	0.155	0.135	0.135	0.290	0.290
16:00-17:00	22	63	0.145	0.145	0.110	0.110	0.255	0.255
17:00-18:00	22	63	0.199	0.199	0.125	0.125	0.324	0.324
18:00-19:00	22	63	0.170	0.170	0.121	0.121	0.291	0.291
19:00-20:00								
20:00-21:00								
21:00-22:00								
22:00-23:00								
23:00-00:00								
Total Rates:			1.435	1.435	1.572	1.571	3.007	3.006

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

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

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Audit Code: afb98a45-50f2-4e51-a203-47445a1914d8

Parameter Summary:

Trip rate parameter range selected:	10 - 1265 (units: Total Bedrooms)
Survey date date range:	22/09/2003 - 20/04/2023
Number of weekdays (Monday-Friday):	22
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

Audit Code: afb98a45-50f2-4e51-a203-47445a1914d8

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

Cyclists

Calculation factor: 1 Total Bedrooms

Estimated TRIP rate value per 1 Total Bedrooms shown in shaded columns

*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. Total Bedrooms	Arrivals	Estimated Trip Rate	Departures	Estimated Trip Rate	Totals	Estimated Trip Rate
00:00-01:00								
01:00-02:00								
02:00-03:00								
03:00-04:00								
04:00-05:00								
05:00-06:00								
06:00-07:00								
07:00-08:00	22	63	0.002	0.002	0.004	0.004	0.006	0.006
08:00-09:00	22	63	0.003	0.003	0.007	0.007	0.010	0.010
09:00-10:00	22	63	0.003	0.003	0.005	0.005	0.008	0.008
10:00-11:00	22	63	0.002	0.002	0.005	0.005	0.007	0.007
11:00-12:00	22	63	0.001	0.001	0.001	0.001	0.002	0.002
12:00-13:00	22	63	0.003	0.003	0.002	0.002	0.005	0.005
13:00-14:00	22	63	0.001	0.001	0.004	0.004	0.005	0.005
14:00-15:00	22	63	0.001	0.001	0.001	0.001	0.002	0.002
15:00-16:00	22	63	0.005	0.005	0.005	0.005	0.010	0.010
16:00-17:00	22	63	0.005	0.005	0.001	0.001	0.006	0.006
17:00-18:00	22	63	0.004	0.004	0.001	0.001	0.005	0.005
18:00-19:00	22	63	0.004	0.004	0.006	0.006	0.010	0.010
19:00-20:00								
20:00-21:00								
21:00-22:00								
22:00-23:00								
23:00-00:00								
Total Rates:			0.034	0.035	0.042	0.043	0.076	0.078

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

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

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Audit Code: afb98a45-50f2-4e51-a203-47445a1914d8

Parameter Summary:

Trip rate parameter range selected:	10 - 1265 (units: Total Bedrooms)
Survey date date range:	22/09/2003 - 20/04/2023
Number of weekdays (Monday-Friday):	19
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

Audit Code: afb98a45-50f2-4e51-a203-47445a1914d8

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

PSVs

Calculation factor: 1 Total Bedrooms

Estimated TRIP rate value per 1 Total Bedrooms shown in shaded columns

*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. Total Bedrooms	Arrivals	Estimated Trip Rate	Departures	Estimated Trip Rate	Totals	Estimated Trip Rate
00:00-01:00								
01:00-02:00								
02:00-03:00								
03:00-04:00								
04:00-05:00								
05:00-06:00								
06:00-07:00								
07:00-08:00	22	63	0.000	0.000	0.000	0.000	0.000	0.000
08:00-09:00	22	63	0.000	0.000	0.000	0.000	0.000	0.000
09:00-10:00	22	63	0.000	0.000	0.000	0.000	0.000	0.000
10:00-11:00	22	63	0.001	0.001	0.001	0.001	0.002	0.002
11:00-12:00	22	63	0.000	0.000	0.000	0.000	0.000	0.000
12:00-13:00	22	63	0.000	0.000	0.000	0.000	0.000	0.000
13:00-14:00	22	63	0.000	0.000	0.000	0.000	0.000	0.000
14:00-15:00	22	63	0.000	0.000	0.000	0.000	0.000	0.000
15:00-16:00	22	63	0.001	0.001	0.000	0.000	0.001	0.001
16:00-17:00	22	63	0.000	0.000	0.001	0.001	0.001	0.001
17:00-18:00	22	63	0.000	0.000	0.000	0.000	0.000	0.000
18:00-19:00	22	63	0.000	0.000	0.000	0.000	0.000	0.000
19:00-20:00								
20:00-21:00								
21:00-22:00								
22:00-23:00								
23:00-00:00								
Total Rates:			0.002	0.001	0.002	0.001	0.004	0.003

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

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

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Audit Code: afb98a45-50f2-4e51-a203-47445a1914d8

Parameter Summary:

Trip rate parameter range selected:	10 - 1265 (units: Total Bedrooms)
Survey date date range:	16/09/2014 - 16/09/2014
Number of weekdays (Monday-Friday):	1
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

Audit Code: afb98a45-50f2-4e51-a203-47445a1914d8

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

OGVs

Calculation factor: 1 Total Bedrooms

Estimated TRIP rate value per 1 Total Bedrooms shown in shaded columns

*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. Total Bedrooms	Arrivals	Estimated Trip Rate	Departures	Estimated Trip Rate	Totals	Estimated Trip Rate
00:00-01:00								
01:00-02:00								
02:00-03:00								
03:00-04:00								
04:00-05:00								
05:00-06:00								
06:00-07:00								
07:00-08:00	22	63	0.002	0.002	0.003	0.003	0.005	0.005
08:00-09:00	22	63	0.000	0.000	0.000	0.000	0.000	0.000
09:00-10:00	22	63	0.002	0.002	0.001	0.001	0.003	0.003
10:00-11:00	22	63	0.003	0.003	0.004	0.004	0.007	0.007
11:00-12:00	22	63	0.000	0.000	0.001	0.001	0.001	0.001
12:00-13:00	22	63	0.002	0.002	0.001	0.001	0.003	0.003
13:00-14:00	22	63	0.001	0.001	0.001	0.001	0.002	0.002
14:00-15:00	22	63	0.001	0.001	0.001	0.001	0.002	0.002
15:00-16:00	22	63	0.001	0.001	0.000	0.000	0.001	0.001
16:00-17:00	22	63	0.000	0.000	0.001	0.001	0.001	0.001
17:00-18:00	22	63	0.000	0.000	0.000	0.000	0.000	0.000
18:00-19:00	22	63	0.000	0.000	0.000	0.000	0.000	0.000
19:00-20:00								
20:00-21:00								
21:00-22:00								
22:00-23:00								
23:00-00:00								
Total Rates:			0.012	0.012	0.013	0.012	0.025	0.024

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

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

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Audit Code: afb98a45-50f2-4e51-a203-47445a1914d8

Parameter Summary:

Trip rate parameter range selected:	10 - 1265 (units: Total Bedrooms)
Survey date date range:	22/09/2003 - 22/09/2021
Number of weekdays (Monday-Friday):	9
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

Audit Code: afb98a45-50f2-4e51-a203-47445a1914d8

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

Vehicle Occupants

Calculation factor: 1 Total Bedrooms

Estimated TRIP rate value per 1 Total Bedrooms shown in shaded columns

*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. Total Bedrooms	Arrivals	Estimated Trip Rate	Departures	Estimated Trip Rate	Totals	Estimated Trip Rate
00:00-01:00								
01:00-02:00								
02:00-03:00								
03:00-04:00								
04:00-05:00								
05:00-06:00								
06:00-07:00								
07:00-08:00	22	63	0.030	0.030	0.083	0.083	0.113	0.113
08:00-09:00	22	63	0.042	0.042	0.123	0.123	0.165	0.165
09:00-10:00	22	63	0.078	0.078	0.090	0.090	0.168	0.168
10:00-11:00	22	63	0.056	0.056	0.064	0.064	0.120	0.120
11:00-12:00	22	63	0.058	0.058	0.066	0.066	0.124	0.124
12:00-13:00	22	63	0.061	0.061	0.069	0.069	0.130	0.130
13:00-14:00	22	63	0.066	0.066	0.061	0.061	0.127	0.127
14:00-15:00	22	63	0.058	0.058	0.080	0.080	0.138	0.138
15:00-16:00	22	63	0.084	0.084	0.075	0.075	0.159	0.159
16:00-17:00	22	63	0.078	0.078	0.065	0.065	0.143	0.143
17:00-18:00	22	63	0.121	0.121	0.081	0.081	0.202	0.202
18:00-19:00	22	63	0.117	0.117	0.082	0.082	0.199	0.199
19:00-20:00								
20:00-21:00								
21:00-22:00								
22:00-23:00								
23:00-00:00								
Total Rates:			0.849	0.850	0.939	0.939	1.788	1.788

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

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

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Audit Code: afb98a45-50f2-4e51-a203-47445a1914d8

Parameter Summary:

Trip rate parameter range selected:	10 - 1265 (units: Total Bedrooms)
Survey date date range:	22/09/2003 - 20/04/2023
Number of weekdays (Monday-Friday):	22
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

Audit Code: afb98a45-50f2-4e51-a203-47445a1914d8

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

Pedestrians

Calculation factor: 1 Total Bedrooms

Estimated TRIP rate value per 1 Total Bedrooms shown in shaded columns

*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. Total Bedrooms	Arrivals	Estimated Trip Rate	Departures	Estimated Trip Rate	Totals	Estimated Trip Rate
00:00-01:00								
01:00-02:00								
02:00-03:00								
03:00-04:00								
04:00-05:00								
05:00-06:00								
06:00-07:00								
07:00-08:00	22	63	0.011	0.011	0.023	0.023	0.034	0.034
08:00-09:00	22	63	0.021	0.021	0.064	0.064	0.085	0.085
09:00-10:00	22	63	0.032	0.032	0.040	0.040	0.072	0.072
10:00-11:00	22	63	0.032	0.032	0.033	0.033	0.065	0.065
11:00-12:00	22	63	0.035	0.035	0.043	0.043	0.078	0.078
12:00-13:00	22	63	0.039	0.039	0.045	0.045	0.084	0.084
13:00-14:00	22	63	0.040	0.040	0.049	0.049	0.089	0.089
14:00-15:00	22	63	0.050	0.050	0.040	0.040	0.090	0.090
15:00-16:00	22	63	0.054	0.054	0.049	0.049	0.103	0.103
16:00-17:00	22	63	0.048	0.048	0.040	0.040	0.088	0.088
17:00-18:00	22	63	0.058	0.058	0.040	0.040	0.098	0.098
18:00-19:00	22	63	0.038	0.038	0.032	0.032	0.070	0.070
19:00-20:00								
20:00-21:00								
21:00-22:00								
22:00-23:00								
23:00-00:00								
Total Rates:			0.458	0.458	0.498	0.499	0.956	0.957

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

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

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Audit Code: afb98a45-50f2-4e51-a203-47445a1914d8

Parameter Summary:

Trip rate parameter range selected:	10 - 1265 (units: Total Bedrooms)
Survey date date range:	22/09/2003 - 20/04/2023
Number of weekdays (Monday-Friday):	22
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

Audit Code: afb98a45-50f2-4e51-a203-47445a1914d8

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

Public Transport Users

Calculation factor: 1 Total Bedrooms

Estimated TRIP rate value per 1 Total Bedrooms shown in shaded columns

*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. Total Bedrooms	Arrivals	Estimated Trip Rate	Departures	Estimated Trip Rate	Totals	Estimated Trip Rate
00:00-01:00								
01:00-02:00								
02:00-03:00								
03:00-04:00								
04:00-05:00								
05:00-06:00								
06:00-07:00								
07:00-08:00	22	63	0.000	0.000	0.009	0.009	0.009	0.009
08:00-09:00	22	63	0.000	0.000	0.024	0.024	0.024	0.024
09:00-10:00	22	63	0.003	0.003	0.010	0.010	0.013	0.013
10:00-11:00	22	63	0.008	0.008	0.008	0.008	0.016	0.016
11:00-12:00	22	63	0.006	0.006	0.008	0.008	0.014	0.014
12:00-13:00	22	63	0.011	0.011	0.006	0.006	0.017	0.017
13:00-14:00	22	63	0.006	0.006	0.006	0.006	0.012	0.012
14:00-15:00	22	63	0.007	0.007	0.006	0.006	0.013	0.013
15:00-16:00	22	63	0.010	0.010	0.005	0.005	0.015	0.015
16:00-17:00	22	63	0.014	0.014	0.004	0.004	0.018	0.018
17:00-18:00	22	63	0.016	0.016	0.003	0.003	0.019	0.019
18:00-19:00	22	63	0.011	0.011	0.001	0.001	0.012	0.012
19:00-20:00								
20:00-21:00								
21:00-22:00								
22:00-23:00								
23:00-00:00								
Total Rates:			0.092	0.091	0.090	0.090	0.182	0.181

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

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Audit Code: afb98a45-50f2-4e51-a203-47445a1914d8

Parameter Summary:

Trip rate parameter range selected:	10 - 1265 (units: Total Bedrooms)
Survey date date range:	22/09/2003 - 19/04/2023
Number of weekdays (Monday-Friday):	15
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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Audit Code: b8d66ba2-10c2-491f-81af-2345eea9ca77

Filtering Summary:

Land Use: 03/A RESIDENTIAL/HOUSES PRIVATELY OWNED

Selected Trip Rate Calculation Parameter Range: 7 - 5396 Total Bedrooms

Actual Trip Rate Calculation Parameter Range: 7 - 5396 Total Bedrooms

Date Range: Minimum: 05/05/1987 Maximum: 30/06/2025

Parking Spaces Range: All Surveys Selected

Parking Spaces Per Dwelling Range: All Surveys Selected

Bedrooms Per Dwelling Range: All Surveys Selected

Percentage of Dwellings Privately Owned: All Surveys Selected

Population Within 500m Range: 220 4900

Days of the week selected:

Friday	10
Monday	19
Thursday	22
Tuesday	31
Wednesday	18

Main Location Types selected:

Edge of Town	60
Edge of Town Centre	10
Free Standing	1
Neighbourhood Centre	3
Suburban Area	26

Inclusion of Servicing Vehicles Counts:

Servicing Vehicle Excluded	85
Servicing Vehicles Included	15

Population <1 Mile ranges selected:

1,000 or Less	1
1,001 to 5,000	24
10,001 to 15,000	39
5,001 to 10,000	36

Audit Code: b8d66ba2-10c2-491f-81af-2345eea9ca77

Population <5 Mile ranges selected:

25,001 to 50,000	32
5,000 or Less	4
5,001 to 25,000	42
50,001 to 75,000	22

Car Ownership <5 Mile ranges selected:

0.6 to 1.0	22
1.1 to 1.5	67
1.6 to 2.0	11

PTAL Rating:

No PTAL Present	100
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Audit Code: b8d66ba2-10c2-491f-81af-2345eea9ca77

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 03 - RESIDENTIAL

Category: A - HOUSES PRIVATELY OWNED

Selected Vehicle Type: Total People

Selected regions and areas:

02	SOUTH EAST	
	ES	EAST SUSSEX 5 days
	HC	HAMPSHIRE 4 days
	HF	HERTFORDSHIRE 2 days
	IW	ISLE OF WIGHT 1 day
	KC	KENT 4 days
	WS	WEST SUSSEX 1 day
03	SOUTH WEST	
	CW	CORNWALL 2 days
	DC	DORSET 3 days
	DV	DEVON 2 days
	GS	GLOUCESTERSHIRE 1 day
04	EAST ANGLIA	
	NF	NORFOLK 11 days
	SF	SUFFOLK 1 day
05	EAST MIDLANDS	
	LE	LEICESTERSHIRE 1 day
06	WEST MIDLANDS	
	TE	TELFORD & WREKIN 1 day
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NE	NORTH EAST LINCOLNSHIRE 2 days
	NY	NORTH YORKSHIRE 8 days
08	NORTH WEST	
	AC	CHESHIRE WEST & CHESTER 1 day
09	NORTH	
	CU	CUMBERLAND 2 days
	DH	DURHAM 1 day
	FU	WESTMORLAND & FURNESS 1 day
	IM	ISLE OF MAN 3 days
10	WALES	
	PS	POWYS 2 days
11	SCOTLAND	
	AS	ABERDEENSHIRE 1 day
	HI	HIGHLAND 1 day
	SR	STIRLING 1 day
12	CONNAUGHT	
	CS	SLIGO 2 days
	GA	GALWAY 4 days
	LT	LEITRIM 1 day
	MA	MAYO 2 days
	RO	ROSCOMMON 4 days
13	MUNSTER	
	CL	CLARE 2 days
	TI	TIPPERARY 1 day
	WA	WATERFORD 1 day
14	LEINSTER	
	KD	KILDARE 1 day
	LU	LOUTH 1 day
	ME	MEATH 1 day
	WC	WICKLOW 2 days
15	GREATER DUBLIN	
	DL	DUBLIN 1 day
16	ULSTER (REPUBLIC OF IRELAND)	
	CV	CAVAN 2 days
	DN	DONEGAL 4 days
	MG	MONAGHAN 2 days

Audit Code: b8d66ba2-10c2-491f-81af-2345eea9ca77

17	ULSTER (NORTHERN IRELAND)		
	AN	ANTRIM	3 days
	AR	ARMAGH	1 day
	DE	DERRY	2 days
	TY	TYRONE	1 day

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

Audit Code: b8d66ba2-10c2-491f-81af-2345eea9ca77

Primary Filtering Selection:

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

Parameter:	Total Bedrooms
Actual Range:	7 to 5396 (units:Total Bedrooms)
Range Selected by User:	7 to 5396 (units:Total Bedrooms)
Parking Spaces Range:	6 - 2824

Public Transport Provision:

Selection by:	All Surveys Included
Date Range:	05/05/87 to 30/06/25

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

Selected survey days:

Friday	10 days
Monday	19 days
Thursday	22 days
Tuesday	31 days
Wednesday	18 days

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

Selected survey types:

Manual count	100
Direction ATC Count	0

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

Selected Locations:

Edge of Town	60 days
Edge of Town Centre	10 days
Free Standing	1 days
Neighbourhood Centre	3 days
Suburban Area	26 days

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

Selected Location Sub Categories:

Built-Up Zone	1 days
Industrial Zone	2 days
No Sub Category	15 days
Out of Town	4 days
Residential Zone	78 days

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

Inclusion of Servicing Vehicle Counts:

Servicing vehicles Excluded	7 days
Servicing vehicles Included	15 days
Servicing vehicles Unknown	78 days

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Secondary Filtering Selection:

Use Class:

C3	100 surveys
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This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

220 - 15312

Population within 1 mile:

1,000 or Less	1 surveys
1,001 to 5,000	24 surveys
10,001 to 15,000	39 surveys
5,001 to 10,000	36 surveys

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

Population within 5 miles:

25,001 to 50,000	32 surveys
5,000 or Less	4 surveys
5,001 to 25,000	42 surveys
50,001 to 75,000	22 surveys

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

Car ownership within 5 miles:

0.6 to 1.0	22 surveys
1.1 to 1.5	67 surveys
1.6 to 2.0	11 surveys

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

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Petrol filling station:

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

Travel Plan:

No	74 surveys
Yes	26 surveys

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

PTAL Rating:

No PTAL Present	100 surveys
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This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

COVID-19 Restrictions:

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

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LIST OF SITES relevant to selection parameters:

Site 1:	AC-03-A-04	Site area:	0.5 hect
Development Name:	TOWN HOUSES	Number of dwellings:	24 DWELLS
Location:	NORTHWICH	Housing density:	54.55
Postcode:	CW9 8RZ	Total Bedrooms:	92.00
Main Location Type:	Suburban Area	Survey Date:	06/06/2019
Sub Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a		
Site 2:	AN-03-A-07	Site area:	2.759999990463257 hect
Development Name:	SEMI DETACHED/TERRACED	Number of dwellings:	55 DWELLS
	HOUSING	Housing density:	22.18
Location:	ANTRIM	Total Bedrooms:	165.00
Postcode:	BT41 4LE	Survey Date:	20/12/2011
Main Location Type:	Suburban Area	Survey Day:	Tuesday
Sub Location Type:	Residential Zone		
PTAL:	n/a		
Site 3:	AN-03-A-09	Site area:	9.479999542236328 hect
Development Name:	DETACHED & SEMI-DETACHED	Number of dwellings:	151 DWELLS
Location:	CARRICKFERGUS	Housing density:	17.70
Postcode:	BT38 8FW	Total Bedrooms:	459.00
Main Location Type:	Edge of Town	Survey Date:	12/10/2016
Sub Location Type:	No Sub Category	Survey Day:	Wednesday
PTAL:	n/a		
Site 4:	AN-03-A-10	Site area:	3.5 hect
Development Name:	DETACHED & SEMI-DETACHED	Number of dwellings:	87 DWELLS
Location:	ANTRIM	Housing density:	36.86
Postcode:	BT41 4NZ	Total Bedrooms:	288.00
Main Location Type:	Suburban Area	Survey Date:	07/06/2024
Sub Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a		
Site 5:	AR-03-A-01	Site area:	4.039999961853027 hect
Development Name:	MIXED HOUSES	Number of dwellings:	153 DWELLS
Location:	LURGAN	Housing density:	37.87
Postcode:	BT66 7SY	Total Bedrooms:	482.00
Main Location Type:	Edge of Town	Survey Date:	15/06/2010
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 6:	AS-03-A-02	Site area:	5.300000190734863 hect
Development Name:	MIXED HOUSES	Number of dwellings:	131 DWELLS
Location:	STONEHAVEN	Housing density:	27.87
Postcode:	AB39 2XZ	Total Bedrooms:	363.00
Main Location Type:	Edge of Town	Survey Date:	20/04/2022
Sub Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a		
Site 7:	CL-03-A-01	Site area:	2.37 hect
Development Name:	PRIVATELY OWNED HOUSES	Number of dwellings:	43 DWELLS
Location:	ENNIS	Housing density:	27.39
Postcode:	V95 F9TN	Total Bedrooms:	186.00
Main Location Type:	Neighbourhood Centre	Survey Date:	24/10/2024
Sub Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a		

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Site 8:	CL-03-A-02	Site area:	3.72 hect
Development Name:	PRIVATELY OWNED HOUSES	Number of dwellings:	76 DWELLS
Location:	ENNIS	Housing density:	24.13
Postcode:	V95 VYOF	Total Bedrooms:	294.00
Main Location Type:	Suburban Area	Survey Date:	25/10/2024
Sub Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a		
Site 9:	CS-03-A-01	Site area:	1.5499999523162842 hect
Development Name:	TERRACED	Number of dwellings:	46 DWELLS
Location:	SLIGO	Housing density:	51.11
Postcode:		Total Bedrooms:	138.00
Main Location Type:	Edge of Town Centre	Survey Date:	14/06/2007
Sub Location Type:	No Sub Category	Survey Day:	Thursday
PTAL:	n/a		
Site 10:	CS-03-A-02	Site area:	1.850000023841858 hect
Development Name:	DETACHED	Number of dwellings:	35 DWELLS
Location:	SLIGO	Housing density:	26.92
Postcode:		Total Bedrooms:	157.00
Main Location Type:	Suburban Area	Survey Date:	14/06/2007
Sub Location Type:	No Sub Category	Survey Day:	Thursday
PTAL:	n/a		
Site 11:	CU-03-A-01	Site area:	1.7999999523162842 hect
Development Name:	SEMI DETACHED	Number of dwellings:	40 DWELLS
Location:	WORKINGTON	Housing density:	25.00
Postcode:	CA14 3HR	Total Bedrooms:	120.00
Main Location Type:	Edge of Town	Survey Date:	
Sub Location Type:	Residential Zone	Survey Day:	
PTAL:	n/a		
Site 12:	CU-03-A-03	Site area:	2.9000000953674316 hect
Development Name:	SEMI DETACHED	Number of dwellings:	82 DWELLS
Location:	WORKINGTON	Housing density:	35.65
Postcode:	CA14 5LH	Total Bedrooms:	246.00
Main Location Type:	Edge of Town	Survey Date:	24/04/2009
Sub Location Type:	No Sub Category	Survey Day:	Friday
PTAL:	n/a		
Site 13:	CV-03-A-02	Site area:	47 hect
Development Name:	DETACHED & SEMI DETACHED	Number of dwellings:	80 DWELLS
Location:	CAVAN	Housing density:	2.05
Postcode:		Total Bedrooms:	295.00
Main Location Type:	Edge of Town	Survey Date:	
Sub Location Type:	No Sub Category	Survey Day:	
PTAL:	n/a		
Site 14:	CV-03-A-03	Site area:	2.5999999046325684 hect
Development Name:	DETACHED HOUSES	Number of dwellings:	37 DWELLS
Location:	CAVAN	Housing density:	18.50
Postcode:		Total Bedrooms:	148.00
Main Location Type:	Edge of Town	Survey Date:	
Sub Location Type:	No Sub Category	Survey Day:	
PTAL:	n/a		
Site 15:	CW-03-A-01	Site area:	0.20000000298023224 hect
Development Name:	TERRACED	Number of dwellings:	13 DWELLS
Location:	PENZANCE	Housing density:	100.00
Postcode:	TR18 4SX	Total Bedrooms:	39.00
Main Location Type:	Suburban Area	Survey Date:	30/06/2005
Sub Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a		

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Site 16:	CW-03-A-02	Site area:	3.3499999046325684 hect
Development Name:	SEMI D./DETACHED	Number of dwellings:	73 DWELLS
Location:	TRURO	Housing density:	28.08
Postcode:	TR1 3NQ	Total Bedrooms:	222.00
Main Location Type:	Suburban Area	Survey Date:	18/09/2007
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 17:	DC-03-A-10	Site area:	1.399999976158142 hect
Development Name:	MIXED HOUSES	Number of dwellings:	26 DWELLS
Location:	GILLINGHAM	Housing density:	20.80
Postcode:	SP8 4JS	Total Bedrooms:	77.00
Main Location Type:	Edge of Town	Survey Date:	09/11/2022
Sub Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a		
Site 18:	DC-03-A-11	Site area:	6.630000114440918 hect
Development Name:	MIXED HOUSES	Number of dwellings:	141 DWELLS
Location:	SHAFTESBURY	Housing density:	26.26
Postcode:	SP7 8TU	Total Bedrooms:	445.00
Main Location Type:	Edge of Town	Survey Date:	31/10/2023
Sub Location Type:	No Sub Category	Survey Day:	Tuesday
PTAL:	n/a		
Site 19:	DC-03-A-13	Site area:	4 hect
Development Name:	MIXED HOUSES	Number of dwellings:	106 DWELLS
Location:	GILLINGHAM	Housing density:	38.33
Postcode:	SP8 4JS	Total Bedrooms:	315.00
Main Location Type:	Edge of Town	Survey Date:	10/06/2025
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 20:	DE-03-A-04	Site area:	1.600000023841858 hect
Development Name:	SEMI-DETACHED & TERRACED	Number of dwellings:	38 DWELLS
Location:	COLERAINE	Housing density:	31.67
Postcode:	BT51 3FD	Total Bedrooms:	116.00
Main Location Type:	Edge of Town	Survey Date:	19/05/2022
Sub Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a		
Site 21:	DE-03-A-05	Site area:	1.9256999492645264 hect
Development Name:	SEMI-DETACHED & TERRACED	Number of dwellings:	51 DWELLS
Location:	COLERAINE	Housing density:	31.88
Postcode:	BT52 2RG	Total Bedrooms:	158.00
Main Location Type:	Edge of Town	Survey Date:	20/05/2022
Sub Location Type:	Industrial Zone	Survey Day:	Friday
PTAL:	n/a		
Site 22:	DH-03-A-02	Site area:	4.03000020980835 hect
Development Name:	MIXED HOUSES	Number of dwellings:	125 DWELLS
Location:	BISHOP AUCKLAND	Housing density:	38.46
Postcode:	DL14 9UG	Total Bedrooms:	423.00
Main Location Type:	Neighbourhood Centre	Survey Date:	
Sub Location Type:	Residential Zone	Survey Day:	
PTAL:	n/a		
Site 23:	DL-03-A-10	Site area:	2.9000000953674316 hect
Development Name:	SEMI DETACHED & DETACHED	Number of dwellings:	65 DWELLS
Location:	MALAHIDE	Housing density:	28.02
Postcode:	K36 P798	Total Bedrooms:	219.00
Main Location Type:	Edge of Town	Survey Date:	20/06/2018
Sub Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a		

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Site 24:	DN-03-A-03	Site area:	3.200000047683716 hect
Development Name:	DETACHED/SEMI-DETACHED	Number of dwellings:	50 DWELLS
Location:	LETTERKENNY	Housing density:	17.48
Postcode:		Total Bedrooms:	200.00
Main Location Type:	Edge of Town	Survey Date:	
Sub Location Type:	Residential Zone	Survey Day:	
PTAL:	n/a		
Site 25:	DN-03-A-04	Site area:	4.150000095367432 hect
Development Name:	SEMI-DETACHED	Number of dwellings:	83 DWELLS
Location:	LETTERKENNY	Housing density:	22.13
Postcode:		Total Bedrooms:	257.00
Main Location Type:	Edge of Town	Survey Date:	26/09/2014
Sub Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a		
Site 26:	DN-03-A-05	Site area:	7.239999771118164 hect
Development Name:	DETACHED/SEMI-DETACHED	Number of dwellings:	146 DWELLS
Location:	LETTERKENNY	Housing density:	23.43
Postcode:		Total Bedrooms:	472.00
Main Location Type:	Suburban Area	Survey Date:	03/09/2014
Sub Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a		
Site 27:	DN-03-A-06	Site area:	1.0199999809265137 hect
Development Name:	DETACHED HOUSING	Number of dwellings:	6 DWELLS
Location:	BALLYBOFEY	Housing density:	7.14
Postcode:		Total Bedrooms:	30.00
Main Location Type:	Edge of Town	Survey Date:	10/10/2018
Sub Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a		
Site 28:	DV-03-A-02	Site area:	4.039999961853027 hect
Development Name:	HOUSES & BUNGALOWS	Number of dwellings:	116 DWELLS
Location:	HONITON	Housing density:	43.94
Postcode:	EX14 1JB	Total Bedrooms:	306.00
Main Location Type:	Suburban Area	Survey Date:	25/09/2015
Sub Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a		
Site 29:	DV-03-A-03	Site area:	2.0199999809265137 hect
Development Name:	TERRACED & SEMI DETACHED	Number of dwellings:	70 DWELLS
Location:	HONITON	Housing density:	50.36
Postcode:	EX14 2DF	Total Bedrooms:	208.00
Main Location Type:	Suburban Area	Survey Date:	
Sub Location Type:	Residential Zone	Survey Day:	
PTAL:	n/a		
Site 30:	ES-03-A-07	Site area:	3.490000009536743 hect
Development Name:	MIXED HOUSES & FLATS	Number of dwellings:	91 DWELLS
Location:	HAILSHAM	Housing density:	34.87
Postcode:	BN27 4FR	Total Bedrooms:	256.00
Main Location Type:	Edge of Town	Survey Date:	07/11/2019
Sub Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a		
Site 31:	ES-03-A-13	Site area:	1.7000000476837158 hect
Development Name:	DETACHED HOUSES	Number of dwellings:	36 DWELLS
Location:	HEATHFIELD	Housing density:	23.84
Postcode:	TN21 0UW	Total Bedrooms:	135.00
Main Location Type:	Edge of Town	Survey Date:	
Sub Location Type:	Residential Zone	Survey Day:	
PTAL:	n/a		

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Site 32:	ES-03-A-20	Site area:	0.51 hect
Development Name:	DETACHED & SEMI-DETACHED	Number of dwellings:	13 DWELLS
Location:	HAILSHAM	Housing density:	39.39
Postcode:	BN27 4EW	Total Bedrooms:	41.00
Main Location Type:	Edge of Town	Survey Date:	06/11/2024
Sub Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a		
Site 33:	ES-03-A-21	Site area:	8.24 hect
Development Name:	MIXED HOUSES & FLATS	Number of dwellings:	160 DWELLS
Location:	HAILSHAM	Housing density:	
Postcode:	BN27 1GW	Total Bedrooms:	475.00
Main Location Type:	Edge of Town	Survey Date:	26/03/2025
Sub Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a		
Site 34:	ES-03-A-22	Site area:	2.5 hect
Development Name:	MIXED HOUSES	Number of dwellings:	85 DWELLS
Location:	NEWHAVEN	Housing density:	40.67
Postcode:	BN9 9FF	Total Bedrooms:	247.00
Main Location Type:	Edge of Town	Survey Date:	22/04/2025
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 35:	FU-03-A-02	Site area:	1.5099999904632568 hect
Development Name:	DETACHED/TERRACED	Number of dwellings:	50 DWELLS
	HOUSING	Housing density:	39.68
Location:	PENRITH	Total Bedrooms:	163.00
Postcode:	CA11 9HS	Survey Date:	21/06/2016
Main Location Type:	Edge of Town Centre	Survey Day:	Tuesday
Sub Location Type:	Residential Zone		
PTAL:	n/a		
Site 36:	GA-03-A-01	Site area:	5.0999999904632568 hect
Development Name:	SEMI DETACHED	Number of dwellings:	123 DWELLS
Location:	GALWAY	Housing density:	36.18
Postcode:		Total Bedrooms:	492.00
Main Location Type:	Edge of Town	Survey Date:	20/09/2006
Sub Location Type:	No Sub Category	Survey Day:	Wednesday
PTAL:	n/a		
Site 37:	GA-03-A-02	Site area:	7 hect
Development Name:	TERRACED	Number of dwellings:	185 DWELLS
Location:	GALWAY	Housing density:	31.36
Postcode:		Total Bedrooms:	393.00
Main Location Type:	Suburban Area	Survey Date:	19/09/2006
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 38:	GA-03-A-03	Site area:	0.8999999761581421 hect
Development Name:	SEMI DET./TERRACED	Number of dwellings:	24 DWELLS
Location:	GALWAY	Housing density:	40.00
Postcode:		Total Bedrooms:	58.00
Main Location Type:	Suburban Area	Survey Date:	20/09/2006
Sub Location Type:	Built-Up Zone	Survey Day:	Wednesday
PTAL:	n/a		
Site 39:	GA-03-A-04	Site area:	1.0800000429153442 hect
Development Name:	SEMi DET. & BUNGALOWS	Number of dwellings:	21 DWELLS
Location:	ATHENRY	Housing density:	26.25
Postcode:		Total Bedrooms:	57.00
Main Location Type:	Edge of Town Centre	Survey Date:	09/10/2012
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		

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Site 40:	GS-03-A-03	Site area:	1 hect
Development Name:	PRIVATLEY OWNED HOUSES	Number of dwellings:	24 DWELLS
Location:	TEWKESBURY	Housing density:	24.00
Postcode:	GL20 8SG	Total Bedrooms:	92.00
Main Location Type:	Suburban Area	Survey Date:	10/10/2024
Sub Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a		
Site 41:	HC-03-A-23	Site area:	1.399999976158142 hect
Development Name:	HOUSES & FLATS	Number of dwellings:	62 DWELLS
Location:	LIPHOOK	Housing density:	46.27
Postcode:	GU30 7TG	Total Bedrooms:	205.00
Main Location Type:	Suburban Area	Survey Date:	19/11/2019
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 42:	HC-03-A-27	Site area:	2.5 hect
Development Name:	MIXED HOUSES	Number of dwellings:	73 DWELLS
Location:	ANDOVER	Housing density:	30.42
Postcode:	SP11 6ZQ	Total Bedrooms:	205.00
Main Location Type:	Edge of Town	Survey Date:	16/11/2021
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 43:	HC-03-A-39	Site area:	6.09 hect
Development Name:	MIXED HOUSES & FLATS	Number of dwellings:	156 DWELLS
Location:	LIPHOOK	Housing density:	34.21
Postcode:	GU30 7WU	Total Bedrooms:	449.00
Main Location Type:	Edge of Town	Survey Date:	14/11/2024
Sub Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a		
Site 44:	HC-03-A-41	Site area:	6.2 hect
Development Name:	MIXED HOUSES & FLATS	Number of dwellings:	195 DWELLS
Location:	RINGWOOD	Housing density:	39.08
Postcode:	BH24 3FJ	Total Bedrooms:	514.00
Main Location Type:	Edge of Town	Survey Date:	
Sub Location Type:	Residential Zone	Survey Day:	
PTAL:	n/a		
Site 45:	HF-03-A-03	Site area:	5.670000076293945 hect
Development Name:	MIXED HOUSES	Number of dwellings:	160 DWELLS
Location:	BUNTINGFORD	Housing density:	32.45
Postcode:	SG9 9FX	Total Bedrooms:	510.00
Main Location Type:	Edge of Town	Survey Date:	
Sub Location Type:	Residential Zone	Survey Day:	
PTAL:	n/a		
Site 46:	HF-03-A-06	Site area:	8 hect
Development Name:	MIXED HOUSES & FLATS	Number of dwellings:	180 DWELLS
Location:	ROYSTON	Housing density:	25.71
Postcode:	SG8 7FJ	Total Bedrooms:	562.00
Main Location Type:	Edge of Town	Survey Date:	28/11/2023
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 47:	HI-03-A-11	Site area:	4.599999904632568 hect
Development Name:	BUNGALOWS	Number of dwellings:	85 DWELLS
Location:	INVERNESS	Housing density:	21.63
Postcode:	IV2 5HG	Total Bedrooms:	185.00
Main Location Type:	Edge of Town	Survey Date:	
Sub Location Type:	Residential Zone	Survey Day:	
PTAL:	n/a		

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Site 48:	IM-03-A-04	Site area:	2.299999952316284 hect
Development Name:	MIXED HOUSES	Number of dwellings:	73 DWELLS
Location:	DOUGLAS	Housing density:	37.44
Postcode:	IM2 1JS	Total Bedrooms:	219.00
Main Location Type:	Suburban Area	Survey Date:	
Sub Location Type:	Residential Zone	Survey Day:	
PTAL:	n/a		
Site 49:	IM-03-A-05	Site area:	2.190000057220459 hect
Development Name:	MIXED HOUSES	Number of dwellings:	45 DWELLS
Location:	CASTLETOWN	Housing density:	24.32
Postcode:	IM9 1TQ	Total Bedrooms:	175.00
Main Location Type:	Edge of Town	Survey Date:	21/05/2024
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 50:	IM-03-A-06	Site area:	6.900000095367432 hect
Development Name:	MIXED HOUSES	Number of dwellings:	129 DWELLS
Location:	RAMSEY	Housing density:	22.28
Postcode:	IM8 2AF	Total Bedrooms:	531.00
Main Location Type:	Edge of Town	Survey Date:	23/05/2024
Sub Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a		
Site 51:	IW-03-A-01	Site area:	7.190000057220459 hect
Development Name:	DETACHED HOUSES	Number of dwellings:	72 DWELLS
Location:	NEAR COWES	Housing density:	12.00
Postcode:	PO31 8QG	Total Bedrooms:	284.00
Main Location Type:	Free Standing	Survey Date:	25/06/2019
Sub Location Type:	Out of Town	Survey Day:	Tuesday
PTAL:	n/a		
Site 52:	KC-03-A-07	Site area:	9.460000038146973 hect
Development Name:	MIXED HOUSES	Number of dwellings:	288 DWELLS
Location:	HERNE BAY	Housing density:	40.06
Postcode:	CT6 6HZ	Total Bedrooms:	934.00
Main Location Type:	Edge of Town	Survey Date:	27/09/2017
Sub Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a		
Site 53:	KC-03-A-10	Site area:	3.9100000858306885 hect
Development Name:	MIXED HOUSES	Number of dwellings:	106 DWELLS
Location:	STAPLEHURST	Housing density:	33.12
Postcode:	TN12 0GT	Total Bedrooms:	311.00
Main Location Type:	Edge of Town	Survey Date:	09/05/2023
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 54:	KC-03-A-12	Site area:	6.78000020980835 hect
Development Name:	MIXED HOUSES & FLATS	Number of dwellings:	186 DWELLS
Location:	FAVERSHAM	Housing density:	35.84
Postcode:	ME13 7FZ	Total Bedrooms:	520.00
Main Location Type:	Edge of Town	Survey Date:	19/09/2023
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 55:	KC-03-A-14	Site area:	6.84 hect
Development Name:	MIXED HOUSES	Number of dwellings:	167 DWELLS
Location:	STAPLEHURST	Housing density:	35.31
Postcode:	TN12 0GT	Total Bedrooms:	489.00
Main Location Type:	Edge of Town	Survey Date:	22/05/2025
Sub Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a		

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Site 56:	KD-03-A-02	Site area:	2.740000009536743 hect
Development Name:	TERRACED/SEMI-D.	Number of dwellings:	71 DWELLS
Location:	NEWBRIDGE	Housing density:	30.60
Postcode:		Total Bedrooms:	210.00
Main Location Type:	Suburban Area	Survey Date:	12/05/2009
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 57:	LE-03-A-01	Site area:	0.4000000059604645 hect
Development Name:	DETACHED	Number of dwellings:	11 DWELLS
Location:	MELTON MOWBRAY	Housing density:	27.50
Postcode:	LE13 1UW	Total Bedrooms:	33.00
Main Location Type:	Edge of Town	Survey Date:	03/05/2005
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 58:	LT-03-A-01	Site area:	4.480000019073486 hect
Development Name:	SEMI-DETACHED & DETACHED	Number of dwellings:	90 DWELLS
Location:	CARRICK-ON-SHANNON	Housing density:	22.78
Postcode:		Total Bedrooms:	342.00
Main Location Type:	Suburban Area	Survey Date:	24/04/2015
Sub Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a		
Site 59:	LU-03-A-01	Site area:	3.6700000762939453 hect
Development Name:	TERRACED & SEMI-DETACHED	Number of dwellings:	111 DWELLS
Location:	DROGHEDA	Housing density:	43.87
Postcode:		Total Bedrooms:	340.00
Main Location Type:	Neighbourhood Centre	Survey Date:	21/09/2021
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 60:	MA-03-A-01	Site area:	3.130000114440918 hect
Development Name:	SEMI-DET. & TERRACED	Number of dwellings:	74 DWELLS
Location:	BALLINA	Housing density:	45.40
Postcode:		Total Bedrooms:	254.00
Main Location Type:	Suburban Area	Survey Date:	15/07/2011
Sub Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a		
Site 61:	MA-03-A-02	Site area:	1.8600000143051147 hect
Development Name:	SEMI-DETACHED HOUSES	Number of dwellings:	31 DWELLS
Location:	CLAREMORRIS	Housing density:	25.83
Postcode:		Total Bedrooms:	126.00
Main Location Type:	Edge of Town Centre	Survey Date:	15/09/2021
Sub Location Type:	No Sub Category	Survey Day:	Wednesday
PTAL:	n/a		
Site 62:	ME-03-A-01	Site area:	2.4 hect
Development Name:	PRIVATELY OWNED HOUSES	Number of dwellings:	42 DWELLS
Location:	RATOATH	Housing density:	24.71
Postcode:	A85 CC66	Total Bedrooms:	168.00
Main Location Type:	Edge of Town	Survey Date:	30/10/2024
Sub Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a		
Site 63:	MG-03-A-01	Site area:	3.299999952316284 hect
Development Name:	SEMI-DETACHED HOUSES	Number of dwellings:	49 DWELLS
Location:	MONAGHAN	Housing density:	19.60
Postcode:		Total Bedrooms:	195.00
Main Location Type:	Suburban Area	Survey Date:	12/10/2021
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		

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Site 64:	MG-03-A-02	Site area:	5.449999809265137 hect
Development Name:	MIXED HOUSES	Number of dwellings:	76 DWELLS
Location:	MONAGHAN	Housing density:	20.60
Postcode:		Total Bedrooms:	308.00
Main Location Type:	Edge of Town Centre	Survey Date:	12/10/2021
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 65:	NE-03-A-02	Site area:	12 hect
Development Name:	SEMI DETACHED & DETACHED	Number of dwellings:	432 DWELLS
Location:	SCUNTHORPE	Housing density:	132.92
Postcode:	DN15 8GS	Total Bedrooms:	1174.00
Main Location Type:	Edge of Town	Survey Date:	
Sub Location Type:	No Sub Category	Survey Day:	
PTAL:	n/a		
Site 66:	NE-03-A-03	Site area:	8 hect
Development Name:	PRIVATE HOUSES	Number of dwellings:	180 DWELLS
Location:	SCUNTHORPE	Housing density:	
Postcode:	DN15 6BW	Total Bedrooms:	432.00
Main Location Type:	Edge of Town Centre	Survey Date:	20/05/2014
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 67:	NF-03-A-01	Site area:	1.4900000095367432 hect
Development Name:	SEMI DET. & BUNGALOWS	Number of dwellings:	27 DWELLS
Location:	CAISTER-ON-SEA	Housing density:	19.29
Postcode:	NR30 5BX	Total Bedrooms:	66.00
Main Location Type:	Suburban Area	Survey Date:	16/10/2012
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 68:	NF-03-A-03	Site area:	0.6299999952316284 hect
Development Name:	DETACHED HOUSES	Number of dwellings:	10 DWELLS
Location:	THETFORD	Housing density:	20.00
Postcode:	IP24 1EY	Total Bedrooms:	40.00
Main Location Type:	Edge of Town	Survey Date:	16/09/2015
Sub Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a		
Site 69:	NF-03-A-05	Site area:	1.5700000524520874 hect
Development Name:	MIXED HOUSES	Number of dwellings:	40 DWELLS
Location:	HOLT	Housing density:	26.32
Postcode:	NR25 6GA	Total Bedrooms:	116.00
Main Location Type:	Edge of Town	Survey Date:	19/09/2019
Sub Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a		
Site 70:	NF-03-A-23	Site area:	26.43000030517578 hect
Development Name:	MIXED HOUSES & FLATS	Number of dwellings:	514 DWELLS
Location:	WYMONDHAM	Housing density:	26.60
Postcode:	NR18 9FP	Total Bedrooms:	1606.00
Main Location Type:	Edge of Town	Survey Date:	22/09/2021
Sub Location Type:	Out of Town	Survey Day:	Wednesday
PTAL:	n/a		
Site 71:	NF-03-A-30	Site area:	11.770000457763672 hect
Development Name:	MIXED HOUSES	Number of dwellings:	266 DWELLS
Location:	SWAFFHAM	Housing density:	26.68
Postcode:	PE37 8JE	Total Bedrooms:	743.00
Main Location Type:	Edge of Town	Survey Date:	23/09/2021
Sub Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a		

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Site 72:	NF-03-A-33	Site area:	4.78000020980835 hect
Development Name:	MIXED HOUSES	Number of dwellings:	143 DWELLS
Location:	ATTLEBOROUGH	Housing density:	38.65
Postcode:	NR17 1FF	Total Bedrooms:	358.00
Main Location Type:	Edge of Town	Survey Date:	29/09/2022
Sub Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a		
Site 73:	NF-03-A-34	Site area:	3.1500000953674316 hect
Development Name:	MIXED HOUSES	Number of dwellings:	80 DWELLS
Location:	SWAFFHAM	Housing density:	31.13
Postcode:	PE37 8GY	Total Bedrooms:	256.00
Main Location Type:	Edge of Town	Survey Date:	27/09/2022
Sub Location Type:	Out of Town	Survey Day:	Tuesday
PTAL:	n/a		
Site 74:	NF-03-A-36	Site area:	3.200000047683716 hect
Development Name:	MIXED HOUSES	Number of dwellings:	75 DWELLS
Location:	WYMONDHAM	Housing density:	23.44
Postcode:	NR18 9GH	Total Bedrooms:	216.00
Main Location Type:	Edge of Town	Survey Date:	29/09/2022
Sub Location Type:	No Sub Category	Survey Day:	Thursday
PTAL:	n/a		
Site 75:	NF-03-A-37	Site area:	1.6399999856948853 hect
Development Name:	MIXED HOUSES	Number of dwellings:	44 DWELLS
Location:	DEREHAM	Housing density:	32.35
Postcode:	NR20 3TY	Total Bedrooms:	141.00
Main Location Type:	Edge of Town	Survey Date:	27/09/2022
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 76:	NF-03-A-39	Site area:	7.840000152587891 hect
Development Name:	MIXED HOUSES	Number of dwellings:	212 DWELLS
Location:	HOLT	Housing density:	31.98
Postcode:	NR25 6GA	Total Bedrooms:	570.00
Main Location Type:	Edge of Town	Survey Date:	27/09/2022
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 77:	NF-03-A-46	Site area:	13.050000190734863 hect
Development Name:	MIXED HOUSES & FLATS	Number of dwellings:	300 DWELLS
Location:	AYLSHAM	Housing density:	28.30
Postcode:	NR11 6FN	Total Bedrooms:	956.00
Main Location Type:	Edge of Town	Survey Date:	14/09/2021
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 78:	NY-03-A-01	Site area:	3.299999952316284 hect
Development Name:	MIXED HOUSES	Number of dwellings:	52 DWELLS
Location:	NORTHALLERTON	Housing density:	18.31
Postcode:	DL6 1BW	Total Bedrooms:	152.00
Main Location Type:	Suburban Area	Survey Date:	25/09/2007
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 79:	NY-03-A-03	Site area:	0.3499999940395355 hect
Development Name:	PRIVATE HOUSING	Number of dwellings:	14 DWELLS
Location:	BOROUGHBRIDGE	Housing density:	60.87
Postcode:	YO51 9NU	Total Bedrooms:	34.00
Main Location Type:	Edge of Town Centre	Survey Date:	
Sub Location Type:	Residential Zone	Survey Day:	
PTAL:	n/a		

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Site 80:	NY-03-A-05	Site area:	2.2100000381469727 hect
Development Name:	HOUSES AND FLATS	Number of dwellings:	71 DWELLS
Location:	RIPON	Housing density:	48.30
Postcode:	HG4 1UH	Total Bedrooms:	138.00
Main Location Type:	Edge of Town	Survey Date:	
Sub Location Type:	No Sub Category	Survey Day:	
PTAL:	n/a		
Site 81:	NY-03-A-06	Site area:	5.230000019073486 hect
Development Name:	BUNGALOWS & SEMI DET.	Number of dwellings:	115 DWELLS
Location:	BOROUGHBRIDGE	Housing density:	27.85
Postcode:	YO51 9NF	Total Bedrooms:	220.00
Main Location Type:	Suburban Area	Survey Date:	14/10/2011
Sub Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a		
Site 82:	NY-03-A-11	Site area:	1.7899999618530273 hect
Development Name:	PRIVATE HOUSING	Number of dwellings:	23 DWELLS
Location:	BOROUGHBRIDGE	Housing density:	14.65
Postcode:	YO51 9LQ	Total Bedrooms:	101.00
Main Location Type:	Edge of Town	Survey Date:	18/09/2013
Sub Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a		
Site 83:	NY-03-A-12	Site area:	0.8199999928474426 hect
Development Name:	TOWN HOUSES	Number of dwellings:	47 DWELLS
Location:	NORTHALLERTON	Housing density:	68.12
Postcode:	DL7 8EY	Total Bedrooms:	122.00
Main Location Type:	Edge of Town Centre	Survey Date:	27/09/2016
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 84:	NY-03-A-14	Site area:	2.9000000953674316 hect
Development Name:	DETACHED & BUNGALOWS	Number of dwellings:	45 DWELLS
Location:	RIPON	Housing density:	18.75
Postcode:	HG4 1EJ	Total Bedrooms:	153.00
Main Location Type:	Edge of Town	Survey Date:	18/05/2022
Sub Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a		
Site 85:	NY-03-A-15	Site area:	6.8 hect
Development Name:	DETACHED & SEMI-DETACHED	Number of dwellings:	145 DWELLS
Location:	BOROUGHBRIDGE	Housing density:	27.36
Postcode:	YO51 9GG	Total Bedrooms:	476.00
Main Location Type:	Edge of Town	Survey Date:	19/09/2024
Sub Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a		
Site 86:	PS-03-A-01	Site area:	1.1200000047683716 hect
Development Name:	MIXED HOUSES	Number of dwellings:	16 DWELLS
Location:	WELSHPOOL	Housing density:	15.38
Postcode:	SY21 7DT	Total Bedrooms:	49.00
Main Location Type:	Edge of Town Centre	Survey Date:	
Sub Location Type:	Residential Zone	Survey Day:	
PTAL:	n/a		
Site 87:	PS-03-A-02	Site area:	0.8100000023841858 hect
Development Name:	DETACHED/SEMI-DETACHED	Number of dwellings:	28 DWELLS
Location:	WELSHPOOL	Housing density:	42.42
Postcode:	SY21 7HX	Total Bedrooms:	84.00
Main Location Type:	Suburban Area	Survey Date:	
Sub Location Type:	Residential Zone	Survey Day:	
PTAL:	n/a		

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Site 88:	RO-03-A-01	Site area:	7.199999809265137 hect
Development Name:	MIXED HOUSES	Number of dwellings:	80 DWELLS
Location:	ROSCOMMON	Housing density:	11.11
Postcode:		Total Bedrooms:	305.00
Main Location Type:	Edge of Town	Survey Date:	07/05/2009
Sub Location Type:	No Sub Category	Survey Day:	Thursday
PTAL:	n/a		
Site 89:	RO-03-A-02	Site area:	1.5499999523162842 hect
Development Name:	SEMI DET. & BUNGALOWS	Number of dwellings:	31 DWELLS
Location:	BALLAGHADERREEN	Housing density:	35.63
Postcode:		Total Bedrooms:	54.00
Main Location Type:	Suburban Area	Survey Date:	14/07/2011
Sub Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a		
Site 90:	RO-03-A-03	Site area:	4.079999923706055 hect
Development Name:	DETACHED HOUSES	Number of dwellings:	23 DWELLS
Location:	BOYLE	Housing density:	8.07
Postcode:		Total Bedrooms:	96.00
Main Location Type:	Edge of Town	Survey Date:	25/09/2014
Sub Location Type:	No Sub Category	Survey Day:	Thursday
PTAL:	n/a		
Site 91:	RO-03-A-04	Site area:	1.9199999570846558 hect
Development Name:	SEMI DET. & BUNGALOWS	Number of dwellings:	39 DWELLS
Location:	ROSCOMMON	Housing density:	27.86
Postcode:		Total Bedrooms:	100.00
Main Location Type:	Suburban Area	Survey Date:	26/09/2014
Sub Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a		
Site 92:	SF-03-A-05	Site area:	1.149999976158142 hect
Development Name:	DETACHED HOUSES	Number of dwellings:	18 DWELLS
Location:	BURY ST EDMUNDS	Housing density:	18.95
Postcode:	IP33 2SN	Total Bedrooms:	78.00
Main Location Type:	Edge of Town	Survey Date:	09/09/2015
Sub Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a		
Site 93:	SR-03-A-01	Site area:	4.050000190734863 hect
Development Name:	DETACHED	Number of dwellings:	115 DWELLS
Location:	STIRLING	Housing density:	38.33
Postcode:	FK7 0HY	Total Bedrooms:	426.00
Main Location Type:	Suburban Area	Survey Date:	
Sub Location Type:	Residential Zone	Survey Day:	
PTAL:	n/a		
Site 94:	TE-03-A-03	Site area:	1.3200000524520874 hect
Development Name:	SEMI-DETACHED/TERRACED	Number of dwellings:	54 DWELLS
Location:	TELFORD	Housing density:	55.67
Postcode:	TF7 4JE	Total Bedrooms:	162.00
Main Location Type:	Edge of Town	Survey Date:	24/10/2013
Sub Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a		
Site 95:	TI-03-A-01	Site area:	3.430000066757202 hect
Development Name:	MIXED HOUSES	Number of dwellings:	76 DWELLS
Location:	THURLES	Housing density:	26.57
Postcode:		Total Bedrooms:	264.00
Main Location Type:	Edge of Town	Survey Date:	17/06/2021
Sub Location Type:	Out of Town	Survey Day:	Thursday
PTAL:	n/a		

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Site 96:	TY-03-A-02	Site area:	10.149999618530273 hect
Development Name:	SEMI DETACHED & BUNGALOWS	Number of dwellings:	101 DWELLS
Location:	COOKSTOWN	Housing density:	12.47
Postcode:	BT80 9XR	Total Bedrooms:	325.00
Main Location Type:	Edge of Town	Survey Date:	14/03/2019
Sub Location Type:	Industrial Zone	Survey Day:	Thursday
PTAL:	n/a		
Site 97:	WA-03-A-04	Site area:	28.59000015258789 hect
Development Name:	DETACHED	Number of dwellings:	280 DWELLS
Location:	WATERFORD	Housing density:	12.44
Postcode:		Total Bedrooms:	1130.00
Main Location Type:	Edge of Town	Survey Date:	24/06/2014
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		
Site 98:	WC-03-A-01	Site area:	2.443000078201294 hect
Development Name:	DETACHED HOUSES	Number of dwellings:	50 DWELLS
Location:	WICKLOW	Housing density:	24.89
Postcode:		Total Bedrooms:	182.00
Main Location Type:	Edge of Town	Survey Date:	
Sub Location Type:	No Sub Category	Survey Day:	
PTAL:	n/a		
Site 99:	WC-03-A-02	Site area:	2.7200000286102295 hect
Development Name:	DETACHED HOUSES	Number of dwellings:	45 DWELLS
Location:	WICKLOW	Housing density:	23.20
Postcode:		Total Bedrooms:	182.00
Main Location Type:	Edge of Town Centre	Survey Date:	
Sub Location Type:	Residential Zone	Survey Day:	
PTAL:	n/a		
Site 100:	WS-03-A-23	Site area:	6.639999866485596 hect
Development Name:	MIXED HOUSES & FLATS	Number of dwellings:	197 DWELLS
Location:	EAST GRINSTEAD	Housing density:	37.88
Postcode:	RH19 4LX	Total Bedrooms:	508.00
Main Location Type:	Edge of Town	Survey Date:	14/05/2024
Sub Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a		

Audit Code: b8d66ba2-10c2-491f-81af-2345eea9ca77

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

Total Vehicles

Calculation factor: 1 Total Bedrooms

Estimated TRIP rate value per 1 Total Bedrooms shown in shaded columns

*BOLD print indicates peak (busiest) period

Period	Trips per 1 Total Bedrooms Total Bedrooms		
	Inbound	Outbound	Total
08:00-09:00	0.050	0.128	0.178
17:00-18:00	0.117	0.066	0.183

Time Range	No. Days	Ave. Total Bedrooms	Arrivals	Estimated Trip Rate	Departures	Estimated Trip Rate	Totals	Estimated Trip Rate
00:00-01:00								
01:00-02:00								
02:00-03:00								
03:00-04:00								
04:00-05:00								
05:00-06:00								
06:00-07:00								
07:00-08:00	100	294	0.023	0.023	0.085	0.085	0.108	0.108
08:00-09:00	100	294	0.050	0.050	0.128	0.128	0.178	0.178
09:00-10:00	100	294	0.052	0.052	0.063	0.063	0.115	0.115
10:00-11:00	100	294	0.043	0.043	0.052	0.052	0.095	0.095
11:00-12:00	100	294	0.048	0.048	0.052	0.052	0.100	0.100
12:00-13:00	100	294	0.058	0.058	0.053	0.053	0.111	0.111
13:00-14:00	100	294	0.059	0.059	0.058	0.058	0.117	0.117
14:00-15:00	100	294	0.062	0.062	0.064	0.064	0.126	0.126
15:00-16:00	100	294	0.088	0.088	0.063	0.063	0.151	0.151
16:00-17:00	100	294	0.096	0.096	0.062	0.062	0.158	0.158
17:00-18:00	100	294	0.117	0.117	0.066	0.066	0.183	0.183
18:00-19:00	100	294	0.090	0.090	0.062	0.062	0.152	0.152
19:00-20:00								
20:00-21:00								
21:00-22:00								
22:00-23:00								
23:00-00:00								
Total Rates:			0.786	0.788	0.808	0.807	1.594	1.595

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

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

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Audit Code: b8d66ba2-10c2-491f-81af-2345eea9ca77

Parameter Summary:

Trip rate parameter range selected:	7 - 5396 (units: Total Bedrooms)
Survey date date range:	03/05/2005 - 30/06/2025
Number of weekdays (Monday-Friday):	100
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	14
Surveys manually removed from selection:	0

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

Audit Code: b8d66ba2-10c2-491f-81af-2345eea9ca77

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

Total People

Calculation factor: 1 Total Bedrooms

Estimated TRIP rate value per 1 Total Bedrooms shown in shaded columns

**BOLD print indicates peak (busiest) period*

Period	Trips per 1 Total Bedrooms Total Bedrooms		
	Inbound	Outbound	Total
08:00-09:00	0.074	0.255	0.329
17:00-18:00	0.190	0.110	0.300

Time Range	No. Days	Ave. Total Bedrooms	Arrivals	Estimated Trip Rate	Departures	Estimated Trip Rate	Totals	Estimated Trip Rate
00:00-01:00								
01:00-02:00								
02:00-03:00								
03:00-04:00								
04:00-05:00								
05:00-06:00								
06:00-07:00								
07:00-08:00	100	294	0.033	0.033	0.134	0.134	0.167	0.167
08:00-09:00	100	294	0.074	0.074	0.255	0.255	0.329	0.329
09:00-10:00	100	294	0.077	0.077	0.102	0.102	0.179	0.179
10:00-11:00	100	294	0.064	0.064	0.083	0.083	0.147	0.147
11:00-12:00	100	294	0.076	0.076	0.084	0.084	0.160	0.160
12:00-13:00	100	294	0.089	0.089	0.083	0.083	0.172	0.172
13:00-14:00	100	294	0.093	0.093	0.091	0.091	0.184	0.184
14:00-15:00	100	294	0.100	0.100	0.097	0.097	0.197	0.197
15:00-16:00	100	294	0.182	0.182	0.105	0.105	0.287	0.287
16:00-17:00	100	294	0.174	0.174	0.103	0.103	0.277	0.277
17:00-18:00	100	294	0.190	0.190	0.110	0.110	0.300	0.300
18:00-19:00	100	294	0.146	0.146	0.106	0.106	0.252	0.252
19:00-20:00								
20:00-21:00								
21:00-22:00								
22:00-23:00								
23:00-00:00								
Total Rates:			1.298	1.300	1.353	1.355	2.651	2.655

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

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

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Audit Code: b8d66ba2-10c2-491f-81af-2345eea9ca77

Parameter Summary:

Trip rate parameter range selected:	7 - 5396 (units: Total Bedrooms)
Survey date date range:	03/05/2005 - 30/06/2025
Number of weekdays (Monday-Friday):	100
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	14
Surveys manually removed from selection:	0

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

Audit Code: b8d66ba2-10c2-491f-81af-2345eea9ca77

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

Cyclists

Calculation factor: 1 Total Bedrooms

Estimated TRIP rate value per 1 Total Bedrooms shown in shaded columns

*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. Total Bedrooms	Arrivals	Estimated Trip Rate	Departures	Estimated Trip Rate	Totals	Estimated Trip Rate
00:00-01:00								
01:00-02:00								
02:00-03:00								
03:00-04:00								
04:00-05:00								
05:00-06:00								
06:00-07:00								
07:00-08:00	100	294	0.001	0.001	0.003	0.003	0.004	0.004
08:00-09:00	100	294	0.001	0.001	0.005	0.005	0.006	0.006
09:00-10:00	100	294	0.001	0.001	0.001	0.001	0.002	0.002
10:00-11:00	100	294	0.001	0.001	0.001	0.001	0.002	0.002
11:00-12:00	100	294	0.001	0.001	0.001	0.001	0.002	0.002
12:00-13:00	100	294	0.001	0.001	0.001	0.001	0.002	0.002
13:00-14:00	100	294	0.001	0.001	0.001	0.001	0.002	0.002
14:00-15:00	100	294	0.001	0.001	0.001	0.001	0.002	0.002
15:00-16:00	100	294	0.004	0.004	0.001	0.001	0.005	0.005
16:00-17:00	100	294	0.003	0.003	0.002	0.002	0.005	0.005
17:00-18:00	100	294	0.003	0.003	0.002	0.002	0.005	0.005
18:00-19:00	100	294	0.002	0.002	0.001	0.001	0.003	0.003
19:00-20:00								
20:00-21:00								
21:00-22:00								
22:00-23:00								
23:00-00:00								
Total Rates:			0.020	0.020	0.020	0.021	0.040	0.040

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

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

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Audit Code: b8d66ba2-10c2-491f-81af-2345eea9ca77

Parameter Summary:

Trip rate parameter range selected:	7 - 5396 (units: Total Bedrooms)
Survey date date range:	03/05/2005 - 30/06/2025
Number of weekdays (Monday-Friday):	87
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	14
Surveys manually removed from selection:	0

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

Audit Code: b8d66ba2-10c2-491f-81af-2345eea9ca77

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

PSVs

Calculation factor: 1 Total Bedrooms

Estimated TRIP rate value per 1 Total Bedrooms shown in shaded columns

*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. Total Bedrooms	Arrivals	Estimated Trip Rate	Departures	Estimated Trip Rate	Totals	Estimated Trip Rate
00:00-01:00								
01:00-02:00								
02:00-03:00								
03:00-04:00								
04:00-05:00								
05:00-06:00								
06:00-07:00								
07:00-08:00	100	294	0.000	0.000	0.000	0.000	0.000	0.000
08:00-09:00	100	294	0.001	0.001	0.001	0.001	0.002	0.002
09:00-10:00	100	294	0.000	0.000	0.000	0.000	0.000	0.000
10:00-11:00	100	294	0.000	0.000	0.000	0.000	0.000	0.000
11:00-12:00	100	294	0.000	0.000	0.000	0.000	0.000	0.000
12:00-13:00	100	294	0.000	0.000	0.000	0.000	0.000	0.000
13:00-14:00	100	294	0.000	0.000	0.000	0.000	0.000	0.000
14:00-15:00	100	294	0.000	0.000	0.000	0.000	0.000	0.000
15:00-16:00	100	294	0.000	0.000	0.000	0.000	0.000	0.000
16:00-17:00	100	294	0.000	0.000	0.000	0.000	0.000	0.000
17:00-18:00	100	294	0.000	0.000	0.000	0.000	0.000	0.000
18:00-19:00	100	294	0.000	0.000	0.000	0.000	0.000	0.000
19:00-20:00								
20:00-21:00								
21:00-22:00								
22:00-23:00								
23:00-00:00								
Total Rates:			0.001	0.002	0.001	0.002	0.002	0.004

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

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

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Audit Code: b8d66ba2-10c2-491f-81af-2345eea9ca77

Parameter Summary:

Trip rate parameter range selected:	7 - 5396 (units: Total Bedrooms)
Survey date date range:	14/06/2007 - 22/05/2025
Number of weekdays (Monday-Friday):	15
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	14
Surveys manually removed from selection:	0

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

Audit Code: b8d66ba2-10c2-491f-81af-2345eea9ca77

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

OGVs

Calculation factor: 1 Total Bedrooms

Estimated TRIP rate value per 1 Total Bedrooms shown in shaded columns

*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. Total Bedrooms	Arrivals	Estimated Trip Rate	Departures	Estimated Trip Rate	Totals	Estimated Trip Rate
00:00-01:00								
01:00-02:00								
02:00-03:00								
03:00-04:00								
04:00-05:00								
05:00-06:00								
06:00-07:00								
07:00-08:00	100	294	0.000	0.000	0.000	0.000	0.000	0.000
08:00-09:00	100	294	0.001	0.001	0.001	0.001	0.002	0.002
09:00-10:00	100	294	0.001	0.001	0.001	0.001	0.002	0.002
10:00-11:00	100	294	0.001	0.001	0.001	0.001	0.002	0.002
11:00-12:00	100	294	0.001	0.001	0.001	0.001	0.002	0.002
12:00-13:00	100	294	0.000	0.000	0.001	0.001	0.001	0.001
13:00-14:00	100	294	0.001	0.001	0.000	0.000	0.001	0.001
14:00-15:00	100	294	0.000	0.000	0.001	0.001	0.001	0.001
15:00-16:00	100	294	0.001	0.001	0.001	0.001	0.002	0.002
16:00-17:00	100	294	0.000	0.000	0.000	0.000	0.000	0.000
17:00-18:00	100	294	0.000	0.000	0.000	0.000	0.000	0.000
18:00-19:00	100	294	0.000	0.000	0.000	0.000	0.000	0.000
19:00-20:00								
20:00-21:00								
21:00-22:00								
22:00-23:00								
23:00-00:00								
Total Rates:			0.006	0.007	0.007	0.007	0.013	0.014

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

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

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Audit Code: b8d66ba2-10c2-491f-81af-2345eea9ca77

Parameter Summary:

Trip rate parameter range selected:	7 - 5396 (units: Total Bedrooms)
Survey date date range:	20/06/2005 - 30/06/2025
Number of weekdays (Monday-Friday):	70
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	14
Surveys manually removed from selection:	0

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

Audit Code: b8d66ba2-10c2-491f-81af-2345eea9ca77

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

Vehicle Occupants

Calculation factor: 1 Total Bedrooms

Estimated TRIP rate value per 1 Total Bedrooms shown in shaded columns

*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. Total Bedrooms	Arrivals	Estimated Trip Rate	Departures	Estimated Trip Rate	Totals	Estimated Trip Rate
00:00-01:00								
01:00-02:00								
02:00-03:00								
03:00-04:00								
04:00-05:00								
05:00-06:00								
06:00-07:00								
07:00-08:00	100	294	0.027	0.027	0.110	0.110	0.137	0.137
08:00-09:00	100	294	0.060	0.060	0.200	0.200	0.260	0.260
09:00-10:00	100	294	0.063	0.063	0.083	0.083	0.146	0.146
10:00-11:00	100	294	0.052	0.052	0.067	0.067	0.119	0.119
11:00-12:00	100	294	0.061	0.061	0.069	0.069	0.130	0.130
12:00-13:00	100	294	0.073	0.073	0.068	0.068	0.141	0.141
13:00-14:00	100	294	0.075	0.075	0.074	0.074	0.149	0.149
14:00-15:00	100	294	0.082	0.082	0.081	0.081	0.163	0.163
15:00-16:00	100	294	0.139	0.139	0.084	0.084	0.223	0.223
16:00-17:00	100	294	0.140	0.140	0.084	0.084	0.224	0.224
17:00-18:00	100	294	0.160	0.160	0.091	0.091	0.251	0.251
18:00-19:00	100	294	0.121	0.121	0.086	0.086	0.207	0.207
19:00-20:00								
20:00-21:00								
21:00-22:00								
22:00-23:00								
23:00-00:00								
Total Rates:			1.053	1.053	1.097	1.096	2.150	2.149

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

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

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Audit Code: b8d66ba2-10c2-491f-81af-2345eea9ca77

Parameter Summary:

Trip rate parameter range selected:	7 - 5396 (units: Total Bedrooms)
Survey date date range:	03/05/2005 - 30/06/2025
Number of weekdays (Monday-Friday):	100
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	14
Surveys manually removed from selection:	0

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

Audit Code: b8d66ba2-10c2-491f-81af-2345eea9ca77

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

Pedestrians

Calculation factor: 1 Total Bedrooms

Estimated TRIP rate value per 1 Total Bedrooms shown in shaded columns

*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. Total Bedrooms	Arrivals	Estimated Trip Rate	Departures	Estimated Trip Rate	Totals	Estimated Trip Rate
00:00-01:00								
01:00-02:00								
02:00-03:00								
03:00-04:00								
04:00-05:00								
05:00-06:00								
06:00-07:00								
07:00-08:00	100	294	0.006	0.006	0.016	0.016	0.022	0.022
08:00-09:00	100	294	0.013	0.013	0.041	0.041	0.054	0.054
09:00-10:00	100	294	0.013	0.013	0.016	0.016	0.029	0.029
10:00-11:00	100	294	0.010	0.010	0.014	0.014	0.024	0.024
11:00-12:00	100	294	0.014	0.014	0.014	0.014	0.028	0.028
12:00-13:00	100	294	0.014	0.014	0.013	0.013	0.027	0.027
13:00-14:00	100	294	0.016	0.016	0.016	0.016	0.032	0.032
14:00-15:00	100	294	0.015	0.015	0.013	0.013	0.028	0.028
15:00-16:00	100	294	0.033	0.033	0.019	0.019	0.052	0.052
16:00-17:00	100	294	0.027	0.027	0.017	0.017	0.044	0.044
17:00-18:00	100	294	0.024	0.024	0.017	0.017	0.041	0.041
18:00-19:00	100	294	0.020	0.020	0.018	0.018	0.038	0.038
19:00-20:00								
20:00-21:00								
21:00-22:00								
22:00-23:00								
23:00-00:00								
Total Rates:			0.205	0.205	0.214	0.214	0.419	0.419

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

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

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Audit Code: b8d66ba2-10c2-491f-81af-2345eea9ca77

Parameter Summary:

Trip rate parameter range selected:	7 - 5396 (units: Total Bedrooms)
Survey date date range:	03/05/2005 - 30/06/2025
Number of weekdays (Monday-Friday):	99
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	14
Surveys manually removed from selection:	0

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

Audit Code: b8d66ba2-10c2-491f-81af-2345eea9ca77

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

Public Transport Users

Calculation factor: 1 Total Bedrooms

Estimated TRIP rate value per 1 Total Bedrooms shown in shaded columns

*BOLD print indicates peak (busiest) period

Time Range	No. Days	Ave. Total Bedrooms	Arrivals	Estimated Trip Rate	Departures	Estimated Trip Rate	Totals	Estimated Trip Rate
00:00-01:00								
01:00-02:00								
02:00-03:00								
03:00-04:00								
04:00-05:00								
05:00-06:00								
06:00-07:00								
07:00-08:00	100	294	0.000	0.000	0.005	0.005	0.005	0.005
08:00-09:00	100	294	0.001	0.001	0.008	0.008	0.009	0.009
09:00-10:00	100	294	0.001	0.001	0.002	0.002	0.003	0.003
10:00-11:00	100	294	0.001	0.001	0.001	0.001	0.002	0.002
11:00-12:00	100	294	0.001	0.001	0.001	0.001	0.002	0.002
12:00-13:00	100	294	0.001	0.001	0.001	0.001	0.002	0.002
13:00-14:00	100	294	0.001	0.001	0.001	0.001	0.002	0.002
14:00-15:00	100	294	0.001	0.001	0.001	0.001	0.002	0.002
15:00-16:00	100	294	0.005	0.005	0.001	0.001	0.006	0.006
16:00-17:00	100	294	0.003	0.003	0.001	0.001	0.004	0.004
17:00-18:00	100	294	0.003	0.003	0.000	0.000	0.003	0.003
18:00-19:00	100	294	0.003	0.003	0.001	0.001	0.004	0.004
19:00-20:00								
20:00-21:00								
21:00-22:00								
22:00-23:00								
23:00-00:00								
Total Rates:			0.021	0.021	0.023	0.023	0.044	0.044

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

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

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Audit Code: b8d66ba2-10c2-491f-81af-2345eea9ca77

Parameter Summary:

Trip rate parameter range selected:	7 - 5396 (units: Total Bedrooms)
Survey date date range:	03/05/2005 - 30/06/2025
Number of weekdays (Monday-Friday):	74
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	14
Surveys manually removed from selection:	0

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

Appendix D. Powscar Raw Data



RESIDENCE_ED_GUID	RESIDENCE_CSOED	RESIDENCE_CSOED_LABEL	RESIDENC	RESIDENCE_COUNTY_LABEL	POWSC_ED_GUID	POWSC_CSOED	POWSC_CSOED_LABEL	POWSC_COUNTY	POWSC_COUNTY_LABEL	COUNT
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE19629185713A3E055000000000001	ed3409_01019	Carlrow Rural	CW	Carlrow	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CEC13A3E055000000000001	ed3409_02002	Arran Quay B	DC	Dublin City	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CED13A3E055000000000001	ed3409_02003	Arran Quay C	DC	Dublin City	2
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D1213A3E055000000000001	ed3409_02022	Beaumont B	DC	Dublin City	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D2613A3E055000000000001	ed3409_02028	Botanic B	DC	Dublin City	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D2B13A3E055000000000001	ed3409_02033	Cabra West A	DC	Dublin City	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D6513A3E055000000000001	ed3409_02047	Drumcondra South A	DC	Dublin City	3
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D6613A3E055000000000001	ed3409_02048	Drumcondra South B	DC	Dublin City	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D8813A3E055000000000001	ed3409_02066	Inns Quay A	DC	Dublin City	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DB213A3E055000000000001	ed3409_02075	North City	DC	Dublin City	14
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DB413A3E055000000000001	ed3409_02077	North Dock B	DC	Dublin City	5
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DB513A3E055000000000001	ed3409_02078	North Dock C	DC	Dublin City	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DCA13A3E055000000000001	ed3409_02082	Priorswood C	DC	Dublin City	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DEA13A3E055000000000001	ed3409_02088	Rotunda A	DC	Dublin City	2
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DEB13A3E055000000000001	ed3409_02089	Rotunda B	DC	Dublin City	3
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291E0913A3E055000000000001	ed3409_02090	Whitehall A	DC	Dublin City	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D4213A3E055000000000001	ed3409_02097	Cherry Orchard C	DC	Dublin City	2
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D4E13A3E055000000000001	ed3409_02099	Crumlin B	DC	Dublin City	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D8613A3E055000000000001	ed3409_02106	Inchicore A	DC	Dublin City	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D9F13A3E055000000000001	ed3409_02117	Mansion House A	DC	Dublin City	17
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DA013A3E055000000000001	ed3409_02118	Mansion House B	DC	Dublin City	5
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DA113A3E055000000000001	ed3409_02119	Merchants Quay A	DC	Dublin City	2
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DA213A3E055000000000001	ed3409_02120	Merchants Quay B	DC	Dublin City	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DA313A3E055000000000001	ed3409_02121	Merchants Quay C	DC	Dublin City	2
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DA513A3E055000000000001	ed3409_02123	Merchants Quay E	DC	Dublin City	3
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DA613A3E055000000000001	ed3409_02124	Merchants Quay F	DC	Dublin City	2
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DB613A3E055000000000001	ed3409_02125	Pembroke East A	DC	Dublin City	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DB713A3E055000000000001	ed3409_02126	Pembroke East B	DC	Dublin City	2
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DB813A3E055000000000001	ed3409_02127	Pembroke East C	DC	Dublin City	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DB913A3E055000000000001	ed3409_02128	Pembroke East D	DC	Dublin City	12
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DBA13A3E055000000000001	ed3409_02129	Pembroke East E	DC	Dublin City	4
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DBB13A3E055000000000001	ed3409_02130	Pembroke West A	DC	Dublin City	5
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DBC13A3E055000000000001	ed3409_02131	Pembroke West B	DC	Dublin City	2
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DBD13A3E055000000000001	ed3409_02132	Pembroke West C	DC	Dublin City	3
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DD413A3E055000000000001	ed3409_02135	Rathmines East B	DC	Dublin City	3
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DD613A3E055000000000001	ed3409_02137	Rathmines East D	DC	Dublin City	2
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DD713A3E055000000000001	ed3409_02138	Rathmines West A	DC	Dublin City	2
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DEC13A3E055000000000001	ed3409_02144	Royal Exchange A	DC	Dublin City	12
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DED13A3E055000000000001	ed3409_02145	Royal Exchange B	DC	Dublin City	3
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DEE13A3E055000000000001	ed3409_02146	St. Kevin's	DC	Dublin City	5
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DEF13A3E055000000000001	ed3409_02147	South Dock	DC	Dublin City	6
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DF113A3E055000000000001	ed3409_02149	Terenure B	DC	Dublin City	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DF213A3E055000000000001	ed3409_02150	Terenure C	DC	Dublin City	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DF413A3E055000000000001	ed3409_02152	Ushers A	DC	Dublin City	3
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291E0513A3E055000000000001	ed3409_02157	Ushers F	DC	Dublin City	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291E0D13A3E055000000000001	ed3409_02161	Wood Quay A	DC	Dublin City	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CFC13A3E055000000000001	ed3409_03004	Clondalkin-Ballymount	SD	South Dublin	2
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CFE13A3E055000000000001	ed3409_03006	Clondalkin-Dunawley	SD	South Dublin	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CFF13A3E055000000000001	ed3409_03007	Clondalkin-Monastery	SD	South Dublin	3
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D5F13A3E055000000000001	ed3409_03011	Edmondstown	SD	South Dublin	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DDE13A3E055000000000001	ed3409_03017	Lucan-St. Helen's	SD	South Dublin	2
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DE213A3E055000000000001	ed3409_03018	Newcastle	SD	South Dublin	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DE413A3E055000000000001	ed3409_03020	Palmerston West	SD	South Dublin	3
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CB513A3E055000000000001	ed3409_03030	Tallaght-Fettercairn	SD	South Dublin	4
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CCA13A3E055000000000001	ed3409_03034	Tallaght-Kilnamanagh	SD	South Dublin	2
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CCC13A3E055000000000001	ed3409_03036	Tallaght-Kingswood	SD	South Dublin	4
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CCF13A3E055000000000001	ed3409_03039	Tallaght-Springfield	SD	South Dublin	4
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CD513A3E055000000000001	ed3409_03045	Templeogue-Osprey	SD	South Dublin	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CD613A3E055000000000001	ed3409_03046	Templeogue Village	SD	South Dublin	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291E2213A3E055000000000001	ed3409_04005	Balgriffin	FL	Fingal	1
2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DE513A3E055000000000001	ed3409_04031	Portmarnock North	FL	Fingal	3

2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	WW	Wicklow	2AE196291CB113A3E0550000000000001	ed3409_04039	Swords-Seatown	FL	Fingal	2
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	WW	Wicklow	2AE196291CE813A3E0550000000000001	ed3409_04041	The Ward	FL	Fingal	3
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291E3413A3E0550000000000001	ed3409_05007	Ballybrack	DR	Dún-Laoghaire Rathdown	5
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291E3813A3E0550000000000001	ed3409_05008	Blackrock-Boooterstown	DR	Dún-Laoghaire Rathdown	2
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CBE13A3E0550000000000001	ed3409_05009	Blackrock-Carysfort	DR	Dún-Laoghaire Rathdown	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CBF13A3E0550000000000001	ed3409_05010	Blackrock-Central	DR	Dún-Laoghaire Rathdown	7
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291E3613A3E0550000000000001	ed3409_05012	Blackrock-Monkstown	DR	Dún-Laoghaire Rathdown	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CC113A3E0550000000000001	ed3409_05013	Blackrock-Newpark	DR	Dún-Laoghaire Rathdown	7
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CC213A3E0550000000000001	ed3409_05015	Blackrock-Stradbrook	DR	Dún-Laoghaire Rathdown	3
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CC313A3E0550000000000001	ed3409_05016	Blackrock-Templehill	DR	Dún-Laoghaire Rathdown	2
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CC413A3E0550000000000001	ed3409_05017	Blackrock-Williamstown	DR	Dún-Laoghaire Rathdown	5
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CE113A3E0550000000000001	ed3409_05018	Cabinteely-Granitefield	DR	Dún-Laoghaire Rathdown	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CE213A3E0550000000000001	ed3409_05019	Cabinteely-Kilbogget	DR	Dún-Laoghaire Rathdown	3
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CE313A3E0550000000000001	ed3409_05020	Cabinteely-Loughlinstown	DR	Dún-Laoghaire Rathdown	8
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CE413A3E0550000000000001	ed3409_05021	Cabinteely-Pottery	DR	Dún-Laoghaire Rathdown	8
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CF713A3E0550000000000001	ed3409_05022	Churchtown-Castle	DR	Dún-Laoghaire Rathdown	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CF913A3E0550000000000001	ed3409_05024	Churchtown-Nutgrove	DR	Dún-Laoghaire Rathdown	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D1913A3E0550000000000001	ed3409_05027	Clonskeagh-Belfield	DR	Dún-Laoghaire Rathdown	16
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D1C13A3E0550000000000001	ed3409_05031	Clonskeagh-Windy Arbour	DR	Dún-Laoghaire Rathdown	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D1F13A3E0550000000000001	ed3409_05032	Dalkey-Avondale	DR	Dún-Laoghaire Rathdown	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D2013A3E0550000000000001	ed3409_05033	Dalkey-Buttock	DR	Dún-Laoghaire Rathdown	3
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D3713A3E0550000000000001	ed3409_05034	Dalkey-Coliemore	DR	Dún-Laoghaire Rathdown	4
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D1D13A3E0550000000000001	ed3409_05035	Dalkey Hill	DR	Dún-Laoghaire Rathdown	3
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D5A13A3E0550000000000001	ed3409_05037	Dundrum-Balally	DR	Dún-Laoghaire Rathdown	13
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D5C13A3E0550000000000001	ed3409_05039	Dundrum-Sandyford	DR	Dún-Laoghaire Rathdown	3
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D5D13A3E0550000000000001	ed3409_05040	Dundrum-Sweetmount	DR	Dún-Laoghaire Rathdown	2
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D5E13A3E0550000000000001	ed3409_05041	Dundrum-Taney	DR	Dún-Laoghaire Rathdown	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D3A13A3E0550000000000001	ed3409_05042	Dún Laoghaire-East Central	DR	Dún-Laoghaire Rathdown	14
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D3D13A3E0550000000000001	ed3409_05045	Dún Laoghaire-Monkstown Farm	DR	Dún-Laoghaire Rathdown	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D3E13A3E0550000000000001	ed3409_05046	Dún Laoghaire-Mount Town	DR	Dún-Laoghaire Rathdown	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D3F13A3E0550000000000001	ed3409_05047	Dún Laoghaire-Sallynoggin East	DR	Dún-Laoghaire Rathdown	4
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D4113A3E0550000000000001	ed3409_05049	Dún Laoghaire-Sallynoggin West	DR	Dún-Laoghaire Rathdown	8
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D5813A3E0550000000000001	ed3409_05050	Dún Laoghaire-Sandycove	DR	Dún-Laoghaire Rathdown	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D5713A3E0550000000000001	ed3409_05051	Dún Laoghaire-Salthill	DR	Dún-Laoghaire Rathdown	2
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D5913A3E0550000000000001	ed3409_05052	Dún Laoghaire-West Central	DR	Dún-Laoghaire Rathdown	10
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D7913A3E0550000000000001	ed3409_05053	Foxrock-Beechpark	DR	Dún-Laoghaire Rathdown	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D7A13A3E0550000000000001	ed3409_05054	Foxrock-Carrickmines	DR	Dún-Laoghaire Rathdown	11
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D7B13A3E0550000000000001	ed3409_05055	Foxrock-Deans Grange	DR	Dún-Laoghaire Rathdown	3
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291D7E13A3E0550000000000001	ed3409_05057	Glencullen	DR	Dún-Laoghaire Rathdown	18
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291DB113A3E0550000000000001	ed3409_05059	Killiney South	DR	Dún-Laoghaire Rathdown	6
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291E1713A3E0550000000000001	ed3409_05060	Shankill-Rathmichael	DR	Dún-Laoghaire Rathdown	31
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291E1813A3E0550000000000001	ed3409_05061	Shankill-Rathsallagh	DR	Dún-Laoghaire Rathdown	5
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291E1913A3E0550000000000001	ed3409_05062	Shankill-Shanganagh	DR	Dún-Laoghaire Rathdown	13
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CA013A3E0550000000000001	ed3409_05063	Stillorgan-Deerpark	DR	Dún-Laoghaire Rathdown	2
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CA213A3E0550000000000001	ed3409_05065	Stillorgan-Leopardstown	DR	Dún-Laoghaire Rathdown	3
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CA313A3E0550000000000001	ed3409_05066	Stillorgan-Merville	DR	Dún-Laoghaire Rathdown	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291CA413A3E0550000000000001	ed3409_05067	Stillorgan-Mount Merrion	DR	Dún-Laoghaire Rathdown	8
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE19629225B13A3E0550000000000001	ed3409_06003	Naas Urban	KE	Kildare	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE19629228E13A3E0550000000000001	ed3409_06034	Celbridge	KE	Kildare	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE19629224013A3E0550000000000001	ed3409_06040	Maynooth	KE	Kildare	3
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE19629224E13A3E0550000000000001	ed3409_06078	Morristownbiller	KE	Kildare	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE19629193513A3E0550000000000001	ed3409_10002	St. Laurence Gate	LH	Louth	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE1962918E213A3E0550000000000001	ed3409_10027	Dundalk Rural	LH	Louth	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291BCD13A3E0550000000000001	ed3409_13002	Athlone West Urban	WH	Westmeath	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291ED513A3E0550000000000001	ed3409_14051	Gorey Rural	WX	Wexford	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291E6913A3E0550000000000001	ed3409_15001	Arklow No. 1 Urban	WW	Wicklow	3
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	WW	Wicklow	56
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	176
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	20
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291EEE13A3E0550000000000001	ed3409_15006	Rathmichael (Bray)	WW	Wicklow	21
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291EE013A3E0550000000000001	ed3409_15007	Wicklow Urban	WW	Wicklow	3
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	VW	Wicklow	2AE196291EF513A3E0550000000000001	ed3409_15021	Kilbride	WW	Wicklow	1

2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	WW	Wicklow	2AE196291ECF13A3E0550000000000001	ed3409_15032	Delgany	WW	Wicklow	4
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	WW	Wicklow	2AE196291E3213A3E0550000000000001	ed3409_15033	Enniskerry	WW	Wicklow	7
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	WW	Wicklow	2AE196291E4713A3E0550000000000001	ed3409_15034	Greystones	WW	Wicklow	10
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	WW	Wicklow	2AE196291E7813A3E0550000000000001	ed3409_15035	Kilmacanoge	WW	Wicklow	98
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	WW	Wicklow	2AE196291E8313A3E0550000000000001	ed3409_15044	Ballyarthur	WW	Wicklow	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	WW	Wicklow	2AE196291E3F13A3E0550000000000001	ed3409_15054	Glenealy	WW	Wicklow	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	WW	Wicklow	2AE196291E6113A3E0550000000000001	ed3409_15056	Kilcoole	WW	Wicklow	6
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	WW	Wicklow	2AE196291E6D13A3E0550000000000001	ed3409_15057	Killiskey	WW	Wicklow	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	WW	Wicklow	2AE196291E9A13A3E0550000000000001	ed3409_15060	Newcastle Lower	WW	Wicklow	7
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	WW	Wicklow	2AE196291E9B13A3E0550000000000001	ed3409_15061	Newcastle Upper	WW	Wicklow	3
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	WW	Wicklow	2AE196291EDF13A3E0550000000000001	ed3409_15066	Wicklow Rural	WW	Wicklow	2
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	WW	Wicklow	2AE196291C0B13A3E0550000000000001	ed3409_22003	Templemore	TY	Tipperary	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	WW	Wicklow			98 Overseas		98 Overseas	1
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	WW	Wicklow		M	No fixed place of work	M	No fixed place of work	51
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	WW	Wicklow		NI	Northern Ireland	NI	Northern Ireland	2
2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	WW	Wicklow		W	Work/school from home	W	Work/school from home	24
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE19629185813A3E0550000000000001	ed3409_01001	Carlow Urban	CW	Carlow	1
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE19629185713A3E0550000000000001	ed3409_01019	Carlow Rural	CW	Carlow	2
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CEC13A3E0550000000000001	ed3409_02002	Arran Quay B	DC	Dublin City	4
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CED13A3E0550000000000001	ed3409_02003	Arran Quay C	DC	Dublin City	6
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D0B13A3E0550000000000001	ed3409_02015	Ballymun A	DC	Dublin City	1
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D2813A3E0550000000000001	ed3409_02030	Cabra East A	DC	Dublin City	2
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D4A13A3E0550000000000001	ed3409_02044	Clontarf West C	DC	Dublin City	2
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D4B13A3E0550000000000001	ed3409_02045	Clontarf West D	DC	Dublin City	2
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D6513A3E0550000000000001	ed3409_02047	Drumcondra South A	DC	Dublin City	1
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D6613A3E0550000000000001	ed3409_02048	Drumcondra South B	DC	Dublin City	1
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D6713A3E0550000000000001	ed3409_02049	Drumcondra South C	DC	Dublin City	3
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D6A13A3E0550000000000001	ed3409_02051	Finglas North A	DC	Dublin City	1
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D6C13A3E0550000000000001	ed3409_02053	Finglas North C	DC	Dublin City	2
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D8813A3E0550000000000001	ed3409_02066	Inns Quay A	DC	Dublin City	5
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D8913A3E0550000000000001	ed3409_02067	Inns Quay B	DC	Dublin City	1
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D8A13A3E0550000000000001	ed3409_02068	Inns Quay C	DC	Dublin City	3
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DA713A3E0550000000000001	ed3409_02073	Mountjoy A	DC	Dublin City	10
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DB213A3E0550000000000001	ed3409_02075	North City	DC	Dublin City	49
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DB313A3E0550000000000001	ed3409_02076	North Dock A	DC	Dublin City	3
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DB413A3E0550000000000001	ed3409_02077	North Dock B	DC	Dublin City	20
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DB513A3E0550000000000001	ed3409_02078	North Dock C	DC	Dublin City	29
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DBE13A3E0550000000000001	ed3409_02079	Phoenix Park	DC	Dublin City	10
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DCC13A3E0550000000000001	ed3409_02080	Priorswood A	DC	Dublin City	6
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DCB13A3E0550000000000001	ed3409_02083	Priorswood D	DC	Dublin City	1
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DD113A3E0550000000000001	ed3409_02087	Raheny-St. Assam	DC	Dublin City	1
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DEA13A3E0550000000000001	ed3409_02088	Rotunda A	DC	Dublin City	6
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DEB13A3E0550000000000001	ed3409_02089	Rotunda B	DC	Dublin City	13
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E0913A3E0550000000000001	ed3409_02090	Whitehall A	DC	Dublin City	5
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D2F13A3E0550000000000001	ed3409_02094	Chapelizod	DC	Dublin City	2
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D3013A3E0550000000000001	ed3409_02095	Cherry Orchard A	DC	Dublin City	1
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D4213A3E0550000000000001	ed3409_02097	Cherry Orchard C	DC	Dublin City	10
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D4F13A3E0550000000000001	ed3409_02100	Crumlin C	DC	Dublin City	1
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D6313A3E0550000000000001	ed3409_02103	Crumlin F	DC	Dublin City	6
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D6813A3E0550000000000001	ed3409_02105	Drumfinn	DC	Dublin City	1
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D8613A3E0550000000000001	ed3409_02106	Inchicore A	DC	Dublin City	3
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D8713A3E0550000000000001	ed3409_02107	Inchicore B	DC	Dublin City	3
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D8C13A3E0550000000000001	ed3409_02109	Kilmainham B	DC	Dublin City	2
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D8D13A3E0550000000000001	ed3409_02110	Kilmainham C	DC	Dublin City	2
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D9B13A3E0550000000000001	ed3409_02113	Kimmage C	DC	Dublin City	2
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D9C13A3E0550000000000001	ed3409_02114	Kimmage D	DC	Dublin City	1
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D9F13A3E0550000000000001	ed3409_02117	Mansion House A	DC	Dublin City	106
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DA013A3E0550000000000001	ed3409_02118	Mansion House B	DC	Dublin City	57
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DA113A3E0550000000000001	ed3409_02119	Merchants Quay A	DC	Dublin City	9
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DA213A3E0550000000000001	ed3409_02120	Merchants Quay B	DC	Dublin City	3
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DA313A3E0550000000000001	ed3409_02121	Merchants Quay C	DC	Dublin City	2
2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DA513A3E0550000000000001	ed3409_02123	Merchants Quay E	DC	Dublin City	4

2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DB613A3E055000000000001	ed3409_02125	Pembroke East A	DC	Dublin City	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DB713A3E055000000000001	ed3409_02126	Pembroke East B	DC	Dublin City	5
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DB813A3E055000000000001	ed3409_02127	Pembroke East C	DC	Dublin City	3
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DB913A3E055000000000001	ed3409_02128	Pembroke East D	DC	Dublin City	50
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DBA13A3E055000000000001	ed3409_02129	Pembroke East E	DC	Dublin City	13
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DBB13A3E055000000000001	ed3409_02130	Pembroke West A	DC	Dublin City	8
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DBC13A3E055000000000001	ed3409_02131	Pembroke West B	DC	Dublin City	12
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DBD13A3E055000000000001	ed3409_02132	Pembroke West C	DC	Dublin City	23
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DD213A3E055000000000001	ed3409_02133	Rathfarnham	DC	Dublin City	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DD313A3E055000000000001	ed3409_02134	Rathmines East A	DC	Dublin City	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DD413A3E055000000000001	ed3409_02135	Rathmines East B	DC	Dublin City	6
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DD513A3E055000000000001	ed3409_02136	Rathmines East C	DC	Dublin City	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DD613A3E055000000000001	ed3409_02137	Rathmines East D	DC	Dublin City	4
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DD713A3E055000000000001	ed3409_02138	Rathmines West A	DC	Dublin City	3
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DE613A3E055000000000001	ed3409_02140	Rathmines West C	DC	Dublin City	3
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DE713A3E055000000000001	ed3409_02141	Rathmines West D	DC	Dublin City	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DE813A3E055000000000001	ed3409_02142	Rathmines West E	DC	Dublin City	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DE913A3E055000000000001	ed3409_02143	Rathmines West F	DC	Dublin City	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DEC13A3E055000000000001	ed3409_02144	Royal Exchange A	DC	Dublin City	66
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DED13A3E055000000000001	ed3409_02145	Royal Exchange B	DC	Dublin City	23
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DEE13A3E055000000000001	ed3409_02146	St. Kevin's	DC	Dublin City	52
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DEF13A3E055000000000001	ed3409_02147	South Dock	DC	Dublin City	71
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DF013A3E055000000000001	ed3409_02148	Terenure A	DC	Dublin City	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DF213A3E055000000000001	ed3409_02150	Terenure C	DC	Dublin City	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DF413A3E055000000000001	ed3409_02152	Ushers A	DC	Dublin City	3
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DF513A3E055000000000001	ed3409_02153	Ushers B	DC	Dublin City	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DF613A3E055000000000001	ed3409_02154	Ushers C	DC	Dublin City	4
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E0513A3E055000000000001	ed3409_02157	Ushers F	DC	Dublin City	5
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E0713A3E055000000000001	ed3409_02159	Walkinstown B	DC	Dublin City	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E0D13A3E055000000000001	ed3409_02161	Wood Quay A	DC	Dublin City	3
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E0E13A3E055000000000001	ed3409_02162	Wood Quay B	DC	Dublin City	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CE013A3E055000000000001	ed3409_03003	Bohernabreena	SD	South Dublin	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CFC13A3E055000000000001	ed3409_03004	Clondalkin-Ballymount	SD	South Dublin	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CFE13A3E055000000000001	ed3409_03006	Clondalkin-Dunawley	SD	South Dublin	5
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CFF13A3E055000000000001	ed3409_03007	Clondalkin-Monastery	SD	South Dublin	7
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D0013A3E055000000000001	ed3409_03008	Clondalkin-Moorfield	SD	South Dublin	3
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D5F13A3E055000000000001	ed3409_03011	Edmondstown	SD	South Dublin	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D6113A3E055000000000001	ed3409_03012	Firhouse-Ballycullen	SD	South Dublin	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D6013A3E055000000000001	ed3409_03014	Firhouse Village	SD	South Dublin	4
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DC713A3E055000000000001	ed3409_03015	Lucan-Esker	SD	South Dublin	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DC813A3E055000000000001	ed3409_03016	Lucan Heights	SD	South Dublin	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DE13A3E055000000000001	ed3409_03017	Lucan-St. Helen's	SD	South Dublin	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DE213A3E055000000000001	ed3409_03018	Newcastle	SD	South Dublin	6
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DE413A3E055000000000001	ed3409_03020	Palmerston West	SD	South Dublin	6
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DFF13A3E055000000000001	ed3409_03021	Rathcoole	SD	South Dublin	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E0113A3E055000000000001	ed3409_03023	Rathfarnham-Butterfield	SD	South Dublin	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E0213A3E055000000000001	ed3409_03024	Rathfarnham-Hermitage	SD	South Dublin	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CB513A3E055000000000001	ed3409_03030	Tallaght-Fettercairn	SD	South Dublin	10
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CB613A3E055000000000001	ed3409_03031	Tallaght-Glenview	SD	South Dublin	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CB713A3E055000000000001	ed3409_03032	Tallaght-Jobstown	SD	South Dublin	3
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CCA13A3E055000000000001	ed3409_03034	Tallaght-Kilnamanagh	SD	South Dublin	9
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CCC13A3E055000000000001	ed3409_03036	Tallaght-Kingswood	SD	South Dublin	8
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CCE13A3E055000000000001	ed3409_03038	Tallaght-Oldbawn	SD	South Dublin	3
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CCF13A3E055000000000001	ed3409_03039	Tallaght-Springfield	SD	South Dublin	8
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CD013A3E055000000000001	ed3409_03040	Tallaght-Tymon	SD	South Dublin	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CE613A3E055000000000001	ed3409_03048	Terenure-Greentrees	SD	South Dublin	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CE713A3E055000000000001	ed3409_03049	Terenure-St. James	SD	South Dublin	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291EEF13A3E055000000000001	ed3409_04001	Airport	FL	Fingal	6
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291EF213A3E055000000000001	ed3409_04004	Baldoye	FL	Fingal	3
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CC513A3E055000000000001	ed3409_04008	Blanchardstown-Abbotstown	FL	Fingal	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CC813A3E055000000000001	ed3409_04011	Blanchardstown-Corduff	FL	Fingal	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CDD13A3E055000000000001	ed3409_04013	Blanchardstown-Mulhuddart	FL	Fingal	4

2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CDE13A3E055000000000001	ed3409_04014	Blanchardstown-Roselawn	FL	Fingal	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CDF13A3E055000000000001	ed3409_04015	Blanchardstown-Tyrrelstown	FL	Fingal	5
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CE513A3E055000000000001	ed3409_04016	Castleknock-Knockmaroon	FL	Fingal	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CF613A3E055000000000001	ed3409_04017	Castleknock-Park	FL	Fingal	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D3913A3E055000000000001	ed3409_04020	Dubber	FL	Fingal	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CA613A3E055000000000001	ed3409_04035	Sutton	FL	Fingal	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CB113A3E055000000000001	ed3409_04039	Swords-Seatown	FL	Fingal	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CB213A3E055000000000001	ed3409_04040	Swords Village	FL	Fingal	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CE813A3E055000000000001	ed3409_04041	The Ward	FL	Fingal	8
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CEA13A3E055000000000001	ed3409_04042	Turnapin	FL	Fingal	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E2513A3E055000000000001	ed3409_05001	Ballinteer-Broadford	DR	Dún-Laoghaire Rathdown	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E2713A3E055000000000001	ed3409_05003	Ballinteer-Marley	DR	Dún-Laoghaire Rathdown	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E3413A3E055000000000001	ed3409_05007	Ballybrack	DR	Dún-Laoghaire Rathdown	6
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E3813A3E055000000000001	ed3409_05008	Blackrock-Boooterstown	DR	Dún-Laoghaire Rathdown	26
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CBE13A3E055000000000001	ed3409_05009	Blackrock-Carysfort	DR	Dún-Laoghaire Rathdown	9
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CBF13A3E055000000000001	ed3409_05010	Blackrock-Central	DR	Dún-Laoghaire Rathdown	18
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CC013A3E055000000000001	ed3409_05011	Blackrock-Glenomena	DR	Dún-Laoghaire Rathdown	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E3613A3E055000000000001	ed3409_05012	Blackrock-Monkstown	DR	Dún-Laoghaire Rathdown	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CC113A3E055000000000001	ed3409_05013	Blackrock-Newpark	DR	Dún-Laoghaire Rathdown	25
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E3713A3E055000000000001	ed3409_05014	Blackrock-Seapoint	DR	Dún-Laoghaire Rathdown	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CC213A3E055000000000001	ed3409_05015	Blackrock-Stradbroke	DR	Dún-Laoghaire Rathdown	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CC313A3E055000000000001	ed3409_05016	Blackrock-Templehill	DR	Dún-Laoghaire Rathdown	16
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CC413A3E055000000000001	ed3409_05017	Blackrock-Williamstown	DR	Dún-Laoghaire Rathdown	15
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CE213A3E055000000000001	ed3409_05019	Cabinteely-Kilbogget	DR	Dún-Laoghaire Rathdown	7
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CE313A3E055000000000001	ed3409_05020	Cabinteely-Loughlinstown	DR	Dún-Laoghaire Rathdown	39
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CE413A3E055000000000001	ed3409_05021	Cabinteely-Pottory	DR	Dún-Laoghaire Rathdown	22
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CF913A3E055000000000001	ed3409_05024	Churchtown-Nutgrove	DR	Dún-Laoghaire Rathdown	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CFA13A3E055000000000001	ed3409_05025	Churchtown-Orwell	DR	Dún-Laoghaire Rathdown	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CFB13A3E055000000000001	ed3409_05026	Churchtown-Woodlawn	DR	Dún-Laoghaire Rathdown	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D1913A3E055000000000001	ed3409_05027	Clonskeagh-Belfield	DR	Dún-Laoghaire Rathdown	93
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D1C13A3E055000000000001	ed3409_05031	Clonskeagh-Windy Arbour	DR	Dún-Laoghaire Rathdown	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D1F13A3E055000000000001	ed3409_05032	Dalkey-Avonvale	DR	Dún-Laoghaire Rathdown	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D2013A3E055000000000001	ed3409_05033	Dalkey-Buttock	DR	Dún-Laoghaire Rathdown	5
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D3713A3E055000000000001	ed3409_05034	Dalkey-Coliemore	DR	Dún-Laoghaire Rathdown	26
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D1D13A3E055000000000001	ed3409_05035	Dalkey Hill	DR	Dún-Laoghaire Rathdown	10
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D5A13A3E055000000000001	ed3409_05037	Dundrum-Ballaly	DR	Dún-Laoghaire Rathdown	55
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D5B13A3E055000000000001	ed3409_05038	Dundrum-Kilmacud	DR	Dún-Laoghaire Rathdown	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D5C13A3E055000000000001	ed3409_05039	Dundrum-Sandyford	DR	Dún-Laoghaire Rathdown	15
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D5D13A3E055000000000001	ed3409_05040	Dundrum-Sweetmount	DR	Dún-Laoghaire Rathdown	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D5E13A3E055000000000001	ed3409_05041	Dundrum-Taney	DR	Dún-Laoghaire Rathdown	3
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D3A13A3E055000000000001	ed3409_05042	Dún Laoghaire-East Central	DR	Dún-Laoghaire Rathdown	33
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D3B13A3E055000000000001	ed3409_05043	Dún Laoghaire-Glasthule	DR	Dún-Laoghaire Rathdown	6
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D3C13A3E055000000000001	ed3409_05044	Dún Laoghaire-Glenageary	DR	Dún-Laoghaire Rathdown	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D3D13A3E055000000000001	ed3409_05045	Dún Laoghaire-Monkstown Farm	DR	Dún-Laoghaire Rathdown	5
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D3F13A3E055000000000001	ed3409_05047	Dún Laoghaire-Sallynoggin East	DR	Dún-Laoghaire Rathdown	11
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D4013A3E055000000000001	ed3409_05048	Dún Laoghaire-Sallynoggin South	DR	Dún-Laoghaire Rathdown	3
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D4113A3E055000000000001	ed3409_05049	Dún Laoghaire-Sallynoggin West	DR	Dún-Laoghaire Rathdown	18
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D5813A3E055000000000001	ed3409_05050	Dún Laoghaire-Sandycove	DR	Dún-Laoghaire Rathdown	4
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D5713A3E055000000000001	ed3409_05051	Dún Laoghaire-Salthill	DR	Dún-Laoghaire Rathdown	12
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D5913A3E055000000000001	ed3409_05052	Dún Laoghaire-West Central	DR	Dún-Laoghaire Rathdown	29
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D7913A3E055000000000001	ed3409_05053	Foxrock-Beechpark	DR	Dún-Laoghaire Rathdown	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D7A13A3E055000000000001	ed3409_05054	Foxrock-Carrickmines	DR	Dún-Laoghaire Rathdown	23
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D7B13A3E055000000000001	ed3409_05055	Foxrock-Deans Grange	DR	Dún-Laoghaire Rathdown	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D7C13A3E055000000000001	ed3409_05056	Foxrock-Torquay	DR	Dún-Laoghaire Rathdown	4
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D7E13A3E055000000000001	ed3409_05057	Glencullen	DR	Dún-Laoghaire Rathdown	38
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D8013A3E055000000000001	ed3409_05058	Killiney North	DR	Dún-Laoghaire Rathdown	3
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DB113A3E055000000000001	ed3409_05059	Killiney South	DR	Dún-Laoghaire Rathdown	21
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E1713A3E055000000000001	ed3409_05060	Shankill-Rathmichael	DR	Dún-Laoghaire Rathdown	59
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E1813A3E055000000000001	ed3409_05061	Shankill-Rathsallagh	DR	Dún-Laoghaire Rathdown	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E1913A3E055000000000001	ed3409_05062	Shankill-Shanganagh	DR	Dún-Laoghaire Rathdown	32
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CA013A3E055000000000001	ed3409_05063	Stillorgan-Deerpark	DR	Dún-Laoghaire Rathdown	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CA113A3E055000000000001	ed3409_05064	Stillorgan-Kilmacud	DR	Dún-Laoghaire Rathdown	1

2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CA213A3E0550000000000001	ed3409_05065	Stillorgan-Leopardstown	DR	Dún-Laoghaire Rathdown	4
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CA313A3E0550000000000001	ed3409_05066	Stillorgan-Merville	DR	Dún-Laoghaire Rathdown	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CA413A3E0550000000000001	ed3409_05067	Stillorgan-Mount Merrion	DR	Dún-Laoghaire Rathdown	8
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CA513A3E0550000000000001	ed3409_05068	Stillorgan-Priory	DR	Dún-Laoghaire Rathdown	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291CE913A3E0550000000000001	ed3409_05069	Tibradden	DR	Dún-Laoghaire Rathdown	3
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE19629225B13A3E0550000000000001	ed3409_06003	Naas Urban	KE	Kildare	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE19629228E13A3E0550000000000001	ed3409_06034	Celbridge	KE	Kildare	3
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE19629223E13A3E0550000000000001	ed3409_06039	Leixlip	KE	Kildare	3
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE19629224013A3E0550000000000001	ed3409_06040	Maynooth	KE	Kildare	12
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE1962922BF13A3E0550000000000001	ed3409_06066	Droichead Nua (Newbridge) Urban	KE	Kildare	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE19629220913A3E0550000000000001	ed3409_06071	Kildare	KE	Kildare	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE19629225A13A3E0550000000000001	ed3409_06079	Naas Rural	KE	Kildare	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE1962918E313A3E0550000000000001	ed3409_10006	Dundalk Urban No. 3	LH	Louth	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE19629195013A3E0550000000000001	ed3409_10019	Ballymascanlan	LH	Louth	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE19629191313A3E0550000000000001	ed3409_10040	Mullary	LH	Louth	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE19629186D13A3E0550000000000001	ed3409_11007	Culmullin	MH	Meath	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE19629186E13A3E0550000000000001	ed3409_11008	Donaghmore	MH	Meath	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE19629181413A3E0550000000000001	ed3409_11016	Ratoath	MH	Meath	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE19629188213A3E0550000000000001	ed3409_11044	Duleek	MH	Meath	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE19629182913A3E0550000000000001	ed3409_11048	Stamullin	MH	Meath	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE19629189213A3E0550000000000001	ed3409_11055	Navan Rural	MH	Meath	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE19629182B13A3E0550000000000001	ed3409_11092	Trim Rural	MH	Meath	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE19629183713A3E0550000000000001	ed3409_13089	Mullingar Rural	WH	Westmeath	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E4013A3E0550000000000001	ed3409_14045	Ballylarkin	WX	Wexford	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291ED513A3E0550000000000001	ed3409_14051	Gorey Rural	WX	Wexford	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291BC513A3E0550000000000001	ed3409_14092	Ardcavan	WX	Wexford	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E6913A3E0550000000000001	ed3409_15001	Arklow No. 1 Urban	WW	Wicklow	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291EE213A3E0550000000000001	ed3409_15003	Bray No. 1	WW	Wicklow	38
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291EED13A3E0550000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	908
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	71
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291EEE13A3E0550000000000001	ed3409_15006	Rathmichael (Bray)	WW	Wicklow	4
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291EE013A3E0550000000000001	ed3409_15007	Wicklow Urban	WW	Wicklow	19
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291ECF13A3E0550000000000001	ed3409_15032	Delgany	WW	Wicklow	17
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E3213A3E0550000000000001	ed3409_15033	Enniskerry	WW	Wicklow	29
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E4713A3E0550000000000001	ed3409_15034	Greystones	WW	Wicklow	55
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E7813A3E0550000000000001	ed3409_15035	Kilmacanoge	WW	Wicklow	299
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291EA613A3E0550000000000001	ed3409_15036	Powerscourt	WW	Wicklow	3
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E6813A3E0550000000000001	ed3409_15038	Arklow Rural	WW	Wicklow	3
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E7613A3E0550000000000001	ed3409_15043	Ballinderry	WW	Wicklow	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E8313A3E0550000000000001	ed3409_15044	Ballyarthur	WW	Wicklow	4
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291EA313A3E0550000000000001	ed3409_15046	Brockagh	WW	Wicklow	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E3F13A3E0550000000000001	ed3409_15054	Glenealy	WW	Wicklow	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E6013A3E0550000000000001	ed3409_15055	Kilbride	WW	Wicklow	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E6113A3E0550000000000001	ed3409_15056	Kilcoole	WW	Wicklow	21
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E6D13A3E0550000000000001	ed3409_15057	Killiskey	WW	Wicklow	3
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E9A13A3E0550000000000001	ed3409_15060	Newcastle Lower	WW	Wicklow	6
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291E9B13A3E0550000000000001	ed3409_15061	Newcastle Upper	WW	Wicklow	4
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291EB413A3E0550000000000001	ed3409_15063	Rathdrum	WW	Wicklow	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291EDF13A3E0550000000000001	ed3409_15066	Wicklow Rural	WW	Wicklow	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE19629200E13A3E0550000000000001	ed3409_16027	Clenagh	CE	Clare	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291F2F13A3E0550000000000001	ed3409_18081	Caherlag	CK	Cork County	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE19629176813A3E0550000000000001	ed3409_21051	Ballycummin	GC	Limerick City and County	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291C0913A3E0550000000000001	ed3409_23110	Kilpatrick	TY	Tipperary	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291BA613A3E0550000000000001	ed3409_24021	Kingsmeadow	WD	Waterford City and County	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE19629235C13A3E0550000000000001	ed3409_26003	Bearna	GC	Galway City	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE19629237413A3E0550000000000001	ed3409_26014	Nuns Island	GC	Galway City	2
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291DA913A3E0550000000000001	ed3409_32048	Cavan Rural	CN	Cavan	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	2AE196291D1613A3E0550000000000001	ed3409_32068	Kilnaleck	CN	Cavan	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow		98	Overseas	M	No fixed place of work	171
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow				NI	Northern Ireland	1
2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow				W	Work/school from home	151

2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE19629187F13A3E055000000000001	ed3409_01004	Hacketstown	CW	Carlow	1
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE19629185713A3E055000000000001	ed3409_01019	Carlow Rural	CW	Carlow	3
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CEC13A3E055000000000001	ed3409_02002	Arran Quay B	DC	Dublin City	4
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CED13A3E055000000000001	ed3409_02003	Arran Quay C	DC	Dublin City	7
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CEE13A3E055000000000001	ed3409_02004	Arran Quay D	DC	Dublin City	1
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CF013A3E055000000000001	ed3409_02006	Ashtown A	DC	Dublin City	1
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D0513A3E055000000000001	ed3409_02009	Ballybough A	DC	Dublin City	1
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D0613A3E055000000000001	ed3409_02010	Ballybough B	DC	Dublin City	1
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D0713A3E055000000000001	ed3409_02013	Ballygall C	DC	Dublin City	1
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D0B13A3E055000000000001	ed3409_02015	Ballymun A	DC	Dublin City	1
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D2513A3E055000000000001	ed3409_02027	Botanic A	DC	Dublin City	2
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D2613A3E055000000000001	ed3409_02028	Botanic B	DC	Dublin City	1
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D2813A3E055000000000001	ed3409_02030	Cabra East A	DC	Dublin City	2
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D2A13A3E055000000000001	ed3409_02032	Cabra East C	DC	Dublin City	1
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D4513A3E055000000000001	ed3409_02039	Clontarf East C	DC	Dublin City	1
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D4A13A3E055000000000001	ed3409_02044	Clontarf West C	DC	Dublin City	3
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D4B13A3E055000000000001	ed3409_02045	Clontarf West D	DC	Dublin City	1
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D6513A3E055000000000001	ed3409_02047	Drumcondra South A	DC	Dublin City	1
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D6713A3E055000000000001	ed3409_02049	Drumcondra South C	DC	Dublin City	2
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D6C13A3E055000000000001	ed3409_02053	Finglas North C	DC	Dublin City	2
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D713A3E055000000000001	ed3409_02058	Grace Park	DC	Dublin City	1
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D8013A3E055000000000001	ed3409_02060	Grange B	DC	Dublin City	1
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D8813A3E055000000000001	ed3409_02066	Inns Quay A	DC	Dublin City	9
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D8913A3E055000000000001	ed3409_02067	Inns Quay B	DC	Dublin City	2
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D8A13A3E055000000000001	ed3409_02068	Inns Quay C	DC	Dublin City	2
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D8E13A3E055000000000001	ed3409_02071	Kilmore C	DC	Dublin City	2
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DA713A3E055000000000001	ed3409_02073	Mountjoy A	DC	Dublin City	7
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DA813A3E055000000000001	ed3409_02074	Mountjoy B	DC	Dublin City	1
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DB213A3E055000000000001	ed3409_02075	North City	DC	Dublin City	31
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DB313A3E055000000000001	ed3409_02076	North Dock A	DC	Dublin City	1
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DB413A3E055000000000001	ed3409_02077	North Dock B	DC	Dublin City	13
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DB513A3E055000000000001	ed3409_02078	North Dock C	DC	Dublin City	36
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DBE13A3E055000000000001	ed3409_02079	Phoenix Park	DC	Dublin City	4
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DCC13A3E055000000000001	ed3409_02080	Priorswood A	DC	Dublin City	1
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DEA13A3E055000000000001	ed3409_02088	Rotunda A	DC	Dublin City	7
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DEB13A3E055000000000001	ed3409_02089	Rotunda B	DC	Dublin City	10
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291E0913A3E055000000000001	ed3409_02090	Whitehall A	DC	Dublin City	4
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D2F13A3E055000000000001	ed3409_02094	Chapelizod	DC	Dublin City	3
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D4213A3E055000000000001	ed3409_02097	Cherry Orchard C	DC	Dublin City	8
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D4E13A3E055000000000001	ed3409_02099	Crumlin B	DC	Dublin City	2
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D6313A3E055000000000001	ed3409_02103	Crumlin F	DC	Dublin City	5
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D6813A3E055000000000001	ed3409_02105	Drumfinn	DC	Dublin City	2
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D8613A3E055000000000001	ed3409_02106	Inchicore A	DC	Dublin City	3
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D8713A3E055000000000001	ed3409_02107	Inchicore B	DC	Dublin City	4
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D9B13A3E055000000000001	ed3409_02113	Kimmage C	DC	Dublin City	3
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D9E13A3E055000000000001	ed3409_02116	Kylemore	DC	Dublin City	1
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D9F13A3E055000000000001	ed3409_02117	Mansion House A	DC	Dublin City	54
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DA013A3E055000000000001	ed3409_02118	Mansion House B	DC	Dublin City	39
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DA113A3E055000000000001	ed3409_02119	Merchants Quay A	DC	Dublin City	3
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DA213A3E055000000000001	ed3409_02120	Merchants Quay B	DC	Dublin City	4
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DA313A3E055000000000001	ed3409_02121	Merchants Quay C	DC	Dublin City	3
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DA513A3E055000000000001	ed3409_02123	Merchants Quay E	DC	Dublin City	5
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DB613A3E055000000000001	ed3409_02125	Pembroke East	DC	Dublin City	3
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DB713A3E055000000000001	ed3409_02126	Pembroke East B	DC	Dublin City	6
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DB813A3E055000000000001	ed3409_02127	Pembroke East C	DC	Dublin City	6
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DB913A3E055000000000001	ed3409_02128	Pembroke East D	DC	Dublin City	61
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DBA13A3E055000000000001	ed3409_02129	Pembroke East E	DC	Dublin City	21
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DBB13A3E055000000000001	ed3409_02130	Pembroke West A	DC	Dublin City	8
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DBC13A3E055000000000001	ed3409_02131	Pembroke West B	DC	Dublin City	16
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DBD13A3E055000000000001	ed3409_02132	Pembroke West C	DC	Dublin City	29
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DD213A3E055000000000001	ed3409_02133	Rathfarnham	DC	Dublin City	1
2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DD313A3E055000000000001	ed3409_02134	Rathmines East A	DC	Dublin City	4

2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291DD413A3E0550000000000001	ed3409_02135	Rathmines East B	DC	Dublin City	9
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291DD513A3E0550000000000001	ed3409_02136	Rathmines East C	DC	Dublin City	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291DD613A3E0550000000000001	ed3409_02137	Rathmines East D	DC	Dublin City	2
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291DD713A3E0550000000000001	ed3409_02138	Rathmines West A	DC	Dublin City	6
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291DE813A3E0550000000000001	ed3409_02142	Rathmines West E	DC	Dublin City	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291DE913A3E0550000000000001	ed3409_02143	Rathmines West F	DC	Dublin City	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291DEC13A3E0550000000000001	ed3409_02144	Royal Exchange A	DC	Dublin City	52
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291DED13A3E0550000000000001	ed3409_02145	Royal Exchange B	DC	Dublin City	17
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291DEE13A3E0550000000000001	ed3409_02146	St. Kevin's	DC	Dublin City	36
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291DEF13A3E0550000000000001	ed3409_02147	South Dock	DC	Dublin City	46
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291DF013A3E0550000000000001	ed3409_02148	Terenure A	DC	Dublin City	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291DF113A3E0550000000000001	ed3409_02149	Terenure B	DC	Dublin City	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291DF413A3E0550000000000001	ed3409_02152	Ushers A	DC	Dublin City	13
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291DF613A3E0550000000000001	ed3409_02154	Ushers C	DC	Dublin City	3
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291E0513A3E0550000000000001	ed3409_02157	Ushers F	DC	Dublin City	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291E0613A3E0550000000000001	ed3409_02158	Walkinstown A	DC	Dublin City	3
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291E0D13A3E0550000000000001	ed3409_02161	Wood Quay A	DC	Dublin City	7
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291CFC13A3E0550000000000001	ed3409_03004	Clondalkin-Ballymount	SD	South Dublin	7
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291CFD13A3E0550000000000001	ed3409_03005	Clondalkin-Cappaghmore	SD	South Dublin	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291CFE13A3E0550000000000001	ed3409_03006	Clondalkin-Dunawley	SD	South Dublin	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291CFF13A3E0550000000000001	ed3409_03007	Clondalkin-Monastery	SD	South Dublin	9
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291D0013A3E0550000000000001	ed3409_03008	Clondalkin-Moorfield	SD	South Dublin	2
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291D0213A3E0550000000000001	ed3409_03010	Clondalkin Village	SD	South Dublin	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291D5F13A3E0550000000000001	ed3409_03011	Edmondstown	SD	South Dublin	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291D6113A3E0550000000000001	ed3409_03012	Firhouse-Ballycullen	SD	South Dublin	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291D6013A3E0550000000000001	ed3409_03014	Firhouse Village	SD	South Dublin	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291DC713A3E0550000000000001	ed3409_03015	Lucan-Esker	SD	South Dublin	7
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291DC813A3E0550000000000001	ed3409_03016	Lucan Heights	SD	South Dublin	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291DE213A3E0550000000000001	ed3409_03018	Newcastle	SD	South Dublin	8
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291DE413A3E0550000000000001	ed3409_03020	Palmerston West	SD	South Dublin	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291E0213A3E0550000000000001	ed3409_03024	Rathfarnham-Hermitage	SD	South Dublin	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291E0313A3E0550000000000001	ed3409_03025	Rathfarnham-St. Enda's	SD	South Dublin	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291E1613A3E0550000000000001	ed3409_03027	Saggart	SD	South Dublin	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291CB513A3E0550000000000001	ed3409_03030	Tallaght-Fettercairn	SD	South Dublin	8
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291CCA13A3E0550000000000001	ed3409_03034	Tallaght-Kilnamanagh	SD	South Dublin	14
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291CCC13A3E0550000000000001	ed3409_03036	Tallaght-Kingswood	SD	South Dublin	5
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291CCE13A3E0550000000000001	ed3409_03038	Tallaght-Oldbawn	SD	South Dublin	5
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291CCF13A3E0550000000000001	ed3409_03039	Tallaght-Springfield	SD	South Dublin	13
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291CD013A3E0550000000000001	ed3409_03040	Tallaght-Tymon	SD	South Dublin	2
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291CD313A3E0550000000000001	ed3409_03043	Templeogue-Limekiln	SD	South Dublin	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291CD513A3E0550000000000001	ed3409_03045	Templeogue-Osprey	SD	South Dublin	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291CD613A3E0550000000000001	ed3409_03046	Templeogue Village	SD	South Dublin	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291EEF13A3E0550000000000001	ed3409_04001	Airport	FL	Fingal	6
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291EF013A3E0550000000000001	ed3409_04002	Balbriggan Rural	FL	Fingal	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291E2213A3E0550000000000001	ed3409_04005	Balgriffin	FL	Fingal	2
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291CC513A3E0550000000000001	ed3409_04008	Blanchardstown-Abbotstown	FL	Fingal	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291CC613A3E0550000000000001	ed3409_04009	Blanchardstown-Blakestown	FL	Fingal	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291CC713A3E0550000000000001	ed3409_04010	Blanchardstown-Coolmine	FL	Fingal	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291CC813A3E0550000000000001	ed3409_04011	Blanchardstown-Corduff	FL	Fingal	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291CDF13A3E0550000000000001	ed3409_04015	Blanchardstown-Tyrrelstown	FL	Fingal	5
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291CF613A3E0550000000000001	ed3409_04017	Castleknock-Park	FL	Fingal	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291D3813A3E0550000000000001	ed3409_04019	Donabate	FL	Fingal	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291D3913A3E0550000000000001	ed3409_04020	Dubber	FL	Fingal	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291DC613A3E0550000000000001	ed3409_04026	Kinsaley	FL	Fingal	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291DCB013A3E0550000000000001	ed3409_04038	Swords-Lissenhall	FL	Fingal	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291CB113A3E0550000000000001	ed3409_04039	Swords-Seaton	FL	Fingal	5
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291CE813A3E0550000000000001	ed3409_04041	The Ward	FL	Fingal	5
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291CEA13A3E0550000000000001	ed3409_04042	Turnapin	FL	Fingal	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291E2513A3E0550000000000001	ed3409_05001	Ballinteer-Broadford	DR	Dún-Laoghaire Rathdown	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291E2613A3E0550000000000001	ed3409_05002	Ballinteer-Ludford	DR	Dún-Laoghaire Rathdown	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291E2813A3E0550000000000001	ed3409_05004	Ballinteer-Meadowbroads	DR	Dún-Laoghaire Rathdown	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	VW	Wicklow	2AE196291E3413A3E0550000000000001	ed3409_05007	Ballybrack	DR	Dún-Laoghaire Rathdown	2

2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291E3813A3E0550000000000001	ed3409_05008	Blackrock-Boooterstown	DR	Dún-Laoghaire Rathdown	12
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CBE13A3E0550000000000001	ed3409_05009	Blackrock-Carysfort	DR	Dún-Laoghaire Rathdown	9
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CBF13A3E0550000000000001	ed3409_05010	Blackrock-Central	DR	Dún-Laoghaire Rathdown	20
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CC013A3E0550000000000001	ed3409_05011	Blackrock-Glenomena	DR	Dún-Laoghaire Rathdown	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291E3613A3E0550000000000001	ed3409_05012	Blackrock-Monkstown	DR	Dún-Laoghaire Rathdown	4
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CC113A3E0550000000000001	ed3409_05013	Blackrock-Newpark	DR	Dún-Laoghaire Rathdown	21
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291E3713A3E0550000000000001	ed3409_05014	Blackrock-Seapoint	DR	Dún-Laoghaire Rathdown	2
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CC213A3E0550000000000001	ed3409_05015	Blackrock-Stradbrook	DR	Dún-Laoghaire Rathdown	4
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CC313A3E0550000000000001	ed3409_05016	Blackrock-Templehill	DR	Dún-Laoghaire Rathdown	16
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CC413A3E0550000000000001	ed3409_05017	Blackrock-Williamstown	DR	Dún-Laoghaire Rathdown	5
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CE113A3E0550000000000001	ed3409_05018	Cabinteely-Granitefield	DR	Dún-Laoghaire Rathdown	3
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CE213A3E0550000000000001	ed3409_05019	Cabinteely-Kilbogget	DR	Dún-Laoghaire Rathdown	5
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CE313A3E0550000000000001	ed3409_05020	Cabinteely-Loughlinstown	DR	Dún-Laoghaire Rathdown	41
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CE413A3E0550000000000001	ed3409_05021	Cabinteely-Pottery	DR	Dún-Laoghaire Rathdown	30
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CF813A3E0550000000000001	ed3409_05023	Churchtown-Landscape	DR	Dún-Laoghaire Rathdown	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CF913A3E0550000000000001	ed3409_05024	Churchtown-Nutgrove	DR	Dún-Laoghaire Rathdown	4
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CFB13A3E0550000000000001	ed3409_05026	Churchtown-Woodlawn	DR	Dún-Laoghaire Rathdown	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D1913A3E0550000000000001	ed3409_05027	Clonskeagh-Belfield	DR	Dún-Laoghaire Rathdown	94
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D1B13A3E0550000000000001	ed3409_05030	Clonskeagh-Roebeck	DR	Dún-Laoghaire Rathdown	2
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D1C13A3E0550000000000001	ed3409_05031	Clonskeagh-Windy Arbour	DR	Dún-Laoghaire Rathdown	3
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D1F13A3E0550000000000001	ed3409_05032	Dalkey-Avondale	DR	Dún-Laoghaire Rathdown	2
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D2013A3E0550000000000001	ed3409_05033	Dalkey-Bullock	DR	Dún-Laoghaire Rathdown	2
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D3713A3E0550000000000001	ed3409_05034	Dalkey-Coliemore	DR	Dún-Laoghaire Rathdown	19
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D1D13A3E0550000000000001	ed3409_05035	Dalkey Hill	DR	Dún-Laoghaire Rathdown	9
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D5A13A3E0550000000000001	ed3409_05037	Dundrum-Balally	DR	Dún-Laoghaire Rathdown	68
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D5B13A3E0550000000000001	ed3409_05038	Dundrum-Kilmacud	DR	Dún-Laoghaire Rathdown	3
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D5C13A3E0550000000000001	ed3409_05039	Dundrum-Sandyford	DR	Dún-Laoghaire Rathdown	21
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D5D13A3E0550000000000001	ed3409_05040	Dundrum-Sweetmount	DR	Dún-Laoghaire Rathdown	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D5E13A3E0550000000000001	ed3409_05041	Dundrum-Taney	DR	Dún-Laoghaire Rathdown	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D3A13A3E0550000000000001	ed3409_05042	Dún Laoghaire-East Central	DR	Dún-Laoghaire Rathdown	28
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D3B13A3E0550000000000001	ed3409_05043	Dún Laoghaire-Glasthule	DR	Dún-Laoghaire Rathdown	11
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D3C13A3E0550000000000001	ed3409_05044	Dún Laoghaire-Glenageary	DR	Dún-Laoghaire Rathdown	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D3D13A3E0550000000000001	ed3409_05045	Dún Laoghaire-Monkstown Farm	DR	Dún-Laoghaire Rathdown	6
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D3E13A3E0550000000000001	ed3409_05046	Dún Laoghaire-Mount Town	DR	Dún-Laoghaire Rathdown	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D3F13A3E0550000000000001	ed3409_05047	Dún Laoghaire-Sallynoggin East	DR	Dún-Laoghaire Rathdown	17
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D4013A3E0550000000000001	ed3409_05048	Dún Laoghaire-Sallynoggin South	DR	Dún-Laoghaire Rathdown	6
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D4113A3E0550000000000001	ed3409_05049	Dún Laoghaire-Sallynoggin West	DR	Dún-Laoghaire Rathdown	21
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D5813A3E0550000000000001	ed3409_05050	Dún Laoghaire-Sandycove	DR	Dún-Laoghaire Rathdown	5
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D5713A3E0550000000000001	ed3409_05051	Dún Laoghaire-Salthill	DR	Dún-Laoghaire Rathdown	10
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D5913A3E0550000000000001	ed3409_05052	Dún Laoghaire-West Central	DR	Dún-Laoghaire Rathdown	28
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D7A13A3E0550000000000001	ed3409_05054	Foxrock-Carrickmines	DR	Dún-Laoghaire Rathdown	42
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D7B13A3E0550000000000001	ed3409_05055	Foxrock-Deans Grange	DR	Dún-Laoghaire Rathdown	4
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D7C13A3E0550000000000001	ed3409_05056	Foxrock-Torquay	DR	Dún-Laoghaire Rathdown	2
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291D7E13A3E0550000000000001	ed3409_05057	Glencullen	DR	Dún-Laoghaire Rathdown	37
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DB013A3E0550000000000001	ed3409_05058	Killiney North	DR	Dún-Laoghaire Rathdown	6
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DB113A3E0550000000000001	ed3409_05059	Killiney South	DR	Dún-Laoghaire Rathdown	29
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291E1713A3E0550000000000001	ed3409_05060	Shankill-Rathmichael	DR	Dún-Laoghaire Rathdown	71
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291E1813A3E0550000000000001	ed3409_05061	Shankill-Rathsallagh	DR	Dún-Laoghaire Rathdown	10
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291E1913A3E0550000000000001	ed3409_05062	Shankill-Shanganagh	DR	Dún-Laoghaire Rathdown	30
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CA013A3E0550000000000001	ed3409_05063	Stillorgan-Deerpark	DR	Dún-Laoghaire Rathdown	2
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CA213A3E0550000000000001	ed3409_05065	Stillorgan-Leopardstown	DR	Dún-Laoghaire Rathdown	4
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CA313A3E0550000000000001	ed3409_05066	Stillorgan-Merville	DR	Dún-Laoghaire Rathdown	3
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CA413A3E0550000000000001	ed3409_05067	Stillorgan-Mount Merrion	DR	Dún-Laoghaire Rathdown	11
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CA513A3E0550000000000001	ed3409_05068	Stillorgan-Priory	DR	Dún-Laoghaire Rathdown	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291CE913A3E0550000000000001	ed3409_05069	Tibbradden	DR	Dún-Laoghaire Rathdown	2
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE19629225B13A3E0550000000000001	ed3409_06003	Naas Urban	KE	Kildare	4
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE19629228E13A3E0550000000000001	ed3409_06034	Celbridge	KE	Kildare	3
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE19629223E13A3E0550000000000001	ed3409_06039	Leixlip	KE	Kildare	3
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE19629224013A3E0550000000000001	ed3409_06040	Maynooth	KE	Kildare	9
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE19629225713A3E0550000000000001	ed3409_06057	Ballysax East	KE	Kildare	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE1962922BF13A3E0550000000000001	ed3409_06066	Droichead Nua (Newbridge) Urban	KE	Kildare	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE19629220913A3E0550000000000001	ed3409_06071	Kildare	KE	Kildare	1

2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE19629222B13A3E055000000000001	ed3409_06076	KE	Kildare	1	
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE19629226B13A3E055000000000001	ed3409_06082	Oughtterard	KE	Kildare	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE1962918E313A3E055000000000001	ed3409_10006	Dundalk Urban No. 3	LH	Louth	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE1962918E213A3E055000000000001	ed3409_10027	Dundalk Rural	LH	Louth	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE19629192A13A3E055000000000001	ed3409_10041	St. Peter's	LH	Louth	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE19629181213A3E055000000000001	ed3409_11011	Kilbrew	MH	Meath	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE19629182913A3E055000000000001	ed3409_11048	Stamullin	MH	Meath	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE1962918CD13A3E055000000000001	ed3409_13002	Athlone West Urban	WH	Westmeath	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291BCC13A3E055000000000001	ed3409_13003	Athlone East Rural	WH	Westmeath	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291E6913A3E055000000000001	ed3409_15001	Arklow No. 1 Urban	WW	Wicklow	5
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291EE213A3E055000000000001	ed3409_15003	Bray No. 1	WW	Wicklow	57
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291EED13A3E055000000000001	ed3409_15004	Bray No. 2	WW	Wicklow	876
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291E9913A3E055000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	130
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291EEE13A3E055000000000001	ed3409_15006	Rathmichael (Bray)	WW	Wicklow	7
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291EE013A3E055000000000001	ed3409_15007	Wicklow Urban	WW	Wicklow	23
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291EEB13A3E055000000000001	ed3409_15014	Dunlavin	WW	Wicklow	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291EC313A3E055000000000001	ed3409_15028	The Grange	WW	Wicklow	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291ECF13A3E055000000000001	ed3409_15032	Delgany	WW	Wicklow	31
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291E3213A3E055000000000001	ed3409_15033	Enniskerry	WW	Wicklow	21
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291E4713A3E055000000000001	ed3409_15034	Greystones	WW	Wicklow	50
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291E7813A3E055000000000001	ed3409_15035	Kilmacanoge	WW	Wicklow	389
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291EA613A3E055000000000001	ed3409_15036	Powerscourt	WW	Wicklow	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291E6813A3E055000000000001	ed3409_15038	Arklow Rural	WW	Wicklow	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291E7613A3E055000000000001	ed3409_15043	Ballinderry	WW	Wicklow	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291E8313A3E055000000000001	ed3409_15044	Ballyarthur	WW	Wicklow	2
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291EA313A3E055000000000001	ed3409_15046	Brockagh	WW	Wicklow	2
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291E3F13A3E055000000000001	ed3409_15054	Glenealy	WW	Wicklow	2
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291E6013A3E055000000000001	ed3409_15055	Kilbride	WW	Wicklow	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291E6113A3E055000000000001	ed3409_15056	Kilcoole	WW	Wicklow	16
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291E6D13A3E055000000000001	ed3409_15057	Killiskeary	WW	Wicklow	2
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291E9A13A3E055000000000001	ed3409_15060	Newcastle Lower	WW	Wicklow	10
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291E9B13A3E055000000000001	ed3409_15061	Newcastle Upper	WW	Wicklow	22
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291ED413A3E055000000000001	ed3409_15064	Togher	WW	Wicklow	2
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291EDF13A3E055000000000001	ed3409_15066	Wicklow Rural	WW	Wicklow	4
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE19629217913A3E055000000000001	ed3409_17028	Gillabbey B	CC	Cork City	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291F2F13A3E055000000000001	ed3409_18081	Caherlag	CK	Cork County	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE1962921EB13A3E05500000000001	ed3409_18098	Monkstown Rural	CK	Cork County	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE19629213713A3E055000000000001	ed3409_18101	Rathcooney (Part Rural)	CK	Cork County	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE19629221E13A3E055000000000001	ed3409_19165	Tralee Rural	KY	Kerry	2
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291C0B13A3E055000000000001	ed3409_22003	Templemore	TY	Tipperary	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE19629237413A3E055000000000001	ed3409_26014	Nuns Island	GC	Galway City	2
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE196291DFB13A3E055000000000001	ed3409_32057	Denn	CN	Cavan	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow	2AE1962920C213A3E055000000000001	ed3409_33032	Na Croisbhealaí	DL	Donegal	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow		98	Overseas	98	Overseas	4
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow		M	No fixed place of work	M	No fixed place of work	237
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow		NI	Northern Ireland	NI	Northern Ireland	1
2AE196291E9913A3E0550000000000001	ed3409_15005	Bray No. 3	WW	Wicklow		W	Work/school from home	W	Work/school from home	84

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