

# TRAFFIC & TRANSPORT ASSESSMENT

## Residential Development Lahardane / Ballincolly Ballyvolane Cork

November 2019





### Document Control Sheet

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**1.0 INTRODUCTION**

**1.1 INTRODUCTION**

- 1.1.1 MHL Consulting Engineers has been instructed by Longview Estates Ltd to prepare a Traffic & Transport Assessment (TTA) in support of a planning application for the development of a portion of their lands at Lahardane, Ballyvolane, Cork.
- 1.1.2 This scheme consists of the development of 753 residential units, a 103 child creche and a local neighbour centre on a phased basis (a 10-year permission is being sought) and will be determined by way of the Strategic Infrastructure Application process to An Bord Pleanála.
- 1.1.3 The development will include associated off-site infrastructure improvements at individual junctions as well as making provision for committed works as part of the Ballyvolane Strategic Transport Corridor (BSTC) project.
- 1.1.4 This TTA will assess how the proposed development will impact the surrounding roads network. It will consider appropriate access arrangements and the transport choices available to future users of the application site and how the existing/proposed transport infrastructure surrounding the site will influence that choice. The impact of traffic demand generated by the proposals will be considered and quantified (note: Traffic modelling has been carried out for a 755-unit dev).
- 1.1.3 The scope of this study has been agreed with Cork City Council’s Traffic & Transportation Department. Technical Notes have been produced to agree the key parameters relating to the traffic modelling carried out including, junctions to be assessed, trip generation, modal shift targets, trip distribution, assessment years and the presentation of results.
- 1.1.5 The key junctions in the area surrounding the proposed development are shown in **Figure 1.1** and are as follows:

- Junction 1. Kilbarry Link Road / Ballyhooly Road
- Junction 2. The Fox & Hounds Junction
- Junction 3. North Ring Road / Ballyhooly Road
- Junction 4. Kilbarry Link Road / Upper Dublin Hill
- Junction 5. Banduff Road / Rathcooney Road
- Junction 6. North Ring Road / Clonard Road



**Figure 1.1: Junction Locations**

## 1.2 PLANNING BACKGROUND

- 1.2.1 The lands at Ballyvolane have been earmarked for significant population growth since the Cork Area Strategic Plan Update 2008 and the Cork County Development Plan 2009. The previous LAP, the Blarney Electoral Area Local Area Plan 2011 and 2015 Update, designated the lands as a Special Policy Area (X-01) noting that a masterplan should be prepared to inform the future development of these lands. This Masterplan was not prepared, and the objective has been superseded by the creation of a traditional zoning framework in the 2014 Cork County Local Area Plans (in this case the Cobh MD LAP).
- 1.2.2 The lands are zoned for development in the current Cobh Municipal District Local Area Plan 2017 as follows:
- NE-R-08 and NE-R-09 for Medium B residential development;
  - NE-C-01 for proposed primary and secondary school;
  - NE-O-04 for open space for public recreation as an urban park. The amenity parkland should provide passive amenity for residents of the North Eastern suburbs and the site. It should also contain the necessary walkways and cycle-ways for accessibility between residential, business, retail and community uses.
- 1.2.3 The NE-O-04 for open space for public recreation / passive amenity is also bounded by a road's objective, NE-U-03 for a service road within Ballyvolane and NE-U-06, the Mayfield Kilbarry Link Road. Isochrone mapping demonstrating the location of the site within the context of local services and amenities is included in Section 6.0 of this report. A master plan is included which highlights the advantages the site location has in terms of promoting sustainable transport solutions.
- 1.2.4 The proposed development of these lands for residential development is in accordance with the Core Strategy of the Cork County Development Plan which sees the North Environs as part of the main engine of population and employment growth for the region. At a regional level the importance of the Ballyvolane UEA is also evident in the draft Regional Spatial and Economic Strategy for the Southern Region and the draft Cork Metropolitan Area Transport Strategy (CMATS).
- 1.2.5 The lands are being actively promoted for significant residential development at local and regional planning policy levels. On this basis the proposed development in this planning application is a plan led development that is entirely suitable at this location.

## 1.3 STATUTORY CONSULTEE CONSULTATION

- 1.3.1 Notwithstanding ongoing consultation with the Traffic & Transportation Department of Cork City Council and through public engagement events, the Design Team, have engaged with An Bord Pleanála, The Department of Education & Skills, Bus Eireann, various departments within Cork City Council and local area residents with a view to consider the respective issues raised as part of the design process of the scheme.
- 1.3.2 These engagements have informed the final layout of the scheme including access arrangements for vehicular, pedestrian and cycle modes of transport. Access to the north of the site, has been provided to a local road which connects the R614 Ballyhooly Road to the Rathcooney Road. This access has been provided following pre application consultations with ABP; local residents having requested that it not be included.

## 1.4 DOCUMENT STRUCTURE

- 1.4.1 A TTA is an appropriate form of assessment for the scale of the proposed development and the scope has been agreed with the Local Authority. The structure of this TTA is in accordance with TII Document, Traffic and Transport Assessment Guidelines, 2014.

The aim of this TTA is to identify the characteristics of the application site and surrounding area, examine the likely transport implications, ensure sustainable accessibility is maximised and appropriate infrastructure provided.

The key issues that need to be addressed within this TTA, with reference to the size and location of the development proposal, are as follows:

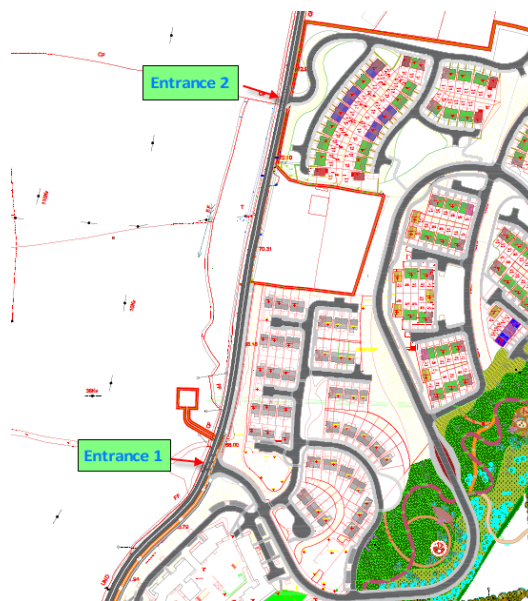
- Review of the site location, composition and local roads network.
- Analysis of Road Safety data for the most recent five-year period available.
- Accessibility critique reviewing pedestrian, cycle and public transport access to the site, plus any infrastructure currently available to promote travel by sustainable means.
- A review of the relevant planning and transport policy.
- Description of the development proposal.
- Description and justification for the proposed access arrangement, internal layout, parking provision, public transport provision, fire tender/service/delivery access, including all necessary swept-path assessments and visibility splays.
- Forecast multi-modal trip rates and trip generation as agreed with the Local Authority.
- Modal split assumptions used in the trip generation process.
- The use of appropriate and agreed traffic modelling software for the assessment of individual junctions.
- Provide With/Without Development assessment for each of the critical junctions taking account of phased delivery.
- Assess significance of development generated traffic upon the surrounding transport infrastructure and identify any necessary mitigation.

1.4.2 The TTA concludes that the proposed development, in traffic and transportation terms is acceptable, and there are no traffic and transportation reasons that should prevent the Planning Authority from recommending approval of this application.

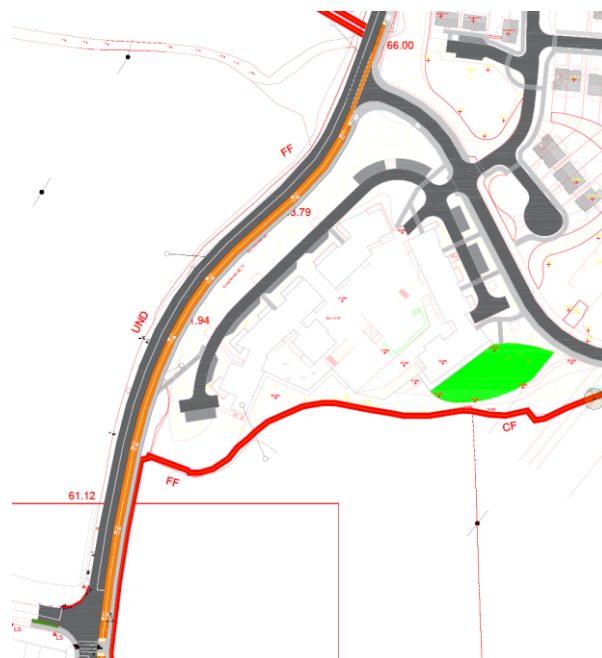
## 2.0 NON-TECHICAL SUMMARY

- 2.1 A TTA has been prepared in support of an application through the Strategic Housing Development (SHD) process for the development of 753 residential units, a large Child Care creche and a local centre suitable for a local convenience store, pharmacy, hairdresser, café. A medical centre / GP facility is also included along with a community room as part of the Neighbourhood scale facility; located in Neighbourhood 2.
- 2.2 The TTA methodology has been agreed with the Local Authority which has taken place as part of the pre-application process.
- 2.3 The TTA has demonstrated the following:
- (i) The proposed residential development is in accordance with the Local Area Plan and forms an important first part in the delivery of planned growth in the area.
  - (ii) A review of the existing roads network and collision data in the vicinity of the site indicates that there are no significant problems in relation to the current operation or safety of the identified junctions. Existing traffic congestion on the R635 North Ring Road during peak periods has already been reduced as a result of Phase I of the BSTC project being implemented. The future year traffic modelling carried out as part of this assessment demonstrates that with further junction improvements proposed as part of the next phase of public works, additional capacity at junctions is generated.
  - (iii) The proposed site layout is permeable to the roads network and is connected to existing pedestrian linkages to public transport offerings, schools, retail and amenity destinations.
  - (iv) The proposed new access arrangements are safe and suitable and are in accordance with the Design Manual for Roads & Bridges (DMRB) and the Design Manual for Urban Roads & Streets (DMURS).
  - (v) The site benefits from being in close proximity to regular transport provision, within walking distance of the site, which enables journeys throughout Cork City.
  - (vi) Junction mitigation measures proposed as part of this application include the signalisation of Junction 1: Ballyhooly Road/Kilbarry Link Road incorporating a toucan crossing to facilitate pedestrian/cycle connectivity to local bus stops, schools, retail provision, church, sports grounds (soccer and GAA) and existing residential areas. The traffic modelling of this junction using LinSig software has demonstrated that the junction operates with spare capacity up to and including the completion of the development in 2029. The junction has been assessed to include for a pedestrian phase each and every cycle. The safety implication of this proposal is positive as the junction and its approaches will be traffic calmed and in addition the signalisation will regularise traffic flow entering the urban environment.
  - (vii) As part of the development proposal the inclusion of an off-road cycle and pedestrian facility from the development entrance to a proposed crossing of the Ballyhooly Road at Mervue Lawn, south of the site, is to be delivered. This will facilitate and encourage modal shift towards more sustainable modes of travel. (The extension of this facility to the R635 North Ring Road Junction is proposed as part of the next phase of the BSTC project currently being designed.)
  - (viii) The cumulative impact of the development, inclusive of future growth background traffic and with proposed junction upgrades to be delivered as part of the BSTC project being in place from 2023 onwards, has been tested on the identified critical junctions, indicating that the proposed development can be accommodated without the need for alternative routes (for example the Northern Orbital Route) as outlined in CMATS, being in place.

- (ix) The completion of the aforementioned Northern Orbital Route (NOR), which will link from 'Tinker's Cross' on the R635, North Ring Road, to the N20 will provide an alternative route for traffic currently using the R635 to bypass the city centre. This route is indicated to pass to the south of the development site, incorporating the 'Kilbarry Link Road' and will serve as a high-quality bus corridor (QBC) orbiting the city. Arterial links to the city centre, such as the Ballyvolane Strategic Transport Corridor, will provide connectivity inwards from this route. The NOR is identified in CMATS (Cork Metropolitan Area Transport Study) with an expected delivery date by 2031. On its completion traffic and travel patterns in this area will undergo significant change which has been included in the SWRM (NTA South West Regional Model) future year scenarios. Consequently, this TTA does not look beyond a 2029 Design Year. This has been agreed with the Local Authority.
- (x) The proposed development is to be accessed via two priority junctions onto the R614 Ballyhooly Road as shown in the following Figure. These junctions have been assessed for development traffic and background traffic flows on the Ballyhooly Road and found to operate within capacity up to and beyond the design year.



**Figure 2.1: Proposed Development Access Junctions**



**Figure 2.2: Proposed Upgrade works to R614 Ballyhooly Road from Entrance 1**



### 3.0 EXISTING CONDITIONS

#### 3.1 INTRODUCTION

3.1.1 This section describes the base data used to develop the junction models, the critical links and junctions as agreed with the Local Authority, committed transport proposals to the area and other surrounding proposed development.

#### 3.2 BASELINE TRAFFIC CONDITIONS

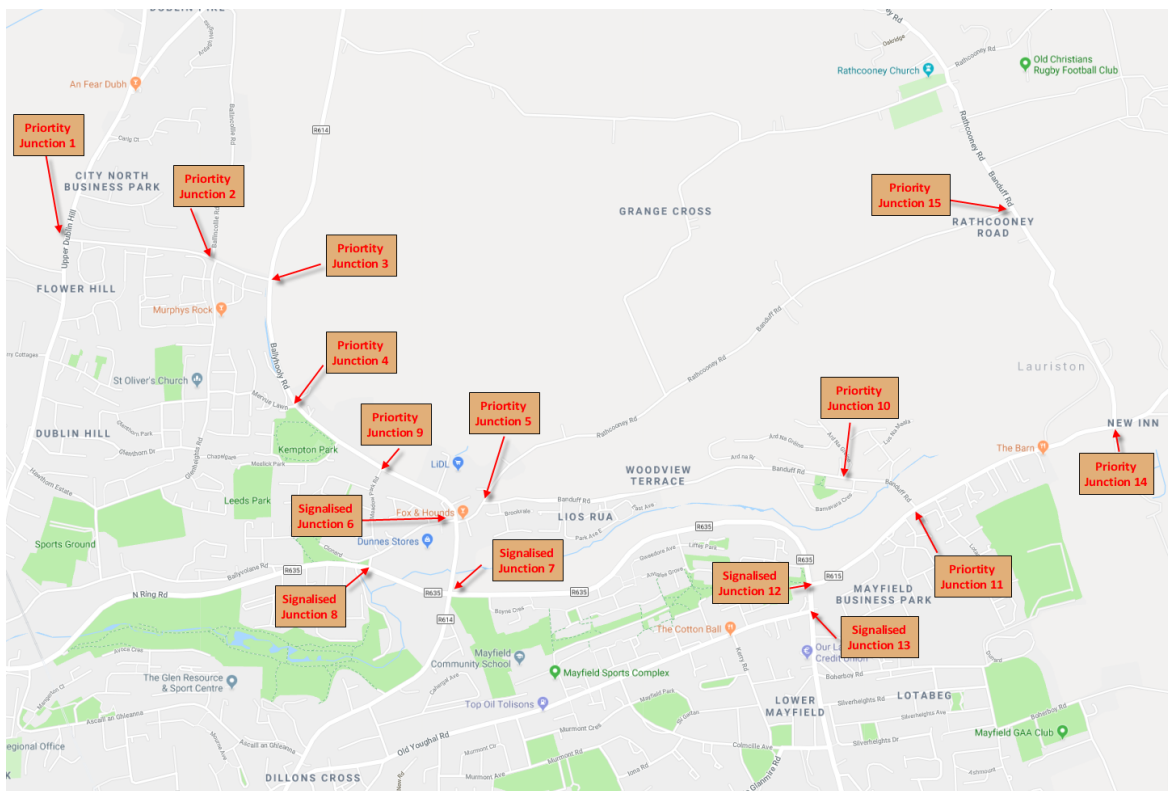
3.2.1 As part of the pre-application process the extent of data collection and the critical links and junctions was agreed with the Local Authority.

3.2.1 A variety of different data sources have been used, including:

- 12-hour classified turning counts (15 sites, refer **Figure 3.1**, (note junction labels differ from Fig. 1.1));
- Background OS Mapping and aerial photography;
- On-site junction measurements including saturation flows, link speeds, queue length measurements, pedestrian movements at signalled crossings and geometric data for each of the modelled junctions;
- Traffic Signal plan data.

3.2.2 A total of 15 turning count surveys were undertaken as part of the study on Thursday 11<sup>th</sup> April 2019, as outlined in the following figure; these surveys were carried out simultaneously using video cameras at each of the junctions for a 12-hour period. Queue length surveys were carried out at the identified critical junctions (ref. **Fig 1.1**) for the peak hour periods to be modelled, 08:00-09:00 and 17:00-18:00.

3.2.3 On-site measurements including lane widths, junction turning radii, lane lengths and saturation flows were undertaken by MHL at various times in the intervening months. Further site-specific queue length, pedestrian crossing frequency and traffic signal timing surveys were undertaken as part of the calibration of the constructed models. These surveys were carried out when school and college traffic had resumed after the summer period.



**Figure 3.1: Traffic Count Survey Locations**

3.2.4 The following figures present the recorded 12-hour traffic profile, percentage of classified vehicles and turning movements for each of the modelled junctions carried out on Thursday 11<sup>th</sup> April 2019:

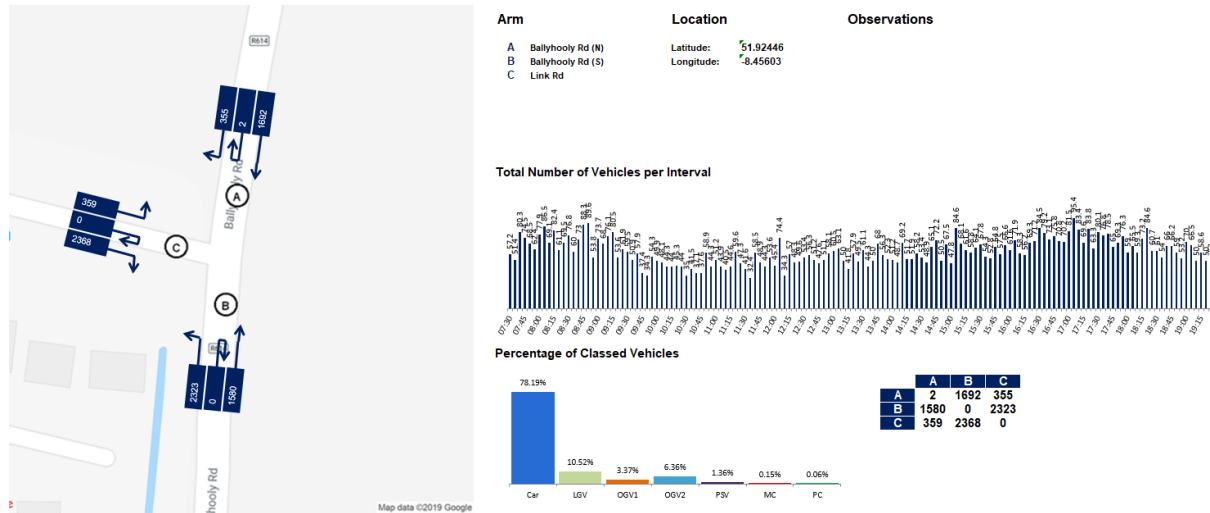


Figure 3.2: Junction 1: Ballyhooley Road/Kilbarry Link Road

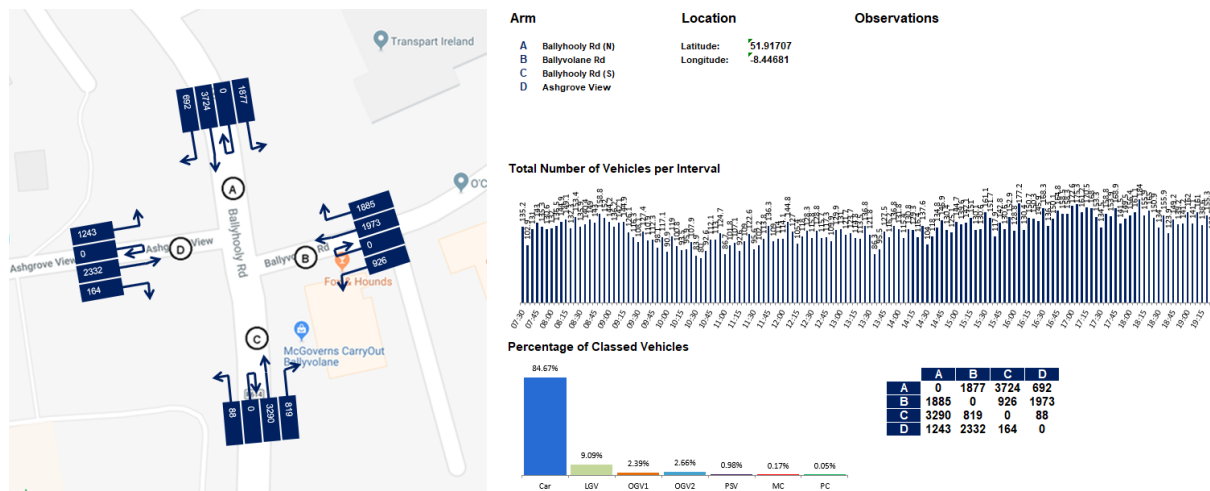


Figure 3.3: Junction 2: Fox & Hounds Junction

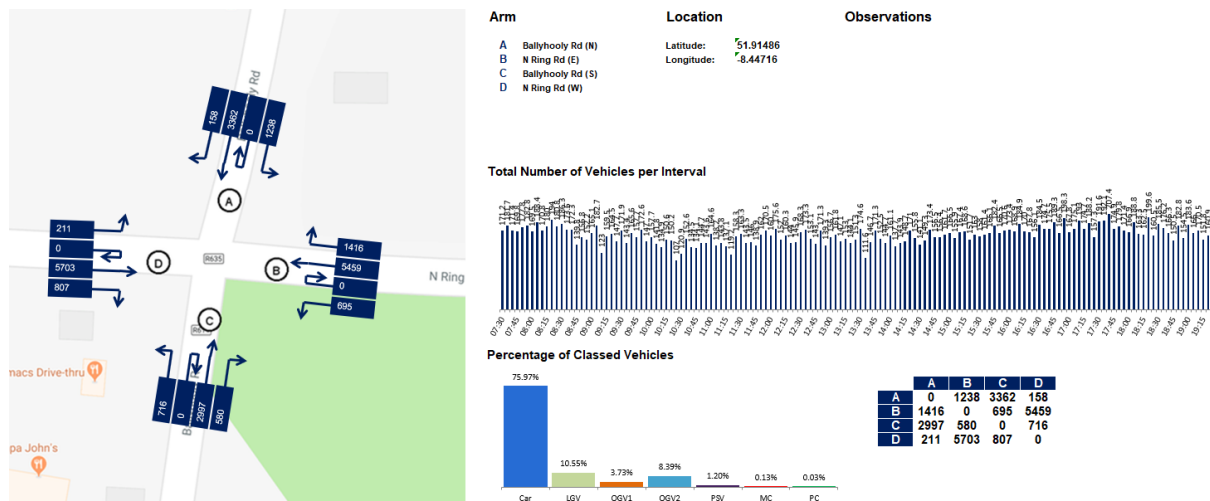
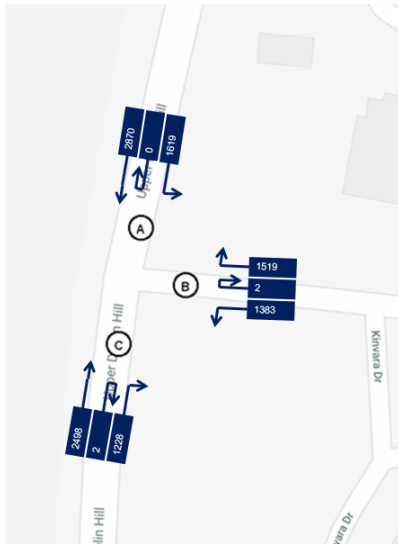
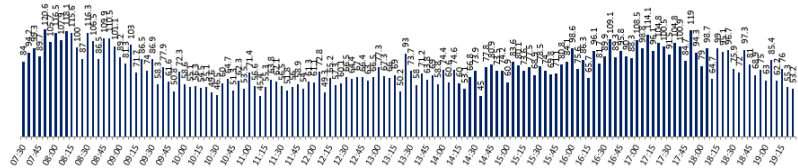


Figure 3.4: Junction 3: R635, North Ring Road/ R614 Ballyhooley Road Junction

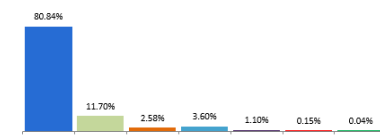


Arm	Location	Observations
A	Upper Dublin Hill (N)	Latitude: 51.92570
B	Link Rd	Longitude: -8.46616
C	Upper Dublin Hill (S)	

Total Number of Vehicles per Interval

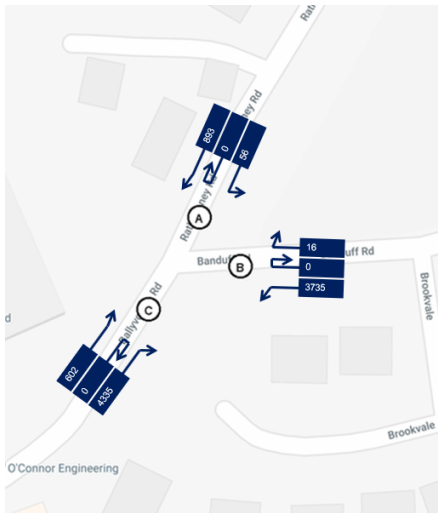


Percentage of Classed Vehicles



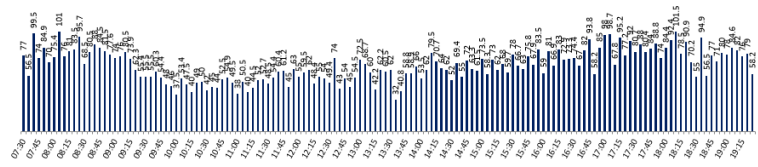
	A	B	C
A	0	1619	2870
B	1519	2	1383
C	2498	1228	2

Figure 3.5: Junction 4: Kilbarry Link Road/ Upper Dublin Hill Junction

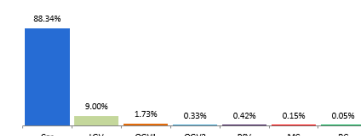


Arm	Location	Observations
A	Rathcooney Rd	Latitude: 51.91763
B	Banduff Rd	Longitude: -8.44546
C	Ballyvolane Rd	

Total Number of Vehicles per Interval



Percentage of Classed Vehicles



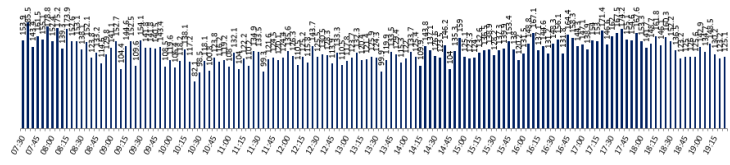
	A	B	C
A	0	56	893
B	16	0	3735
C	602	4335	0

Figure 3.6: Junction 5: Rathcooney Road/Banduff Road Junction

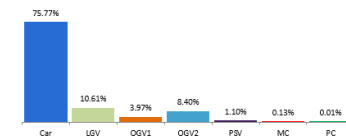


Arm	Location	Observations
A	N Ring Rd (W)	Latitude: 51.91562
B	Clonard Rd	Longitude: -8.45110
C	N Ring Rd (E)	

Total Number of Vehicles per Interval



Percentage of Classed Vehicles



	A	B	C
A	0	3563	6433
B	2830	0	263
C	6155	188	0

Figure 3.7: Junction 6: R635, North Ring Road/Clonard Road Junction

3.2.5 The data presented in the above figures clearly shows the peak hour traffic periods for both morning and evening, 08:00-09:00 and 17:00-18:00 respectively.

*Note: For the major routes such as the R635 the peak is less defined and extends beyond the time-period modelled but definitely coincides with the minor road peaks.*

- 3.2.6 The percentage of classified vehicles was used within the generated traffic models to accurately reflect existing conditions.
- 3.2.7 The following Junction Location Diagrams and associated Tables present the average recorded queue lengths (measured in metres) for each of the approaches at specific junctions for the critical time periods. This data has been used to calibrate the 2019 current year traffic models.

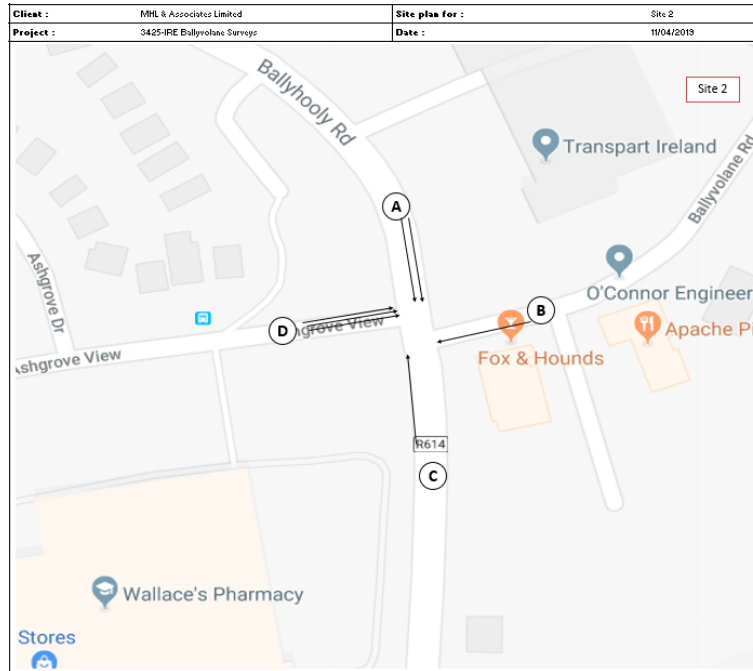


Figure 3.8: Junction 2: Fox & Hounds Junction – Queue Length Survey Site Plan

	* reaches next junction		Arm B	Arm C	Arm D		
	NS	OS			NS	Middle	OS
08:00	5	0	25	20	5	0	0
08:05	60	5	80	0	0	0	0
08:10	105+	0	50	25	0	15	0
08:15	30	15	125+	10	0	0	0
08:20	75	0	130+	15	0	20	0
08:25	35	5	90	0	0	5	0
08:30	40	0	40+	50	10	5	5
08:35	47.5	0	25	5	5	30	0
08:40	20	0	90	10	5	45	0
08:45	55	10	85	65	5	5	0
08:50	52.5	0	75	5	10	20	5
08:55	45	10	27.5	50	0	5	0
09:00	20	0	60	5	10	0	0

Table 3.1: Junction 2: Fox & Hounds Junction – AM Queue Length Survey

	* reaches next junction		Arm B	Arm C	Arm D		
	NS	OS			NS	Middle	OS
17:00	40	0	70+	90	5	25	0
17:05	40	5	70+	10	10	30	0
17:10	30	10	50+	20	15	70	0
17:15	85	0	100+	70	10	30	15
17:20	40	0	65	65	5	10	0
17:25	15	10	75+	60	10	60	5
17:30	25	5	100+	40	5	22.5	0
17:35	30	0	60+	10	5	40	0
17:40	35	0	100+	115	5	30	0
17:45	45	0	50+	140	5	10	15
17:50	10	0	105+	40	0	10	0
17:55	20	0	60+	145	20	20	0
18:00	20	5	60+	100	20	45	5

Table 3.2: Junction 2: Fox & Hounds Junction – PM Queue Length Survey

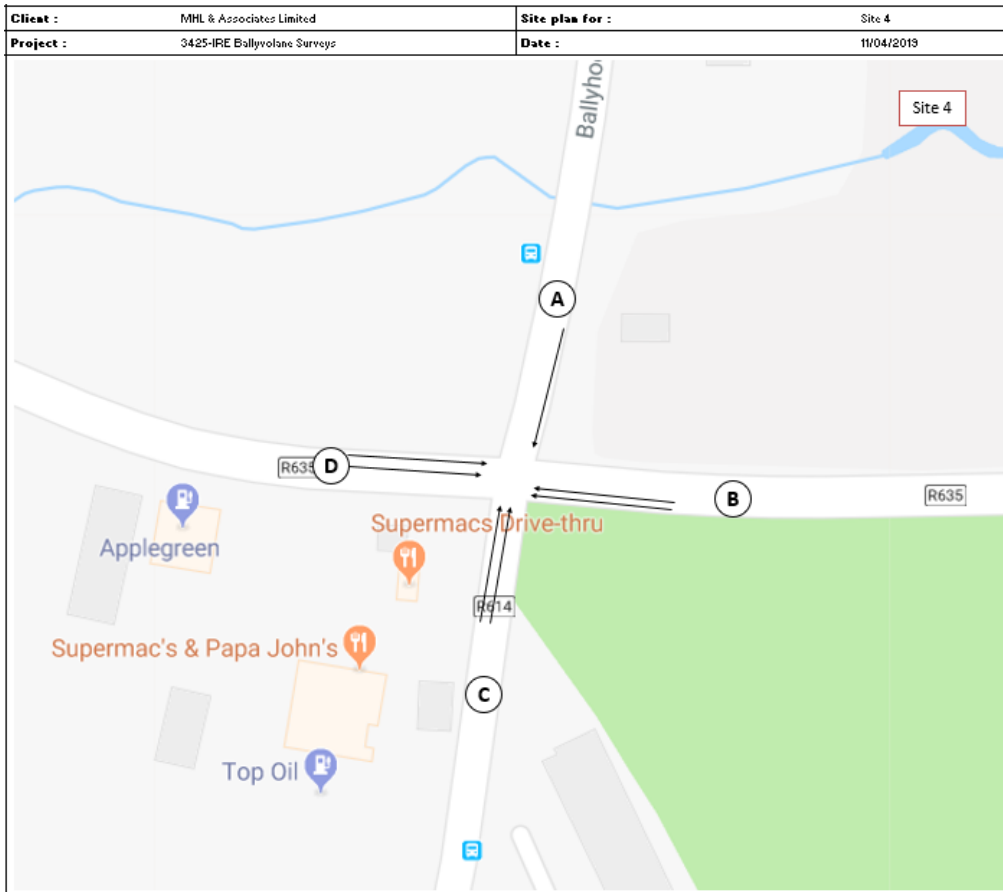


Figure 3.9: Junction 3: R635, North Ring Road/ R614 Ballyhooly Road – Queue Length Survey Site Plan

	* reaches next junction							
	Arm A	Arm B		Arm C		Arm D		
			NS	OS	NS	OS	NS	OS
08:00	135	175	10	40	15	100	5	
08:05	172.5*	165	0	15	5	55	0	
08:10	87.5	115+	10	5	5	90	5	
08:15	110	100	0	35	15	75	25	
08:20	90	95	10	5	10	30	5	
08:25	80	35	30	40	5	35	10	
08:30	70	125	10	45	10	30	10	
08:35	80	100	15	20	5	60	5	
08:40	25	90	5	35	20	55	5	
08:45	40	25	5	5	10	55	30	
08:50	50	95	15	25	5	30	5	
08:55	60	60	0	40	5	40	0	
09:00	30	120	5	45	10	10	2.5	

Table 3.3: Junction 3: R635, North Ring Road/ R614 Ballyhooly Road – AM Queue Length Survey

	* reaches next junction							
	Arm A	Arm B		Arm C		Arm D		
			NS	OS	NS	OS	NS	OS
17:00	25	110+	35	65	5	55	0	
17:05	40	100	10	75	10	105	10	
17:10	40	80	40	50	10	55	10	
17:15	55	32.5	10	75	5	105	10	
17:20	70	105	5	30	20	40	5	
17:25	55	95	5	40	20	110	10	
17:30	55	110	0	32.5	15	75	10	
17:35	65	105	15	95+	5	75	10	
17:40	30	55	5	30	10	45	5	
17:45	45	60	30	50	20	30	0	
17:50	20	105	10	45	20	35	0	
17:55	10	15	20	25	15	70	10	
18:00	95	45	10	90	0	155	10	

Table 3.4: Junction 3: R635, North Ring Road/ R614 Ballyhooly Road – PM Queue Length Survey

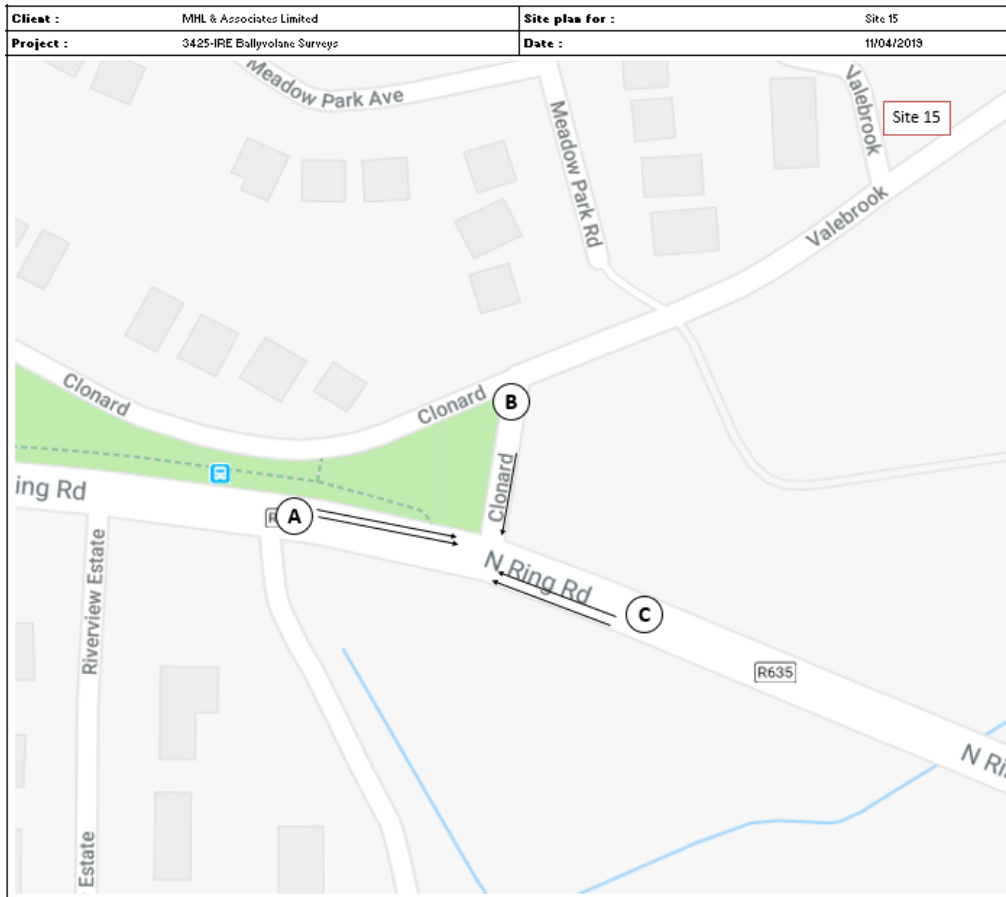


Figure 3.10: Junction 6: R635, North Ring Road/Clonard Road Junction – Queue Length Survey Site Plan

	Arm A			Arm B	Arm C	
	NS	OS			NS	OS
08:00	5	0		55	25	0
08:05	35	0		95	10	0
08:10	5	0		115	5	0
08:15	25	5		60	35	0
08:20	25	5		30	0	0
08:25	5	10		30	25	0
08:30	0	5		60	0	0
08:35	25	0		10	95	0
08:40	0	0		15	5	5
08:45	0	0		20	0	0
08:50	20	0		15	0	0
08:55	5	0		30	5	0
09:00	0	0		30	15	0

Table 3.5: Junction 3: R635, North Ring Road/ R614 Ballyhooly Road – AM Queue Length Survey

	Arm A			Arm B	Arm C	
	NS	OS			NS	OS
17:00	10	0		10	10	0
17:05	5	0		10	0	0
17:10	10	5		10	25	10
17:15	5	0		27.5	25	5
17:20	65	0		40	15	0
17:25	45	5		40	30	0
17:30	15	5		0	20	0
17:35	15	0		25	15	5
17:40	35	5		15	0	0
17:45	5	0		40	40	0
17:50	70	5		30	110	0
17:55	55	10		25	60	0
18:00	35	10		25	75	5

Table 3.6: Junction 3: R635, North Ring Road/ R614 Ballyhooly Road – PM Queue Length Survey

### 3.3 SITE LOCATION AND COMPOSITION

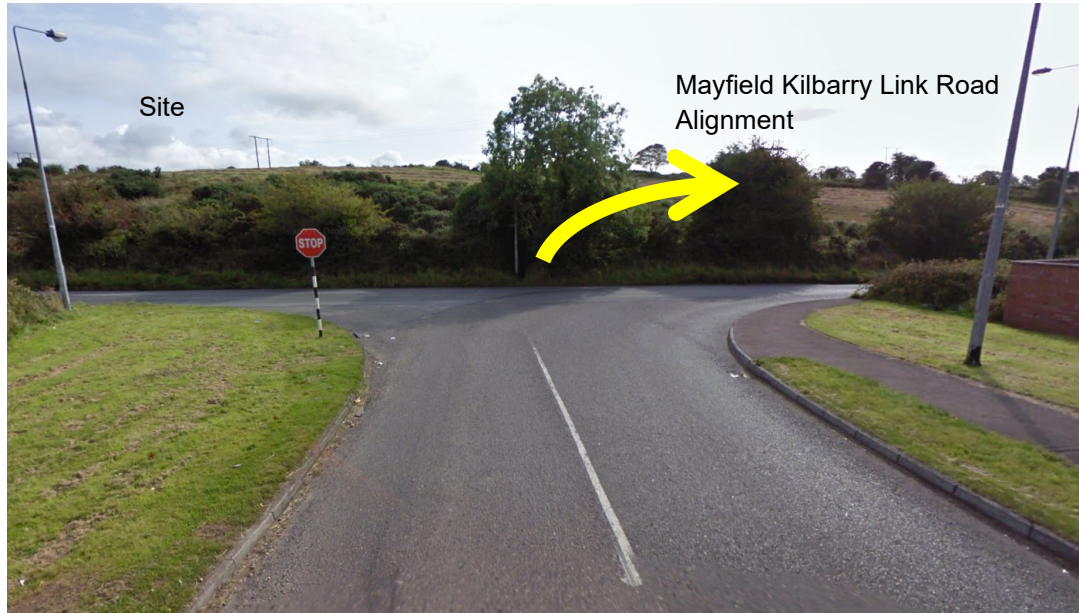
- 3.3.1 The application site is located on land adjacent to the R614 Ballyhooly Road, to the south of the R616 regional road which connects to the R639 which connects onwards to the M8 south of Watergrasshill, and north of the junction of the R614/Kilbarry Link Road, which provides an alternative to the North Ring Road when connecting to the N20 Cork Limerick National Route. The site currently comprises agricultural open land and is bound to the north by a local road (L-2976-0) linking the Ballyhooly Road to Rathcooney Village. This northern road is rural in nature with a narrow carriageway and reduced forward visibility at bends.
- 3.3.2 The site is currently served by a number of existing field gate accesses off the Ballyhooly Road and the L-2976-0. The site at present generates little or no traffic other than for farm related activities.

### 3.4 LOCAL ROADS NETWORK

#### 3.4.1 *R614 Ballyhooly Road to the Fox & Hound Junction:*

The Ballyhooly Road is a single carriageway, two-way road, characterised by two distinct sections, a section which currently fronts the site with no pedestrian footpath (posted speed limit of 80km/hr) and to the south of the site an area (posted speed limit 50 km/hr) which kicks in just north of the Kilbarry Link Road and which develops a footpath approximately 500m south of the site at the entrance to the residential estate, Mervue lawn. From this junction south there is footpath provision to The Fox & Hounds Junction, approximately 800m. The measured AADT (Annual Average Daily Traffic) on the R614 as it passes the site is, 4,105.

The R614 forms a priority 'T' junction with the Kilbarry Link Road as demonstrated in **Image 3.4.1**. Traffic count data shows a significant number of right turners exiting the Kilbarry Link Road onto the Ballyhooly Road over the 12-hour survey period.



**Image 3.4.1: Junction of Kilbarry Link Road/R614 Ballyhooly Road**

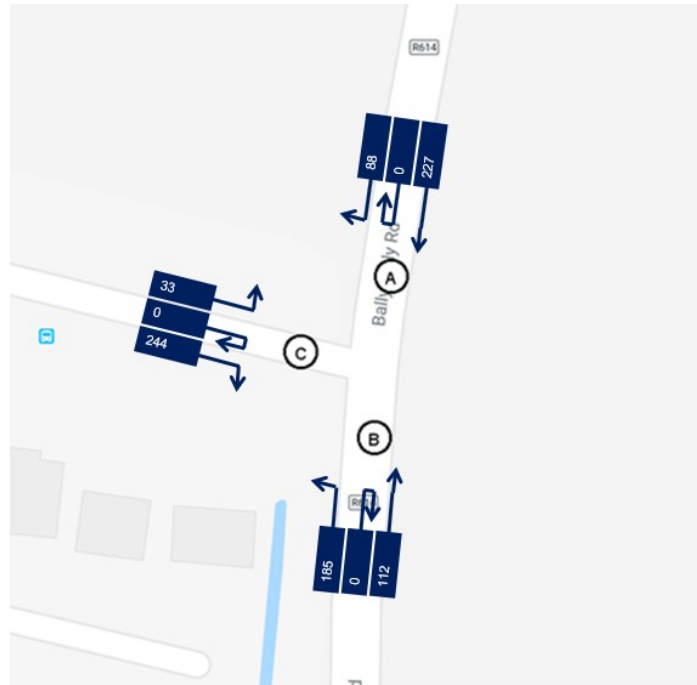


Fig 3.4.1: Junction of Kilbarry Link Road/R614 Ballyhooly Road – AM Peak Hour Flows

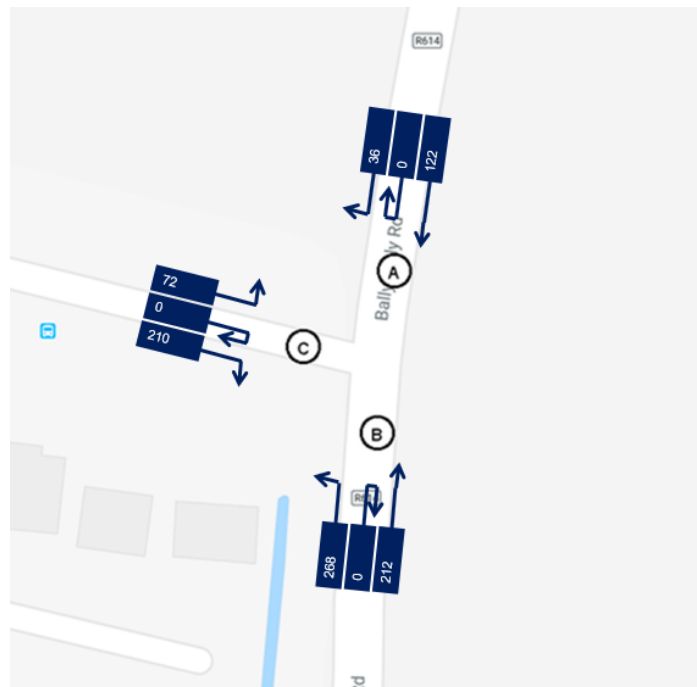


Fig 3.4.2: Junction of Kilbarry Link Road/R614 Ballyhooly Road – PM Peak Hour Flows

3.4.2 L-7094 Kilbarry Link Road:

The Kilbarry Link Road is a single carriageway (7.0m), two-way road with a posted speed limit of 50kph. This road links the R614 Ballyhooly Road to Upper Dublin Hill and provides local access to the residential estates of Brockwood, Kinvara Close, Kinvara Avenue and Kinvara Drive via priority ‘T’ junctions. Upper Dublin Hill serves as an alternative route for traffic heading to or coming from the M8 to the N20 Limerick Road via Blackpool. A 2.0m footpath runs the length of the road on the southern side with a 1.0m grass verge separating the carriageway, **Image 3.4.2**. The 207 Bus service has two stops, the nearest stop being 300m from the main entrance to the development lands and 50m from the proposed cycle



way/footpaths on the eastern side of the Ballyhooly Road. This city-wide service connects Ballyvolane, via the city centre to the southern suburb of Douglas.



Image 3.4.2: Junction of Kilbarry Link Road/Upper Dublin Hill

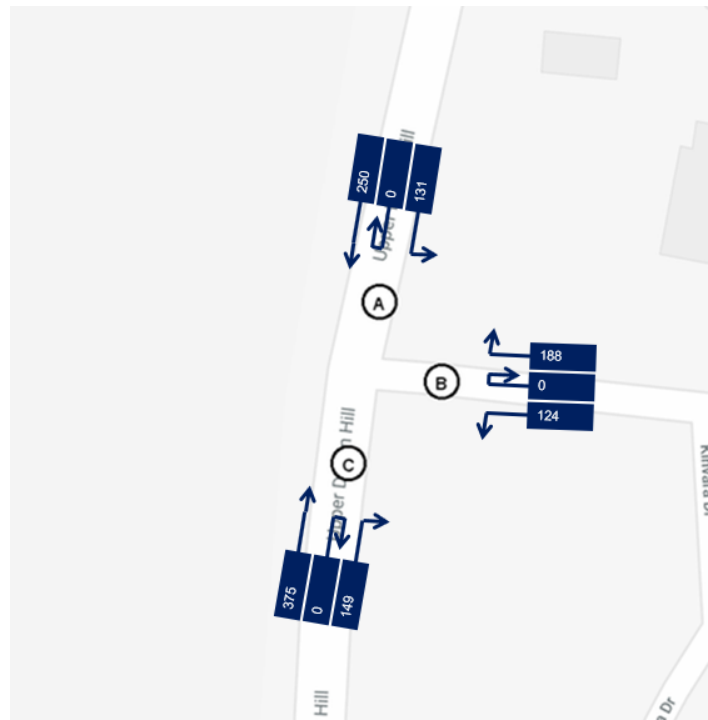
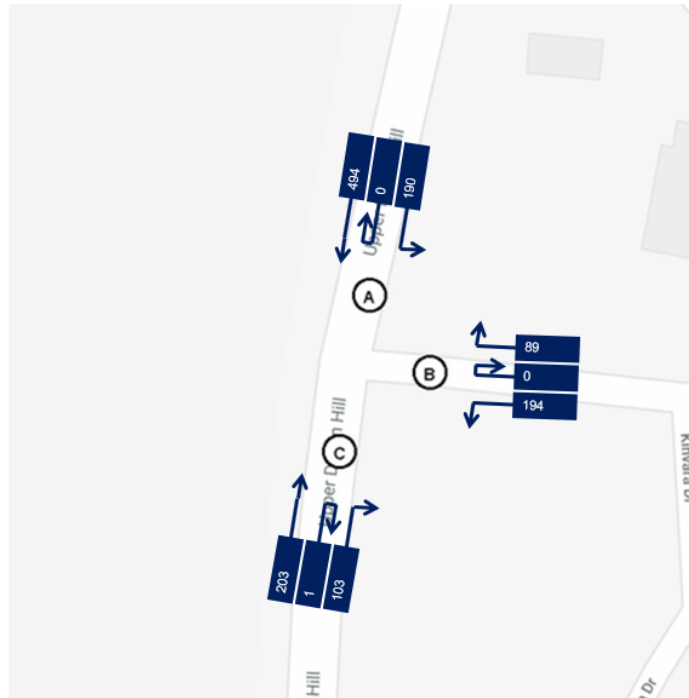


Fig 3.4.3: Junction of Kilbarry Link Road/Upper Dublin Hill – AM Peak Hour Flows



**Fig 3.4.4: Junction of Kilbarry Link Road/Upper Dublin Hill – PM Peak Hour Flows**

3.4.3 *R614 Ballyhooly Road south of the Fox & Hounds:*

The R614 south of the Fox & Hounds Junction is an urban commuter link which intersects the R635 North Ring Road junction via a traffic-signal controlled junction and continues via Dillons Cross and St. Luke’s Cross to Patrick’s Quay in the city centre. The route from the city centre to Dillon’s Cross is a major bus route with the following services: 207, 207A, 208 and 209. Upgrade works as part of Phase I of the Ballyvolane Strategic Transport Corridor have been carried out which provides bus and cycle facilities from the junction of Gordon’s Hill to the North Ring Road. **Image 3.4.3** shows the junction of North Ring Road with the recently upgraded R614 Ballyhooly Road.



**Image 3.4.3: Junction of R614 Ballyhooly Road/North Ring Road**

3.4.4 R635 North Ring Road:

The R635 North Ring Road serves as the main northern orbital route of Cork City, linking the N8 at the Tivoli Junction with the N20 at Blackpool. In addition to bypass traffic it also caters for significant commuter traffic from outlying areas via the Ballyhooly Road and the Old Youghal Road. The posted speed limit on this route is 50kph and it serves an AADT of 15,500. The carriageway cross-section varies considerably.



Image 3.4.4: R635 North Ring Road

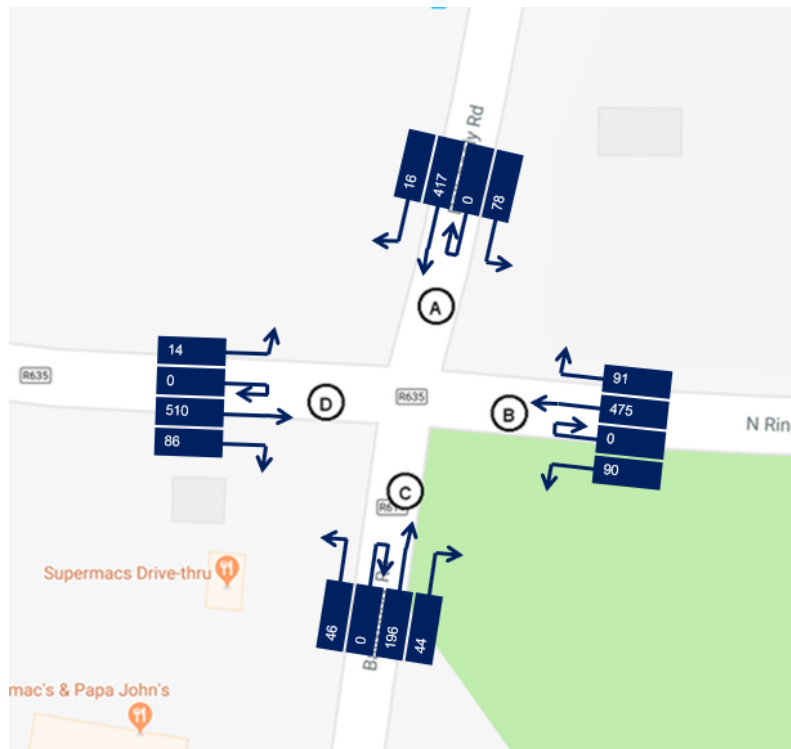
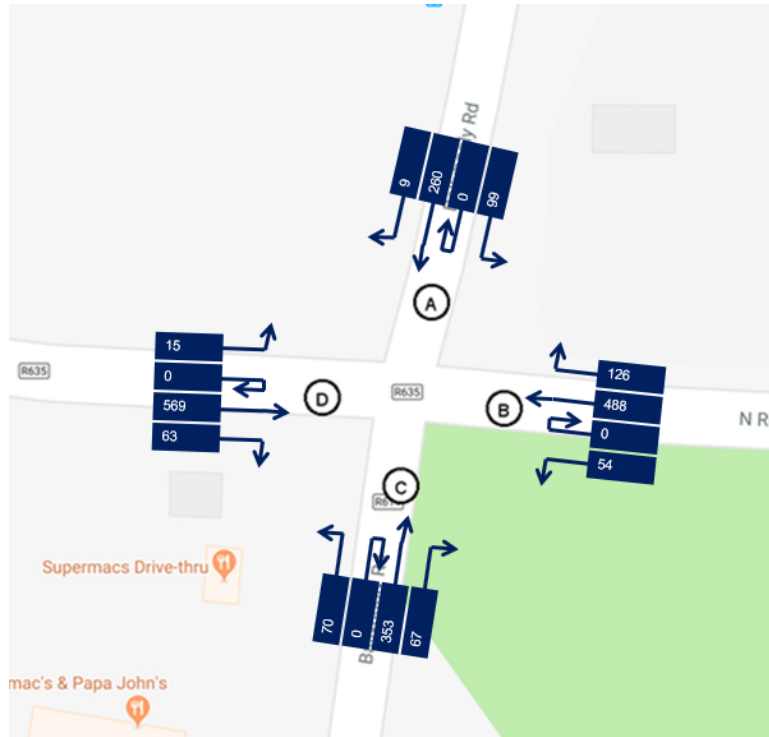


Fig 3.4.5: Junction of R614 Ballyhooly Road/North Ring Road – AM Peak Hour Flows



**Fig 3.4.6: Junction of R614 Ballyhooly Road/North Ring Road – PM Peak Hour Flows**

**3.4.5 R614 Fox & Hounds Junction:**

The Fox Hounds Junction is a traffic-signal-controlled staggered cross-roads junction at the intersection of the R614 Ballyhooly Road/Ashgrove View Road and the Banduff/Rathcooney Road. The Banduff Road acts as a 'rat-run' for Glanmire traffic during peak periods via the 'Old Youghal Road'.



**Image 3.4.5: The Fox & Hounds Junction**



Fig 3.4.7: The Fox & Hounds – AM Peak Hour Flows



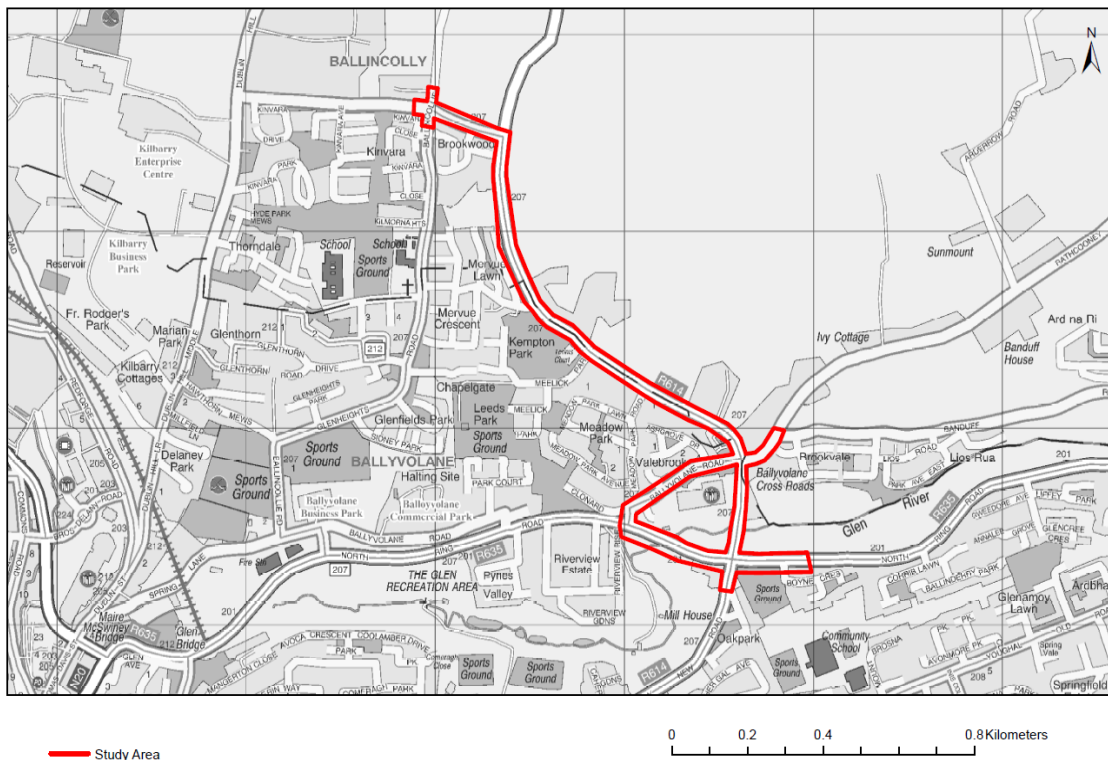
Fig 3.4.8: The Fox & Hounds – PM Peak Hour Flows

### 3.5 COMMITTED TRANSPORT PROPOSALS

3.5.1 As identified previously Cork City Council in association with the National Transport Authority have recently appointed a design team to design and deliver Phase II of the Ballyvolane Strategic Transport Corridor Project: North Ring Road to Ballincolly (BSTC).

The project objective is to deliver:

- Enhanced facilities for all road users but with particular benefits for pedestrians, cyclists and public transport users while providing, in as much as possible, for the efficient movement of vehicular traffic within the study area, refer **Fig 3.5.1**.
- to deliver the preliminary design drawings, including drawings required for a public consultation and the Part VIII planning application process; and
- to facilitate the appointment of a Contractor through a tender process to deliver the works within a specified timeframe (2023).



**Fig 3.5.1: BSTC – Study Area**

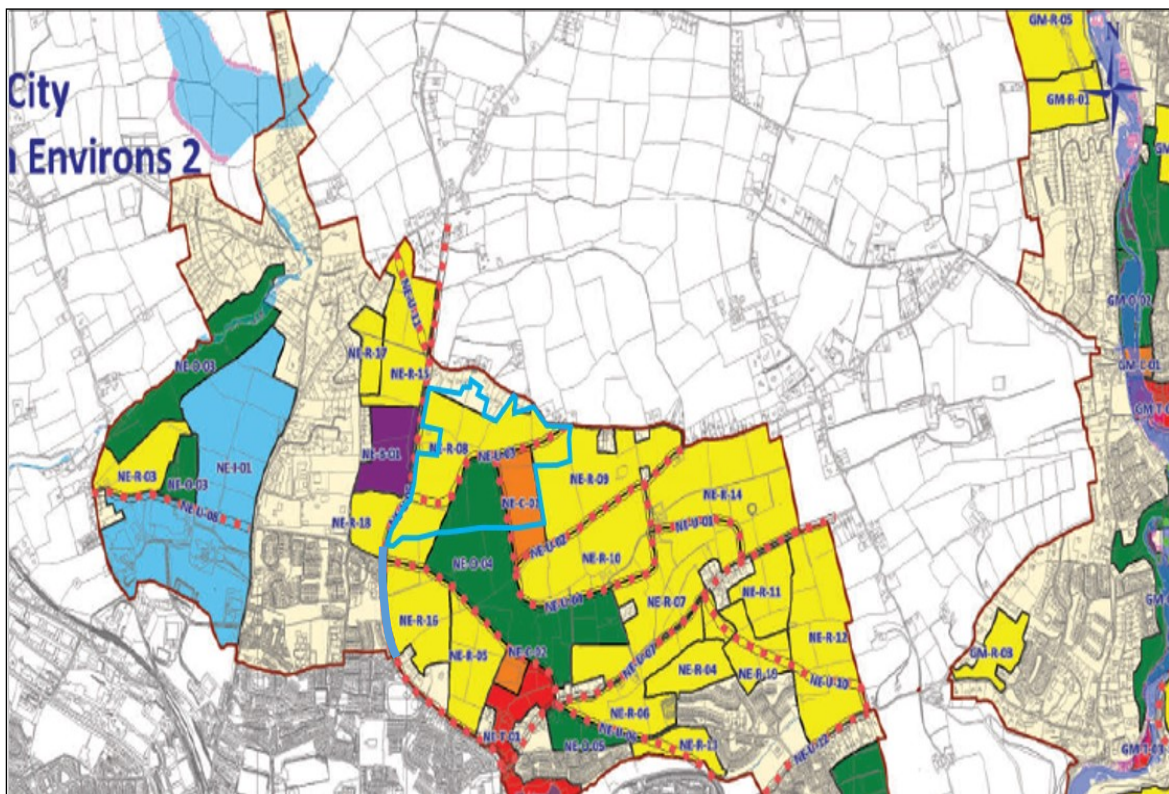
The study area includes all of the junctions and links being assessed as part of this application. The Project is based on a previous study that looked at individual junctions on this route (The Northern Corridors Study) which provided proposed junction upgrades to prioritise public transport and to reduce journey times to the city centre. Future year modelling as set out in this report has included the delivery of junction upgrade works as outlined in the original study. This is based on the assumption that the previously identified works will be provided as a minimum as part of the new scheme. Part VIII approval has already been issued for the upgrade of the Ballyhooly Rd North Ring Road junction upgrade.

3.5.2 The improvement works that have been included in future year traffic models from 2023 onwards for the BSTC, based on the findings of the previous Northern Corridors Transport Study, include;

- Right turn lane at Fox and Hounds Junction from Banduff Road
- Dedicated off road bus shelters.
- Cycle lanes

- New Junction layout to North Ring Road / Ballyhooly Road as per approved Part VIII
- Pedestrian Crossings at all junctions

3.5.3 As outlined in the current LAP for the area comprising the development lands, the overall Urban Expansion Area (UEA), considers the provision of a number of Distributor Roads (NE-U-01 to NE-U-10) throughout the zoned lands as indicated in **Figure 3.5.2** below. The proposed main access road serving the development, NE-U-03, has been agreed with the Local Authority in terms of geometric requirements and will ultimately serve as the template for the provision of the remaining routes in this area for cross section, carriageway widths, bus and cycle provision. Evident from **Figure 3.5.2** is the critical nature of NE-U-03 and the role it will play in opening up the various zonings, ultimately serving as an alternative route for public transport provision and local commuter traffic in the area. The provision of NE-U-03 as part of this application and its linkage to the Ballyhooly Road is a first step in the delivery of the Local Area Plan Objective in this area. While the linkage to the local access road (L-2976-0) linking the Ballyhooly Road to Rathcooney Village is provided the alignment proposed for NE-U-03 has been rerouted to incorporate and provide a portion of the NE-U-04 route and linkage to the NE-U-02. This design proposal creates less distributor road overall in the northern areas of the UEA.



**Fig. 3.5.2: Local Area Plan: Development site comprises NE-R-08, NE-R-09, NE-C-01 and NE-O-04**

3.5.4 The recent publication of the Cork Metropolitan Area Transport Strategy 2040 (CMATS), currently at public consultation stage, has identified the importance of the Ballyvolane UEA in the delivery of the projected growth in population for Cork City into the future. In order to support this growth in terms of transportation, the strategy proposes a Northern Distributor Road (NDR), an indicative route for which is shown in **Figure 3.5.3**, which coincides with NE-U-06 in the LAP; this is the Mayfield Kilbarry Link Road.

As previously identified the timescale for the delivery of this route is 2031, which will lead to a fundamental change in traffic flow patterns in the area when it is in place. It is anticipated that the most pronounced change will be to the existing R635, North Ring Road, as the NDR will fulfil the function of a bypass for N25/M28/N20 bound traffic.

As part of the development of the CMATS document, significant traffic modelling has been carried out using the NTA SWRM (South Western Regional Model) model which, it is

understood, has accounted for the completion of the entire Ballyvolane UEA, including the proposed development site. This modelling has included for additional public transport provision as well as improved splits in terms of pedestrian/cycle modes of travel. It has also accounted for the aforementioned change in traffic distribution.

Based on this understanding it has been agreed with the Local Authority that assessing individual junctions beyond the 2029 period is not a requirement of this Traffic & Transportation Assessment. It is assumed that the proposed junction upgrades, provided as part of the BSTC scheme, will be compatible with the requirements of CMATS and will facilitate the delivery of zoned lands in advance of the NDR being in place.

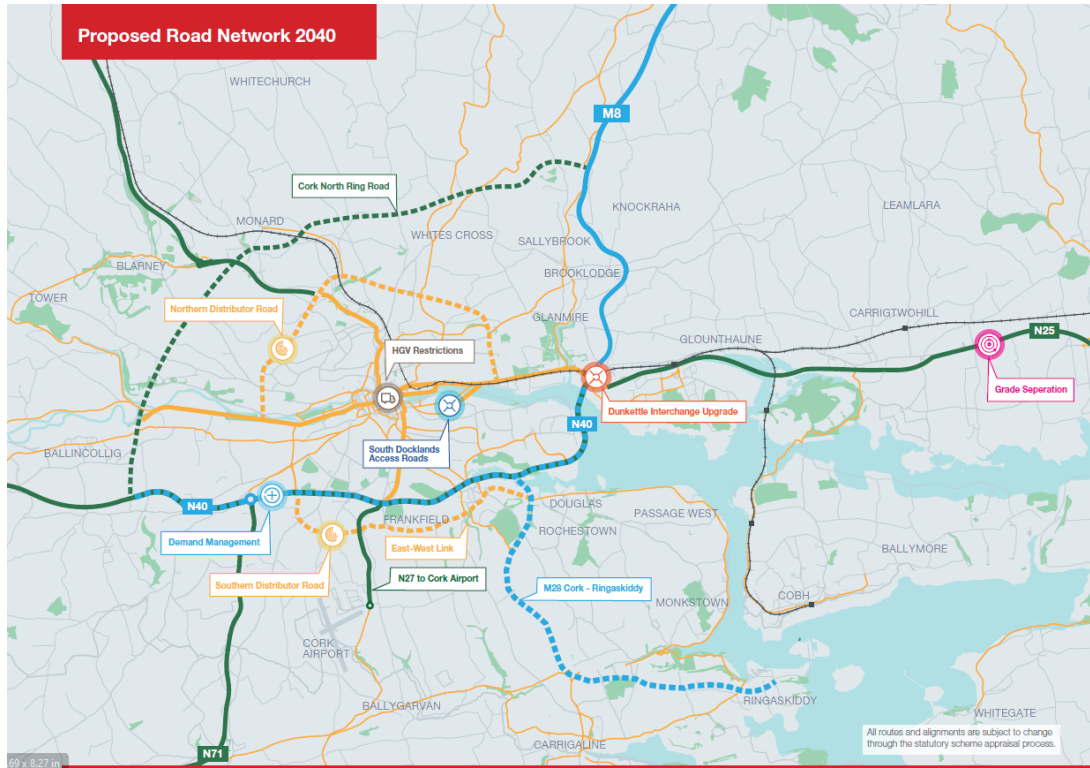


Fig. 3.5.3: Extract from Published CMATS document, Northern Distributor Road

### 3.6 SURROUNDING PROPOSED DEVELOPMENT

- 3.6.1 The LAP as shown in **Figure 3.5.2** identifies the zonings in the vicinity of the lands the subject of this application. A number of smaller planning applications have been made within the area that have either been granted or are under consideration. These applications, on surrounding zoned lands, do not deliver on the infrastructural requirements needed to ‘open-up’ the UEA, nor do they provide the level of residential and other development needed to generate the financial investment in critical services such as Foul Services provision so as to serve the planned expansion of the City.
- 3.6.2 In order to account for traffic generation from adjoining sites, it has been agreed with the Local Authority, that TII Medium Growth Rate factors should be applied to existing background traffic when determining future year scenarios. As an additional factor-of-safety the resulting figures **have not been reduced** in accordance with an anticipated increase in modal shift with the delivery of the BSTC Scheme.
- 3.6.3 As already outlined the future year modelling carried out as part of CMATS using the SWRM has included for the complete development of the Ballyvolane UEA which includes all current zoned lands. The mitigation as proposed by this strategy is assumed to be sufficient to cater for all future traffic flows, including the proposed development site, and should give the Local Authority comfort in terms of implementing the Local Area Plan.



#### 4.0 PROPOSED DEVELOPMENT

##### 4.1 INTRODUCTION

- 4.1.1 The proposed development on our Client’s site is consistent with the zoning which is comprised mainly of NE-R-08 and NE-R-09 for Medium B residential development, zoning NE-C-01 for proposed primary and secondary school campus with playing pitches and NE-O-04 for public recreation as an urban park. The overall vision for the Cork City North Environs is to re-invigorate the northern suburbs of the city, within the County area, as a significant location for future residential development.
- 4.1.2 Following consultation with the Department of Education & Skills the development of the school campus is not required at this point in time. Current school provision in the area is sufficient for the foreseeable future.
- 4.1.3 As part of this application the NE-O-04 public recreation park will be partially delivered in agreement with the Parks Department of Cork City Council.
- 4.1.4 It is anticipated that up to 753 residential units, creche and a local neighbourhood centre will be provided as part of this application.
- 4.1.5 The proposed primary access to the site is from Ballyhooly Road (Regional Road R614) by means of two ‘Priority ‘T’ Junctions’. The main spine road access (NE-U-03 **Figure 3.5.4**) will serve as part of a network of Distributor Roads throughout the Urban Expansion Area and has been developed in consultation with the Local Authorities Traffic & Transportation Department and Strategic Planning Section. This road has been designed in accordance with ‘DMURS’ and will serve the future school campus site as well as the surrounding residential zoned lands. Ultimately this distributor road will serve as an orbital public transport corridor encompassing the entire expansion area from the Ballyhooly Road to the R615 ‘Old Youghal Road’ and the North Ring Road.
- 4.1.6 The following **Figure 4.1.1** presents the scheme layout, the subject of this application.



Fig 4.1.1: Proposed Site Layout

## 4.2 PHASING

4.2.1 This section describes the proposed phasing of the scheme in terms of the number of units expected to be completed on an annual basis commencing in 2021<sup>1</sup>.

4.2.2 The following table, **Table 4.2.1**, presents the anticipated delivery of units over a 10-year period and includes a column referencing 'Modal Shift'. For an explanation of these percentages please refer to Chapter 6 of this report.

Neighbourhoods		N1	N 2	N 3	N 4	N 5	N 6	
<b>Note</b> (Exact Nos subject to final phasing & consent)		75 Units	218 Units (Incl 27 Apts)	63 Units	93 Units	178 Units	126 Units	
Phases	Site Works	Phase 1 – End 2021	Phase 2 / 3– End 2022	Phase 2 / 3– End 2023	Phase 4– End 2024	Phase 5– End 2025	Phase 6 – End 2026	Phase 6- Mid 2027 – 2029
<b>Indicative House &amp; delivery Programme</b>	Q2 2020 Early 2021	75 units <sup>2</sup>	100 units <sup>3</sup>	100 Units <sup>4</sup>	100 Units <sup>5</sup>	100 Units <sup>6</sup>	125 Units <sup>7</sup>	153 <sup>8</sup> Units (Incl Apts in Neighbourhood 2 & 6)
<b>Indicative Cumulative Delivery</b>	0	75	175	275	375	475	600	753
<b>Modal Shift</b>		13% <sup>9</sup>	25%	35%	40%	45%	45%	45%

**Table 4.2.1: Proposed Phasing of Scheme**

4.2.3 Traffic generation from the development will commence on the occupancy of the completed units as shown in the above table.

4.2.4 In order to provide a robust assessment of the traffic impact from the development on the existing roads network it was decided to adopt the following measures:

- incrementally increase the modal shift rate over a number of years (2022-2025; with cycle, pedestrian and bus infrastructure provided in the proposed development and completion of the BTCS)
- not to apply the increase in modal shift to background traffic flows (which would result in a reduction in junction flows)

## 4.3 CONSTRUCTION STAGE TRAFFIC IMPACT

4.3.1 The construction stage of the proposed development will be phased as described above. As noted in the Construction Environmental Management Plan (CEMP) that accompanies this

<sup>1</sup> Delivery of all units subject to Multi phase Connection Agreement with Irish Water

<sup>2</sup> All Neighbourhood 1

<sup>2</sup> Delivery of all units subject to Multi phase Connection Agreement with Irish Water

<sup>2</sup> All Neighbourhood 1

<sup>3</sup> 100 Units from Phase 2

<sup>4</sup> Remainder 91 Units from Neighbourhood 2 and 26 from Neighbourhood 3

<sup>5</sup> 54 Units from Neighbourhood 3 and 46 from Neighbourhood 4

<sup>6</sup> Balance of 47 Units from Neighbourhood 4 and 53 from Neighbourhood 5

<sup>7</sup> Residual Houses in Neighbourhood 5

<sup>8</sup> Balance of Neighbourhood 5 and Neighbourhood 6

<sup>9</sup> Public Transport and Non-Vehicle use in area currently at 13%

planning application the Construction Access to the site will be from the R614 Ballyhooly Road via the proposed main Distributor Road serving the site.

Having regard to the scope of the site works and processes, a detailed scheme of works is described in the CEMP in the following sub-sections.

#### 4.3.2 Pre-commencement Activities

Before works commences a number of preparatory activities will be carried out. The following key works will be undertaken as part of the site preparation and pre-development activities:

##### **Pre-Commencement Surveys:**

- Prior to any commencement of any physical works, a professional land surveyor shall be appointed to carry out demarcation works and establish bench-marks on site. Upon obtaining all the necessary survey data, a joint survey to check existing ground levels shall be carried out with the consulting engineers.
- Any detailed ground investigations required to support the site regrading process will be carried out and finalized.
- Any pre-commencement archaeological survey.
- Pre- commencement noise survey.
- Pre- commencement dust survey.
- Pre-commencement traffic surveys.

Traffic generation to the site for this pre-commencement stage will be minimal with the delivery of machinery and materials scheduled for outside of peak hours.

#### 4.3.3 Enabling Works:

- The initial enabling works, to be carried out in accordance with the Project specific CEMP (Traffic Management, control of surface water, storage of materials etc.), will be in developing the main access road off the R614 Ballyhooly Road to facilitate construction access to the site. These works will involve the excavation of the main distributor road facilitating access to N1 and N6.
- This will be followed by bulk excavation works in the area designated for the compound. These works will create a level platform, accessible from the main distributor road, upon which the site compound and materials storage area will be constructed.

The following processes will be repeated for each phase of development and will be carried out in accordance with the requirements of the adopted CEMP.

##### **Bulk Excavation:**

- Following the topsoil strip of N1, the main access road serving this neighbourhood will be constructed to formation level followed by the excavation of the housing platforms to the right of this road. Suitable structural fill material arising from these works will be used to fill the housing platforms to the left and excess suitable fill material will be stored locally to be used in the continuation of the main distributor road.
- Having established the desired site levels during the early works, the next phase of construction will involve the digging of the foundations for each of the buildings. The civil and structural design for each building will determine the location and extent of foundations that are required to support each of the buildings. The foundations for each building will be excavated to the desired size and depth in preparation for the pouring of concrete.

**Civil Works:**

- The initial civil concrete works will involve the pouring of the foundations for each of the prepared buildings in this phase. Once the foundations are poured and have cured it will allow the building envelope to be erected.
- It is envisaged that a timber frame construction process will be used which will imply the delivery of pre-formed timber walls and trusses to site followed by external finishing material such as blockwork, brickwork, plaster and roof tiles.
- Construction materials will be sourced locally where possible. This will be based on the necessary constraints of performance, durability and cost.
- External Services including water mains, foul sewers, storm sewers, roads, footpaths and public lighting will be carried out in conjunction with the completion of the units.
- All buildings will be constructed in accordance with current building regulations and certified by an appropriated qualified engineer during and after construction.

**Landscaping:**

- In tandem with the other construction activities being carried out on the buildings, elements of the sites landscaping plan will be progressed. The formation of landscape features will take place in parallel to the early works, utilising material excavated during the cut and fill exercise. As the site build progresses the landscape works will begin to focus on the soft landscaping aspects such as establishment of green zones and walkways, as well as planting of trees and shrubs in designated areas. This element of works is not expected to generate significant traffic volumes other than occasional deliveries.

- 4.3.4 The successful Contractor will develop a Construction Stage Traffic Management Plan including identified haulage routes in compliance with the Preliminary Temporary Traffic Management Plan developed in consultation with Cork City Council Roads & Transportation Department. It should be noted that the bulk of all excavation on site will be re-used thereby reducing the importation and exportation of materials. All works to the public roads network will be carried out in accordance with Cork City Council's requirements including road widening and junction upgrades. These will be scheduled to avoid particularly busy periods and ideally carried out during school holiday periods.

The surrounding road network is suitable to accommodate the construction traffic associated with the proposed development and the Construction Traffic Management Plan will include a range of mitigating measures as identified in the CEMP to ensure the safety of the workforce on the site and accessing the site, and the public on the surrounding roads and to minimise construction traffic generation and disruption on the surrounding road network.

### 5.0 TRAFFIC GENERATION

5.1.1 This section describes the traffic generation from the development and is based on recorded traffic generation from an existing residential development, 'Meadow Park', which has a direct vehicular access onto Ballyhooly Road. Traffic counts were undertaken at this junction as part of the overall data collection process.

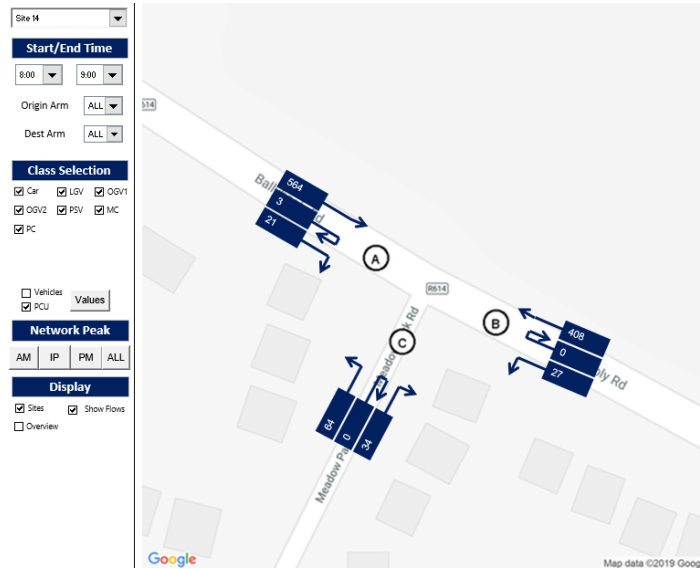


Figure 5.1 08:00-09:00 AM Peak Hour Traffic Flows (Meadow Park)

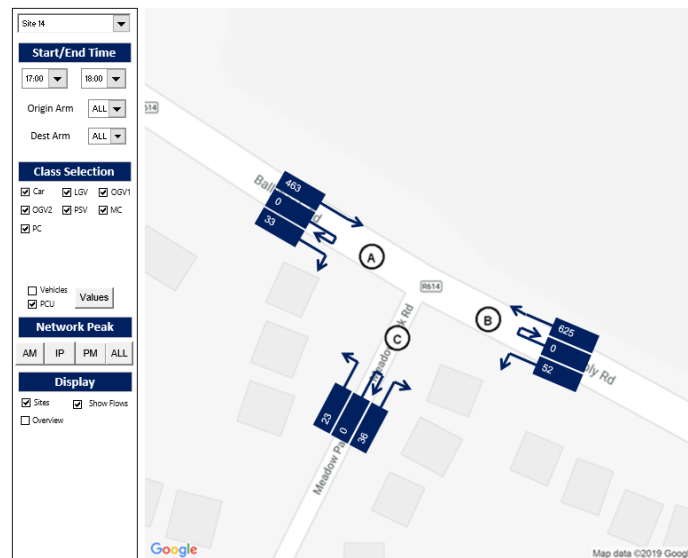


Figure 5.2 17:00-18:00 PM Peak Hour Traffic Flows (Meadow Park)

5.1.2 The Meadow Park Residential Development comprises 212 semi-detached units with parking provision for two vehicles per unit. This unit mix is conservative in terms of the proposed Longview Estate Development, as is the car parking provision and hence its use will ensure a robust assessment of traffic impact from the proposed scheme will occur.

Using the above data, traffic generation from the development will be as follows;

Site 14: Meadow Park Junction		Traffic Generation Factor (per unit)	
		IN	OUT
2019	AM	0.22	0.46
	PM	0.4	0.28

Table 5.3 Trip Generation Per Unit (Meadow Park)

5.1.3 In order to carry out a sense check of the trip rates presented above, the TRICS database was used. Sites included the Greater Dublin Area, Cavan and Monaghan. Evident from the highlighted figures below, the rates used as per Table 4.3 are in general more conservative and reflect higher car dependency (a factor of safety in terms of trips generated).

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	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	3	30	0.066	0.000	3	30	0.187	0.000	3	30	0.253	0.000
08:00 - 09:00	3	30	0.242	0.000	3	30	0.385	0.000	3	30	0.627	0.000
09:00 - 10:00	3	30	0.154	0.000	3	30	0.231	0.000	3	30	0.385	0.000
10:00 - 11:00	3	30	0.143	0.000	3	30	0.110	0.000	3	30	0.253	0.000
11:00 - 12:00	3	30	0.121	0.000	3	30	0.088	0.000	3	30	0.209	0.000
12:00 - 13:00	3	30	0.143	0.000	3	30	0.121	0.000	3	30	0.264	0.000
13:00 - 14:00	3	30	0.121	0.000	3	30	0.220	0.000	3	30	0.341	0.000
14:00 - 15:00	3	30	0.209	0.000	3	30	0.121	0.000	3	30	0.330	0.000
15:00 - 16:00	3	30	0.253	0.000	3	30	0.264	0.000	3	30	0.517	0.000
16:00 - 17:00	3	30	0.264	0.000	3	30	0.176	0.000	3	30	0.440	0.000
17:00 - 18:00	3	30	0.264	0.000	3	30	0.132	0.000	3	30	0.396	0.000
18:00 - 19:00	3	30	0.220	0.000	3	30	0.187	0.000	3	30	0.407	0.000
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
<b>Total Rates:</b>			2.200	0.000			2.222	0.000			4.422	0.000

**Table 5.4 Trip Generation Per Residential Unit (TRICS)**

5.1.4 In the following chapter reference is made to the current (2016) Modal Shift by means of travel to work, school or college and is based on 2016 Census Data, ref. **Table 6.1.1**. This current year figure implies 12% of persons in this area use sustainable means of travel.

5.1.5 Trip Generation from the proposed 103 pupil creche was derived using the TRICS database. The following table presents the peak hour trip rates for a standalone creche.

In this instance it is assumed that the creche will serve the proposed scheme and in the future will serve the wider UEA (with the completion of the Distributor Road Network). In the interim it is anticipated that the creche will not add to traffic entering the development during the morning/evening peak hours over and above 'pass-by' traffic (traffic already accounted for on the network (living within the estate)).

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	1	52	0.038	1	52	0.019	1	52	0.057
08:00 - 09:00	1	52	0.519	1	52	0.385	1	52	0.904
09:00 - 10:00	1	52	0.673	1	52	0.673	1	52	1.346
10:00 - 11:00	1	52	0.038	1	52	0.058	1	52	0.096
11:00 - 12:00	1	52	0.192	1	52	0.058	1	52	0.250
12:00 - 13:00	1	52	0.231	1	52	0.346	1	52	0.577
13:00 - 14:00	1	52	0.058	1	52	0.115	1	52	0.173
14:00 - 15:00	1	52	0.077	1	52	0.038	1	52	0.115
15:00 - 16:00	1	52	0.135	1	52	0.154	1	52	0.289
16:00 - 17:00	1	52	0.250	1	52	0.269	1	52	0.519
17:00 - 18:00	1	52	0.423	1	52	0.500	1	52	0.923
18:00 - 19:00	1	52	0.000	1	52	0.096	1	52	0.096
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			2.634			2.711			5.345

**Table 5.5 Trip Generation Per Pupil – Creche (TRICS)**

5.1.6 The Local Retail Area in Neighbourhood 2 is expected to generate trips locally within the scheme and it is assumed that it will not become a trip attractor from outside of the scheme. In terms of assessing the public road junctions this retail area will have negligible effect.

## 6.0 MODAL SPLIT

- 6.1.1 This section describes the application of modal shift (the use of sustainable modes of travel) using an evidence-based approach as agreed with the Local Authority when generating development traffic.
- 6.1.2 The 2016 Census online SAP data was used to assess current modal shift patterns in the Ballyvolane area, specifically the electoral division of Rathcooney which encompasses the site. 12% of people in this area said they were commuting on foot, bike or using public transport.

PDF Excel Print			
Population aged 5 years and over by means of travel to work, school or college			
Means of Travel	Work	School or College	Total
On foot	111	126	237
Bicycle	33	7	40
Bus, minibus or coach	151	280	431
Train, DART or LUAS	2	1	3
Motorcycle or scooter	12	5	17
Car driver	2,728	100	2,828
Car passenger	205	1,468	1,673
Van	215	2	217
Other (incl. lorry)	23	0	23
Work mainly at or from home	113	0	113
Not stated	78	68	146
<b>Total</b>	<b>3,671</b>	<b>2,057</b>	<b>5,728</b>

**Table 6.1.1: 2016 Modal Shift by means of travel to work, school or college.  
(Electoral Division of Rathcooney)**

- 6.1.2 Following discussions with Cork City Council Transportation Department it was suggested that a location in Dublin, that would have a similar population mix in terms of employment and house ownership, but with an improved sustainable transport network (including cycle facilities and dedicated public transport corridors) could be used to derive future modal shift targets that would reflect committed NTA upgrade works currently being undertaken by Cork City Council on the Ballyhooly Transport Corridor Scheme (BTCS). The Blanchardstown area of Dublin was identified as having similar characteristics to the study area. A breakdown of the data shows up to 45% of people in this area use sustainable transport options at present.

PDF Excel Print			
Population aged 5 years and over by means of travel to work, school or college			
Means of Travel	Work	School or College	Total
On foot	467	1,299	1,766
Bicycle	176	79	255
Bus, minibus or coach	662	375	1,037
Train, DART or LUAS	239	64	303
Motorcycle or scooter	32	4	36
Car driver	2,274	83	2,357
Car passenger	206	689	895
Van	173	1	174
Other (incl. lorry)	9	0	9
Work mainly at or from home	56	1	57
Not stated	375	200	575
<b>Total</b>	<b>4,669</b>	<b>2,795</b>	<b>7,464</b>

**Table 2.3.1: 2016 Modal Shift by means of travel to work, school or college  
(Electoral Division of Blanchardstown-Coolmine)**

- 6.1.3 On completion of the Ballyhooly Transport Corridor works, scheduled for the first quarter of 2023, an increase in modal shift of 33% would be expected to be delivered for the area. This increase in modal shift has not been applied to existing traffic numbers when developing future year traffic models but was used in developing traffic generation from the site.

In-line with the 2016 Census Data the existing modal shift rate of 12% has been assumed to remain stagnant up to the end of 2021. Thereafter, with the completion of the Ballyhooly Strategic Transport Corridor Scheme, this modal shift rate is expected to increase with the aim of achieving a rate of 45% (2016 rate for Blanchardstown-Coolmines in Dublin) by the end of 2025. Refer to **Table 4.2.1** for details of modal shift being applied in-line with the phasing of the development.



**7.0 TRAFFIC GENERATION / FORECASTING**

- 7.1.1 This section describes the traffic generation from the development and is based on recorded traffic generation from an existing residential development, 'Meadow Park', which has a direct vehicular access onto Ballyhooly Road as outlined in Section 5.
- 7.1.2 Based on the above trip generation rates and incorporating the expected percentage increase in modal shift for future year, the following table presents development specific traffic for future years. This traffic has been added to existing background flows and distributed through the network to model each of the identified junctions. The results are presented in Section 6 of this report.

Year (No. of units)		IN	OUT
2022 (65 units)	AM	14	30
	PM	26	18
2023 (175 units)	AM	34	71
	PM	61	43
2024 (275 units)	AM	47	98
	PM	85	67
2025 (375 units)	AM	60	125
	PM	108	76
2026 (475 units)	AM	70	147
	PM	127	89
2027 (601 units)	AM	88	185
	PM	161	113
2029 (755 units)	AM	111	233
	PM	202	141

**Table 7.1 Proposed Development Traffic**

- 7.1.3 As the proposed development site currently generates little or no traffic no reduction has been applied to account for pass-by trips, transfer trips or combined trips. It is assumed that the Creche will be used primarily for the proposed development and will not become a trip attractor in itself.
- 7.1.4 In addition to development traffic recorded background traffic was factored using TII (Transport Infrastructure Ireland) Project Appraisal Guidelines (PE-PAG-02017) for use in future year scenarios. The following table presents the factors used on recorded pcu's based on Link Based Growth Rates (Central Growth) for the Southwest Region. The percentage HV content is based on that recorded on the Ballyhooly Road (5%).

Year	LV 95%	HV 5%	Combined
2019-2022	1.0309	1.0728	1.0329
2022-2023	1.0102	1.0237	1.0108
2023-2024	1.0102	1.0237	1.0108
2024-2025	1.0102	1.0237	1.0108
2025-2026	1.0102	1.0237	1.0108
2026-2027	1.0102	1.0237	1.0108
2027-2029	1.0205	1.0479	1.0218

**Table 7.2 Background Traffic Growth Rates**

## 8.0 TRIP ATTRACTION AND DISTRIBUTION

- 8.1.1 This section describes the methodology used in the distribution of development specific traffic onto the modelled network. **Figure 3.1** outlines the location of each of the junctions where turning count movements were recorded over a 12-hour timeframe. This 'snapshot' of existing traffic movements provides a basis for determining desire lines which can be used to assign development traffic at each of the modelled junctions. Given the location of the development site, an assumption was made that a higher percentage of development traffic will travel towards the city during the morning peak than would be the case if the percentage of current two-way flow on Ballyhooly Road fronting the proposed access was used (assumed that 80% of traffic will travel towards the city). This assumption is justified based on the location of schools, shopping, employment centres and access to the wider roads network in the direction of the city.
- 8.1.2 The resulting distribution matrix can be compared with link flows derived from the NTA SWRM (South West Regional Model) however in the absence of alternative routes (such as the CMATS Northern Orbital Route scheduled to be in place in 2031) the recorded flows will provide a much more accurate picture of current and future year route impacts up to 2031.
- 8.1.3 With the completion of the Northern Orbital Route as outlined in CMATS, existing travel patterns at each of the modelled junctions are expected to change. It has been assumed that the impact of these changes has been assessed using the SWRM model as part of CMATS and will include the development of zoned lands (such as the Longview Site). The constructed CMATS traffic model will also have included for improvements to bus frequency on dedicated bus corridors as well as specific junction improvement works proposed.
- 8.1.4 When developing the traffic models of the six critical junctions identified in Section 1, as part of this traffic and transport assessment, future year scenarios after 2023 include for proposed junction improvement works (Ballyhooly Transport Corridor Scheme) at Junction 2: The Fox & Hounds Junction and Junction 3: North Ring Road / Ballyhooly Road.
- 8.1.5 Traffic flow matrices have been developed for each phase of the development for the following scenarios:
- 2019 Current Year Flows AM/PM
  - 2022 AM/PM With/Without Dev
  - 2023 AM/PM With/Without Dev
  - 2024 AM/PM With/Without Dev
  - 2025 AM/PM With/Without Dev
  - 2026 AM/PM With/Without Dev
  - 2027 AM/PM With/Without Dev
  - 2029 AM/PM With/Without Dev

These flow matrices are included in Appendix 1 for all signalised junctions. Junctions 4 & 5 Priority Controlled Junction flow matrices are included in the results section in Appendix 3.

**9.0 NETWORK MODELLING RESULTS**

**9.1 INTRODUCTION**

9.1.1 This section presents the results of the traffic modelling of the six identified junctions presented both with/without development in place for the current year 2019, and for each phase of the proposed development as it becomes occupied. Traffic Signal controlled junctions are analysed using LinSig Version 3.3 and priority-controlled junctions are analysed using Junctions 9 Software (PICADY). The complete results sheets as well as digital copies for all of the generated models are provided as an appendix (Appendix 2).

9.1.2 The LinSig modelling software produces a PRC % (Practical Reserve Capacity) and a Delay figure which are used to compare the effects the development will have on the junction being modelled. A PRC of 10% implies that the junction has reached capacity but is still operational with delay incurred. The delay figure produced (pcuHr) is a measure of the overall delay incurred on all arms of the junction and is based on the Demand Flow per arm multiplied by the Average Delay per PCU.

9.1.3 The Junctions 9: PICADY modelling software produces an RFC % (Ratio of Flow to Capacity), a Delay figure measured in seconds and a LOS (Level of Service) which are used to compare the effects the development will have on the junction being modelled. An RFC of 85% on a priority-controlled junction implies that the junction has reached capacity but is still operational with delay incurred. The following table describes the different LOS and the implications for the junction being assessed.

Level of Service A	Free-Flow
Level of Service B	Reasonably Free-Flow (no delay incurred)
Level of Service C	Stable Operation (busy but operational with acceptable delay incurred)
Level of Service D	Borderline Unstable (Junctions reaching capacity – but still operational- delay incurred)
Level of Service E	Extremely Unstable (Junctions at capacity or over, any incident will cause a grid-lock situation- significant delay incurred)
Level of Service F	Breakdown (Junctions over capacity, unacceptable delay traffic at a standstill)

**Table 9.1 Level of Service**

**9.2 Junction 1: Kilbarry Link Road / Ballyhooly Road**

9.2.1 The Kilbarry Link Road/Ballyhooly Road Junction is a priority-controlled junction and has been analysed as such for the current year 2019. As part of the proposed development and independent of the Ballyhooly Transport Corridor Scheme, it is proposed to upgrade this junction to signal controlled as part of Phase I of the Longview Development. This proposed change is to facilitate pedestrian/cycle/public transport connectivity from the site to schools, retail offerings and employment provision in the area.

Site 1: Kilbarry Link Road Junction		No Development		With Development	
		PRC %	Delay (pcuHr)	PRC %	Delay (pcuHr)
2019	AM	35	21.79	N/A	N/A
	PM	45	18.62	N/A	N/A
2022*	AM	35.9	10.49	29.2	11.2
	PM	29	10.42	24.6	11.44
2023	AM	34.5	10.68	22.3	12.3
	PM	27.7	10.62	22.8	11.77
2024	AM	32.7	10.9	17.8	13.33
	PM	26.2	10.86	19.9	12.65
2025	AM	31.8	11.05	14.6	14.5
	PM	25	11.05	16.9	13.36
2026	AM	30	11.3	12.1	15.6
	PM	23.5	11.31	12.1	14.18
2027	AM	28.7	11.51	9.3	17.58
	PM	22.3	11.5	12.5	15.43
2029	AM	25.8	11.99	4.7	20.83
	PM	19.8	12.02	7.4	17.59

\* From 2022 onwards it is assumed that the Junction has been signalised as part of Phase I of the development.

**Table 9.2 Junction 1: Kilbarry Link Road/Ballyhooly Road**

9.2.2 As outlined in Table 6.1 the assumption is that the junction has been signalised as part of the completion of Phase I of the development. The signalised junction includes for a pedestrian phase each cycle which, in reality will be demand activated. Future year results inclusive of development (right hand column) show that the junction operates within capacity up to and including 2029.

**9.3 Junction 2: Fox & Hounds**

9.3.1 The Fox Hounds Junction is a traffic-signal-controlled junction at the intersection of the R614 Ballyhooly Road/Ashgrove View Road and the Banduff/Rathcooney Road. The junction includes a demand activated pedestrian cycle.

Site 2: Fox & Hounds Junction		No Development		With Development	
		PRC %	Delay (pcuHr)	PRC %	Delay (pcuHr)
2019	AM	11.6	19.25	N/A	N/A
	PM	22.4	20.86	N/A	N/A
2022	AM	7.1	21.03	5.2	22.06
	PM	17	22.42	14.7	23.29
2023	AM	6	21.63	0.6	24.44
	PM	15.7	23.02	13.4	24.1
2024*	AM	13	19.7	8.7	21.64
	PM	13.2	22.93	10.3	24.6
2025	AM	11.8	20.18	6	22.84
	PM	14.7	23.88	8.5	25.85
2026	AM	10.7	20.65	4.5	24.07
	PM	10.8	24.08	4	26.77
2027	AM	9.6	21.16	1.2	26.02
	PM	9.7	24.8	6.2	29.03
2029	AM	7.2	22.28	-2.6	29.8
	PM	7.4	26.12	1	32.76

\* From 2024 onwards it is assumed that the Ballyhooly Road upgrade works have been complete

**Table 9.3 Junction 2: Fox & Hounds Junction**

9.3.2 As outlined in Table 6.3 future year modelling from 2023 onwards assumes that certain upgrades to the junction have been completed as part of the Ballyhooly Transport Scheme.

9.3.3 The results of the future year modelling show that the junction will operate within capacity up to and including 2027. With the final completion of the development in 2029 the junction is seen to exceed capacity by 2.6% during the AM peak period. Putting this future year result in context most junctions within large urban areas exceed capacity during peak hour traffic. The resulting increase in delay does not imply that the junction is at a gridlock more so that a vehicle arriving at the back of a formed queue on an approach will not get through the junction during one cycle of the lights. In many instances the resulting queue reaches a maximum before diminishing back to normal levels once the ‘peak-peak’ has passed.

**9.4 Junction 3: North Ring Road/Ballyhooly Road**

9.4.1 The North Ring Road Ballyhooly Road Junction is a traffic-signal-controlled cross-roads junction at the intersection of the R614 Ballyhooly Road and the R635 North Ring Road. The North Ring Road is the main arterial link serving the north side of the city and links the M8 and the N25 to the N20 Limerick Road. This junction has recently been upgraded as part of Phase I of the Ballyhooly Transport Corridor Scheme which has seen the inclusion of a right turn lane on the city approach in addition to bus and cycle/pedestrian facilities.

Site 4: North Ring Road Ballyhooly Road Junction		No Development		With Development	
		PRC %	Delay (pcuHr)	PRC %	Delay (pcuHr)
2019	AM	6.4	26.91	N/A	N/A
	PM	14.8	27.44	N/A	N/A
2022	AM	2.8	29.19	2	29.96
	PM	11.1	29.28	10.8	29.77
2023	AM	2	29.93	0	31.77
	PM	10	29.97	9.5	30.55
2024*	AM	13.3	26.26	11.1	27.67
	PM	10	28.65	9.7	29.42
2025	AM	12	26.77	9.6	28.67
	PM	8.9	29.32	8.3	30.33
2026	AM	10.9	27.35	7.1	29.6
	PM	7.9	29.96	7.1	31.17
2027	AM	9.9	27.88	5.4	30.92
	PM	6.7	30.66	5.1	32.25
2029	AM	7.4	29.15	2	33.39
	PM	4.3	32.27	2	34.49

\* From 2024 onwards it is assumed that the Ballyhooly Road upgrade works have been complete

**Table 9.4 Junction 3: North Ring Road/Ballyhooly Road**

- 9.4.2 As this junction is also on the Ballyhooly Transport Corridor Scheme (BTCS) the 2024 results operate on the basis that upgrades have been put in place. These upgrades would include additional lanes on all approaches including the lengthening of the right turn lane on the eastern approach.
- 9.4.3 The results show that the junction currently operates within capacity for both the morning and evening peak periods. With the addition of development-traffic the junction capacity for the morning peak reduces to zero in 2023. Thereafter with proposed upgrades in place the junction will continue to operate within capacity up to 2029 with the development fully in place.
- 9.4.4 As outlined earlier in this report the development of a Northern Orbital Route (2031), as proposed in the CMATS study, will see a significant change in travel patterns for this junction. A completed outer orbital route will mean an alternative route will exist for N20/M8/N25 bound traffic. This will result in significant spare capacity at this junction for future years beyond 2031.

**9.5 Junction 4: Kilbarry Link Road Upper Dublin Hill**

- 9.5.1 This junction is a priority-controlled junction with uncontrolled pedestrian facilities. The junction has been analysed using the PICADY traffic modelling package.

Site 12: Kilbarry Link/Upper Dublin Hill		No Development			With Development		
		Delay (s)	RFC (%)	LOS	Delay (s)	RFC (%)	LOS
2019	AM	33.2	0.81	D	N/A	N/A	N/A
	PM	32.9	0.66	D	N/A	N/A	N/A
2022	AM	27.86	0.44	D	28.73	0.45	D
	PM	38.47	0.7	E	40.35	0.71	E
2023	AM	29.12	0.45	D	31.41	0.47	D
	PM	40.94	0.72	E	43.55	0.73	E
2024	AM	30.24	0.47	D	33.76	0.49	D
	PM	43.61	0.73	E	48.26	0.75	E
2025	AM	31.54	0.48	D	36.87	0.52	E
	PM	47.41	0.75	E	54.07	0.78	F
2026	AM	32.93	0.49	D	39.73	0.54	E
	PM	51.33	0.77	F	61	0.81	F
2027	AM	34.37	0.51	D	44.41	0.57	E
	PM	55.17	0.79	F	67.6	0.83	F
2029	AM	38.49	0.54	E	57.34	0.64	F
	PM	66.55	0.83	F	94.59	0.9	F

The results presented are based on the minor arm (Kilbarry Link Road) accessing onto the major arm (Upper Dublin Hill). The right turn movement on this leg is incurring significant delay.

**Table 9.5 Junction 4: Kilbarry Link Road/ Upper Dublin Hill**

- 9.5.2 The results indicate that the junction operates within capacity (RFC less than 85%) however the Level of Service (LOS) D is a result of delay being incurred by traffic exiting from the minor arm (Kilbarry Link Road) onto Upper Dublin Hill.
- 9.5.3 In order to improve the operational characteristics of this junction the option of providing traffic signals was investigated. The following LinSig generated results show that the junction operates within capacity, including with the addition of a pedestrian phase each cycle, up to and including the completion of the full development in 2029.

Site 12: Kilbarry Link/Upper Dublin Hill		No Development		With Development	
		PRC %	Delay (pcuHr)	PRC %	Delay (pcuHr)
2019	AM	22.6	9.88	N/A	N/A
	PM	44.1	9.08	N/A	N/A
2022	AM	18.7	10.52	18.7	10.52
	PM	39.6	9.54	39.6	9.54
2023	AM	17.4	10.8	17.4	11.07
	PM	37.8	9.72	36.4	9.91
2024	AM	16.1	11.05	16.1	11.42
	PM	36.6	9.89	33.6	10.18
2025	AM	14.8	11.31	14.2	11.85
	PM	35.1	10.08	31.3	10.33
2026	AM	13.6	11.58	12.8	12.2
	PM	33.7	10.26	29	10.59
2027	AM	12.5	11.85	10.7	12.65
	PM	32.3	10.44	26.5	10.9
2029	AM	10	12.52	7.6	13.61
	PM	29.3	10.83	22.4	11.59

Junction Signal Controlled with Pedestrian Crossing and 90sec cycle time

**Table 9.6 Junction 4: Kilbarry Link Road/ Upper Dublin Hill (Signalised)**

- 9.5.4 It should be noted that this junction will form part of the Northern Orbital Route as proposed in CMATS and will take on a different form once this route is completed. Signalisation can be provided by way of mitigation if required by condition.

**9.6 Junction 5: Banduff Road/Rathcooney Road Junction**

- 9.6.1 This junction is a priority-controlled junction with uncontrolled pedestrian facilities. The junction has been analysed using the PICADY traffic modelling package for current year flows.

Site 3: Banduff Rathcooney Road Junction		No Development			With Development		
		Delay (s)	RFC (%)	LOS	Delay (s)	RFC (%)	LOS
2019	AM	25.26	0.41	D	N/A	N/A	N/A
	PM	86.56	0.98	F	N/A	N/A	N/A
2022	AM	39.07	0.84	E	41.62	0.86	E
	PM	113.22	1.02	F	119.27	1.02	F
2023	AM	41.25	0.85	E	46.67	0.88	E
	PM	123.69	1.03	F	135.29	1.04	F
2024	AM	44.14	0.87	E	53.32	0.9	F
	PM	135.87	1.04	F	155.01	1.06	F
2025	AM	46.81	0.88	E	59.54	0.91	F
	PM	147.75	1.05	F	172.41	1.07	F
2026	AM	50.72	0.89	F	69.05	0.93	F
	PM	161.31	1.07	F	191.44	1.09	F
2027	AM	54.19	0.9	F	81.29	0.96	F
	PM	174.45	1.08	F	217.4	1.11	F
2029	AM	62.76	0.92	F	105.04	0.99	F
	PM	205.81	1.1	F	287.52	1.14	F

The results presented are based on traffic flows from Arm C to the minor Arm B (Banduff Road). The option of changing the priority on this junction would result in a significant improvement.

**Table 9.7 Junction 5: Banduff Road/Rathcooney Road**

- 9.6.2 Evident from **Table 9.7** is that the junction currently operates above capacity at a Level of Service F which results in notable queueing. The addition of development traffic adds to the delay incurred but not significantly. Based on recorded traffic flows changing the priorities at this junction could result in significant improvements. **Table 9.8** presents the results of this priority change with the Rathcooney Road becoming the minor leg approach.

Site 3: Banduff Rathcooney Road Junction		No Development			With Development		
		Delay (s)	RFC (%)	LOS	Delay (s)	RFC (%)	LOS
2019	AM	29.63	0.71	C	N/A	N/A	N/A
	PM	17.43	0.42	C	N/A	N/A	N/A
2022	AM	33.9	0.74	D	29.63	0.71	D
	PM	18.54	0.45	C	35.2	0.75	E
2023	AM	35.52	0.75	E	38.39	0.77	E
	PM	18.89	0.45	C	19.38	0.46	C
2024	AM	37.12	0.76	E	41.88	0.79	E
	PM	19.37	0.46	C	20.14	0.48	C
2025	AM	39.05	0.77	E	45.39	0.81	E
	PM	19.75	0.47	C	20.79	0.49	C
2026	AM	41.79	0.79	E	51.32	0.83	F
	PM	20.27	0.48	C	21.47	0.5	C
2027	AM	44.34	0.8	E	57.26	0.85	F
	PM	20.68	0.49	C	22.42	0.52	C
2029	AM	50.23	0.83	F	70.95	0.89	F
	PM	21.88	0.51	C	24.3	0.55	C

**Table 9.8 Junction 5: Banduff Road/Rathcooney Road (Priority Layout Change)**

- 9.6.3 The results for the revised junction, which are based on the worst performing arm, The Rathcooney Approach, show significant improvement in terms of overall capacity at the junction. The delay incurred on Rathcooney Road will result in queues forming specifically during the morning peak hour. In 2029 with development traffic included this queue would comprise on average 6 vehs. The 2022 LOS D is based on the delay experienced by a queue of 0.8 vehs.
- 9.6.4 Evident is that development generated traffic contributes just 3% on average to the RFC. This junction will form part of the BTCS and is likely to be realigned as part of these works.

**9.7 Junction 6: North Ring Road / Clonard Road Junction**

- 9.7.1 This junction is a traffic signal-controlled junction with controlled pedestrian facilities. The junction has been analysed using the LinSig traffic modelling package for current year flows.

Site 15: North Ring Road/Clonard Road		No Development		With Development	
		PRC %	Delay (pcuHr)	PRC %	Delay (pcuHr)
2019	AM	26.6	13.23	N/A	N/A
	PM	37.2	11.92	N/A	N/A
2022	AM	22.6	13.98	22.6	13.98
	PM	32.8	12.58	32.8	12.58
2023	AM	21.2	14.28	21.2	14.39
	PM	31.4	12.83	31.1	12.94
2024	AM	16.1	11.05	16.1	11.42
	PM	36.6	9.89	33.6	10.18
2025	AM	14.8	11.31	14.2	11.85
	PM	35.1	10.08	31.3	10.33
2026	AM	13.6	11.58	12.8	12.2
	PM	33.7	10.26	29	10.59
2027	AM	12.5	11.85	10.7	12.65
	PM	32.3	10.44	26.5	10.9
2029	AM	10	12.52	7.6	13.61
	PM	29.3	10.83	22.4	11.59

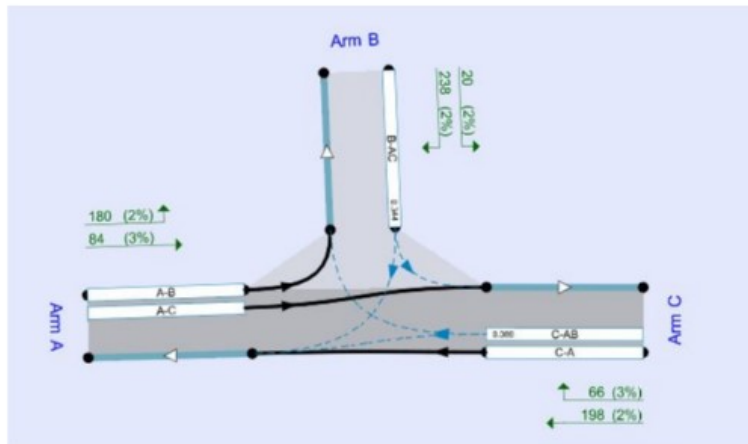
Junction Signal Controlled with Pedestrian Crossing and 90sec cycle time

**Table 9.9 Junction 6: North Ring Road / Clonard Road Junction**

- 9.7.2 This junction operates within capacity up to and including the completion of the development in 2029. Development generated traffic is seen to have little impact on Delay incurred.

**9.8 Junction 7: Proposed Development Access/R614 Ballyhooly Road (Entrance 1)**

9.8.1 This junction will be a priority-controlled junction. The junction has been analysed using the Junction 9 traffic modelling package for current and future year flows.



**Fig 9.1 Junction 7: Proposed Access Road (Arm B) /R614 Ballyhooly Road**

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
<b>2019</b>								
Stream B-AC	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream C-AB	0.0	0.00	0.00	A	0.0	0.00	0.00	A
<b>2021</b>								
Stream B-AC	0.0	6.11	0.04	A	0.0	5.89	0.02	A
Stream C-AB	0.0	5.52	0.01	A	0.0	4.90	0.02	A
<b>2022</b>								
Stream B-AC	0.1	6.75	0.12	A	0.1	6.24	0.06	A
Stream C-AB	0.0	5.66	0.03	A	0.1	5.08	0.08	A
<b>2023</b>								
Stream B-AC	0.3	7.54	0.21	A	0.1	6.60	0.10	A
Stream C-AB	0.1	5.82	0.06	A	0.2	5.29	0.13	A
<b>2024</b>								
Stream B-AC	0.4	8.51	0.30	A	0.2	7.01	0.14	A
Stream C-AB	0.1	5.96	0.08	A	0.3	5.64	0.18	A
<b>2025</b>								
Stream B-AC	0.6	9.78	0.38	A	0.2	7.48	0.18	A
Stream C-AB	0.1	6.15	0.11	A	0.4	6.05	0.23	A
<b>2026</b>								
Stream B-AC	0.9	11.48	0.47	B	0.3	8.02	0.22	A
Stream C-AB	0.2	6.33	0.13	A	0.5	6.54	0.29	A
<b>2027</b>								
Stream B-AC	1.3	13.89	0.56	B	0.4	8.64	0.27	A
Stream C-AB	0.2	6.52	0.15	A	0.7	7.14	0.34	A
<b>2028</b>								
Stream B-AC	1.8	17.65	0.65	C	0.5	9.42	0.32	A
Stream C-AB	0.3	6.74	0.18	A	0.9	7.80	0.40	A

**Table 9.10 Junction 7: Proposed Access Road (Arm B) /R614 Ballyhooly Road - Results**

9.8.2 This junction operates within capacity up to and including the completion of the development in 2029 with a maximum RFC of 65% and a maximum queue forming of 2 vehicles during the morning peak.

9.8.3 As this junction serves the main portion of the development and is seen to work with significant spare capacity, it is logical to assume that Entrance 2 will operate with similar type results.



## 10.0 CUMMULATIVE IMPACT

- 10.1.1 As outlined in **Section 7.0** of this report, industry standard growth rates have been applied to background traffic for future year assessments (to account for further development within the area). These growth rates make allowance for modal shift targets as set by national policy but do not take account of site-specific measures that may be implemented to mitigate against traffic generation from a particular development. In this instance the development of strategic transport corridors in-line with national and local policy should allow for the development of the Ballyvolane Zoned Area using lower traffic generation.
- 10.1.2 A full network of new distributor roads is proposed within this area facilitating better distribution of traffic and allowing for the development of public transport solutions based on demand.
- 10.1.3 Upgrade works to specific junctions, namely Junction 2 and Junction 3 are proposed as part of the NSTC Study. The Ballyvolane Transport Corridor Scheme will facilitate the delivery of these upgrade works as outlined in **Section 3.5**.
- 10.1.4 As previously discussed the Northern Distributor Road as outlined in CMATS will be designed as a Quality Bus Corridor (QBC) and ultimately will allow for high frequency bus services to orbit the city. This 'Orbital' Route will have arterial links, such as the Ballyhooly Transport Corridor, facilitating direct access to the city centre. In practice these routes also include cycle provision such as secure bicycle parking, cycle lanes and other inducements to reduce reliance on the car for travel. In order to function properly and to justify their provision a certain density of population is required. The proposed development is one such scheme that has the necessary scale to change existing travel patterns.
- 10.1.4 The development of an outer North Ring Road linking the M8 to the N20 (M20) via the proposed new town of Monard and ultimately to the M22 at Ballincollig, will result in significant changes to existing travel patterns, resulting in capacity increases within the modelled network. The status of this route is unknown, but an indicative route is shown in CMATS.

## 11.0 ROAD SAFETY

### 11.1.1 Existing Road Network Safety

The R614 Ballyhooly Road adjoining the proposed site operates at an 80kph speed limit. At present this section of road is rural in nature with no pedestrian/cycle facilities and no public lighting. Observed speed was at, or marginally above the posted speed limit in the in-bound direction.

South of the Kilbarry Road Junction (Junction 1 of the modelled network) the R614 gradually becomes more urban with footpaths and public lighting on the approaches to the Fox & Hounds Junction (Junction 2). This traffic signal-controlled junction includes a full all-red pedestrian phase and provides good connectivity to this Local Shopping Area.

The R614/R635 North Ring Road Junction (Junction 3) is another traffic signal-controlled junction with an on-demand pedestrian phase. This junction provides one of the few controlled pedestrian crossings of the North Ring Road with bus stops located on either side. A significant volume of traffic passes through this junction on a daily basis. Upgrade works at this junction have been recently completed, funded by the NTA (National Transport Authority) as part of the development of the Ballyvolane Strategic Transport Corridor. As previously outlined a Phase II of these works will extend north to the Kilbarry Link Road, the Ballyvolane Transport Corridor Scheme currently underway by Cork City Council.

### 11.1.2 Road Collision Database

A review of the road collision database for the area shows a number of accidents occurring over an 11-year period with two fatal accidents occurring on the R614, refer to **Figure 11.1**. One of these fatal accidents involved a pedestrian.

### 11.1.3 Proposed Road Safety Mitigation Measures

The proposed development will include a number of measures that are deemed necessary to improve road safety in the area. These measures include:

- The provision of an off-road cycle path and footpath on the Ballyhooly Road which will provide a safe link to the residential estate of Mervue Lawn and Kempton Recreation Park on the R614, where existing footpaths are located. These works are proposed to be carried out as part of the first phase of development and are expected to be in advance of the BTCS Project.
- The proposed signalisation of Junction 1: Ballyhooly Road/Kilbarry Link Road to include an all-red pedestrian phase on demand. This will facilitate and encourage the use of existing public transport offerings on the Kilbarry Link Road.
- A newly constructed off-road bus stop on the R614 will again encourage the use of sustainable transport, thereby reducing the numbers of private cars in use. Less traffic generally results in reduced traffic related accidents.
- The Distributor Road within the development has been designed to include a shared 3.0m wide continuous footpath/cycleway facilitating safe access to schools, public transport, shops and sports grounds in the wider area. These are discussed in more detail in the following chapters.

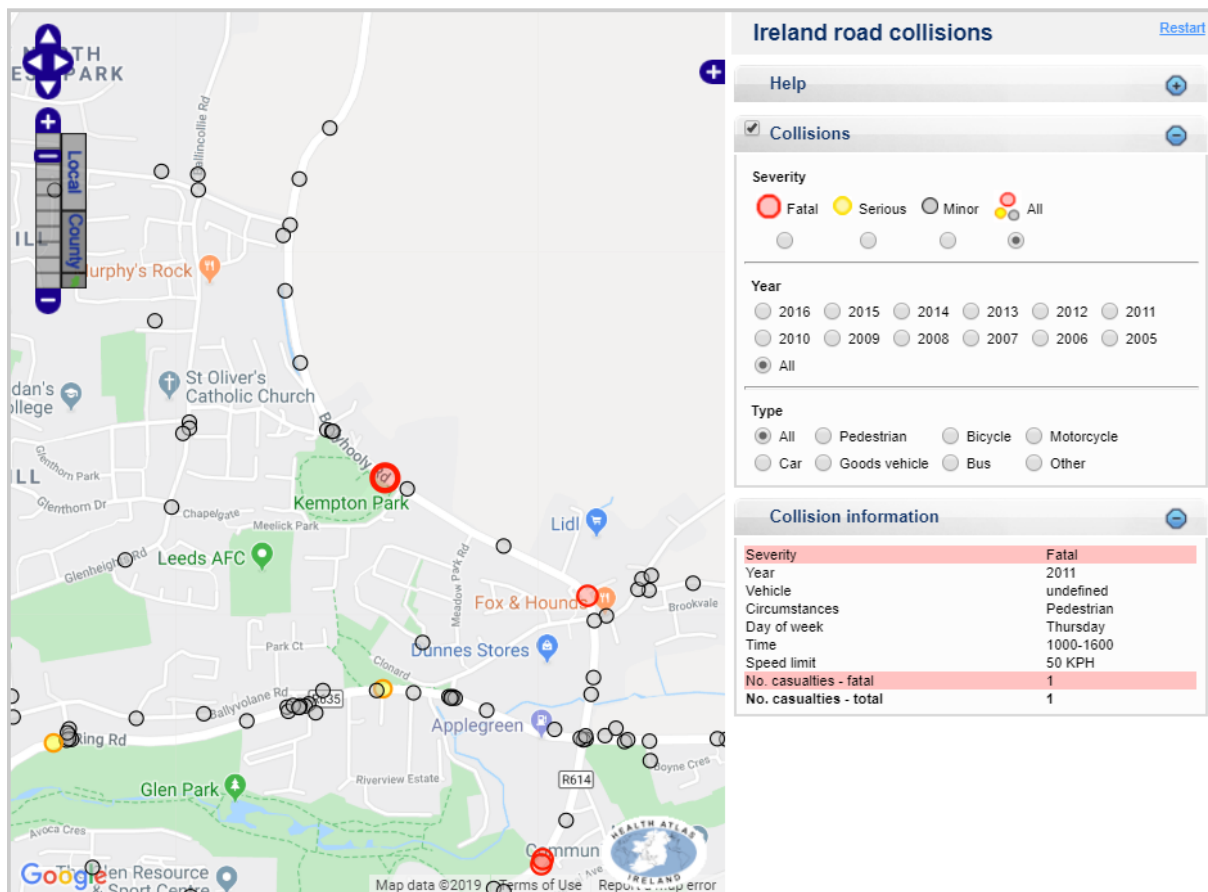


Fig 11.1: Accident statistics for Roads in the vicinity of the site

## 12.0 ENVIRONMENTAL IMPACT

- 12.1 The proposed development has been designed in accordance with the principles of DMURS (Design Manual for Urban Roads and Streets) with all internal roads in housing areas having a gradient of not greater than 5% and good pedestrian connectivity throughout. The main access road will serve as a distributor road that progresses through the entire UEA (Urban Expansion Area) providing for future public transport routes. This has a gradient that exceeds 5% in short rising sections in order to manage topographical changes but is consistent with DMRB in this respect and DMURS where residential units and parking faces this road.
- 12.2 As outlined in this report the development of the Ballyvolane zoned area will need to encourage and promote the use of sustainable transport solutions. The inclusion of a school campus site and a Local Retail Centre site in the overall plan, in conjunction with the continued development of the Strategic Transport Corridors, should result in a reduction of trips generated by the scheme helping to achieve the target modal split as set out by Government.
- 12.3 The construction stage of the scheme proposes to re-use / relocate the bulk of the excavation within the site implying that there will be a significant reduction in construction traffic generated to and from the site over and above a site where importation or exportation of earthworks is required. This will minimise the impact the development will have on the existing roads network during this period.

Construction based traffic will include site workers, deliveries of materials relating to house construction, roads construction and sales related traffic. This traffic will be mitigated by means of a traffic management plan developed as part of the Construction Management Plan (CMP). Mitigation measures such as start/finishing times outside of the identified peak periods, strict delivery times for raw materials and other measures are proposed. The construction-based traffic impact will not exceed the impact of the completed scheme on the surrounding roads network.

A Preliminary CEMP is submitted as part of this application. For further details pertaining to initial site investigation results and cut/fill analysis carried out for each home zone please refer to the Engineering Report and relevant chapters in the EIAR ((Environmental Impact Assessment Report).

- 12.4 The traffic related environmental impact of the proposed development is further detailed in the accompanying EIAR.

## 13.0 INTERNAL LAYOUT & PARKING PROVISION

- 13.1 **Figure 4.1.1** presents the proposed layout which includes the provision of off-road bus stops on the Distributor Road, bus turning areas adjacent to the school campus, shared cycle/footpaths, pedestrian/cycle permeability throughout the site on designated off-road routes and speed control measures where appropriate. The development of a portion of the adjoining parkland has facilitated the delivery of linear park including cycleways, walkways, exercise and play areas.
- 13.2 Parking is provided in accordance with the LAP and is suitably located on site in residential properties, in shared parking areas or in areas where there are apartment provisions (in sub levels). Parking is also provided on the Distributor Road in parallel bays so as to serve local residential areas. With respect to cycle parking, 580+ dedicated cycle parking provision spaces are proposed as part of the proposed development.

## 14.0 PUBLIC TRANSPORT

- 14.1 The closest public bus route serving the site is the 207, the terminus of which is approximately 300m from the site entrance (5mins walk). Route 207 runs from Ballyvolane to Donnybrook via Cork City centre with terminus at Glenheights Park, Glenheights Road in Ballyvolane on the North of the City and at Scairt Cross, Donnybrook on the South side. The route services Glen Rovers Hurling Club, Ballyvolane Business Park, Ballyvolane Shopping Centre, Cork City Centre and Douglas via the main Douglas Road in the south side. Services depart from Glenheights Park, every 30 minutes from 0710 hours to 2300 hours on Mondays to Saturdays. Sunday services are every thirty minutes from 0930 to 2300 hours.

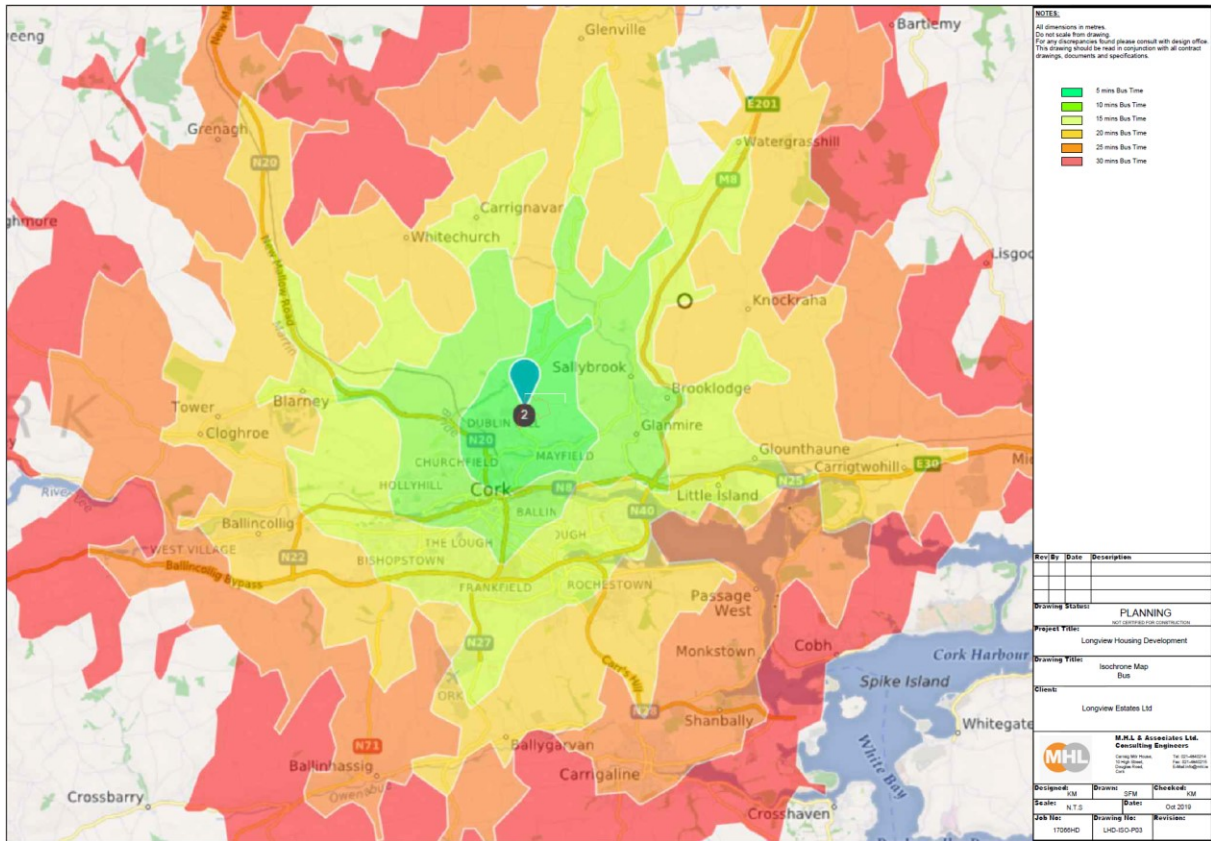
The outbound route runs from Donnybrook to Ballyvolane through Patrick Street with the same frequency as the inbound route. The inbound route commences at Glenheights Park in the north side of the city near Glen Rovers GAA Club, travels past Ballyvolane Business Park, then east along the North Ring Road, northeast along Ballyvolane Road past Ballyvolane Shopping Centre, then south along Ballyhooly Road through Dillon's Cross, St. Luke's Cross and down Summerhill North, through Brian Boru Street and crossing the River Lee at Brian Boru Bridge to the Bus Station at Parnell Place before continuing on its southbound path through the city centre. The outbound/northbound route differs from the southbound path, as it follows the inbound path along the Ballyhooly Road from the City Centre to Ballyvolane Shopping Centre, where it continues northward along Ballyhooly Road as far as Ballyhooly New Road, passing Brockwood, Upper Kinvara Road and emerging onto Dublin Hill Upper in the vicinity of City North Business Park, Kilbarry Business Park and Industrial Estate in Blackpool. From here the route heads south again along Dublin Hill Middle and turns eastward through Glenthorne Drive to the terminus at Glenheights.

- 14.2 As part of the Ballyvolane Strategic Transport Corridor (BSTC) significant improvements to Route 207 are proposed with the aim of decreasing journey times and enhancing public facilities. These include bus shelters and RTPi (Realtime Public Information) boards to be provided at bus stops along the corridor and bus priority at all signal-controlled junctions. With the provision of these facilities and other incentives as part of national policy, it is anticipated that a shift to public transport will occur over the construction phase of this scheme. CMATS has provided more certainty for the delivery of these enhancements. The LAP states that is an objective of the plan to *Support the achievement of high levels of modal shift by collaborating with other agencies to improve public transport services and influence patterns of employment development to support use of sustainable modes and travel by public transport*". (Cobh MD Lap Sec 3.4.82)
- 14.3 The proposed development of the scheme an off-road bus stop is proposed on the R614 adjacent to the newly signalised R614/Kilbarry Link Road Junction (Junction 2). The provision of this bus stop will allow for a supplementary service to be provided, which is one of the objectives of the BSTC scheme.



**Fig 14.1: Proposed New Bus Stop on the R614, two-way cycle lanes and footpath**

- 14.4 As previously outlined the proposed development is to include the provision of off-road bus stops on the main distributor road within the development, as well as temporary turning areas to facilitate the provision of a re-routed service prior to the completion of the overall roads network proposed as part of the UEA zoning. The stops are located centrally within the development adjacent to the 'Parks' area which will facilitate disabled access from the entire scheme. Bus Eireann re-routing of services occurs at the direction of the NTA once infrastructure is in place.
- 14.5 The following isochrone map shows the areas accessible by public transport based on time of travel from the site. The existing bus stop on the Kilbarry Link Road was used as the terminus. Note: The distances include transfers to different services so are indicative only (delay may be experienced during transfer)



**Fig 14.2: Time of travel by Public Transport Options**

14.6 Evident from the above map is that current bus provision in the area allows travel to a wide area within 30 mins, with many of the main employment centres being within the 20 mins range. This is significantly shorter than CSO figures for other areas such as Dublin City 28.9 mins, South Dublin 30.6 mins, Waterford City & County 22.4 mins, Limerick City & County 24.2 mins.

A commute time by public transport in excess of 45 mins results in a change in behavioural preference away from public transport. It can be concluded that the proposed development site by its location will encourage the use of public transport in-line with national policy.

14.7 The aforementioned travel times are set to significantly improve as a result of the BSTC project which will include bus priority at junctions, additional on-road facilities such as covered shelters, real-time arrival departure boards and an increase in frequency of service. These measures, scheduled for delivery in 2023, will require the density of population in the area served, to justify this expenditure by the NTA.

**15.0 ACCESSIBILITY AND INTEGRATION**

15.1 A desktop assessment of existing permeability for cyclists and pedestrians from the site was carried out. Presented in the following isochrome maps are the range of distances, for both pedestrians and cyclists, based on travel time.

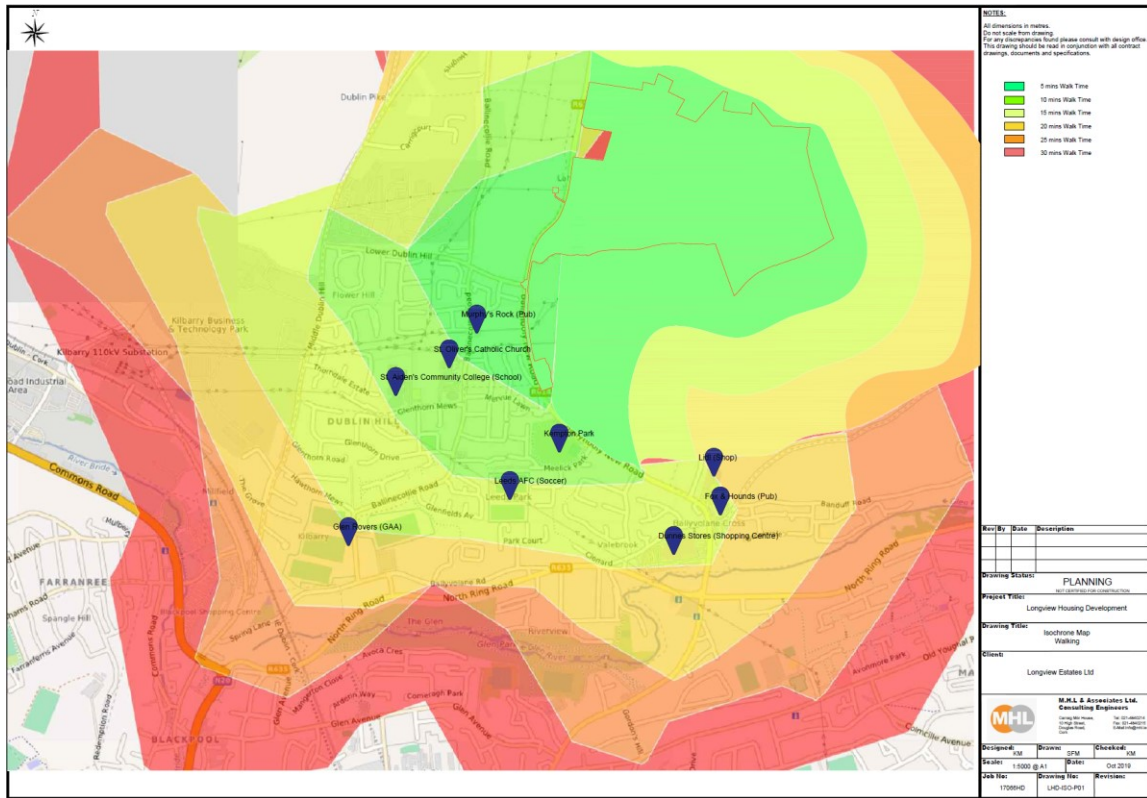


Fig 15.1: Proposed Development: Walking distance to local area

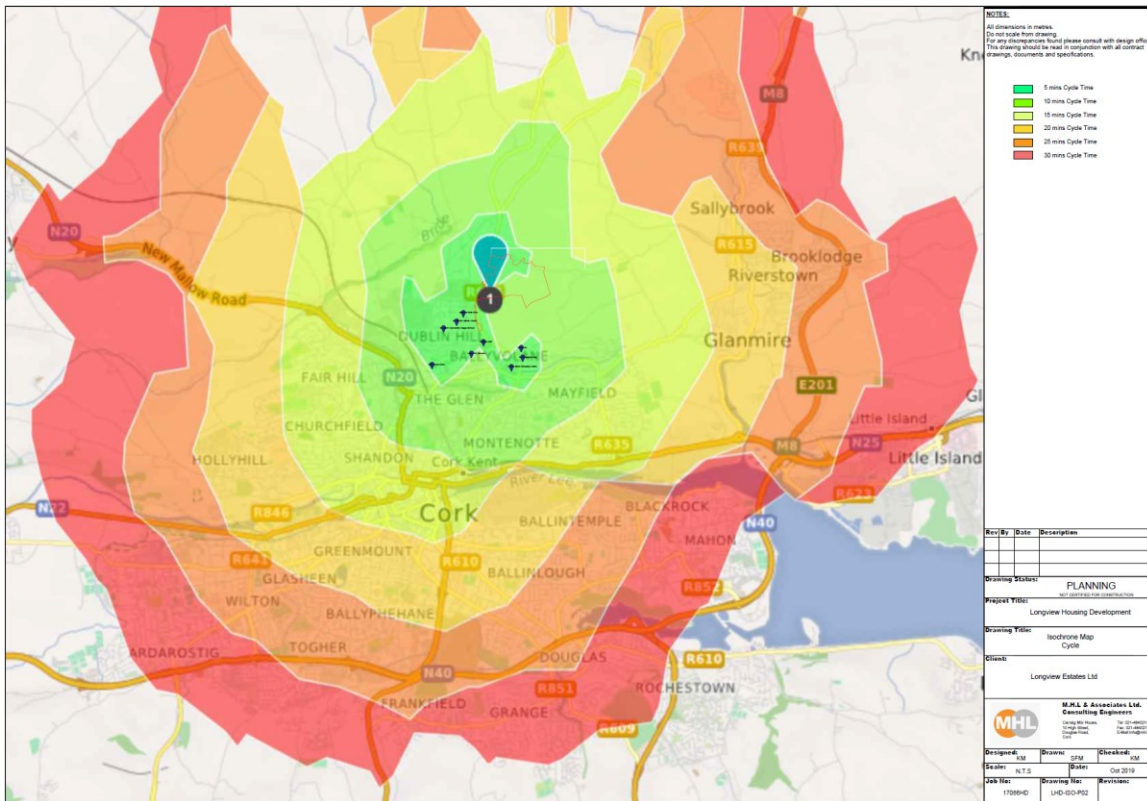


Fig 15.2: Proposed Development: Cycle distance to local area

- 15.2 Within 10 mins walk time from the site entrance on Ballyhooly Road encompasses the Local Church, both existing Pprimary and Secondary schools, Murphy’s Rock Pub, Kempton Park, Bus Stops (207) and the local soccer club, Leeds Utd.

Within the 15 mins walk time you have a Lidl Store, The Fox & Hounds Bar & Restaurant, Betting Shop, Off-Licence, hairdresser, further bus stops (the 207a) and the Dunnes Stores District Centre.

The 20-30 mins walking range includes 'The Glen' Hurling & Football Club, The Blackpool Retail Park including cinema, Mayfield Community School and Mayfield Sports Complex.

Evident is the range of services within 'normal' walking distance (taken as 20 mins at moderate pace equating to 5.0 km/hr) of the site.

- 15.3 The cycle range is presented in similar terms and relates to the average distance travelled in a specific time (16-19 kmh). Cork City Centre falls within the 15 min category based on unrestricted flow through junctions. The 30 mins range includes all of the city including the southern suburbs.

*Note: The travel speed used is on the low side, an experienced cyclist would have a 26-30kph average speed, however the speed used is more reflective of the topography in and around Cork City. It should also be noted that as a result of the aforementioned topography the inbound from the site to, say the City Centre, would be considerably quicker than the outbound trip, so on average it is considered that the speed used is appropriate.*

## 16.0 ACCESS FOR PEOPLE WITH DISABILITIES

- 16.1 Details of the internal road geometry for the proposed development are included in the Engineering Design Report showing full compliance with DMURS. Access to individual housing units fully complies with Part M of the building regulations. At-grade pedestrian crossings on the Main Distributor Road will be provided, linking the development to the 'Park' and further afield with minimal interaction with trafficked roads. All junctions and pedestrian crossings will be constructed to include tactile paving. Gradients for pedestrian and cyclist movement have been maintained at 1 in 20, where connectivity is critical; i.e. the Park and Neighbourhood Centre areas in particular.
- 16.2 All proposed new bus stops will include accessible kerbs which allow ease of access for wheelchair users. They are to be located on level sections of the Distributor Road and the Ballyhooly Road and will be connected by footpath from each of the Neighbourhoods.

## 17.0 MOBILITY MANAGEMENT PLAN (SUSTAINABLE ACCESS STRATEGY)

- 17.1 As outlined in the previous chapters significant effort has been put in to delivering connectivity from the site to local services and public transport options. A 'Mobility Management Plan/Travel Plan' is a strategy for managing multi-modal access to a site or development, focusing on promoting access by sustainable modes. The objective of national and local policy is to reduce reliance on the car for travel. Inducements and encouragement should be applied in order to influence change and this can be achieved through the delivery of 'Mobility Management Plans'.
- 17.2 A mobility management plan relating to a residential development would form part of the sales/promotion package presented to would be purchasers and would highlight the proximity of local services, public transport provision, schools and walking/cycle distances to same. The proposed 'hard measures' that will facilitate safer pedestrian, cycle and public bus access will be provided as part of the application and will be further complimented by scheduled Local Authority Works (BSTC).
- 17.3 An overview of the sustainable infrastructure proposed is as follows:
- Over 10km of upgraded or new footway/cycleway provision both within the site and on approaches to the site on Ballyhooly Road.
  - The proposed upgrading of the Kilbarry Link Road/ Ballyhooly Road to include a Toucan Crossing as well as a full pedestrian phase.
  - The provision of a new bus-stop on Ballyhooly Road to be provided as part of Phase I of the Scheme. This new bus-stop will facilitate the re-routing of the existing service



or the provision of additional services in the area. This proposal is compatible with the BSTC Project.

- Proposed off-road bus stops on the main Distributor Road within the development which will facilitate future bus routes serving the entire UEA.
- Interim Bus-turning areas adjacent to the lands reserved for school campus to facilitate the provision of a bus service (to be provided when warranted based on density of population served) in the absence of the adjoining UEA lands not being developed.
- The provision of a combined footway/cycleway on Ballyhooly Road to serve the site which will result in the urbanisation of this section of the Ballyhooly Road encouraging walking and cycling as a safe option in what should become a lower speed area.
- The development of a portion of the 'Park' with its associated walkways and cycle ways providing amenity to both existing residential developments in the area in addition to the proposed development.

## 18.0 MITIGATION

- 18.1 It has been clearly demonstrated that the proposed scheme falls within the category of development where the use of sustainable transport solutions will be a real option. This premise is further supported by the Local Authority and the National Transport Authority's commitment to the delivery of the Ballyvolane Strategic Transport Corridors Project. This scheme has received funding with works to be completed on the ground in 2023. The proposed upgrade works will include junction improvements on the R614 Ballyhooly Road that have been assessed as part of the traffic modelling exercise carried out in this report.
- 18.2 The traffic modelling of the 6 no. junctions, included as part of this study have concluded that Phase I of the scheme to be completed and occupied by 2022, requires no change to the existing roads network. It is proposed as part of this first phase of works to provide a traffic signal-controlled junction at the junction of the Kilbarry Link Road and the R614 Ballyhooly Road. The purpose of this intervention is to provide a pedestrian/ cycle crossing of the Ballyhooly Road which has the added benefit of controlling the inbound flow of traffic to the Fox & Hounds Junction. Modelling was carried out on the basis that an incremental increase in the modal shift rate over a number of years (2022-2025) was applied to development traffic only and that there was no associated application of the increase in modal shift to background traffic flows (which would result in a reduction in junction flows).
- 18.3 Future year models for each phase of development have been carried out on the premise that upgrade works provided as part of the BSTC Project are in place from 2023 onwards. This modelling concludes that these proposed upgrade works are sufficient to ensure that the critical junctions remain operational for future years up to and including the completion date of the final phase in 2029. Thereafter additional infrastructure as outlined in CMATS will be in the process of being delivered.
- 18.4 As identified previously there will be improvements on the existing roads network associated with funded Local Authority Plans. In addition to this, the CMATS document has identified the need for additional infrastructure to be provided as part of the future public transport solution to support the expansion of Cork City. The Northern Distributor Road, when completed in 2031, will provide an orbital route of Cork City, encompassing the Ballyvolane UEA. The proposal, the subject of this application, is fully compatible with CMATS.

## 19.0 REFERENCES

National Roads Authority (May 2014) Traffic and Transport Assessment Guidelines NRA, Dublin

Institution of Highways & Transportation (1994) Guidelines for Traffic Impact Assessment IHT, London

National Roads Authority (2000) Road Geometry Handbook NRA, Dublin

National Roads Authority (revised 2003) Design Manual For Roads and Bridges NRA, Dublin

National Roads Authority (November 2004) Draft Traffic and Transport Assessment Guidelines NRA, Dublin

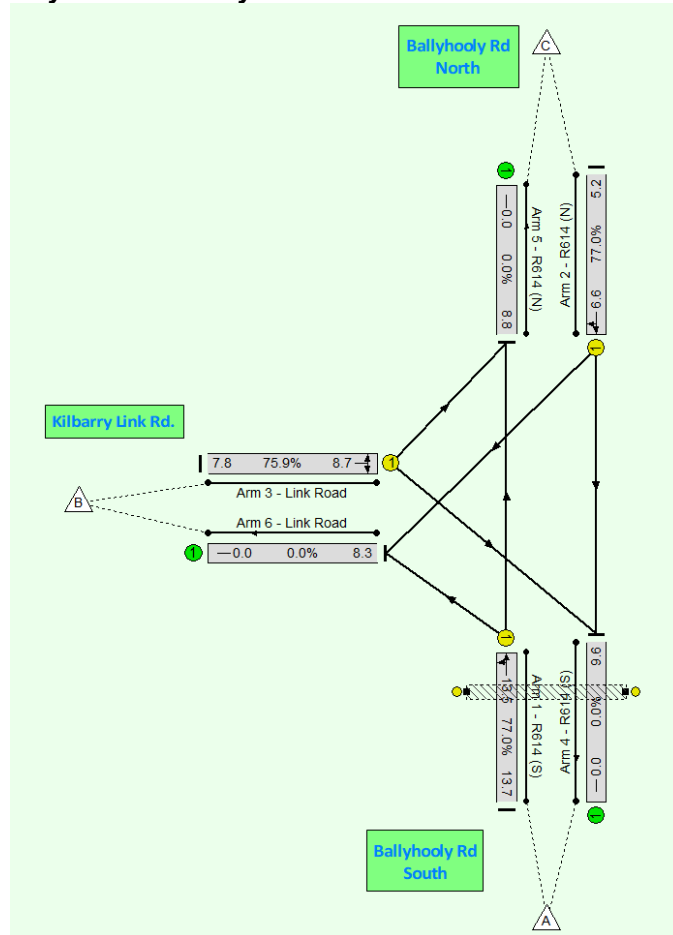
RSA Ireland Road Collisions

<http://www.rsa.ie/RSA/Road-Safety/Our-Research/Ireland-Road-Collisions/>



**APPENDIX 1: TRAFFIC FLOW MATRICES**

**Fig. 1.1 Site 1: Ballyhooly Road/ Kilbarry Link Road Junction**



**2022 AM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	191	116	307
	B	252	0	34	286
	C	234	91	0	325
	Tot.	486	282	150	918

**2022 PM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	277	219	496
	B	217	0	74	291
	C	126	37	0	163
	Tot.	343	314	293	950

**2022 AM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	191	127	318
	B	252	0	37	289
	C	251	97	0	348
	Tot.	503	288	164	955

**2022 PM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	277	239	516
	B	217	0	80	297
	C	140	41	0	181
	Tot.	357	318	319	994

**2023 AM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	193	117	310
	B	255	0	34	289
	C	237	92	0	329
	Tot.	492	285	151	928

**2023 PM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	280	221	501
	B	219	0	75	294
	C	127	38	0	165
	Tot.	346	318	296	960

**2023 AM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	193	136	329
	B	255	0	40	295
	C	276	107	0	383
	Tot.	531	300	176	1007

**2023PM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	280	242	522
	B	219	0	82	301
	C	145	43	0	188
	Tot.	364	323	324	1011

**2024 AM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	195	118	313
	B	258	0	35	293
	C	240	93	0	333
	Tot.	498	288	153	939

**2024 PM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	283	224	507
	B	222	0	76	298
	C	129	38	0	167
	Tot.	351	321	300	972

**2024 AM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	195	146	341
	B	258	0	43	301
	C	293	114	0	407
	Tot.	551	309	189	1049

**2024 PM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	283	252	535
	B	221	0	86	307
	C	156	46	0	202
	Tot.	377	329	338	1044

**2025 AM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	197	119	316
	B	260	0	35	295
	C	242	94	0	336
	Tot.	502	291	154	947

**2025 PM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	286	226	512
	B	224	0	77	301
	C	130	38	0	168
	Tot.	354	324	303	981

**2025 AM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	197	154	351
	B	261	0	47	308
	C	311	121	0	432
	Tot.	572	318	201	1091

**2025 PM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	286	263	549
	B	223	0	89	312
	C	161	48	0	209
	Tot.	384	334	352	1070

**2026 AM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	199	121	320
	B	263	0	36	299
	C	245	95	0	340
	Tot.	508	294	157	959

**2026 PM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	289	229	518
	B	226	0	78	304
	C	132	39	0	171
	Tot.	358	328	307	993

**2026 AM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	199	161	360
	B	264	0	49	313
	C	327	126	0	453
	Tot.	591	325	210	1126

**2026 PM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	289	271	560
	B	225	0	92	317
	C	167	51	0	218
	Tot.	392	340	363	1095

**2027 AM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	202	122	324
	B	266	0	36	302
	C	247	96	0	343
	Tot.	513	298	158	969

**2027 PM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	292	231	523
	B	229	0	78	307
	C	133	39	0	172
	Tot.	362	331	309	1002

**2027 AM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	201	173	374
	B	267	0	53	320
	C	351	135	0	486
	Tot.	618	336	226	1180

**2027 PM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	292	285	577
	B	227	0	97	324
	C	178	55	0	233
	Tot.	405	347	382	1134

**2029 AM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	206	125	331
	B	272	0	37	309
	C	253	98	0	351
	Tot.	525	304	162	991

**2029 PM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	298	236	534
	B	234	0	80	314
	C	136	40	0	176
	Tot.	370	338	316	1024

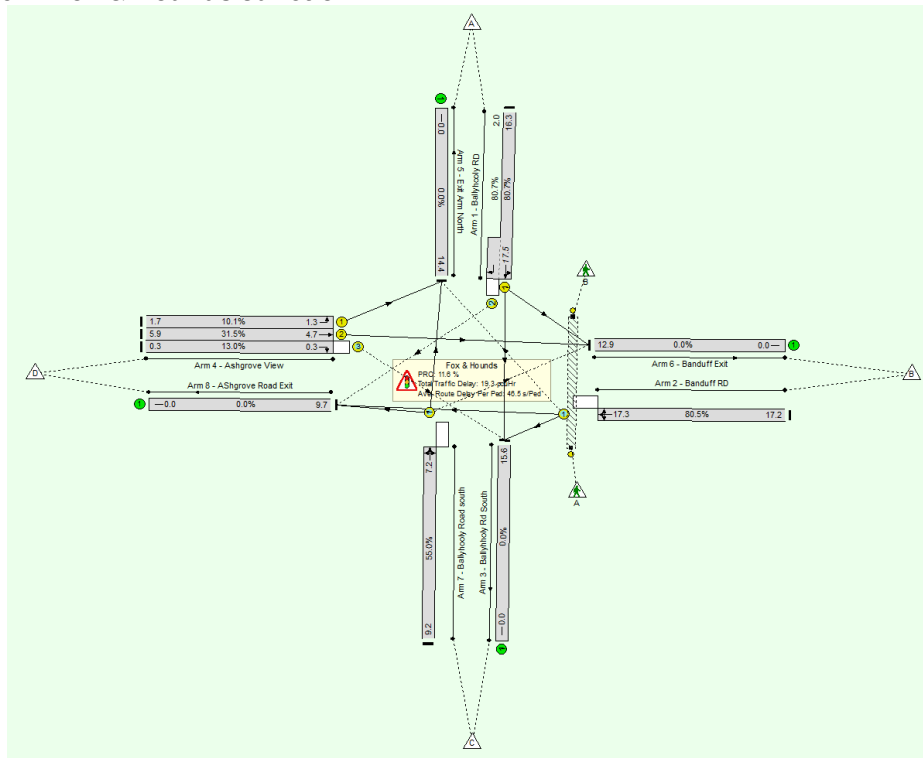
**2029 AM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	205	189	394
	B	273	0	58	331
	C	381	148	0	529
	Tot.	654	353	247	1254

**2029 PM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	298	304	602
	B	232	0	104	336
	C	193	59	0	252
	Tot.	425	357	408	1190

**Fig. 1.2 Site 2: Fox & Hounds Junction**



**2019 AM Current Year**

		Destination				Tot.
		A	B	C	D	
Origin	A	0	156	377	65	598
	B	189	0	124	250	563
	C	225	73	0	2	300
	D	56	192	11	0	259
	Tot.	470	421	512	317	1720

**2019 PM Current Year**

		Destination				Tot.
		A	B	C	D	
Origin	A	0	208	269	48	525
	B	196	0	78	144	418
	C	365	90	0	6	461
	D	138	349	12	0	499
	Tot.	699	647	359	198	1903

**2022 AM No Dev**

		Destination				Tot.
		A	B	C	D	
Origin	A	0	161	389	67	617
	B	195	0	128	258	581
	C	232	75	0	3	310
	D	58	198	12	0	268
	Tot.	485	434	529	328	1776

**2022 PM No Dev**

		Destination				Tot.
		A	B	C	D	
Origin	A	0	215	278	50	543
	B	202	0	80	149	431
	C	377	93	0	7	477
	D	143	360	13	0	516
	Tot.	722	668	371	206	1967

**2022 AM with Dev**

		Destination				Tot.
		A	B	C	D	
Origin	A	0	165	400	69	634
	B	200	0	128	258	586
	C	237	75	0	3	315
	D	59	198	12	0	269
	Tot.	496	438	540	330	1804

**2022 PM with Dev**

		Destination				Tot.
		A	B	C	D	
Origin	A	0	219	285	53	557
	B	208	0	80	149	437
	C	387	93	0	7	487
	D	147	360	13	0	520
	Tot.	742	672	378	209	2001

**2023 AM No Dev**

		Destination				Tot.
		A	B	C	D	
Origin	A	0	163	393	68	624
	B	197	0	129	261	587
	C	235	76	0	4	315
	D	59	200	12	0	271
	Tot.	491	439	534	333	1797

**2023 PM No Dev**

		Destination				Tot.
		A	B	C	D	
Origin	A	0	217	281	51	549
	B	204	0	81	151	436
	C	381	94	0	8	483
	D	145	364	14	0	523
	Tot.	730	675	376	210	1991

**2023 AM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	173	418	72	663
	B	205	0	129	261	595
	C	244	76	0	4	324
	D	61	200	12	0	273
	Tot.	510	449	559	337	1855

**2023PM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	224	290	53	567
	B	210	0	81	151	442
	C	392	94	0	8	494
	D	149	364	14	0	527
	Tot.	751	682	385	212	2030

**2024 AM No Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	165	397	69	631
	B	199	0	130	264	593
	C	238	77	0	5	320
	D	60	202	13	0	275
	Tot.	497	444	540	338	1819

**2024 PM No Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	219	284	52	555
	B	206	0	82	153	441
	C	385	95	0	9	489
	D	147	368	15	0	530
	Tot.	738	682	381	214	2015

**2024 AM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	179	430	75	684
	B	211	0	130	264	605
	C	251	77	0	5	333
	D	63	202	13	0	278
	Tot.	525	458	573	344	1900

**2024 PM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	230	298	55	583
	B	214	0	82	153	449
	C	400	95	0	9	504
	D	153	368	15	0	536
	Tot.	767	693	395	217	2072

**2025 AM No Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	167	401	70	638
	B	201	0	131	267	599
	C	241	78	0	6	325
	D	61	204	14	0	279
	Tot.	503	449	546	343	1841

**2025 PM No Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	221	287	53	561
	B	208	0	83	155	446
	C	389	96	0	10	495
	D	149	372	16	0	537
	Tot.	746	689	386	218	2039

**2025 AM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	184	444	78	706
	B	215	0	131	267	613
	C	258	78	0	6	342
	D	65	204	14	0	283
	Tot.	538	466	589	351	1944

**2025 PM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	234	303	56	593
	B	219	0	83	155	457
	C	409	96	0	10	515
	D	156	372	16	0	544
	Tot.	784	702	402	221	2109

**2026 AM No Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	169	405	71	645
	B	203	0	132	270	605
	C	244	79	0	7	330
	D	62	206	15	0	283
	Tot.	509	454	552	348	1863

**2026 PM No Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	223	290	54	567
	B	210	0	84	157	451
	C	393	97	0	11	501
	D	151	376	17	0	544
	Tot.	754	696	391	222	2063

**2026 AM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	190	456	80	726
	B	219	0	132	270	621
	C	264	79	0	7	350
	D	67	206	15	0	288
	Tot.	550	475	603	357	1985

**2026 PM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	238	309	57	604
	B	222	0	84	157	463
	C	416	97	0	11	524
	D	160	376	17	0	553
	Tot.	798	711	410	225	2144



**2027 AM No Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	171	409	72	652
	B	205	0	133	273	611
	C	247	80	0	8	335
	D	63	208	16	0	287
	Tot.	515	459	558	353	1885

**2027 PM No Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	225	293	55	573
	B	212	0	85	159	456
	C	397	98	0	12	507
	D	153	380	18	0	551
	Tot.	762	703	396	226	2087

**2027 AM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	198	473	83	754
	B	226	0	133	273	632
	C	272	80	0	8	360
	D	69	208	16	0	293
	Tot.	567	486	622	364	2039

**2027 PM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	244	317	59	620
	B	228	0	85	159	472
	C	426	98	0	12	536
	D	164	380	18	0	562
	Tot.	818	722	420	230	2190

**2029 AM No Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	175	418	74	667
	B	209	0	136	279	624
	C	252	82	0	9	343
	D	64	213	17	0	294
	Tot.	525	470	571	362	1928

**2029 PM No Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	230	299	56	585
	B	217	0	87	162	466
	C	406	100	0	13	519
	D	156	388	19	0	563
	Tot.	779	718	405	231	2133

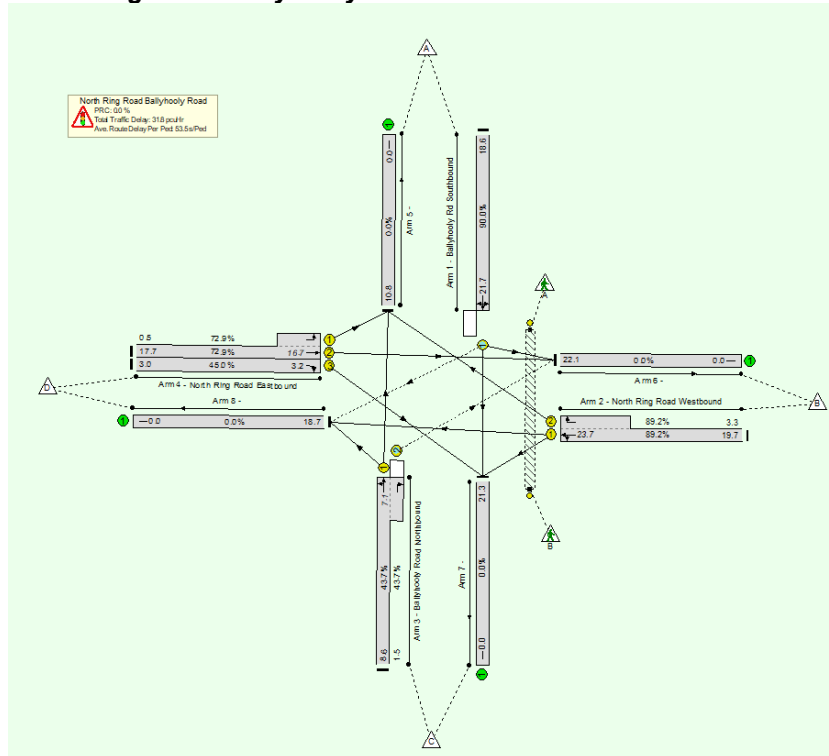
**2029 AM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	208	498	88	794
	B	235	0	136	279	650
	C	283	82	0	9	374
	D	72	213	17	0	302
	Tot.	590	503	651	376	2120

**2029 PM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	254	329	61	644
	B	237	0	87	162	486
	C	442	100	0	13	555
	D	170	388	19	0	577
	Tot.	849	742	435	236	2262

**Fig. 1.3 Site 3: North Ring Road Ballyhooly Road Junction**



**2019 AM Current Year**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	78	417	16	511
	B	91	0	90	475	656
	C	196	44	0	46	286
	D	14	510	86	0	610
	Tot.	301	632	593	537	2063

**2019 PM Current Year**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	99	260	9	368
	B	126	0	54	488	668
	C	353	67	0	70	490
	D	15	569	63	0	647
	Tot.	494	735	377	567	2173

**2022 AM No Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	215	278	50	543
	B	202	0	80	149	431
	C	377	93	0	7	477
	D	143	360	13	0	516
	Tot.	722	668	371	206	1967

**2022 PM No Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	102	269	9	380
	B	130	0	56	504	690
	C	365	69	0	72	506
	D	15	588	65	0	668
	Tot.	510	759	390	585	2244

**2022 AM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	219	285	53	557
	B	208	0	80	149	437
	C	387	93	0	7	487
	D	147	360	13	0	520
	Tot.	742	672	378	209	2001

**2022 PM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	102	274	11	387
	B	133	0	56	504	693
	C	372	69	0	72	513
	D	15	588	65	0	668
	Tot.	520	759	395	587	2261

**2023 AM No Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	217	281	51	549
	B	204	0	81	151	436
	C	381	94	0	8	483
	D	145	364	14	0	523
	Tot.	730	675	376	210	1991

**2023 PM No De**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	103	271	9	383
	B	132	0	56	509	697
	C	369	70	0	73	512
	D	16	594	66	0	676
	Tot.	517	767	393	591	2268

**2023 AM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	85	456	17	558
	B	98	0	94	496	688
	C	211	46	0	48	305
	D	15	532	90	0	637
	Tot.	324	663	640	561	2188

**2023PM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	106	277	9	392
	B	135	0	56	509	700
	C	377	70	0	73	520
	D	16	594	66	0	676
	Tot.	528	770	399	591	2288

**2024 AM No Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	82	440	17	539
	B	96	0	95	501	692
	C	207	46	0	49	302
	D	15	538	91	0	644
	Tot.	318	666	626	567	2177

**2024 PM No Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	104	274	9	387
	B	133	0	57	515	705
	C	373	71	0	74	518
	D	16	600	66	0	682
	Tot.	522	775	397	598	2292

**2024 AM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	87	467	18	572
	B	100	0	95	501	696
	C	215	46	0	49	310
	D	16	538	91	0	645
	Tot.	331	671	653	568	2223

**2024 PM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	108	284	9	401
	B	137	0	57	515	709
	C	384	71	0	74	529
	D	16	600	66	0	682
	Tot.	537	779	407	598	2321

**2025 AM No Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	83	445	17	545
	B	97	0	96	507	700
	C	209	47	0	49	305
	D	15	544	92	0	651
	Tot.	321	674	633	573	2201

**2025 PM No Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	106	277	10	393
	B	134	0	58	521	713
	C	377	71	0	75	523
	D	16	607	67	0	690
	Tot.	527	784	402	606	2319

**2025 AM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	89	480	19	588
	B	102	0	96	507	705
	C	220	47	0	49	316
	D	16	544	92	0	652
	Tot.	338	680	668	575	2261

**2025 PM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	110	288	11	409
	B	139	0	58	521	718
	C	391	71	0	75	537
	D	17	607	67	0	691
	Tot.	547	788	413	607	2355

**2026 AM No Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	84	450	17	551
	B	98	0	97	512	707
	C	211	47	0	50	308
	D	15	550	93	0	658
	Tot.	324	681	640	579	2224

**2026 PM No Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	107	280	10	397
	B	136	0	58	526	720
	C	381	72	0	75	528
	D	16	614	68	0	698
	Tot.	533	793	406	611	2343

**2026 AM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	92	492	18	602
	B	104	0	97	512	713
	C	224	47	0	50	321
	D	16	550	93	0	659
	Tot.	344	689	682	580	2295

**2026 PM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	112	293	11	416
	B	142	0	58	526	726
	C	397	72	0	75	544
	D	17	614	68	0	699
	Tot.	556	798	419	612	2385

**2027 AM No Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	85	454	17	556
	B	99	0	98	518	715
	C	214	48	0	50	312
	D	15	556	94	0	665
	Tot.	328	689	646	585	2248

**2027 PM No Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	108	283	10	401
	B	137	0	59	532	728
	C	385	73	0	76	534
	D	16	620	69	0	705
	Tot.	538	801	411	618	2368

**2027 AM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	95	506	19	620
	B	107	0	98	518	723
	C	230	48	0	50	328
	D	16	556	94	0	666
	Tot.	353	699	698	587	2337

**2027 PM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	114	300	11	425
	B	145	0	59	532	736
	C	406	73	0	76	555
	D	16	620	69	0	705
	Tot.	567	807	428	619	2421

**2029 AM No Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	87	464	18	569
	B	101	0	100	529	730
	C	218	49	0	51	318
	D	16	568	96	0	680
	Tot.	335	704	660	598	2297

**2029 PM No Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	110	290	10	410
	B	140	0	60	543	743
	C	393	75	0	78	546
	D	17	634	70	0	721
	Tot.	550	819	420	631	2420

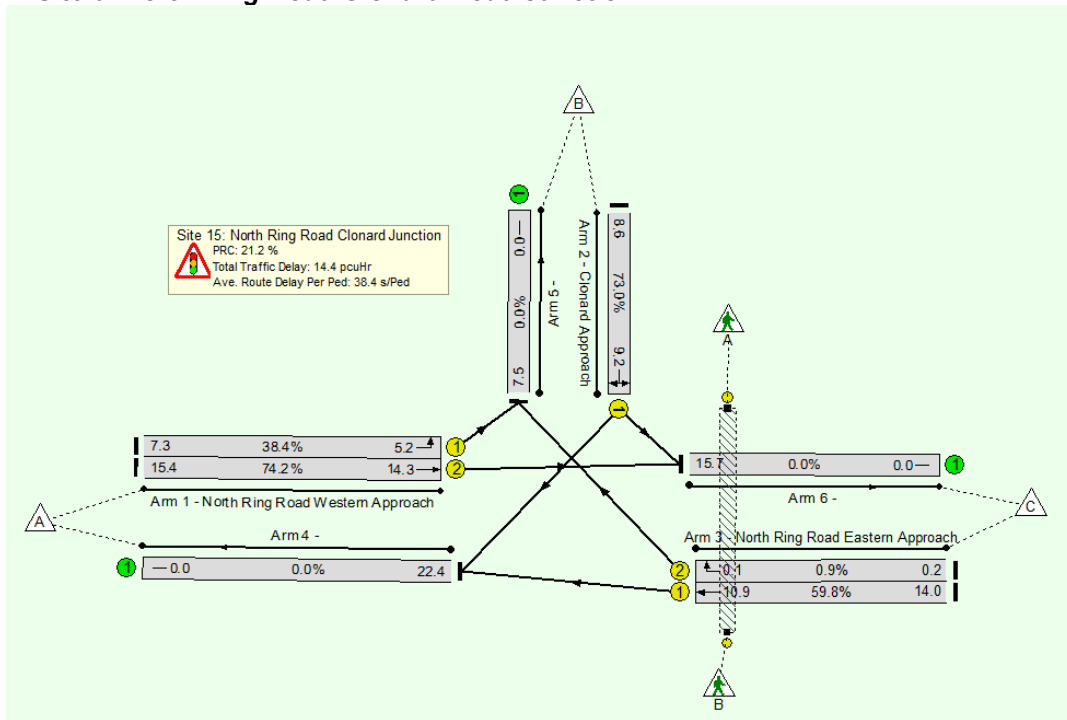
**2029 AM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	99	530	20	649
	B	109	0	100	529	738
	C	240	49	0	51	340
	D	17	568	96	0	681
	Tot.	366	716	726	600	2408

**2029 PM with Dev**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	118	311	11	440
	B	149	0	60	543	752
	C	419	75	0	78	572
	D	18	634	70	0	722
	Tot.	586	827	441	632	2486

**Fig. 1.4 Site 6: North Ring Road Clonard Road Junction**



**2019 AM Current Year**

		Destination			
		A	B	C	Tot.
Origin	A	0	276	590	866
	B	316	0	10	326
	C	536	8	0	544
	Tot.	852	284	600	1736

**2019 PM Current Year**

		Destination			
		A	B	C	Tot.
Origin	A	0	467	628	1095
	B	193	0	32	225
	C	537	33	0	570
	Tot.	730	500	660	1890

**2022 AM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	285	609	894
	B	326	0	10	336
	C	554	8	0	562
	Tot.	880	293	619	1792

**2022 PM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	482	649	1131
	B	199	0	33	232
	C	555	34	0	589
	Tot.	754	516	682	1952

**2022 AM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	286	609	895
	B	328	0	10	338
	C	554	8	0	562
	Tot.	882	294	619	1795

**2022 PM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	486	649	1135
	B	202	0	33	235
	C	555	34	0	589
	Tot.	757	520	682	1959

**2023 AM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	288	616	904
	B	330	0	10	340
	C	560	8	0	568
	Tot.	890	296	626	1812

**2023 PM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	488	656	1144
	B	202	0	33	235
	C	561	34	0	595
	Tot.	763	522	689	1974

**2023 AM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	290	616	906
	B	334	0	10	344
	C	560	8	0	568
	Tot.	894	298	626	1818

**2023PM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	492	656	1148
	B	205	0	33	238
	C	561	34	0	595
	Tot.	766	526	689	1981

**2024 AM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	291	623	914
	B	333	0	11	344
	C	566	8	0	574
	Tot.	899	299	634	1832

**2024 PM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	493	663	1156
	B	204	0	34	238
	C	567	35	0	602
	Tot.	771	528	697	1996

**2024 AM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	294	623	917
	B	339	0	11	350
	C	566	8	0	574
	Tot.	905	302	634	1841

**2024 PM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	499	663	1162
	B	207	0	34	241
	C	567	35	0	602
	Tot.	774	534	697	2005

**2025 AM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	294	629	923
	B	337	0	11	348
	C	572	9	0	581
	Tot.	909	303	640	1852

**2025 PM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	498	670	1168
	B	206	0	34	240
	C	573	35	0	608
	Tot.	779	533	704	2016

**2025 AM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	298	629	927
	B	345	0	11	356
	C	572	9	0	581
	Tot.	917	307	640	1864

**2025 PM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	505	670	1175
	B	209	0	34	243
	C	573	35	0	608
	Tot.	782	540	704	2026

**2026 AM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	298	636	934
	B	341	0	11	352
	C	578	9	0	587
	Tot.	919	307	647	1873

**2026 PM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	504	677	1181
	B	208	0	35	243
	C	579	36	0	615
	Tot.	787	540	712	2039

**2026 AM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	303	636	939
	B	350	0	11	361
	C	578	9	0	587
	Tot.	928	312	647	1887

**2026 PM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	512	678	1190
	B	211	0	35	246
	C	579	36	0	615
	Tot.	790	548	713	2051

**2027 AM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	301	643	944
	B	344	0	11	355
	C	584	9	0	593
	Tot.	928	310	654	1892

**2027 PM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	509	684	1193
	B	210	0	35	245
	C	585	36	0	621
	Tot.	795	545	719	2059

**2027 AM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	307	643	950
	B	355	0	11	366
	C	584	9	0	593
	Tot.	939	316	654	1909

**2027 PM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	519	685	1204
	B	213	0	36	249
	C	585	36	0	621
	Tot.	798	555	721	2074

**2029 AM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	307	657	964
	B	352	0	11	363
	C	597	9	0	606
	Tot.	949	316	668	1933

**2029 PM No Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	520	699	1219
	B	215	0	36	251
	C	598	37	0	635
	Tot.	813	557	735	2105

**2029 AM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	315	657	972
	B	366	0	11	377
	C	597	9	0	606
	Tot.	963	324	668	1955

**2029 PM with Dev**

		Destination			
		A	B	C	Tot.
Origin	A	0	533	700	1233
	B	219	0	37	256
	C	598	37	0	635
	Tot.	817	570	737	2124

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**APPENDIX 2: TRAFFIC MODELLING RESULTS (LINSIG & JUNCTION 9: PICADY)**



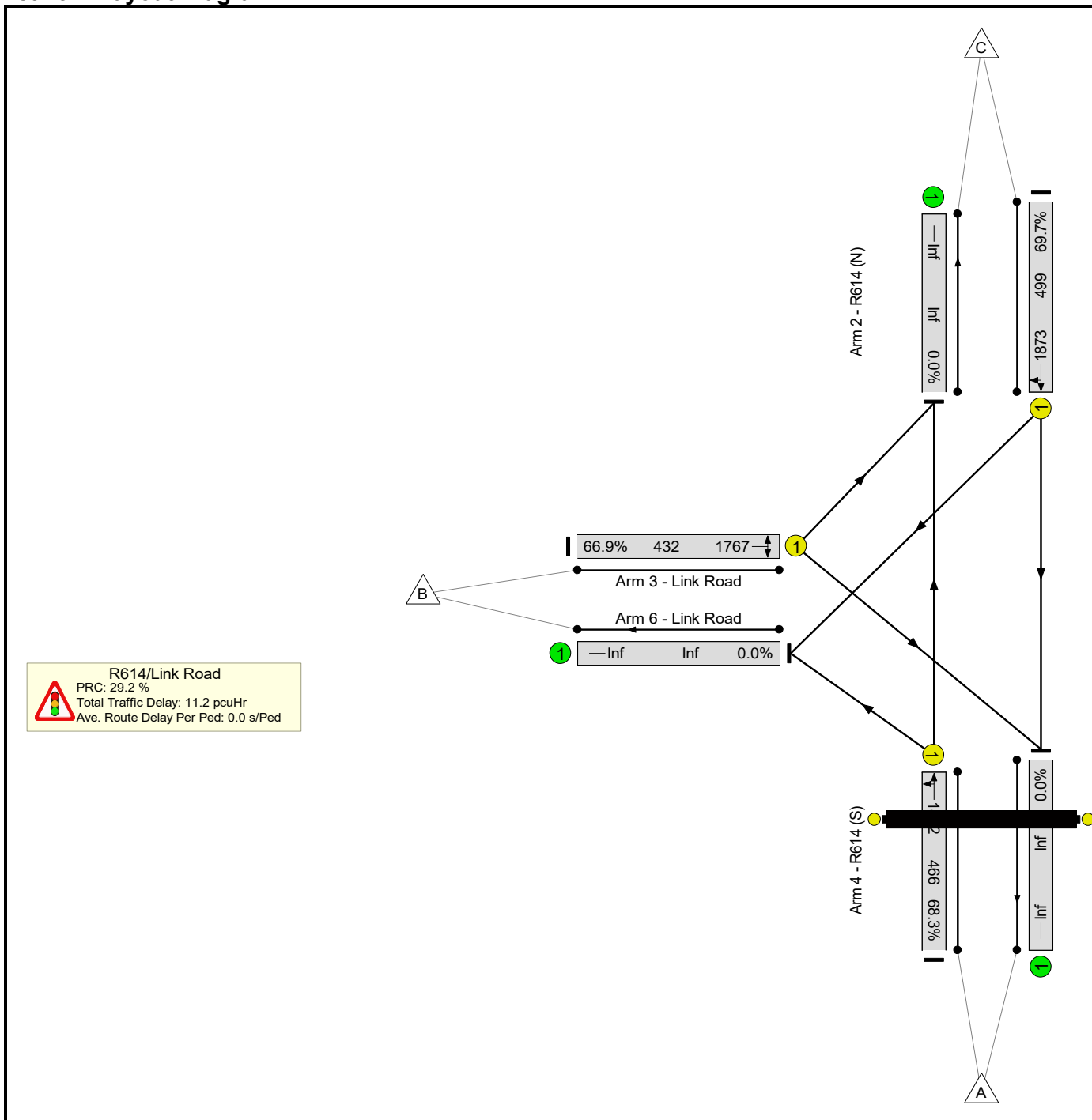
Basic Results Summary  
**Basic Results Summary**

**User and Project Details**

<b>Project:</b>	Longview Estate
<b>Title:</b>	Link Road TIA
<b>Location:</b>	
<b>Client:</b>	Longview Estates Ltd
<b>Additional detail:</b>	
<b>File name:</b>	Site 1 Ballyhooly Kilbarry Jnc.lsg3x
<b>Author:</b>	
<b>Company:</b>	
<b>Address:</b>	

Scenario 1: '2022AM with Dev' (FG1: '2022 AM with Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	191	127	318
	B	252	0	37	289
	C	251	97	0	348
	Tot.	503	288	164	955

Basic Results Summary

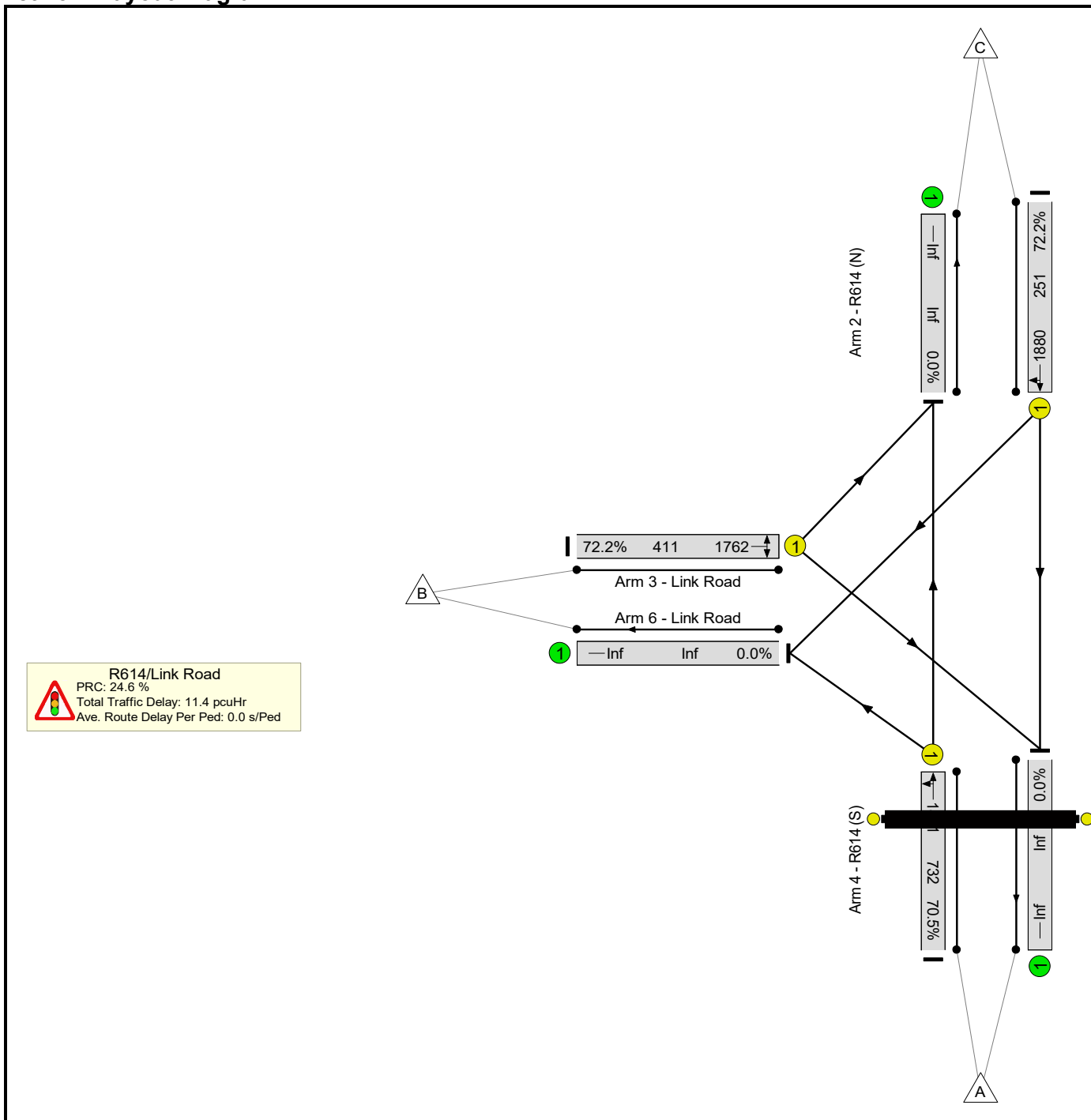
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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: Link Road TIA	-	-	-		-	-	-	-	-	-	69.7%	0	0	0	11.2	-	-	
R614/Link Road	-	-	-		-	-	-	-	-	-	69.7%	0	0	0	11.2	-	-	
1/1	R614 (S) Ahead Left	U	A		1	22	-	318	1822	466	68.3%	-	-	-	3.7	42.2	8.2	
2/1	R614 (N) Ahead Right	U	C		1	23	-	348	1873	499	69.7%	-	-	-	4.0	41.4	9.0	
3/1	Link Road Right Left	U	B		1	21	-	289	1767	432	66.9%	-	-	-	3.5	43.1	7.5	
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-	
C1				PRC for Signalled Lanes (%):		29.2		Total Delay for Signalled Lanes (pcuHr):				11.20		Cycle Time (s): 90				
				PRC Over All Lanes (%):		29.2		Total Delay Over All Lanes(pcuHr):				11.20						

Basic Results Summary

Scenario 2: '2022 PM with Dev' (FG2: '2022 PM with Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	277	239	516
	B	217	0	80	297
	C	140	41	0	181
Tot.	357	318	319	994	

Basic Results Summary

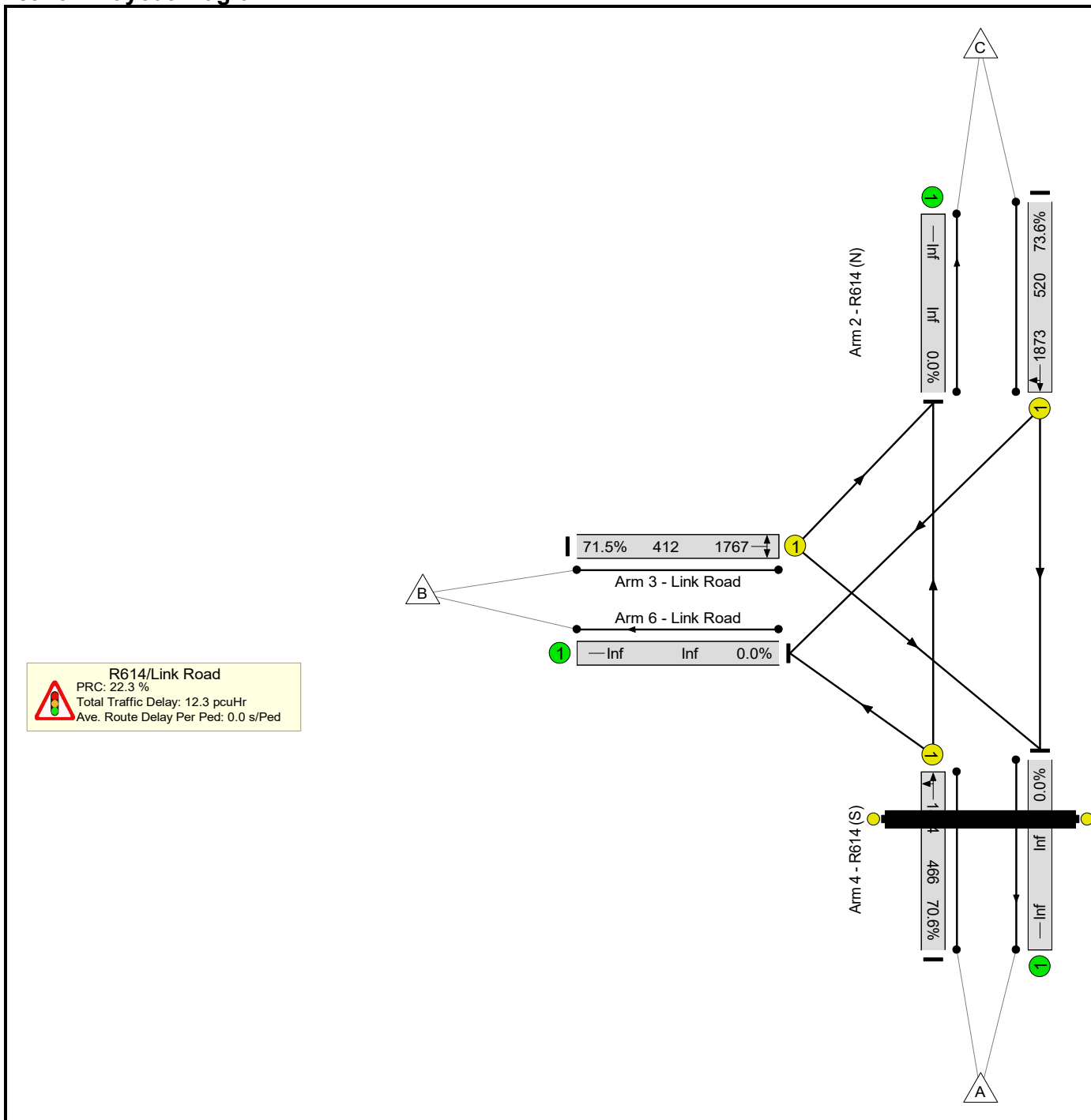
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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: Link Road TIA	-	-	-		-	-	-	-	-	-	72.2%	0	0	0	11.4	-	-
R614/Link Road	-	-	-		-	-	-	-	-	-	72.2%	0	0	0	11.4	-	-
1/1	R614 (S) Ahead Left	U	A		1	35	-	516	1831	732	70.5%	-	-	-	4.4	30.8	11.9
2/1	R614 (N) Ahead Right	U	C		1	11	-	181	1880	251	72.2%	-	-	-	3.1	62.4	5.6
3/1	Link Road Right Left	U	B		1	20	-	297	1762	411	72.2%	-	-	-	3.9	47.2	8.0
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-
C1					PRC for Signalled Lanes (%):		24.6	Total Delay for Signalled Lanes (pcuHr):				11.44	Cycle Time (s): 90				
					PRC Over All Lanes (%):		24.6	Total Delay Over All Lanes(pcuHr):				11.44					

Basic Results Summary

Scenario 3: '2023 AM with Dev' (FG3: '2023 AM with Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	193	136	329
	B	255	0	40	295
	C	276	107	0	383
	Tot.	531	300	176	1007

Basic Results Summary

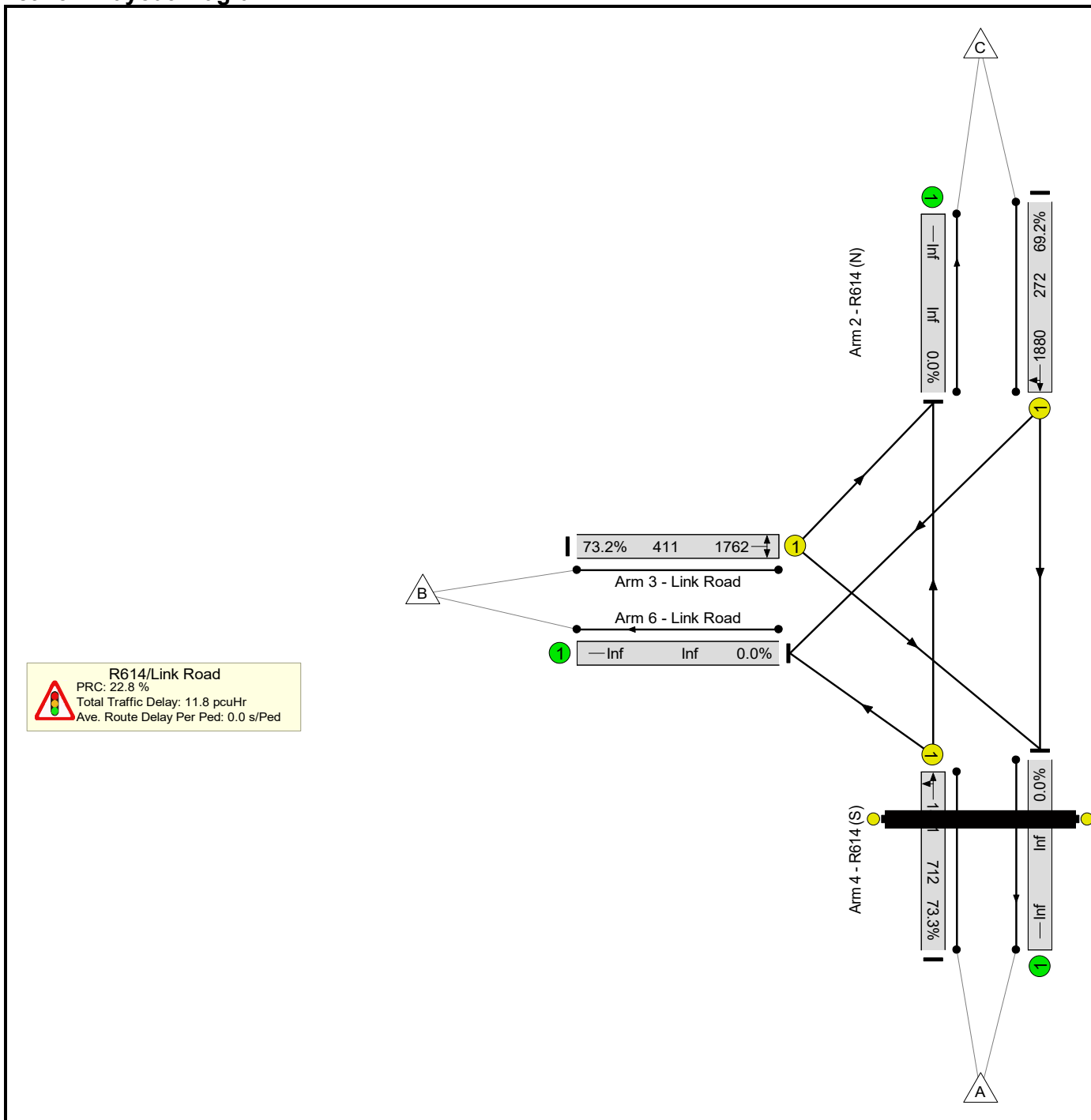
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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: Link Road TIA	-	-	-		-	-	-	-	-	-	73.6%	0	0	0	12.3	-	-
R614/Link Road	-	-	-		-	-	-	-	-	-	73.6%	0	0	0	12.3	-	-
1/1	R614 (S) Ahead Left	U	A		1	22	-	329	1824	466	70.6%	-	-	-	4.0	43.3	8.6
2/1	R614 (N) Ahead Right	U	C		1	24	-	383	1873	520	73.6%	-	-	-	4.5	42.4	10.0
3/1	Link Road Right Left	U	B		1	20	-	295	1767	412	71.5%	-	-	-	3.8	46.8	8.0
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-
		C1		PRC for Signalled Lanes (%):		22.3		Total Delay for Signalled Lanes (pcuHr):		12.30		Cycle Time (s):		90			
				PRC Over All Lanes (%):		22.3		Total Delay Over All Lanes(pcuHr):		12.30							

Basic Results Summary

Scenario 4: '2023 PM With Dev' (FG4: '2023 PM with Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	280	242	522
	B	219	0	82	301
	C	145	43	0	188
	Tot.	364	323	324	1011



Basic Results Summary

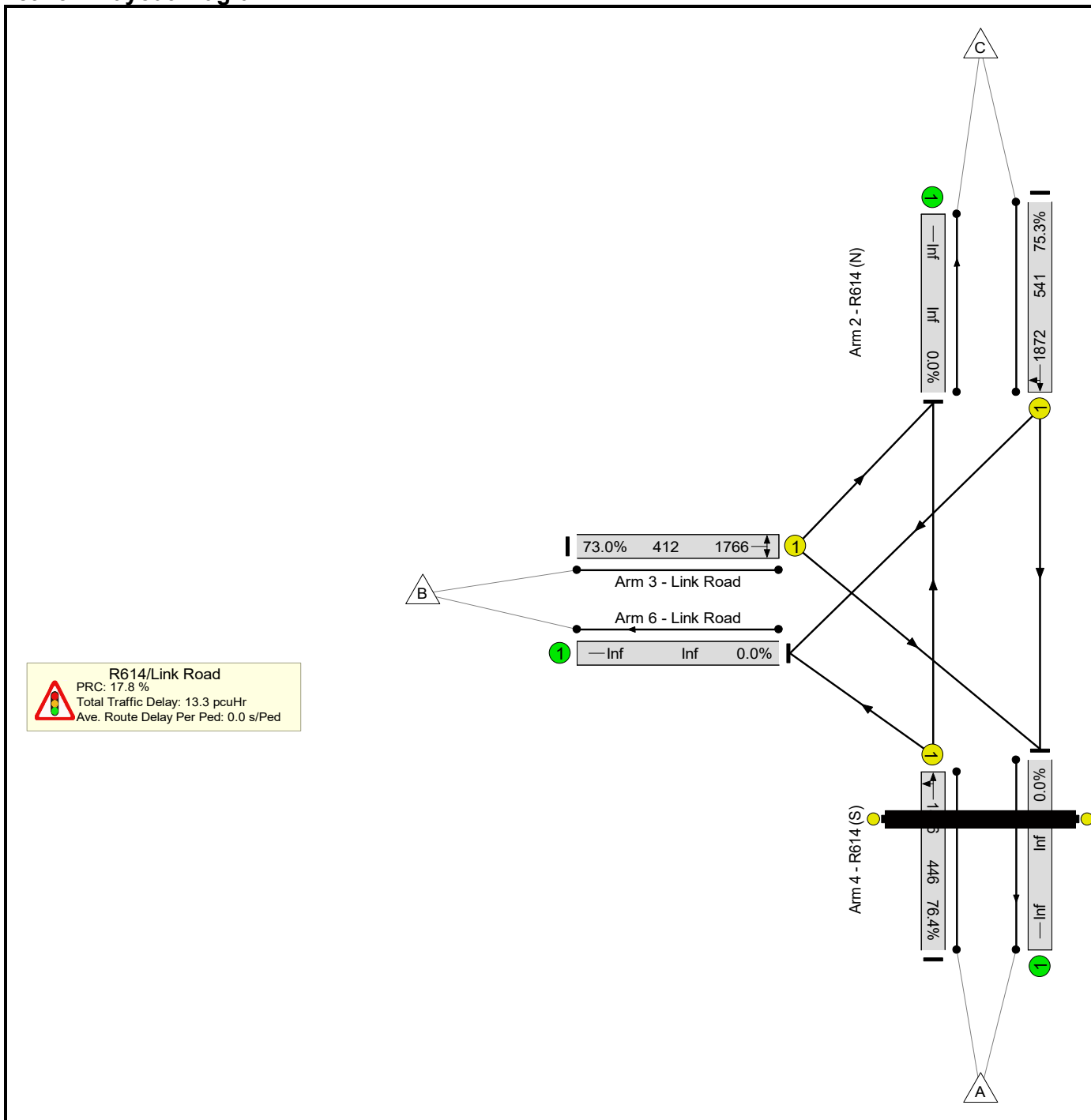
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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: Link Road TIA	-	-	-		-	-	-	-	-	-	73.3%	0	0	0	11.8	-	-
R614/Link Road	-	-	-		-	-	-	-	-	-	73.3%	0	0	0	11.8	-	-
1/1	R614 (S) Ahead Left	U	A		1	34	-	522	1831	712	73.3%	-	-	-	4.8	32.8	12.4
2/1	R614 (N) Ahead Right	U	C		1	12	-	188	1880	272	69.2%	-	-	-	3.0	57.6	5.5
3/1	Link Road Right Left	U	B		1	20	-	301	1762	411	73.2%	-	-	-	4.0	47.9	8.3
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-
C1				PRC for Signalled Lanes (%):		22.8		Total Delay for Signalled Lanes (pcuHr):		11.77		Cycle Time (s):		90			
				PRC Over All Lanes (%):		22.8		Total Delay Over All Lanes(pcuHr):		11.77							

Basic Results Summary

Scenario 5: '2024 AM With Dev' (FG5: '2024 AM with Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	195	146	341
	B	258	0	43	301
	C	293	114	0	407
Tot.	551	309	189	1049	

Basic Results Summary

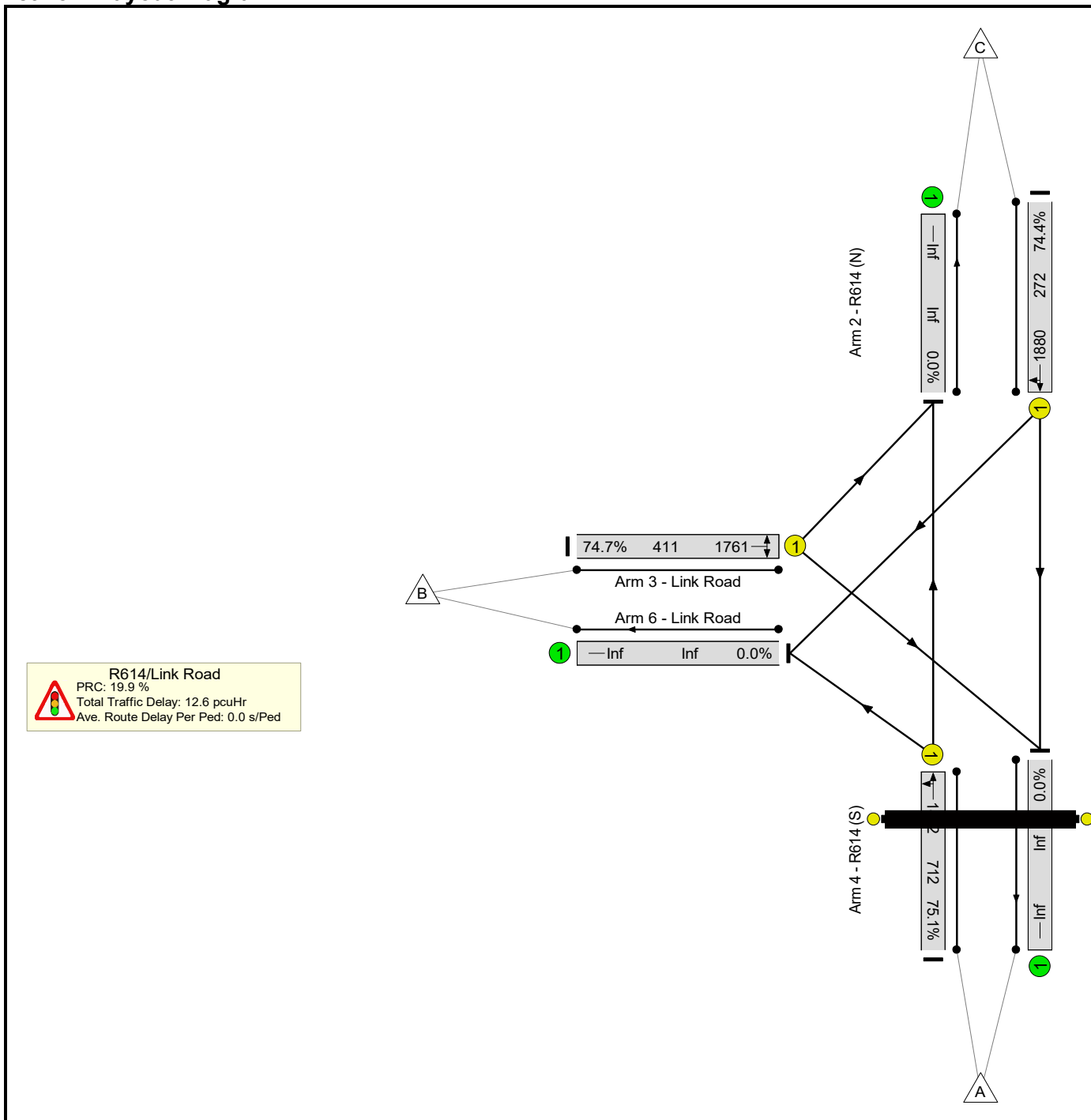
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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: Link Road TIA	-	-	-		-	-	-	-	-	-	76.4%	0	0	0	13.3	-	-
R614/Link Road	-	-	-		-	-	-	-	-	-	76.4%	0	0	0	13.3	-	-
1/1	R614 (S) Ahead Left	U	A		1	21	-	341	1826	446	76.4%	-	-	-	4.6	48.2	9.4
2/1	R614 (N) Ahead Right	U	C		1	25	-	407	1872	541	75.3%	-	-	-	4.8	42.2	10.6
3/1	Link Road Right Left	U	B		1	20	-	301	1766	412	73.0%	-	-	-	4.0	47.7	8.3
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-
C1				PRC for Signalled Lanes (%): 17.8			PRC Over All Lanes (%): 17.8		Total Delay for Signalled Lanes (pcuHr): 13.33			Total Delay Over All Lanes(pcuHr): 13.33		Cycle Time (s): 90			

Basic Results Summary

Scenario 6: '2024 PM With Dev' (FG6: '2024 PM with Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	283	252	535
	B	221	0	86	307
	C	156	46	0	202
Tot.	377	329	338	1044	

Basic Results Summary

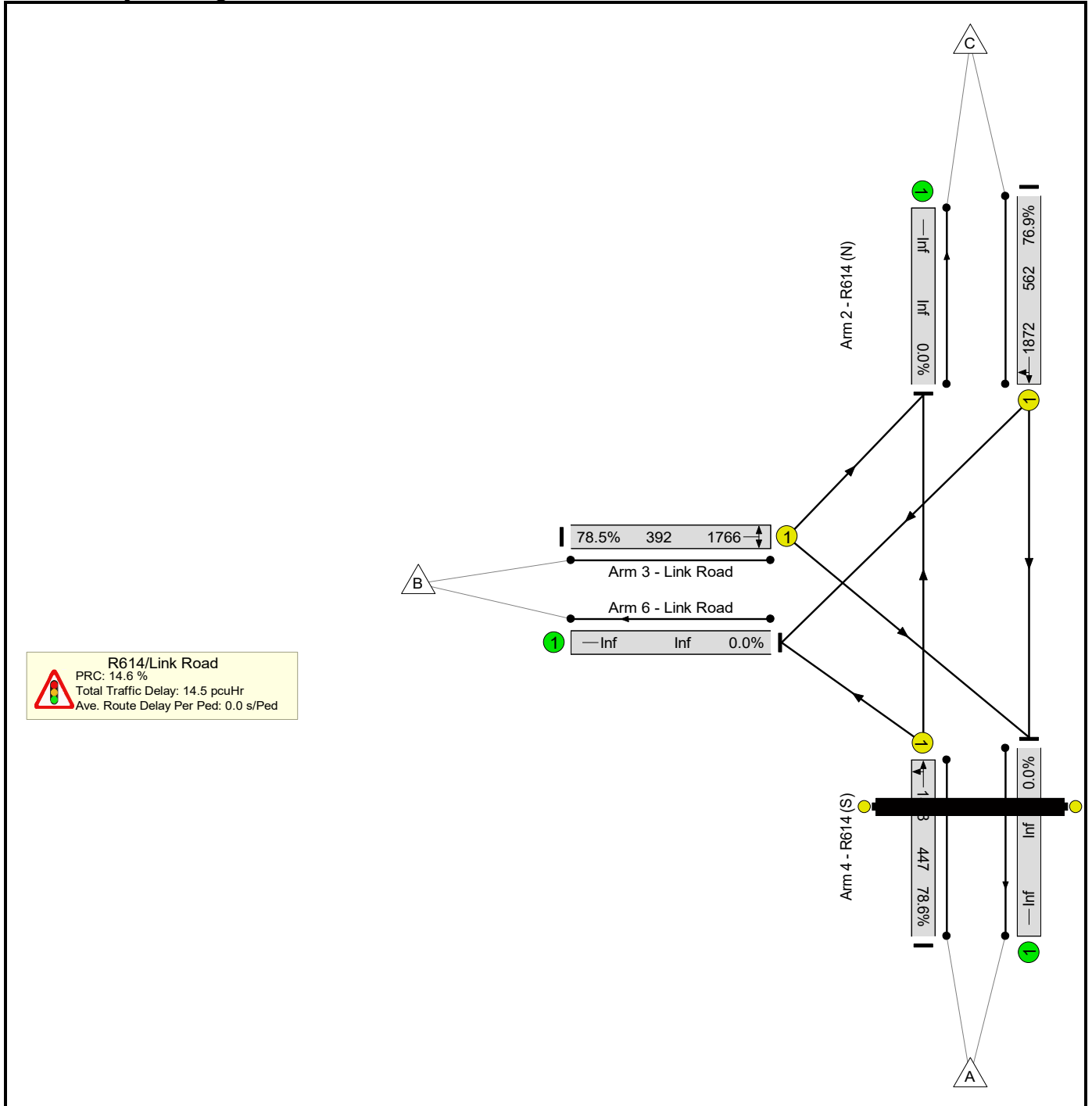
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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: Link Road TIA	-	-	-		-	-	-	-	-	-	75.1%	0	0	0	12.6	-	-
R614/Link Road	-	-	-		-	-	-	-	-	-	75.1%	0	0	0	12.6	-	-
1/1	R614 (S) Ahead Left	U	A		1	34	-	535	1832	712	75.1%	-	-	-	5.0	33.7	12.9
2/1	R614 (N) Ahead Right	U	C		1	12	-	202	1880	272	74.4%	-	-	-	3.5	61.8	6.2
3/1	Link Road Right Left	U	B		1	20	-	307	1761	411	74.7%	-	-	-	4.2	48.9	8.5
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-
C1				PRC for Signalled Lanes (%):		19.9		Total Delay for Signalled Lanes (pcuHr):				12.65		Cycle Time (s): 90			
				PRC Over All Lanes (%):		19.9		Total Delay Over All Lanes(pcuHr):				12.65					

Basic Results Summary

Scenario 7: '2025 AM With Dev' (FG7: '2025 AM with Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	197	154	351
	B	261	0	47	308
	C	311	121	0	432
Tot.	572	318	201	1091	

Basic Results Summary

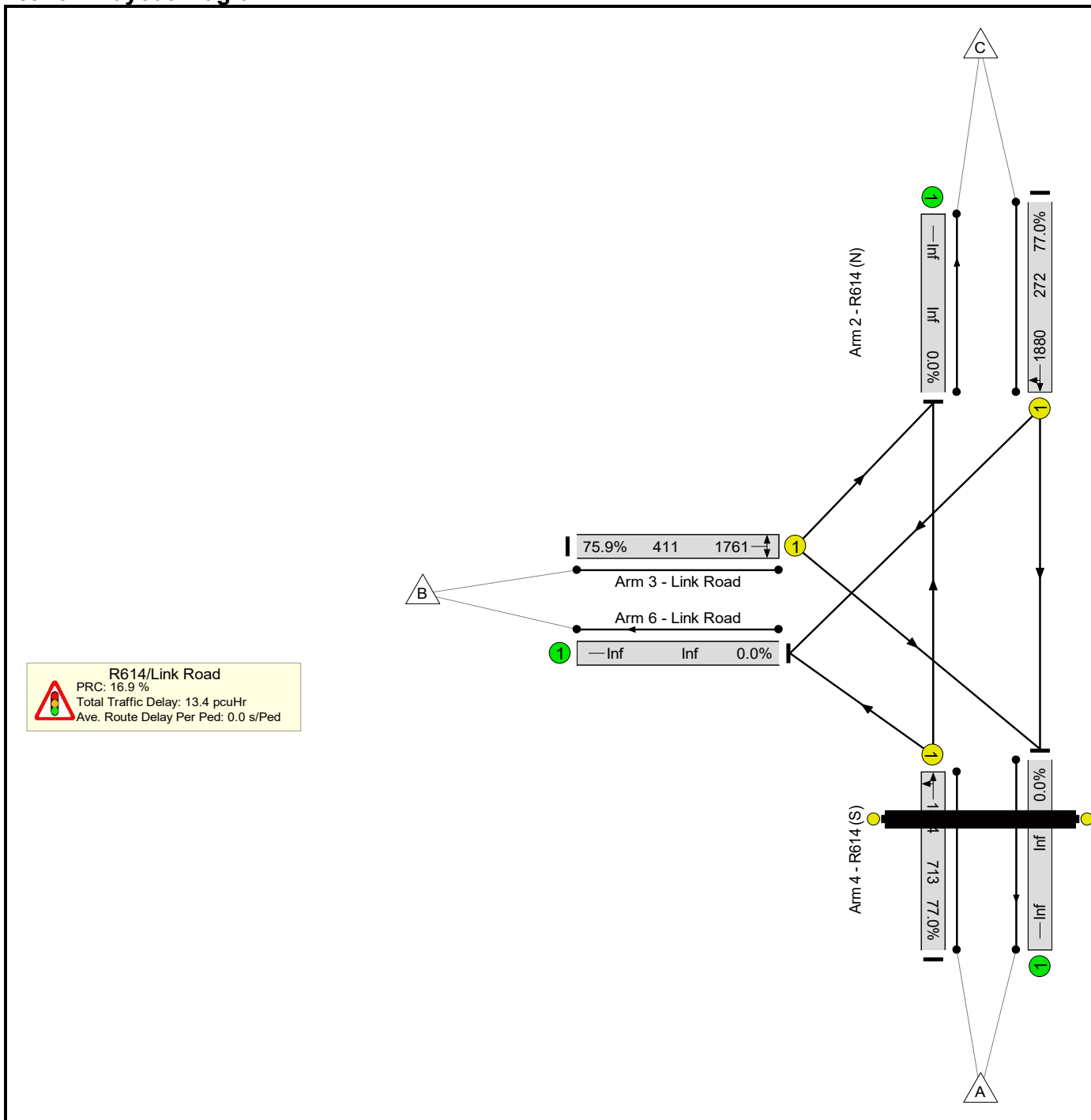
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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: Link Road TIA	-	-	-		-	-	-	-	-	-	78.6%	0	0	0	14.5	-	-
R614/Link Road	-	-	-		-	-	-	-	-	-	78.6%	0	0	0	14.5	-	-
1/1	R614 (S) Ahead Left	U	A		1	21	-	351	1828	447	78.6%	-	-	-	4.9	49.9	10.0
2/1	R614 (N) Ahead Right	U	C		1	26	-	432	1872	562	76.9%	-	-	-	5.1	42.2	11.3
3/1	Link Road Right Left	U	B		1	19	-	308	1766	392	78.5%	-	-	-	4.6	53.4	8.9
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-
		C1		PRC for Signalled Lanes (%):		14.6		Total Delay for Signalled Lanes (pcuHr):		14.50		Cycle Time (s):		90			
				PRC Over All Lanes (%):		14.6		Total Delay Over All Lanes(pcuHr):		14.50							

Basic Results Summary

Scenario 8: '2025 PM With Dev' (FG8: '2025 PM with Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	286	263	549
	B	223	0	89	312
	C	161	48	0	209
Tot.	384	334	352	1070	



Basic Results Summary

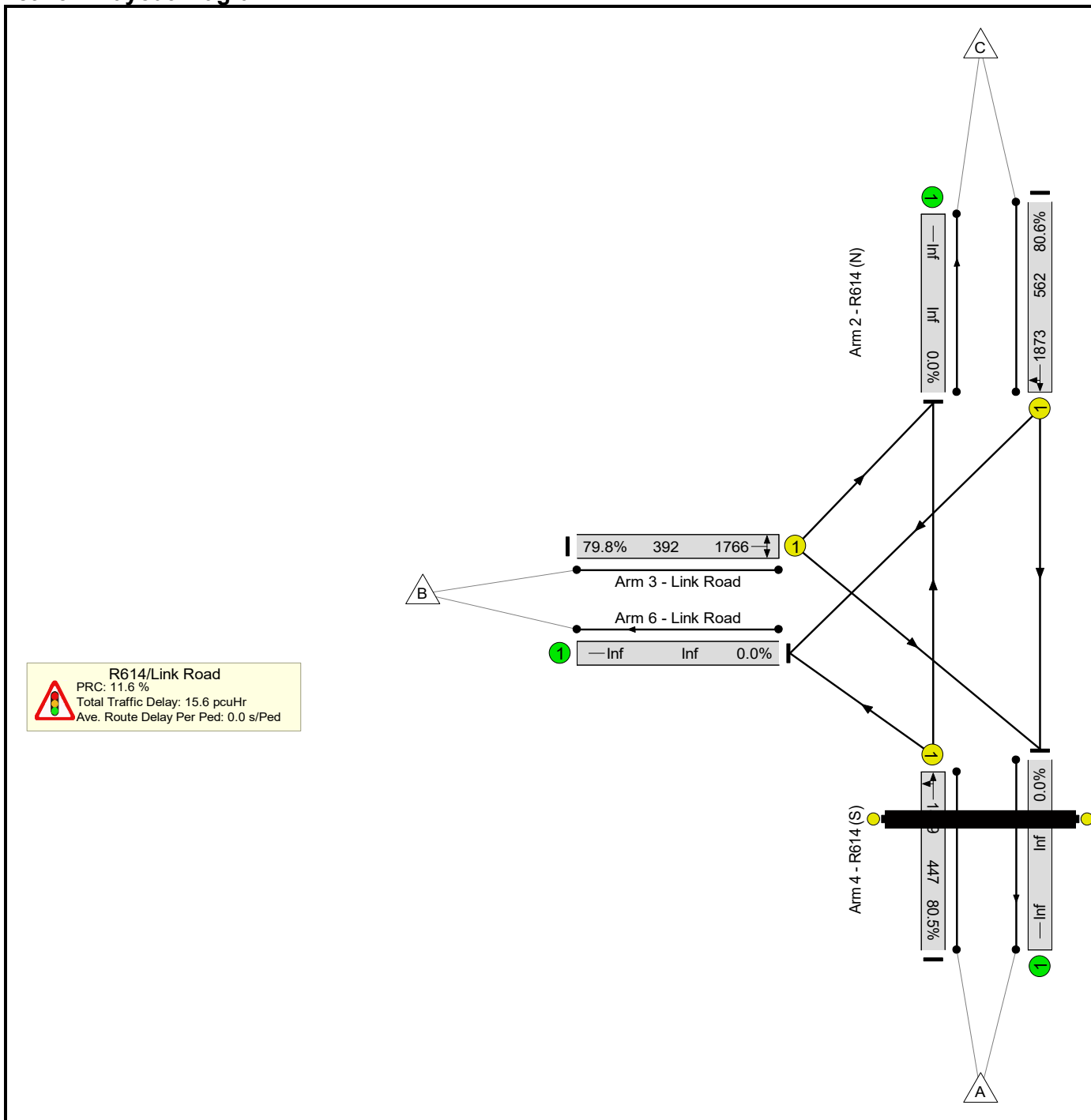
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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: Link Road TIA	-	-	-		-	-	-	-	-	-	77.0%	0	0	0	13.4	-	-	
R614/Link Road	-	-	-		-	-	-	-	-	-	77.0%	0	0	0	13.4	-	-	
1/1	R614 (S) Ahead Left	U	A		1	34	-	549	1834	713	77.0%	-	-	-	5.3	34.7	13.5	
2/1	R614 (N) Ahead Right	U	C		1	12	-	209	1880	272	77.0%	-	-	-	3.7	64.5	6.6	
3/1	Link Road Right Left	U	B		1	20	-	312	1761	411	75.9%	-	-	-	4.3	49.8	8.7	
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-	
C1				PRC for Signalled Lanes (%):			16.9	Total Delay for Signalled Lanes (pcuHr):			13.36	Cycle Time (s):			90			
				PRC Over All Lanes (%):			16.9	Total Delay Over All Lanes(pcuHr):			13.36							

Basic Results Summary

Scenario 9: '2026 AM With Dev' (FG9: '2026 AM with Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

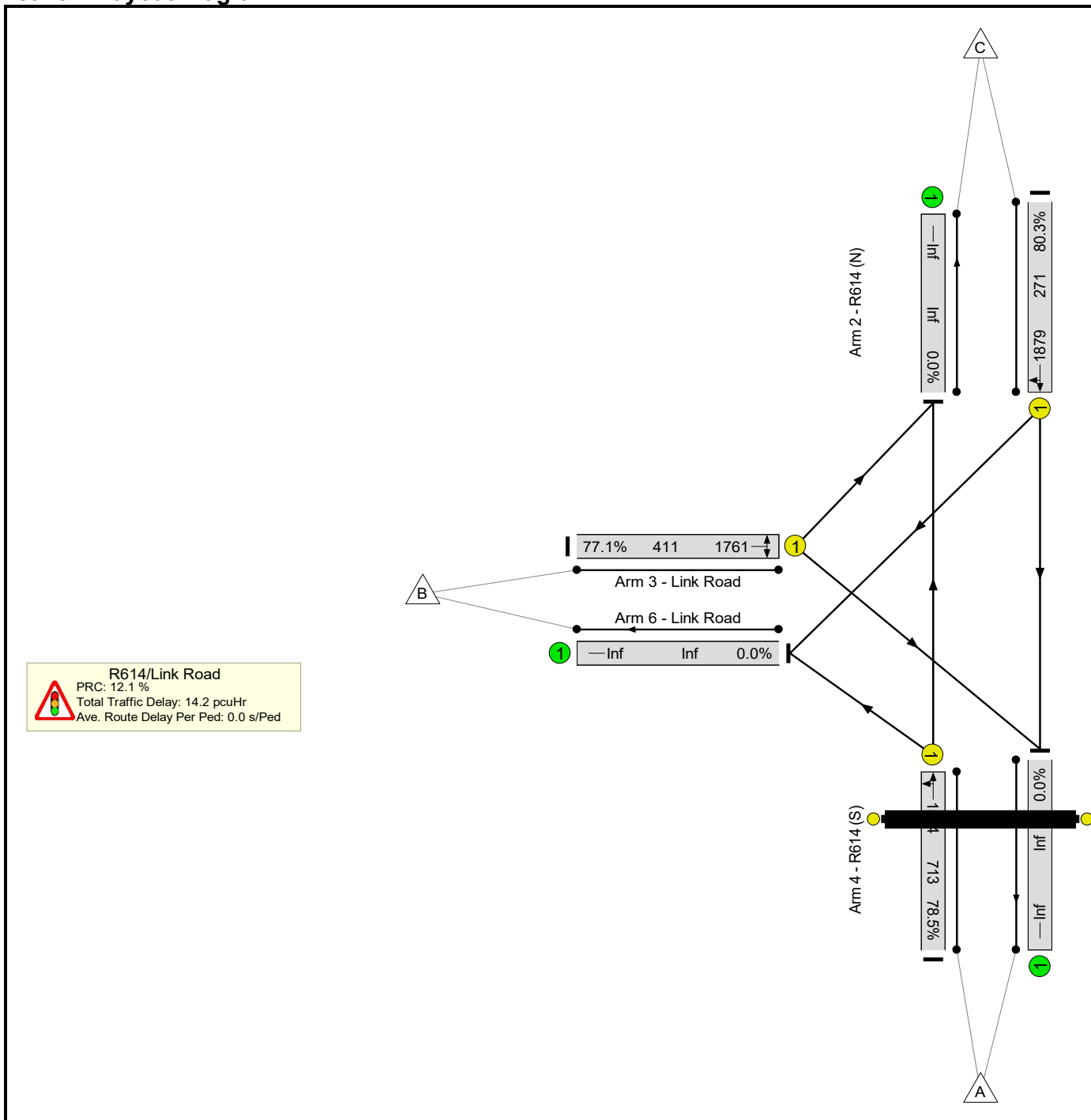
	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	199	161	360
	B	264	0	49	313
	C	327	126	0	453
	Tot.	591	325	210	1126

Basic Results Summary

**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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)
<b>Network: Link Road TIA</b>	-	-	-		-	-	-	-	-	-	<b>80.6%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15.6</b>	-	-
<b>R614/Link Road</b>	-	-	-		-	-	-	-	-	-	<b>80.6%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15.6</b>	-	-
1/1	R614 (S) Ahead Left	U	A		1	21	-	360	1829	447	80.5%	-	-	-	5.2	51.8	10.4
2/1	R614 (N) Ahead Right	U	C		1	26	-	453	1873	562	80.6%	-	-	-	5.7	45.0	12.5
3/1	Link Road Right Left	U	B		1	19	-	313	1766	392	79.8%	-	-	-	4.8	54.7	9.3
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-
C1				PRC for Signalled Lanes (%):		11.6		Total Delay for Signalled Lanes (pcuHr):				15.60		Cycle Time (s): 90			
				PRC Over All Lanes (%):		11.6		Total Delay Over All Lanes(pcuHr):				15.60					

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	289	271	560
	B	225	0	92	317
	C	167	51	0	218
Tot.	392	340	363	1095	

Basic Results Summary

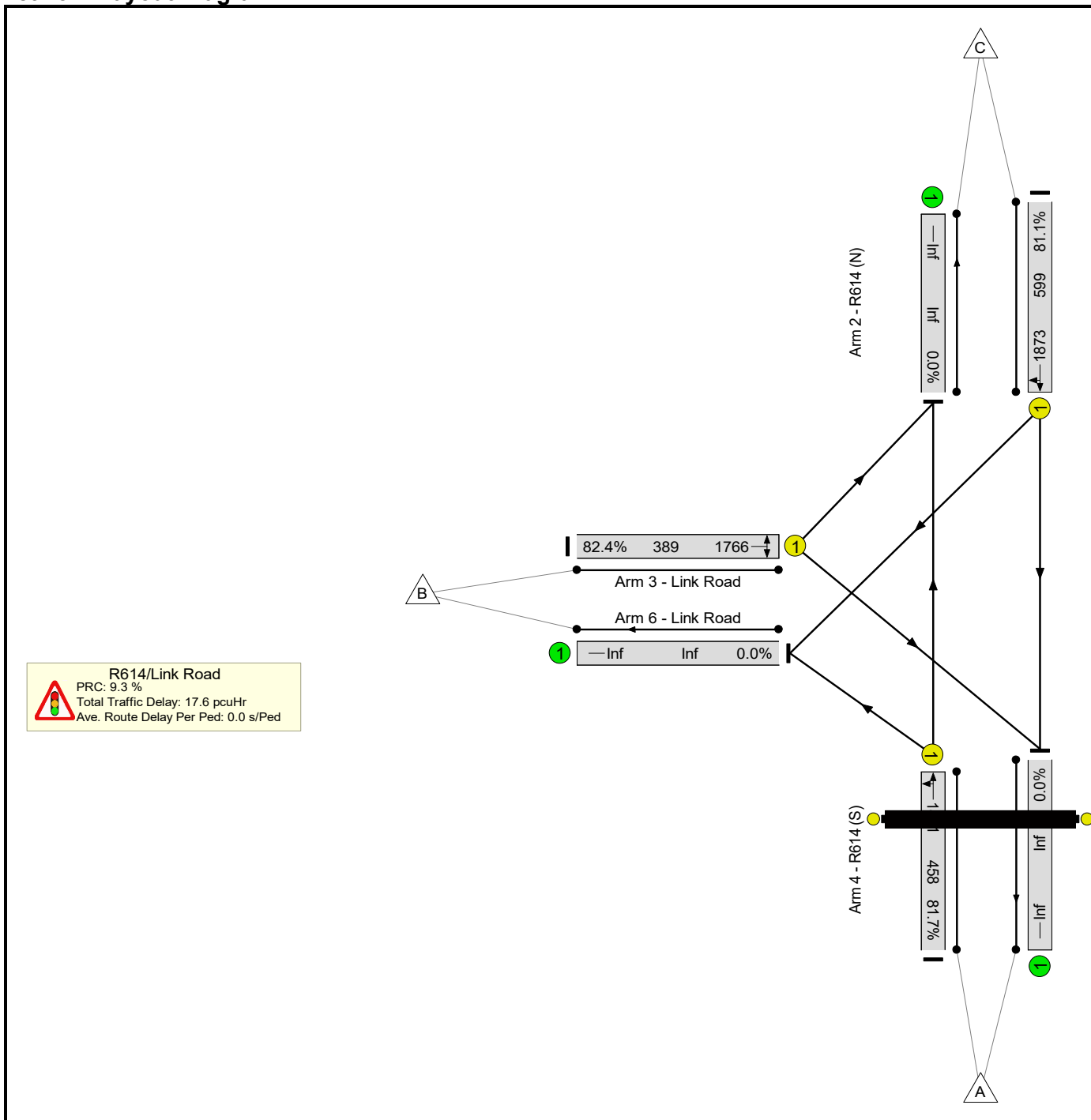
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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: Link Road TIA	-	-	-		-	-	-	-	-	-	80.3%	0	0	0	14.2	-	-	
R614/Link Road	-	-	-		-	-	-	-	-	-	80.3%	0	0	0	14.2	-	-	
1/1	R614 (S) Ahead Left	U	A		1	34	-	560	1834	713	78.5%	-	-	-	5.5	35.7	14.1	
2/1	R614 (N) Ahead Right	U	C		1	12	-	218	1879	271	80.3%	-	-	-	4.2	68.7	7.2	
3/1	Link Road Right Left	U	B		1	20	-	317	1761	411	77.1%	-	-	-	4.5	50.8	9.0	
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-	
C1				PRC for Signalled Lanes (%): 12.1			PRC Over All Lanes (%): 12.1		Total Delay for Signalled Lanes (pcuHr): 14.18			Total Delay Over All Lanes(pcuHr): 14.18		Cycle Time (s): 90				

Basic Results Summary

Scenario 11: '2027 AM With Dev' (FG11: '2027 AM with Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	201	173	374
	B	267	0	53	320
	C	351	135	0	486
	Tot.	618	336	226	1180

Basic Results Summary

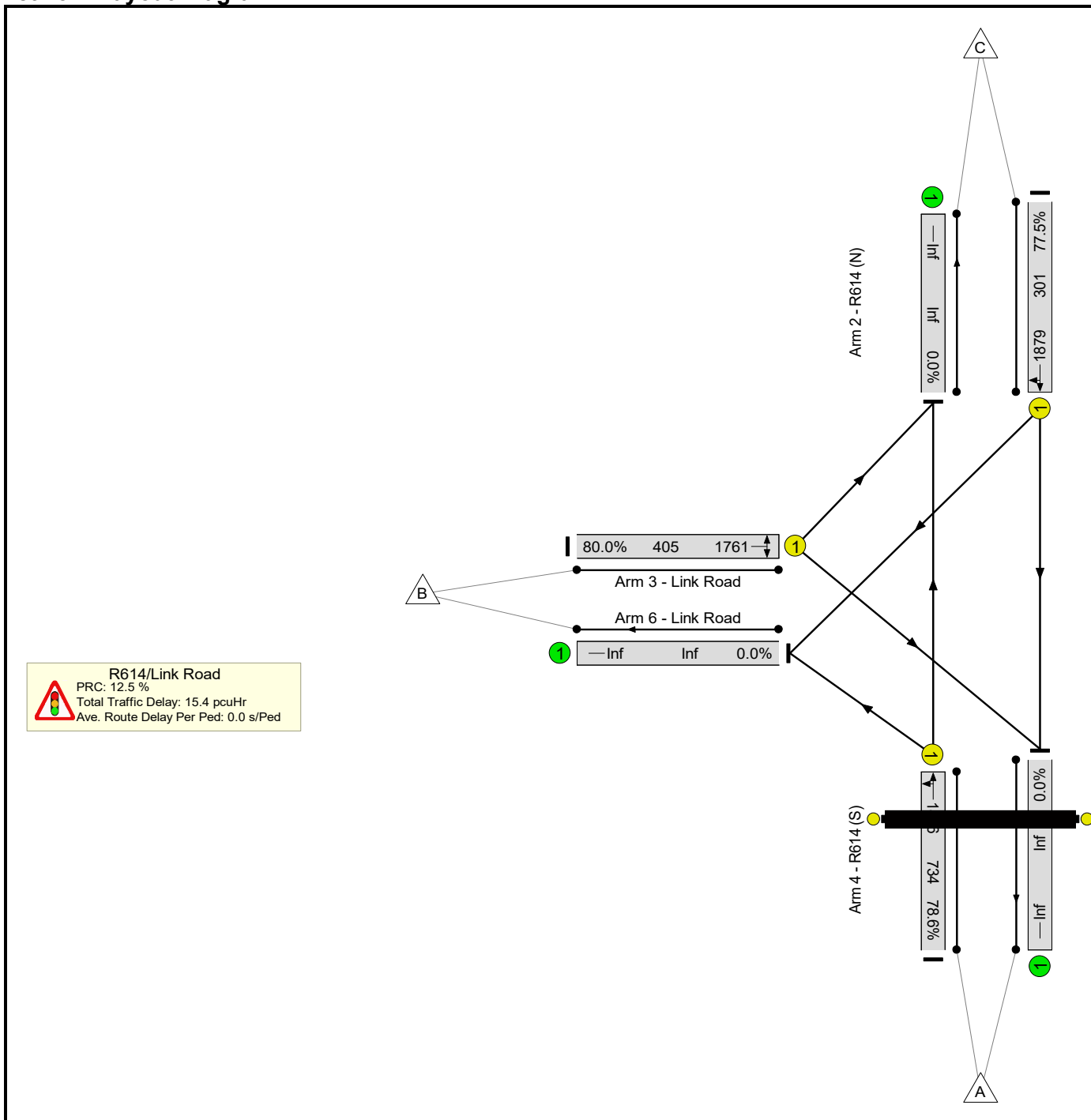
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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: Link Road TIA	-	-	-		-	-	-	-	-	-	82.4%	0	0	0	17.6	-	-
R614/Link Road	-	-	-		-	-	-	-	-	-	82.4%	0	0	0	17.6	-	-
1/1	R614 (S) Ahead Left	U	A		1	24	-	374	1831	458	81.7%	-	-	-	5.8	55.8	11.9
2/1	R614 (N) Ahead Right	U	C		1	31	-	486	1873	599	81.1%	-	-	-	6.3	46.5	14.4
3/1	Link Road Right Left	U	B		1	21	-	320	1766	389	82.4%	-	-	-	5.5	61.8	10.6
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-
		C1		PRC for Signalled Lanes (%):			9.3	Total Delay for Signalled Lanes (pcuHr):				17.58	Cycle Time (s): 100				
		PRC Over All Lanes (%):			9.3			Total Delay Over All Lanes(pcuHr):				17.58					

Basic Results Summary

Scenario 12: '2027 PM With Dev' (FG12: '2027 PM with Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				
	A	B	C	Tot.	
Origin	A	0	292	285	577
	B	227	0	97	324
	C	178	55	0	233
	Tot.	405	347	382	1134



Basic Results Summary

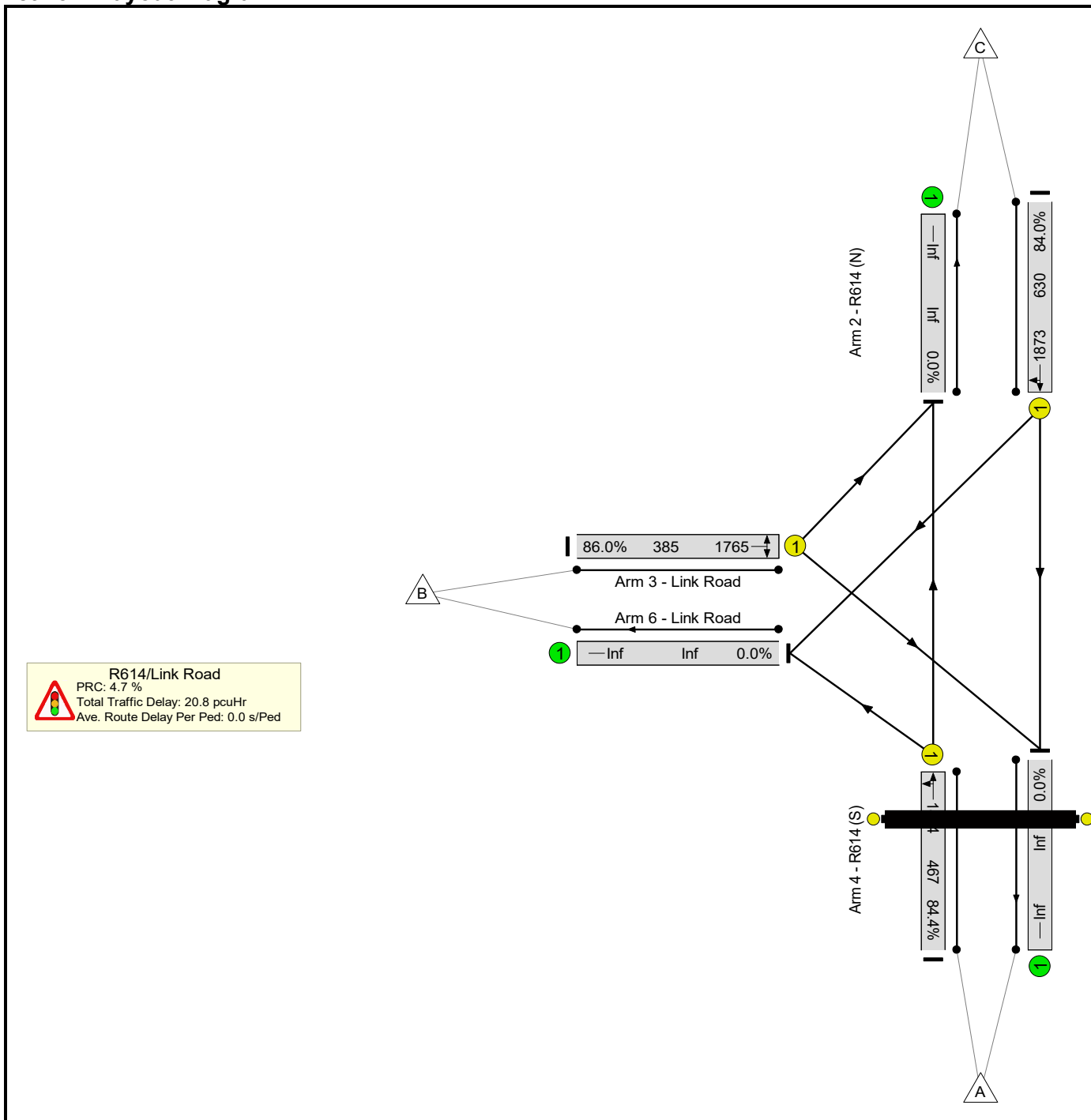
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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)	
<b>Network: Link Road TIA</b>	-	-	-		-	-	-	-	-	-	<b>80.0%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15.4</b>	-	-	
<b>R614/Link Road</b>	-	-	-		-	-	-	-	-	-	<b>80.0%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15.4</b>	-	-	
1/1	R614 (S) Ahead Left	U	A		1	39	-	577	1836	734	78.6%	-	-	-	6.0	37.4	15.7	
2/1	R614 (N) Ahead Right	U	C		1	15	-	233	1879	301	77.5%	-	-	-	4.2	65.7	7.8	
3/1	Link Road Right Left	U	B		1	22	-	324	1761	405	80.0%	-	-	-	5.2	57.5	10.4	
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-	
C1				PRC for Signalled Lanes (%): 12.5			12.5		Total Delay for Signalled Lanes (pcuHr): 15.43			15.43		Cycle Time (s): 100				
				PRC Over All Lanes (%): 12.5					Total Delay Over All Lanes(pcuHr): 15.43									

Basic Results Summary

Scenario 13: '2029 AM With Dev' (FG13: '2029 AM with Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	205	189	394
	B	273	0	58	331
	C	381	148	0	529
	Tot.	654	353	247	1254

Basic Results Summary

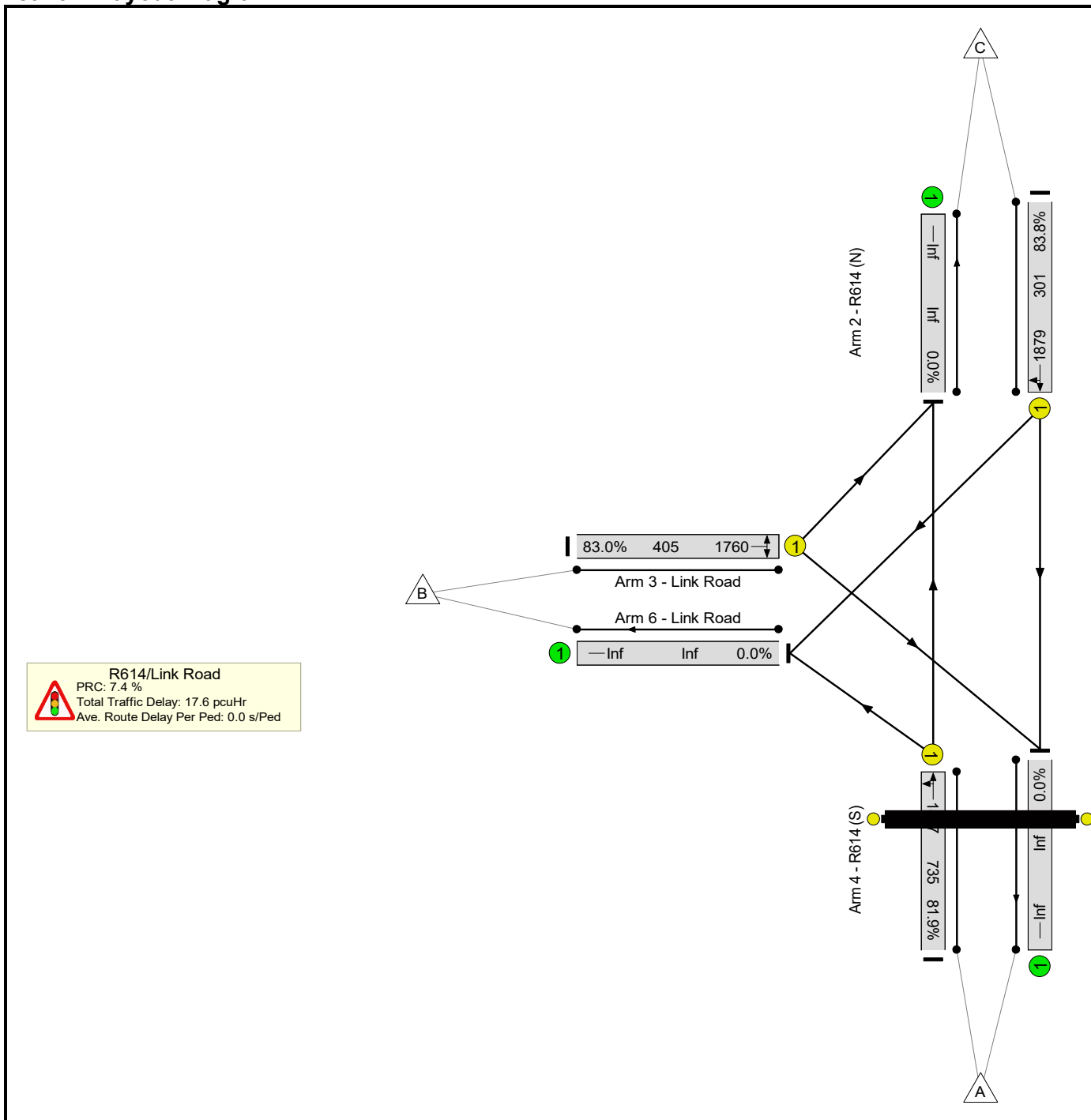
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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: Link Road TIA	-	-	-		-	-	-	-	-	-	86.0%	0	0	0	20.8	-	-
R614/Link Road	-	-	-		-	-	-	-	-	-	86.0%	0	0	0	20.8	-	-
1/1	R614 (S) Ahead Left	U	A		1	27	-	394	1834	467	84.4%	-	-	-	6.8	62.0	13.9
2/1	R614 (N) Ahead Right	U	C		1	36	-	529	1873	630	84.0%	-	-	-	7.5	50.7	17.3
3/1	Link Road Right Left	U	B		1	23	-	331	1765	385	86.0%	-	-	-	6.6	71.6	12.4
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-
		C1		PRC for Signalled Lanes (%):		4.7		Total Delay for Signalled Lanes (pcuHr):		20.83		Cycle Time (s):		110			
				PRC Over All Lanes (%):		4.7		Total Delay Over All Lanes(pcuHr):		20.83							

Basic Results Summary

Scenario 14: '2029 PM With Dev' (FG14: '2029 PM with Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				
	A	B	C	Tot.	
Origin	A	0	298	304	602
	B	232	0	104	336
	C	193	59	0	252
	Tot.	425	357	408	1190

Basic Results Summary

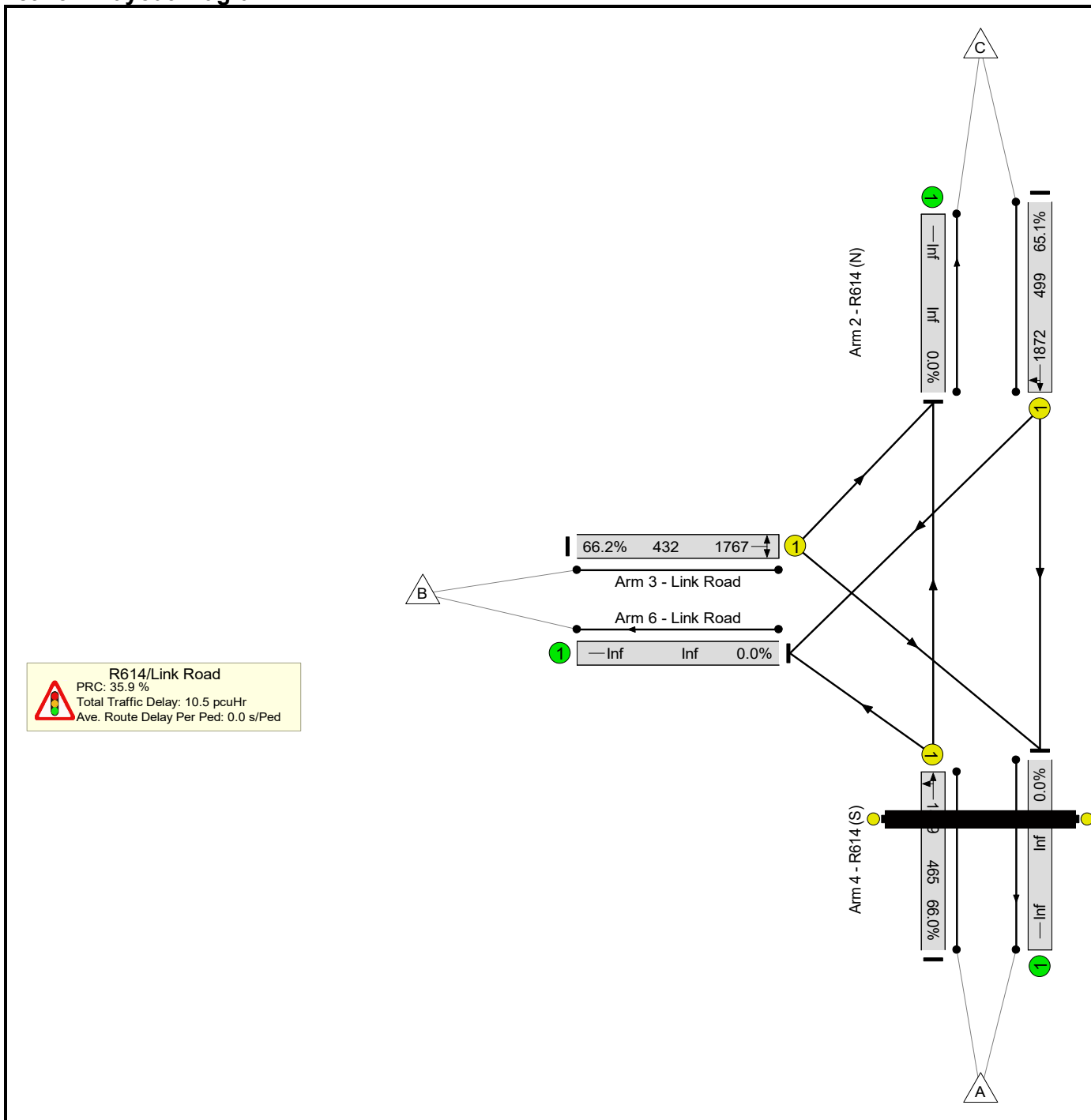
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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)
<b>Network: Link Road TIA</b>	-	-	-		-	-	-	-	-	-	83.8%	0	0	0	17.6	-	-
<b>R614/Link Road</b>	-	-	-		-	-	-	-	-	-	83.8%	0	0	0	17.6	-	-
1/1	R614 (S) Ahead Left	U	A		1	39	-	602	1837	735	81.9%	-	-	-	6.7	39.9	17.1
2/1	R614 (N) Ahead Right	U	C		1	15	-	252	1879	301	83.8%	-	-	-	5.2	74.5	9.2
3/1	Link Road Right Left	U	B		1	22	-	336	1760	405	83.0%	-	-	-	5.7	61.2	11.2
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-
C1				PRC for Signalled Lanes (%):		7.4		Total Delay for Signalled Lanes (pcuHr):				17.59		Cycle Time (s): 100			
				PRC Over All Lanes (%):		7.4		Total Delay Over All Lanes(pcuHr):				17.59					

Basic Results Summary

Scenario 15: '2022 AM Without Dev' (FG15: '2022 AM without Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

Origin	Destination				Tot.
	A	B	C	Tot.	
A	0	191	116	307	
B	252	0	34	286	
C	234	91	0	325	
Tot.	486	282	150	918	

Basic Results Summary

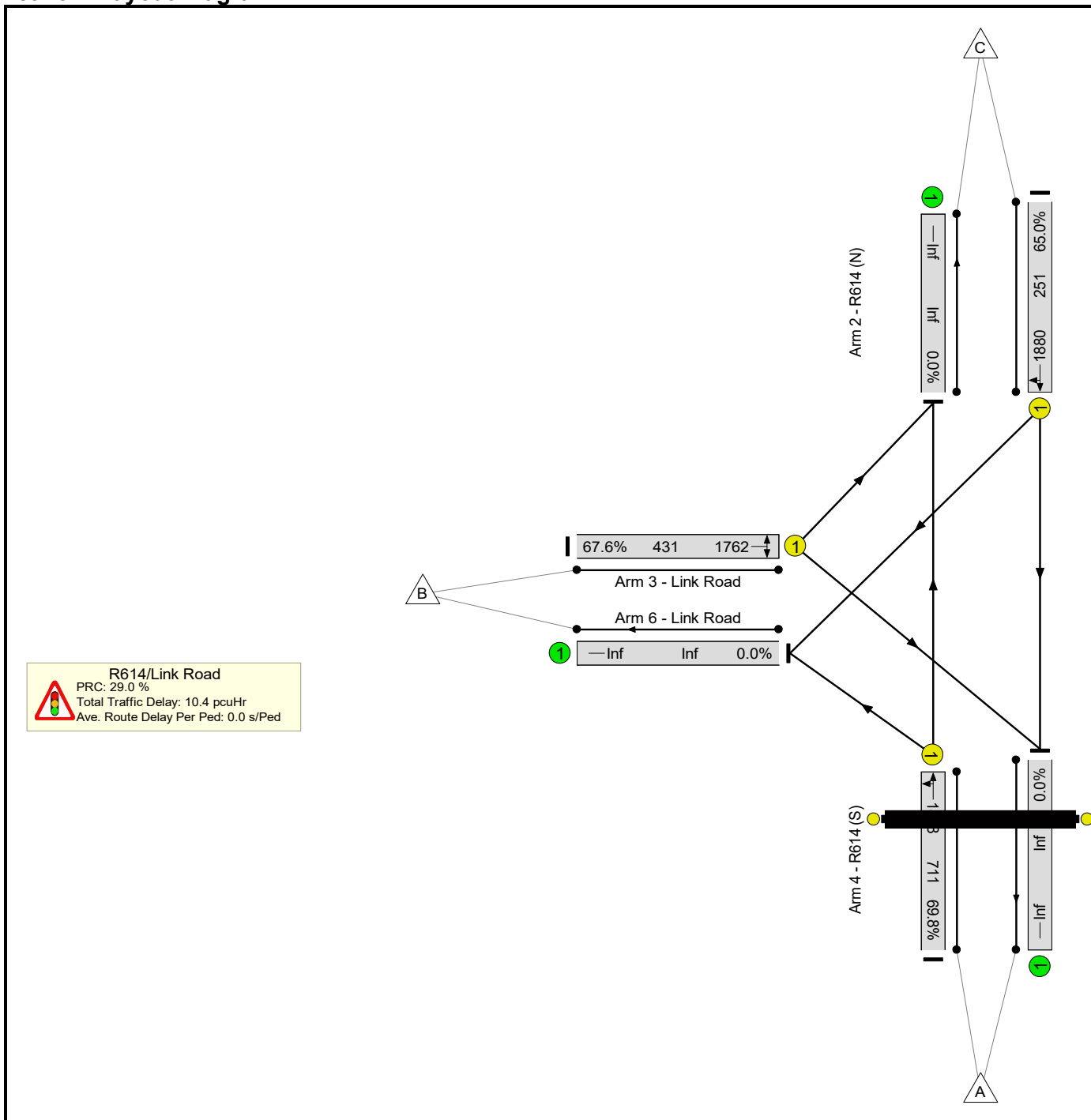
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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)
<b>Network: Link Road TIA</b>	-	-	-		-	-	-	-	-	-	<b>66.2%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10.5</b>	-	-
<b>R614/Link Road</b>	-	-	-		-	-	-	-	-	-	<b>66.2%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10.5</b>	-	-
1/1	R614 (S) Ahead Left	U	A		1	22	-	307	1819	465	66.0%	-	-	-	3.5	41.3	7.8
2/1	R614 (N) Ahead Right	U	C		1	23	-	325	1872	499	65.1%	-	-	-	3.6	39.5	8.1
3/1	Link Road Right Left	U	B		1	21	-	286	1767	432	66.2%	-	-	-	3.4	42.8	7.4
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-
C1					PRC for Signalled Lanes (%):		35.9	Total Delay for Signalled Lanes (pcuHr):				10.49	Cycle Time (s):		90		
					PRC Over All Lanes (%):		35.9	Total Delay Over All Lanes(pcuHr):				10.49					

Basic Results Summary

Scenario 16: '2022 PM Without Dev' (FG16: '2022 PM without Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	277	219	496
	B	217	0	74	291
	C	126	37	0	163
	Tot.	343	314	293	950



Basic Results Summary

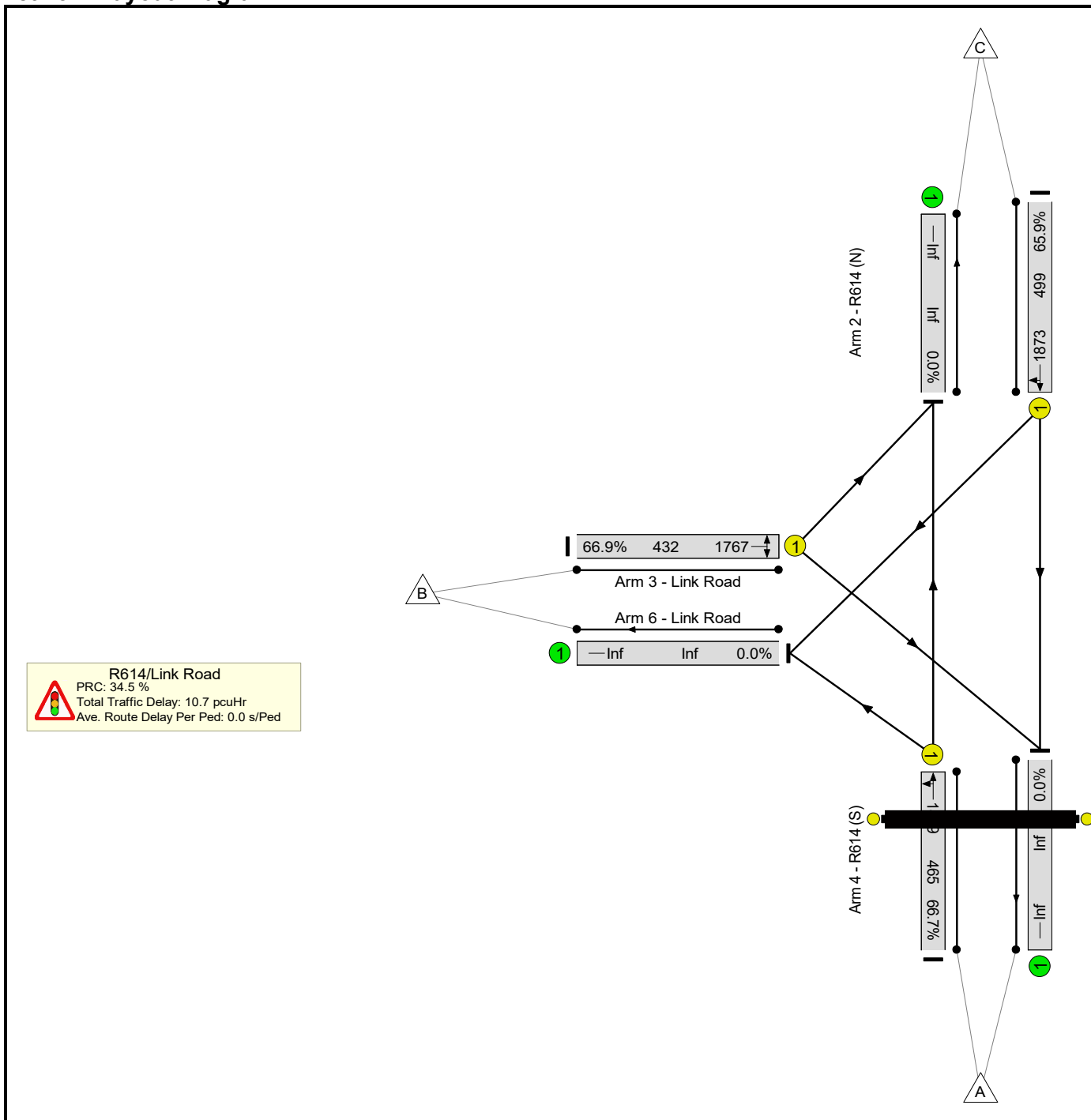
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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)
<b>Network: Link Road TIA</b>	-	-	-		-	-	-	-	-	-	<b>69.8%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10.4</b>	-	-
<b>R614/Link Road</b>	-	-	-		-	-	-	-	-	-	<b>69.8%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10.4</b>	-	-
1/1	R614 (S) Ahead Left	U	A		1	34	-	496	1828	711	69.8%	-	-	-	4.3	31.4	11.5
2/1	R614 (N) Ahead Right	U	C		1	11	-	163	1880	251	65.0%	-	-	-	2.6	57.1	4.8
3/1	Link Road Right Left	U	B		1	21	-	291	1762	431	67.6%	-	-	-	3.5	43.5	7.6
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-
C1					PRC for Signalled Lanes (%):		29.0	Total Delay for Signalled Lanes (pcuHr):				10.42	Cycle Time (s):		90		
					PRC Over All Lanes (%):		29.0	Total Delay Over All Lanes(pcuHr):				10.42					

Basic Results Summary

Scenario 17: '2023 AM Without Dev' (FG17: '2023 AM without Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	193	117	310
	B	255	0	34	289
	C	237	92	0	329
	Tot.	492	285	151	928

Basic Results Summary

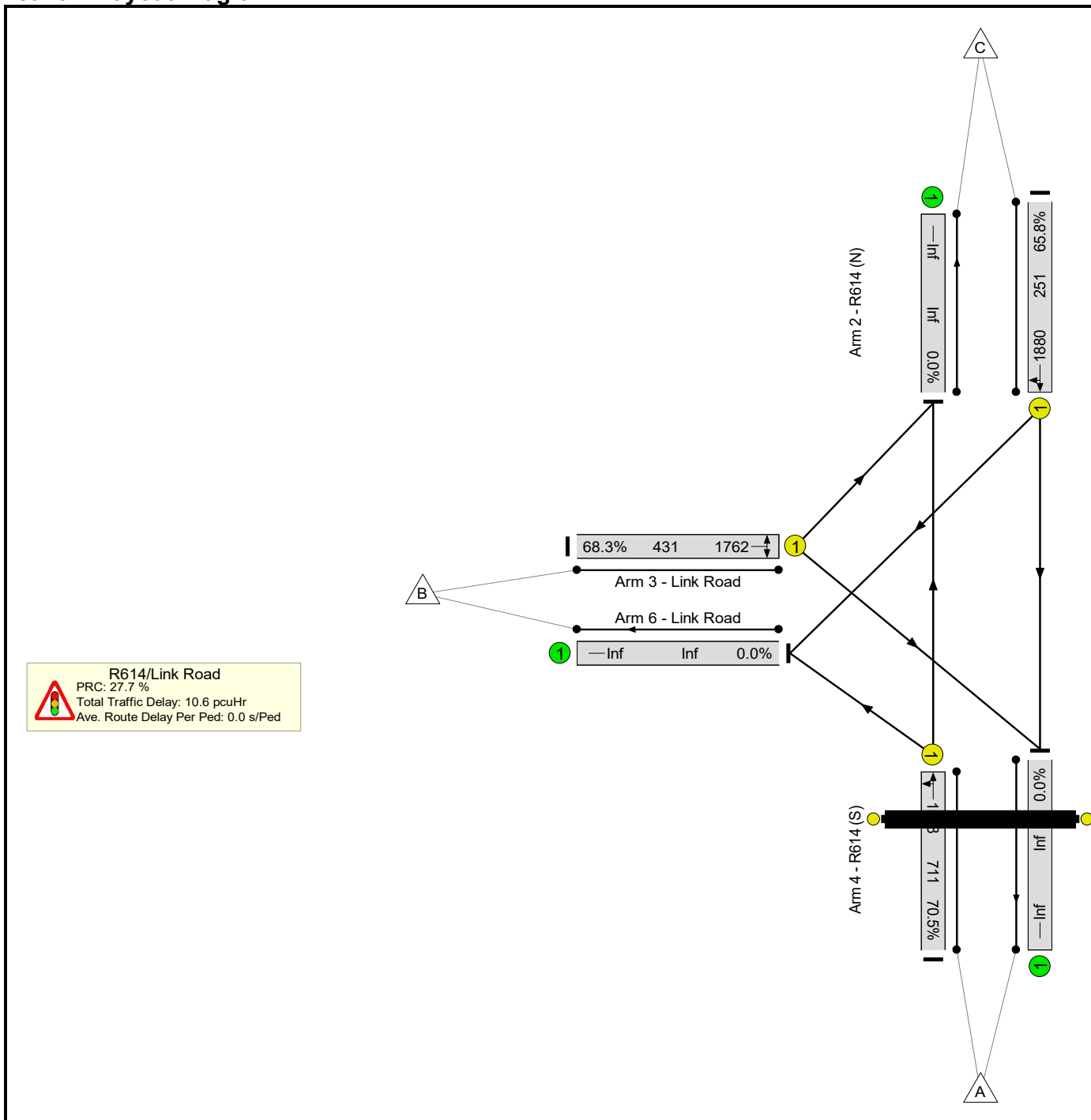
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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: Link Road TIA	-	-	-		-	-	-	-	-	-	66.9%	0	0	0	10.7	-	-
R614/Link Road	-	-	-		-	-	-	-	-	-	66.9%	0	0	0	10.7	-	-
1/1	R614 (S) Ahead Left	U	A		1	22	-	310	1819	465	66.7%	-	-	-	3.6	41.5	7.9
2/1	R614 (N) Ahead Right	U	C		1	23	-	329	1873	499	65.9%	-	-	-	3.6	39.8	8.3
3/1	Link Road Right Left	U	B		1	21	-	289	1767	432	66.9%	-	-	-	3.5	43.1	7.5
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-
C1					PRC for Signalled Lanes (%):		34.5	Total Delay for Signalled Lanes (pcuHr):		10.68		Cycle Time (s):		90			
					PRC Over All Lanes (%):		34.5	Total Delay Over All Lanes(pcuHr):		10.68							

Basic Results Summary

Scenario 18: '2023 PM Without Dev' (FG18: '2023 PM without Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	280	221	501
	B	219	0	75	294
	C	127	38	0	165
Tot.	346	318	296	960	

Basic Results Summary

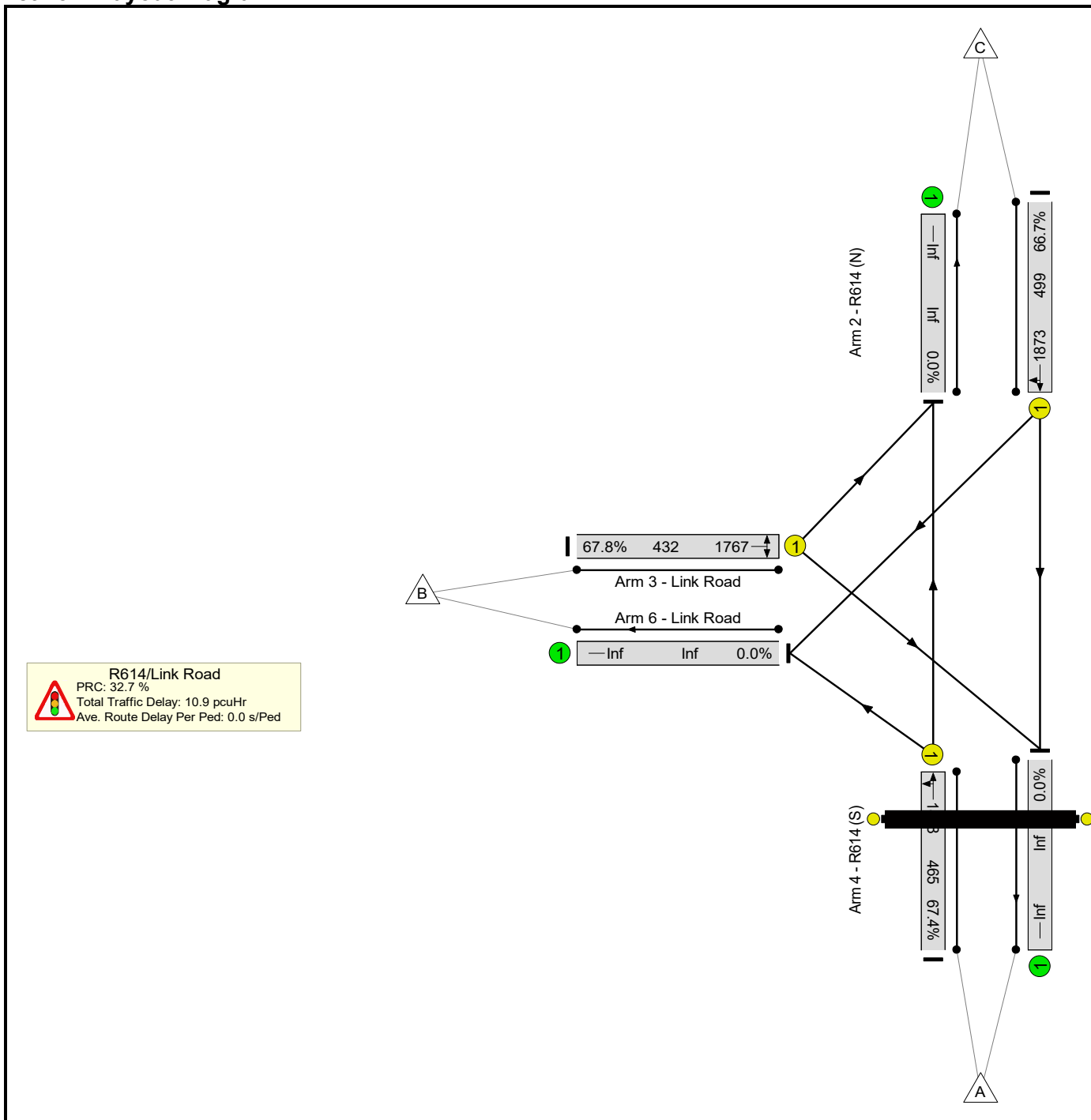
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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: Link Road TIA	-	-	-		-	-	-	-	-	-	70.5%	0	0	0	10.6	-	-
R614/Link Road	-	-	-		-	-	-	-	-	-	70.5%	0	0	0	10.6	-	-
1/1	R614 (S) Ahead Left	U	A		1	34	-	501	1828	711	70.5%	-	-	-	4.4	31.6	11.6
2/1	R614 (N) Ahead Right	U	C		1	11	-	165	1880	251	65.8%	-	-	-	2.6	57.6	4.8
3/1	Link Road Right Left	U	B		1	21	-	294	1762	431	68.3%	-	-	-	3.6	43.8	7.7
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-
C1					PRC for Signalled Lanes (%):		27.7	Total Delay for Signalled Lanes (pcuHr):		10.62		Cycle Time (s):		90			
					PRC Over All Lanes (%):		27.7	Total Delay Over All Lanes(pcuHr):		10.62							

Basic Results Summary

Scenario 19: '2024 AM Without Dev' (FG19: '2024 AM without Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

Origin	Destination				Tot.
	A	B	C	Tot.	
A	0	195	118	313	
B	258	0	35	293	
C	240	93	0	333	
Tot.	498	288	153	939	

Basic Results Summary

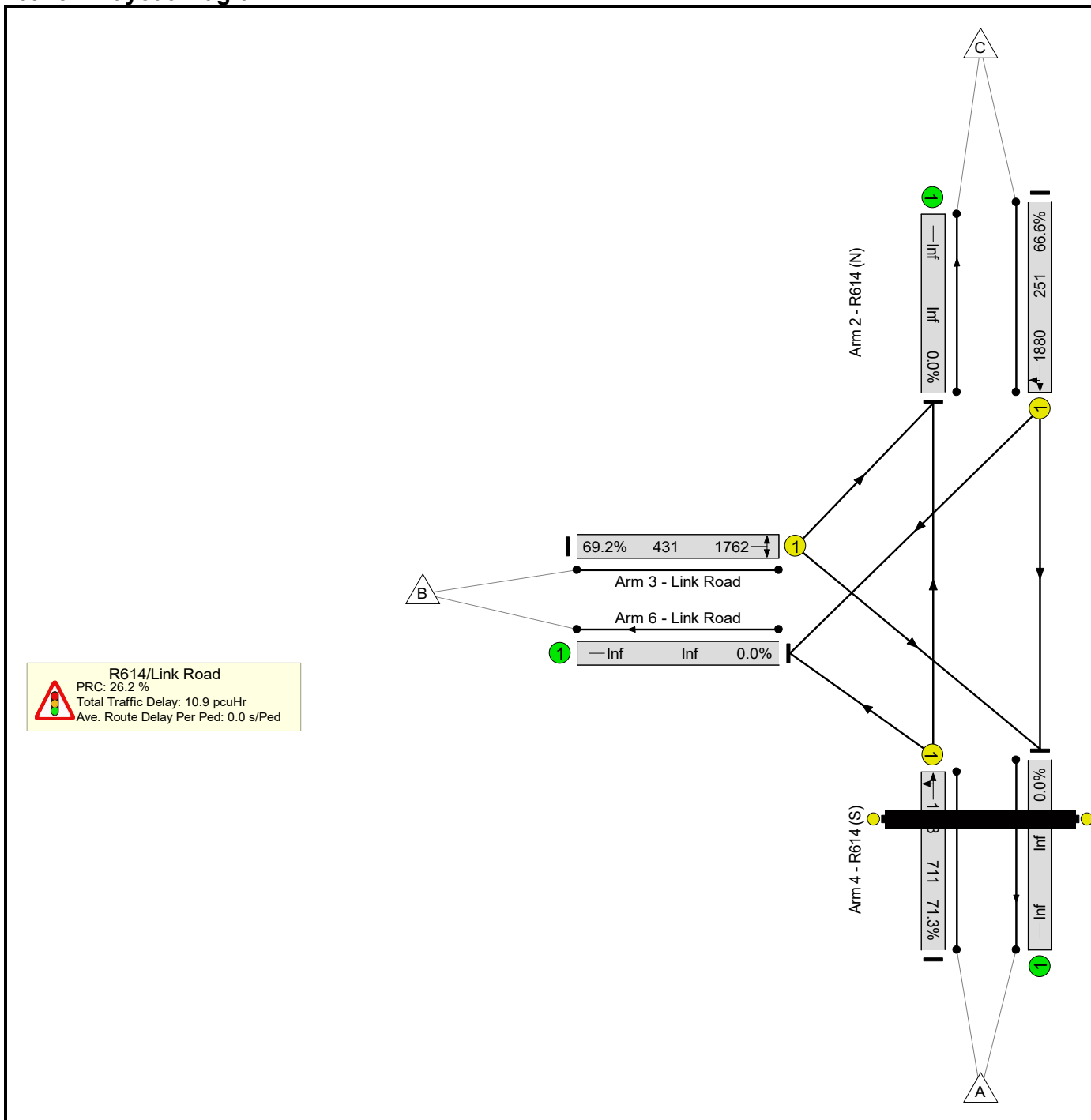
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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)
<b>Network: Link Road TIA</b>	-	-	-		-	-	-	-	-	-	67.8%	0	0	0	10.9	-	-
<b>R614/Link Road</b>	-	-	-		-	-	-	-	-	-	67.8%	0	0	0	10.9	-	-
1/1	R614 (S) Ahead Left	U	A		1	22	-	313	1818	465	67.4%	-	-	-	3.6	41.8	8.0
2/1	R614 (N) Ahead Right	U	C		1	23	-	333	1873	499	66.7%	-	-	-	3.7	40.1	8.4
3/1	Link Road Right Left	U	B		1	21	-	293	1767	432	67.8%	-	-	-	3.5	43.6	7.6
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-
		C1		PRC for Signalled Lanes (%):		32.7		Total Delay for Signalled Lanes (pcuHr):		10.90		Cycle Time (s):		90			
				PRC Over All Lanes (%):		32.7		Total Delay Over All Lanes(pcuHr):		10.90							

Basic Results Summary

Scenario 20: '2024 PM Without Dev' (FG20: '2024 PM without Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

Origin	Destination				Tot.
	A	B	C	Tot.	
A	0	283	224	507	
B	222	0	76	298	
C	129	38	0	167	
Tot.	351	321	300	972	



Basic Results Summary

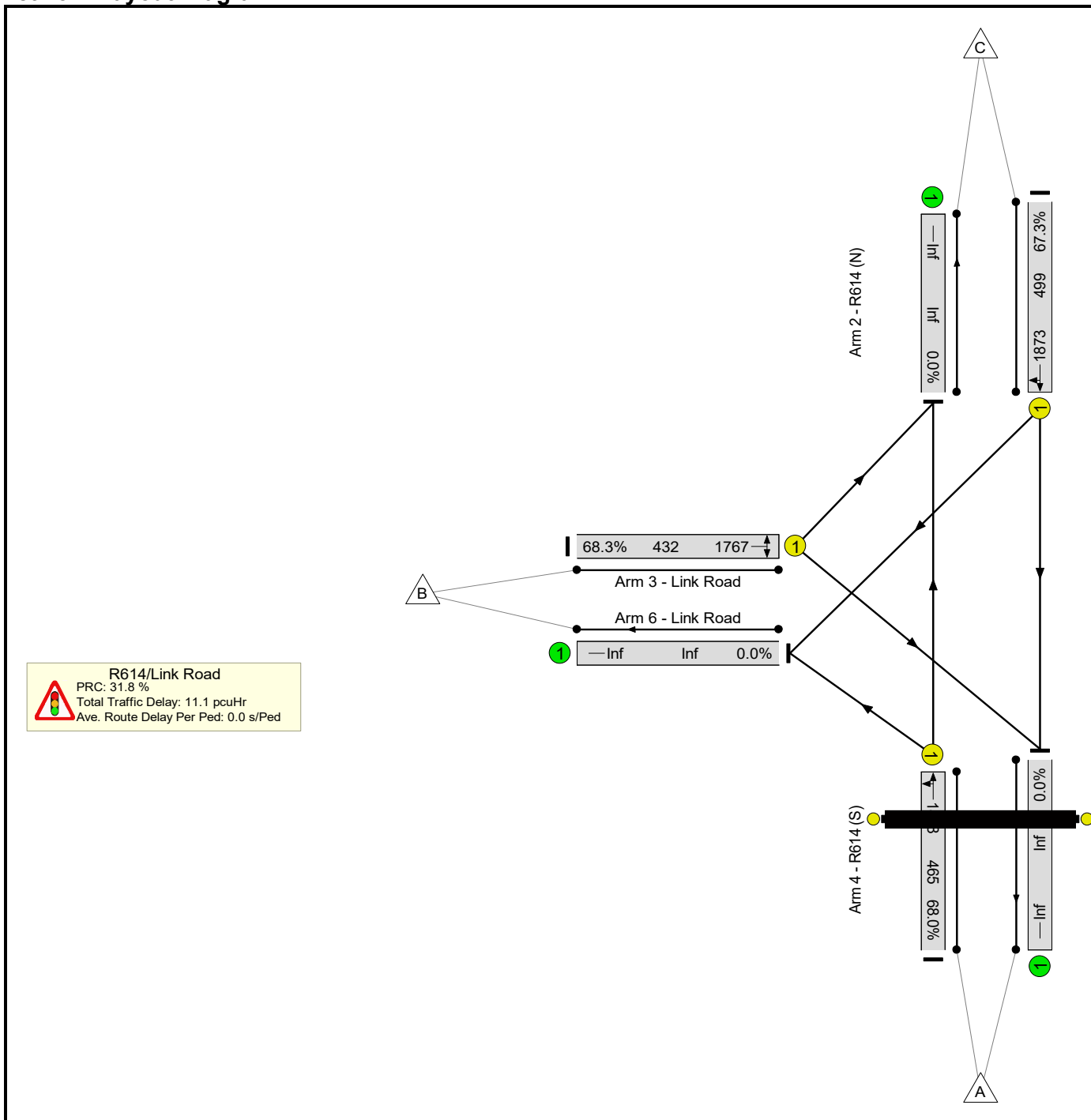
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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: Link Road TIA	-	-	-		-	-	-	-	-	-	71.3%	0	0	0	10.9	-	-
R614/Link Road	-	-	-		-	-	-	-	-	-	71.3%	0	0	0	10.9	-	-
1/1	R614 (S) Ahead Left	U	A		1	34	-	507	1828	711	71.3%	-	-	-	4.5	32.0	11.9
2/1	R614 (N) Ahead Right	U	C		1	11	-	167	1880	251	66.6%	-	-	-	2.7	58.1	4.9
3/1	Link Road Right Left	U	B		1	21	-	298	1762	431	69.2%	-	-	-	3.7	44.3	7.8
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-
C1					PRC for Signalled Lanes (%):		26.2	Total Delay for Signalled Lanes (pcuHr):		10.86		Cycle Time (s):		90			
					PRC Over All Lanes (%):		26.2	Total Delay Over All Lanes(pcuHr):		10.86							

Basic Results Summary

Scenario 21: '2025 AM Without Dev' (FG21: '2025 AM without Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	197	119	316
	B	260	0	35	295
	C	242	94	0	336
Tot.	502	291	154	947	

Basic Results Summary

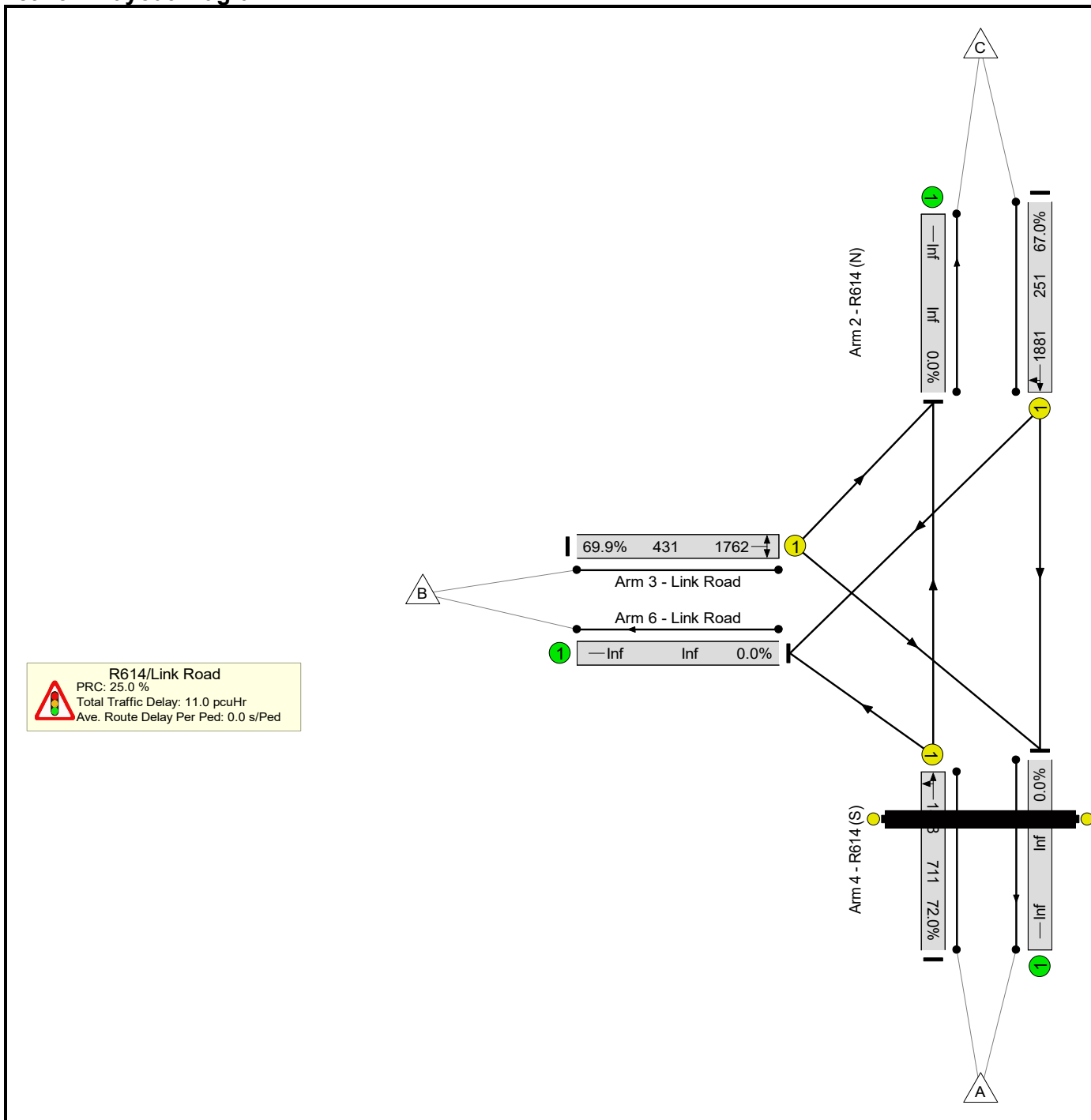
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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: Link Road TIA	-	-	-		-	-	-	-	-	-	68.3%	0	0	0	11.1	-	-
R614/Link Road	-	-	-		-	-	-	-	-	-	68.3%	0	0	0	11.1	-	-
1/1	R614 (S) Ahead Left	U	A		1	22	-	316	1818	465	68.0%	-	-	-	3.7	42.1	8.2
2/1	R614 (N) Ahead Right	U	C		1	23	-	336	1873	499	67.3%	-	-	-	3.8	40.4	8.5
3/1	Link Road Right Left	U	B		1	21	-	295	1767	432	68.3%	-	-	-	3.6	43.8	7.7
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-
		C1		PRC for Signalled Lanes (%):		31.8		Total Delay for Signalled Lanes (pcuHr):		11.05		Cycle Time (s):		90			
				PRC Over All Lanes (%):		31.8		Total Delay Over All Lanes(pcuHr):		11.05							

Basic Results Summary

Scenario 22: '2025 PM Without Dev' (FG22: '2025 PM without Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	286	226	512
	B	224	0	77	301
	C	130	38	0	168
	Tot.	354	324	303	981

Basic Results Summary

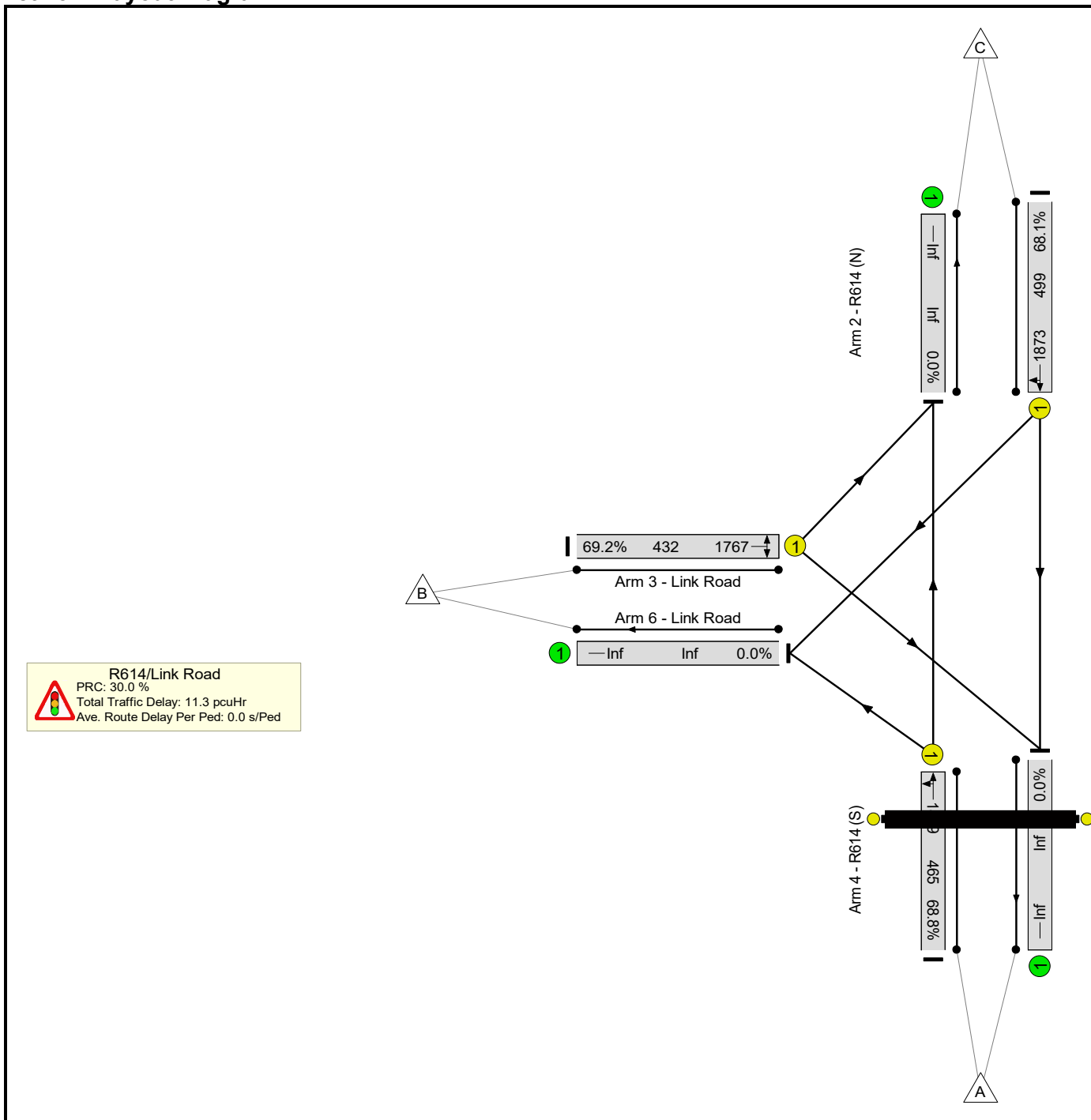
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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: Link Road TIA	-	-	-		-	-	-	-	-	-	72.0%	0	0	0	11.0	-	-
R614/Link Road	-	-	-		-	-	-	-	-	-	72.0%	0	0	0	11.0	-	-
1/1	R614 (S) Ahead Left	U	A		1	34	-	512	1828	711	72.0%	-	-	-	4.6	32.3	12.1
2/1	R614 (N) Ahead Right	U	C		1	11	-	168	1881	251	67.0%	-	-	-	2.7	58.4	5.0
3/1	Link Road Right Left	U	B		1	21	-	301	1762	431	69.9%	-	-	-	3.7	44.6	8.0
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-
				C1	PRC for Signalled Lanes (%): 25.0		25.0	Total Delay for Signalled Lanes (pcuHr):			11.05	Cycle Time (s): 90					
					PRC Over All Lanes (%):		25.0	Total Delay Over All Lanes(pcuHr):			11.05						

Basic Results Summary

Scenario 23: '2026 AM Without Dev' (FG23: '2026 AM without Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	199	121	320
	B	263	0	36	299
	C	245	95	0	340
Tot.	508	294	157	959	

Basic Results Summary

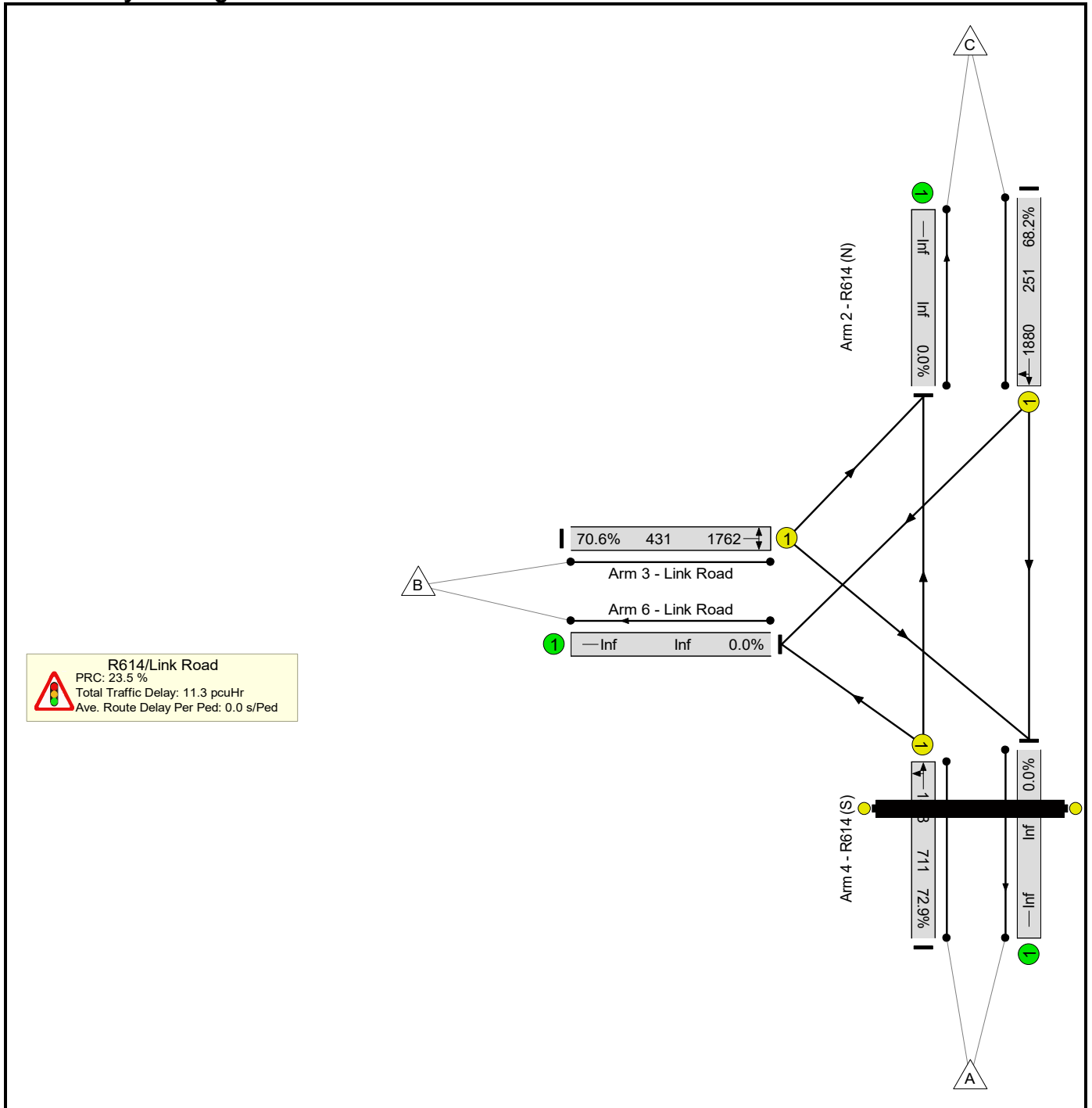
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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: Link Road TIA	-	-	-		-	-	-	-	-	-	69.2%	0	0	0	11.3	-	-
R614/Link Road	-	-	-		-	-	-	-	-	-	69.2%	0	0	0	11.3	-	-
1/1	R614 (S) Ahead Left	U	A		1	22	-	320	1819	465	68.8%	-	-	-	3.8	42.5	8.3
2/1	R614 (N) Ahead Right	U	C		1	23	-	340	1873	499	68.1%	-	-	-	3.8	40.7	8.6
3/1	Link Road Right Left	U	B		1	21	-	299	1767	432	69.2%	-	-	-	3.7	44.2	7.8
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-
				C1	PRC for Signalled Lanes (%):		30.0	Total Delay for Signalled Lanes (pcuHr):				11.30	Cycle Time (s):		90		
					PRC Over All Lanes (%):		30.0	Total Delay Over All Lanes(pcuHr):				11.30					

Basic Results Summary

Scenario 24: '2026 PM Without Dev' (FG24: '2026 PM without Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	289	229	518
	B	226	0	78	304
	C	132	39	0	171
	Tot.	358	328	307	993



Basic Results Summary

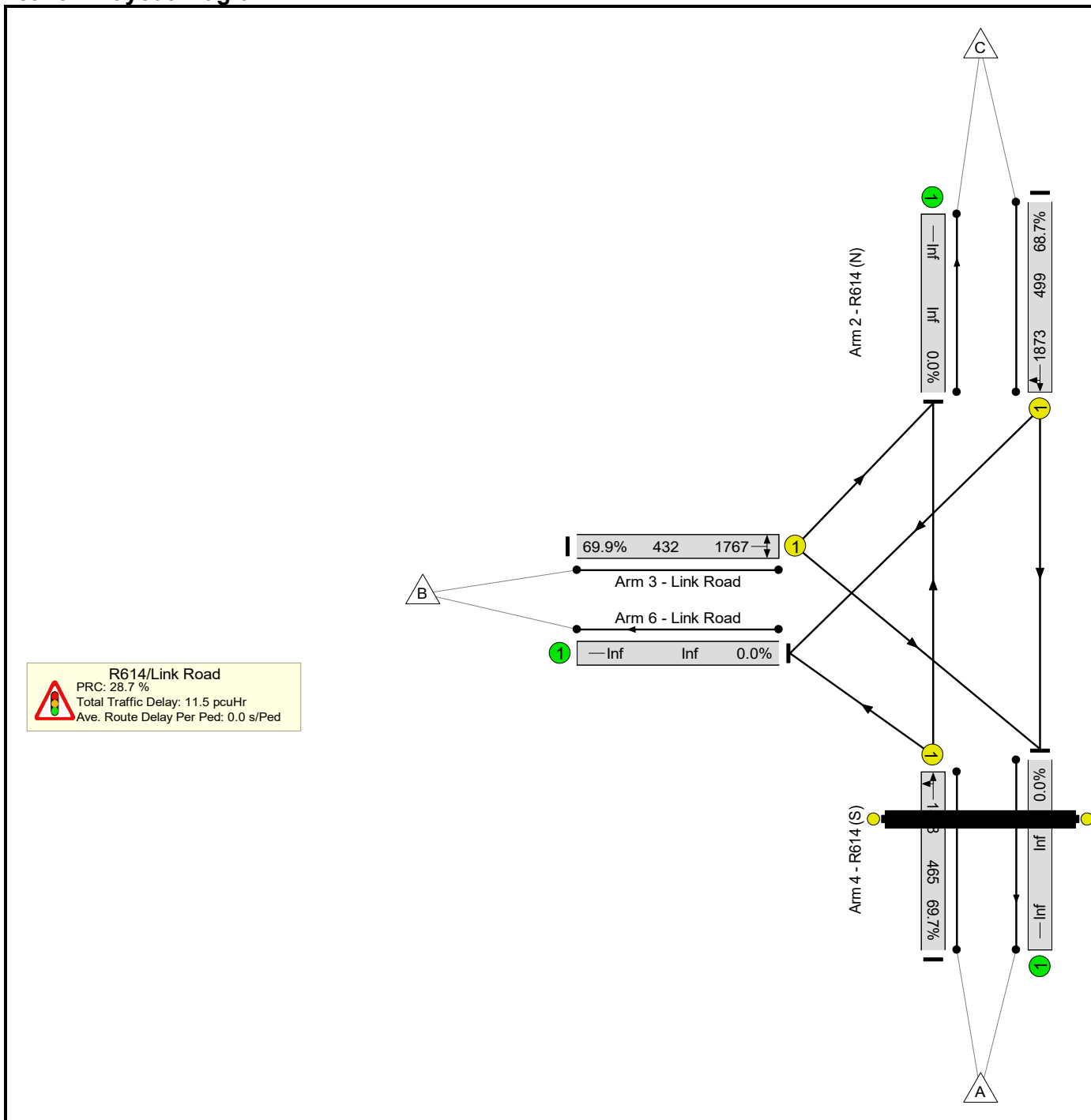
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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: Link Road TIA	-	-	-		-	-	-	-	-	-	72.9%	0	0	0	11.3	-	-
R614/Link Road	-	-	-		-	-	-	-	-	-	72.9%	0	0	0	11.3	-	-
1/1	R614 (S) Ahead Left	U	A		1	34	-	518	1828	711	72.9%	-	-	-	4.7	32.7	12.3
2/1	R614 (N) Ahead Right	U	C		1	11	-	171	1880	251	68.2%	-	-	-	2.8	59.2	5.1
3/1	Link Road Right Left	U	B		1	21	-	304	1762	431	70.6%	-	-	-	3.8	45.0	8.1
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-
C1					PRC for Signalled Lanes (%):		23.5	Total Delay for Signalled Lanes (pcuHr):		11.31	Cycle Time (s):		90				
					PRC Over All Lanes (%):		23.5	Total Delay Over All Lanes(pcuHr):		11.31							

Basic Results Summary

Scenario 25: '2027 AM Without Dev' (FG25: '2027 AM without Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	202	122	324
	B	266	0	36	302
	C	247	96	0	343
	Tot.	513	298	158	969

Basic Results Summary

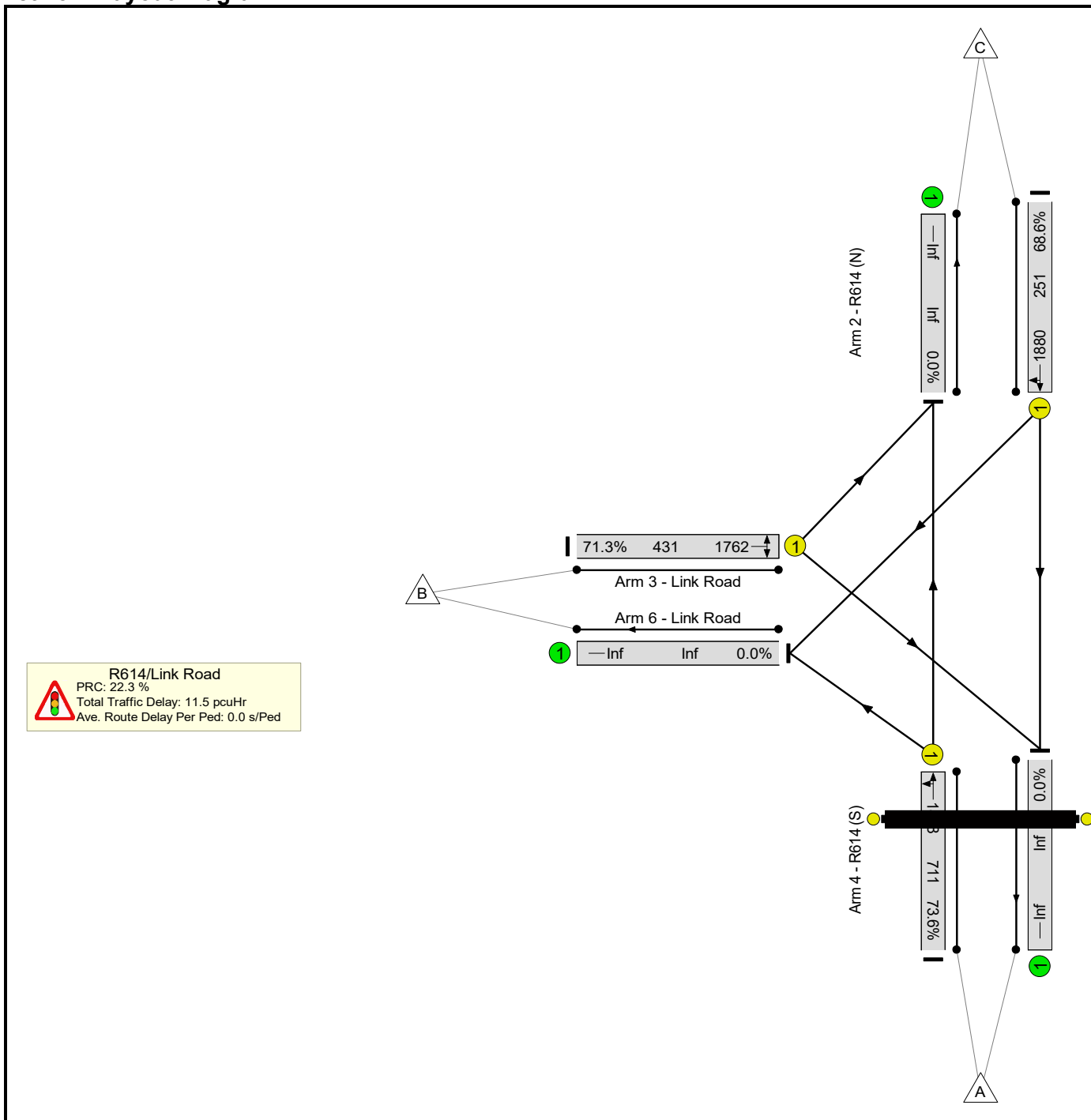
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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)
<b>Network: Link Road TIA</b>	-	-	-		-	-	-	-	-	-	<b>69.9%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11.5</b>	-	-
<b>R614/Link Road</b>	-	-	-		-	-	-	-	-	-	<b>69.9%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11.5</b>	-	-
1/1	R614 (S) Ahead Left	U	A		1	22	-	324	1818	465	69.7%	-	-	-	3.9	43.0	8.4
2/1	R614 (N) Ahead Right	U	C		1	23	-	343	1873	499	68.7%	-	-	-	3.9	41.0	8.7
3/1	Link Road Right Left	U	B		1	21	-	302	1767	432	69.9%	-	-	-	3.7	44.6	8.0
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-
C1				PRC for Signalled Lanes (%):		28.7		Total Delay for Signalled Lanes (pcuHr):				11.51		Cycle Time (s):		90	
				PRC Over All Lanes (%):		28.7		Total Delay Over All Lanes(pcuHr):				11.51					

Basic Results Summary

Scenario 26: '2027 PM Without Dev' (FG26: '2027 PM without Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	292	231	523
	B	229	0	78	307
	C	133	39	0	172
Tot.	362	331	309	1002	

Basic Results Summary

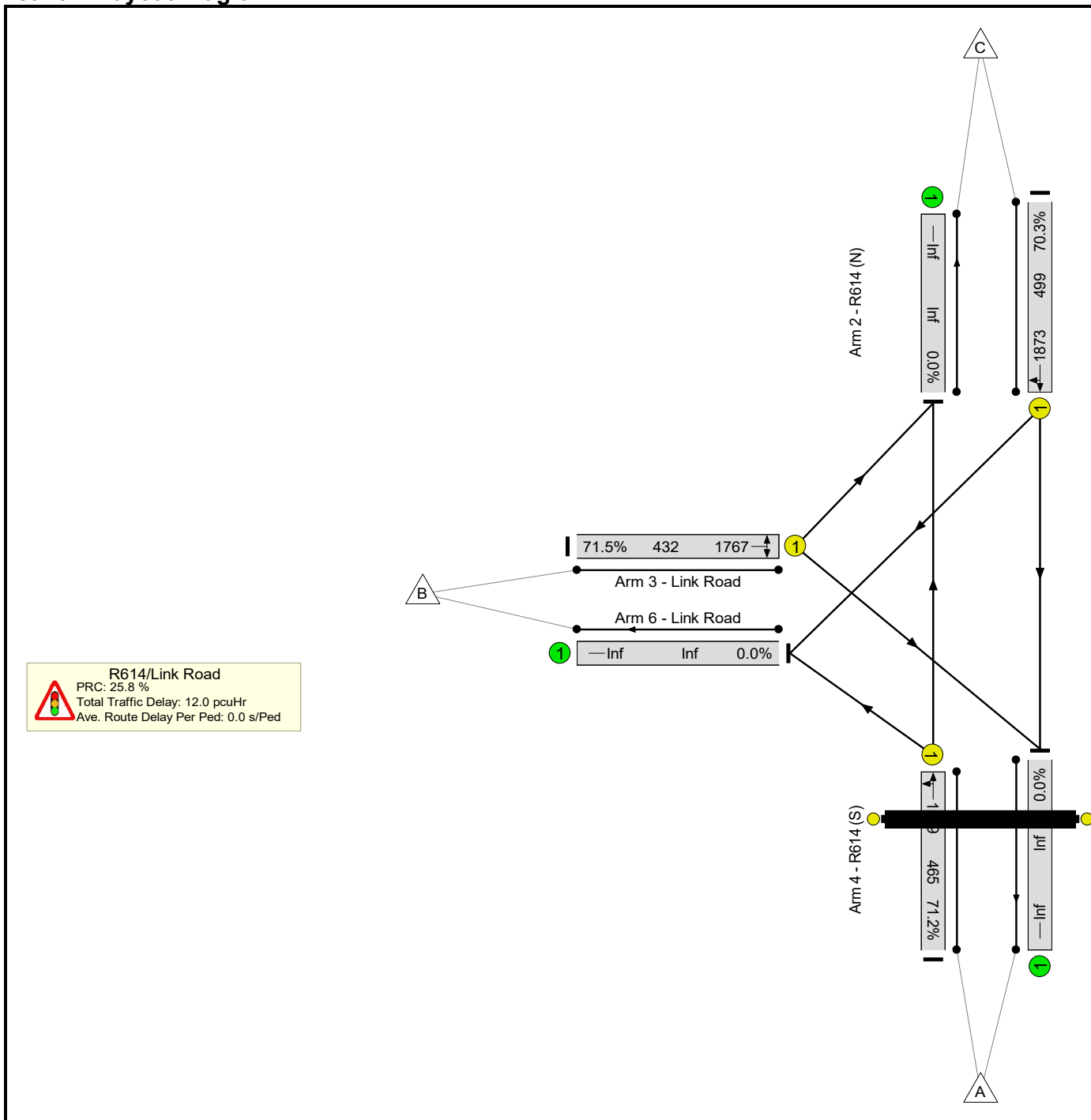
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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: Link Road TIA	-	-	-		-	-	-	-	-	-	73.6%	0	0	0	11.5	-	-
R614/Link Road	-	-	-		-	-	-	-	-	-	73.6%	0	0	0	11.5	-	-
1/1	R614 (S) Ahead Left	U	A		1	34	-	523	1828	711	73.6%	-	-	-	4.8	33.0	12.6
2/1	R614 (N) Ahead Right	U	C		1	11	-	172	1880	251	68.6%	-	-	-	2.8	59.5	5.1
3/1	Link Road Right Left	U	B		1	21	-	307	1762	431	71.3%	-	-	-	3.9	45.4	8.2
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-
C1					PRC for Signalled Lanes (%):		22.3	Total Delay for Signalled Lanes (pcuHr):		11.50		Cycle Time (s):		90			
					PRC Over All Lanes (%):		22.3	Total Delay Over All Lanes(pcuHr):		11.50							

Basic Results Summary

Scenario 27: '2029 AM Without Dev' (FG27: '2029 AM without Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	206	125	331
	B	272	0	37	309
	C	253	98	0	351
Tot.	525	304	162	991	

Basic Results Summary

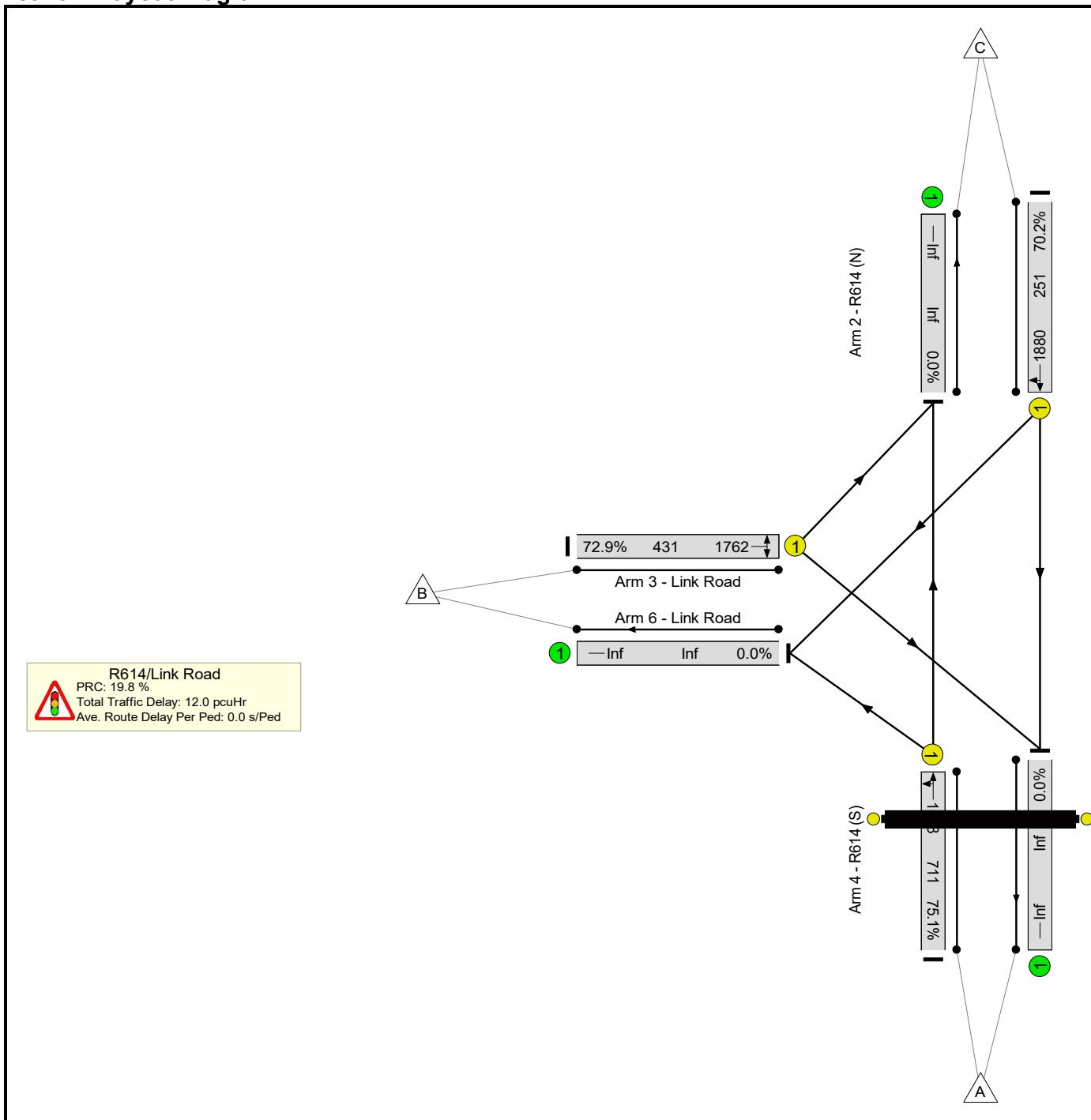
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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: Link Road TIA	-	-	-		-	-	-	-	-	-	71.5%	0	0	0	12.0	-	-
R614/Link Road	-	-	-		-	-	-	-	-	-	71.5%	0	0	0	12.0	-	-
1/1	R614 (S) Ahead Left	U	A		1	22	-	331	1819	465	71.2%	-	-	-	4.0	43.7	8.7
2/1	R614 (N) Ahead Right	U	C		1	23	-	351	1873	499	70.3%	-	-	-	4.1	41.7	9.1
3/1	Link Road Right Left	U	B		1	21	-	309	1767	432	71.5%	-	-	-	3.9	45.5	8.3
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-
		C1		PRC for Signalled Lanes (%):		25.8		Total Delay for Signalled Lanes (pcuHr):		11.99		Cycle Time (s):		90			
				PRC Over All Lanes (%):		25.8		Total Delay Over All Lanes(pcuHr):		11.99							

Basic Results Summary

Scenario 28: '2029 PM Without Dev' (FG28: '2029 PM without Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Traffic Flows, Desired

Desired Flow :

	Destination				Tot.
	A	B	C	Tot.	
Origin	A	0	298	236	534
	B	234	0	80	314
	C	136	40	0	176
Tot.	370	338	316	1024	



Basic Results Summary

**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow 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: Link Road TIA	-	-	-		-	-	-	-	-	-	75.1%	0	0	0	12.0	-	-	
R614/Link Road	-	-	-		-	-	-	-	-	-	75.1%	0	0	0	12.0	-	-	
1/1	R614 (S) Ahead Left	U	A		1	34	-	534	1828	711	75.1%	-	-	-	5.0	33.8	12.9	
2/1	R614 (N) Ahead Right	U	C		1	11	-	176	1880	251	70.2%	-	-	-	3.0	60.7	5.3	
3/1	Link Road Right Left	U	B		1	21	-	314	1762	431	72.9%	-	-	-	4.0	46.3	8.5	
Ped Link: P1	Unnamed Ped Link	-	D		1	10	-	0	-	0	0.0%	-	-	-	-	-	-	
C1				PRC for Signalled Lanes (%):			19.8	Total Delay for Signalled Lanes (pcuHr):			12.02	Cycle Time (s):			90			
				PRC Over All Lanes (%):			19.8	Total Delay Over All Lanes(pcuHr):			12.02							

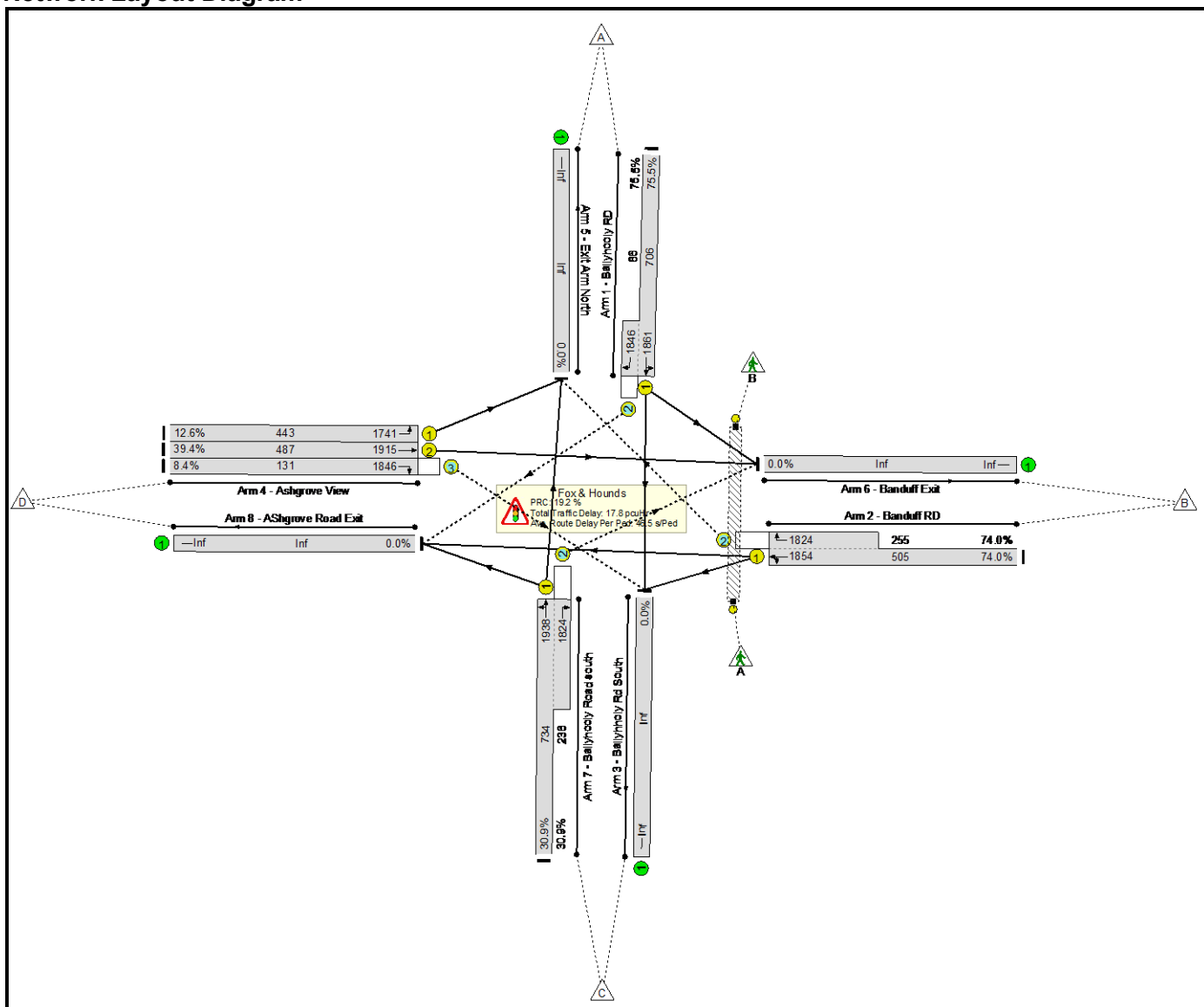
Basic Results Summary  
**Basic Results Summary**

**User and Project Details**

<b>Project:</b>	<b>Longview Residential Development</b>
<b>Title:</b>	
<b>Location:</b>	Ballyhooley Road, Ballyvolane, Cork
<b>Client:</b>	Longview Estates Ltd
<b>Date Started:</b>	24.09.2019
<b>Additional detail:</b>	
<b>File name:</b>	Fox & Hounds Junction with upgrade works.lsg3x
<b>Author:</b>	Ken Manley
<b>Company:</b>	MHL Consulting Engineers
<b>Address:</b>	10 High Street, Cork

**Scenario 1: '2019 AM'** (FG1: 'Fox & Hounds AM 2019', Plan 1: 'Network Control Plan 1')

**Network Layout Diagram**



Basic Results Summary

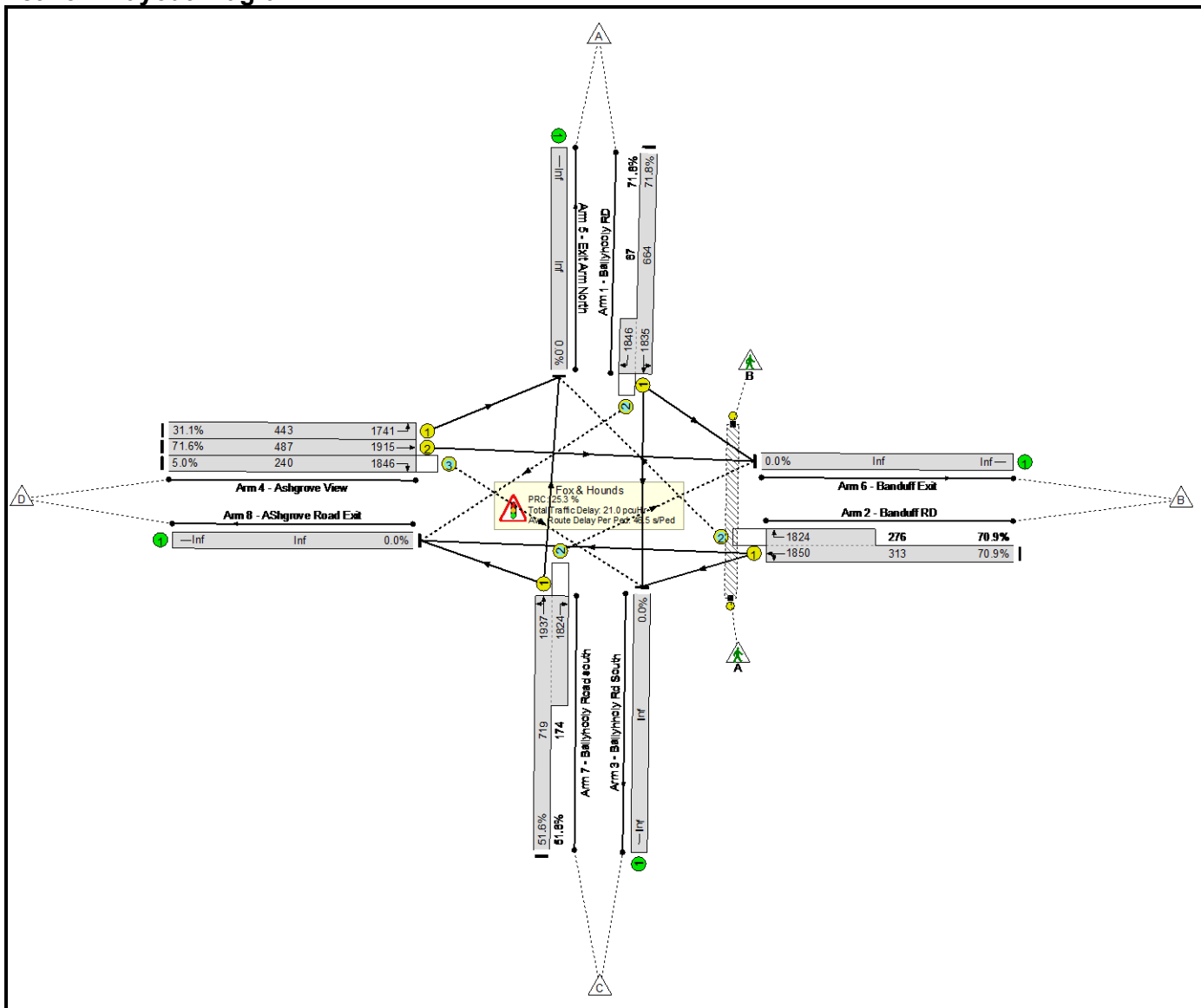
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	75.5%	321	10	7	17.8	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	75.5%	321	10	7	17.8	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	45	-	598	1861:1846	706+86	75.5 : 75.5%	65	0	0	6.0	36.1	16.4		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	34	7	563	1854:1824	505+255	74.0 : 74.0%	175	9	5	6.7	42.9	11.1		
4/1	Ashgrove View Left	U	C		1	27	-	56	1741	443	12.6%	-	-	-	0.6	36.3	1.4		
4/2	Ashgrove View Ahead	U	C		1	27	-	192	1915	487	39.4%	-	-	-	2.1	40.1	5.2		
4/3	Ashgrove View Right	O	D		1	29	-	11	1846	131	8.4%	11	0	0	0.2	61.9	0.3		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	49	4	300	1938:1824	734+236	30.9 : 30.9%	70	1	2	2.2	26.0	4.4		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		19.2		PRC Over All Lanes (%):		19.2		Total Delay for Signalled Lanes (pcuHr):		17.75		Total Delay Over All Lanes(pcuHr):		17.75		Cycle Time (s): 110	

Basic Results Summary

Scenario 2: '2019 PM' (FG2: 'Fox & Hounds PM 2019', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

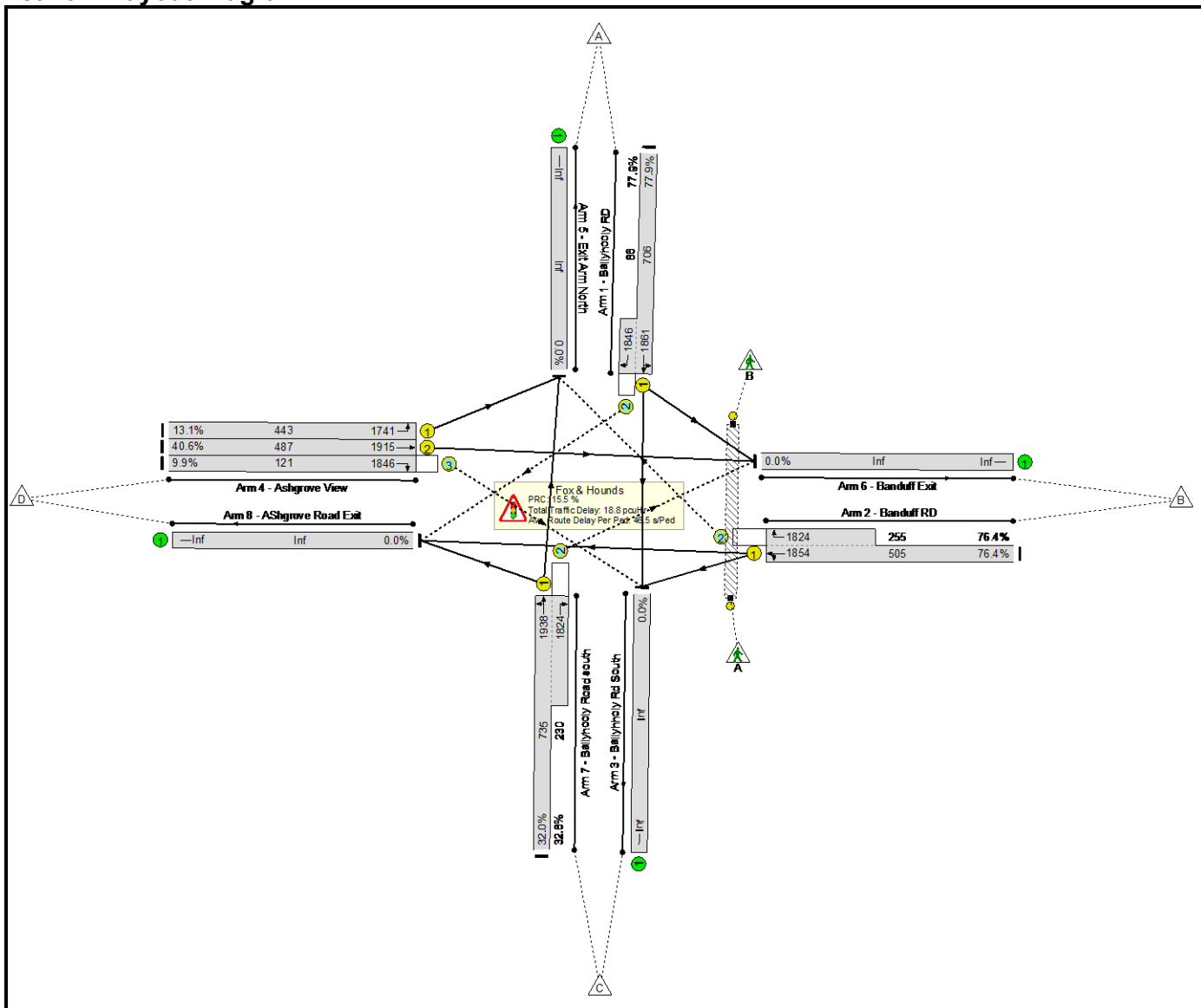
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	71.8%	224	114	8	21.0	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	71.8%	224	114	8	21.0	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	42	-	525	1835:1846	664+67	71.8 : 71.8%	48	0	0	5.4	37.1	14.2		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	37	10	418	1850:1824	313+276	70.9 : 70.9%	78	112	5	5.3	45.4	6.8		
4/1	Ashgrove View Left	U	C		1	27	-	138	1741	443	31.1%	-	-	-	1.5	39.1	3.6		
4/2	Ashgrove View Ahead	U	C		1	27	-	349	1915	487	71.6%	-	-	-	4.9	50.2	10.9		
4/3	Ashgrove View Right	O	D		1	29	-	12	1846	240	5.0%	12	0	0	0.2	46.8	0.3		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	46	4	461	1937:1824	719+174	51.6 : 51.6%	86	2	2	3.8	29.7	8.5		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		25.3		PRC Over All Lanes (%):		25.3		Total Delay for Signalled Lanes (pcuHr):		21.00		Total Delay Over All Lanes(pcuHr):		21.00		Cycle Time (s): 110	

Basic Results Summary

Scenario 3: '2022 AM no dev' (FG3: 'Fox & Hounds AM 2022 no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

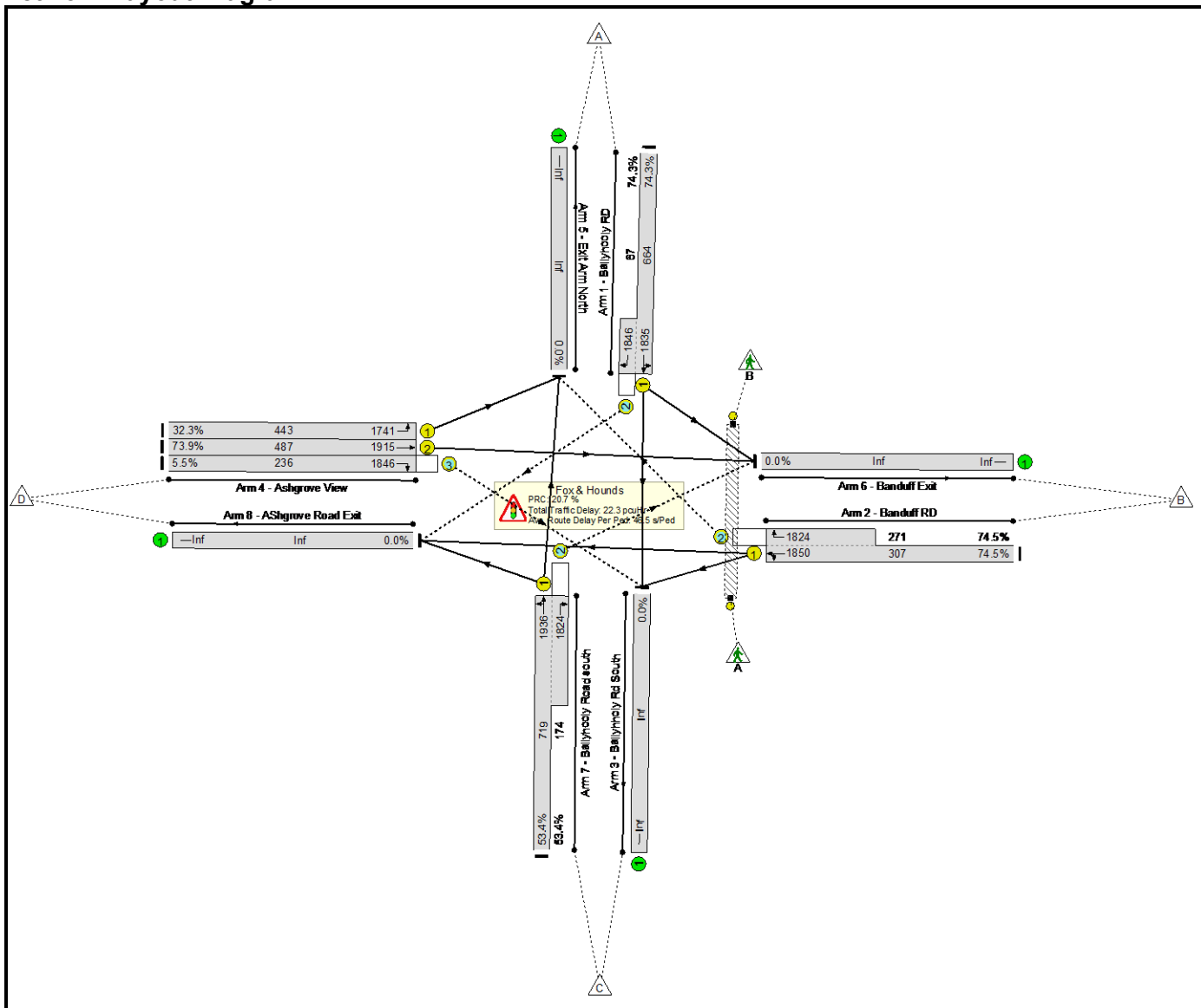
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	77.9%	331	10	7	18.8	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	77.9%	331	10	7	18.8	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	45	-	617	1861:1846	706+86	77.9 : 77.9%	67	0	0	6.4	37.4	17.2		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	34	7	581	1854:1824	505+255	76.4 : 76.4%	181	9	5	7.1	44.2	11.7		
4/1	Ashgrove View Left	U	C		1	27	-	58	1741	443	13.1%	-	-	-	0.6	36.3	1.4		
4/2	Ashgrove View Ahead	U	C		1	27	-	198	1915	487	40.6%	-	-	-	2.2	40.3	5.3		
4/3	Ashgrove View Right	O	D		1	29	-	12	1846	121	9.9%	12	0	0	0.2	64.4	0.3		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	49	4	310	1938:1824	735+230	32.0 : 32.6%	72	1	2	2.3	26.5	4.7		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		15.5		PRC Over All Lanes (%):		15.5		Total Delay for Signalled Lanes (pcuHr):		18.84		Total Delay Over All Lanes(pcuHr):		18.84		Cycle Time (s): 110	

Basic Results Summary

Scenario 4: '2022 PM no dev' (FG4: 'Fox & Hounds PM 2022 no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram





Basic Results Summary

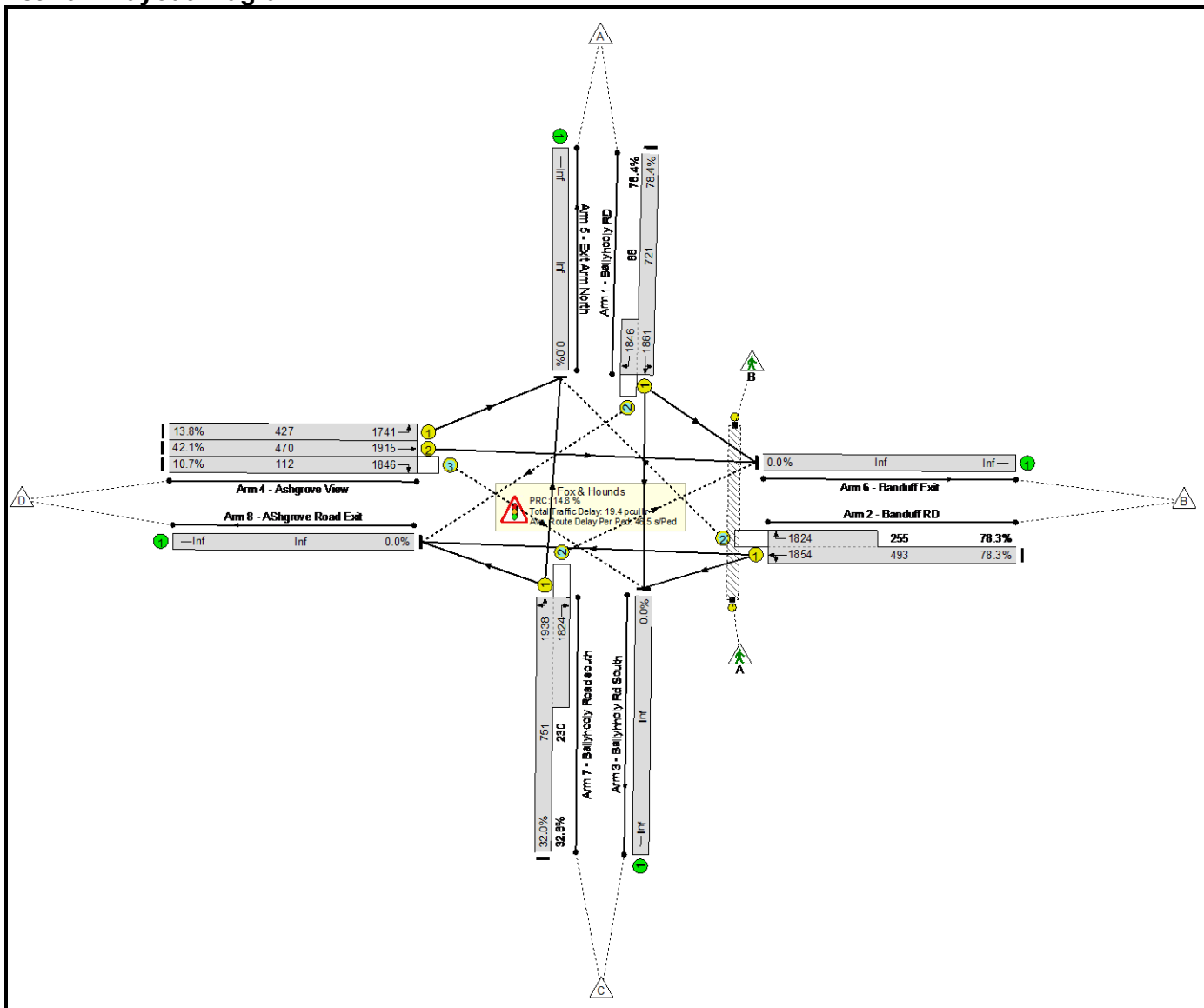
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)				
<b>Network</b>	-	-	-		-	-	-	-	-	-	74.5%	225	125	8	22.3	-	-				
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	74.5%	225	125	8	22.3	-	-				
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	42	-	543	1835:1846	664+67	74.3 : 74.3%	50	0	0	5.8	38.3	15.1				
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	37	10	431	1850:1824	307+271	74.5 : 74.5%	73	124	6	5.7	47.3	7.2				
4/1	Ashgrove View Left	U	C		1	27	-	143	1741	443	32.3%	-	-	-	1.6	39.3	3.8				
4/2	Ashgrove View Ahead	U	C		1	27	-	360	1915	487	73.9%	-	-	-	5.1	51.5	11.4				
4/3	Ashgrove View Right	O	D		1	29	-	13	1846	236	5.5%	13	0	0	0.2	47.2	0.3				
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	46	4	477	1936:1824	719+174	53.4 : 53.4%	89	2	3	4.0	30.3	8.9				
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6				
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		20.7		Total Delay for Signalled Lanes (pcuHr):		22.33		Cycle Time (s):		110		PRC Over All Lanes (%):		20.7		Total Delay Over All Lanes(pcuHr):		22.33	

Basic Results Summary

Scenario 5: '2022 AM with dev' (FG5: 'Fox & Hounds AM 2022 with dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

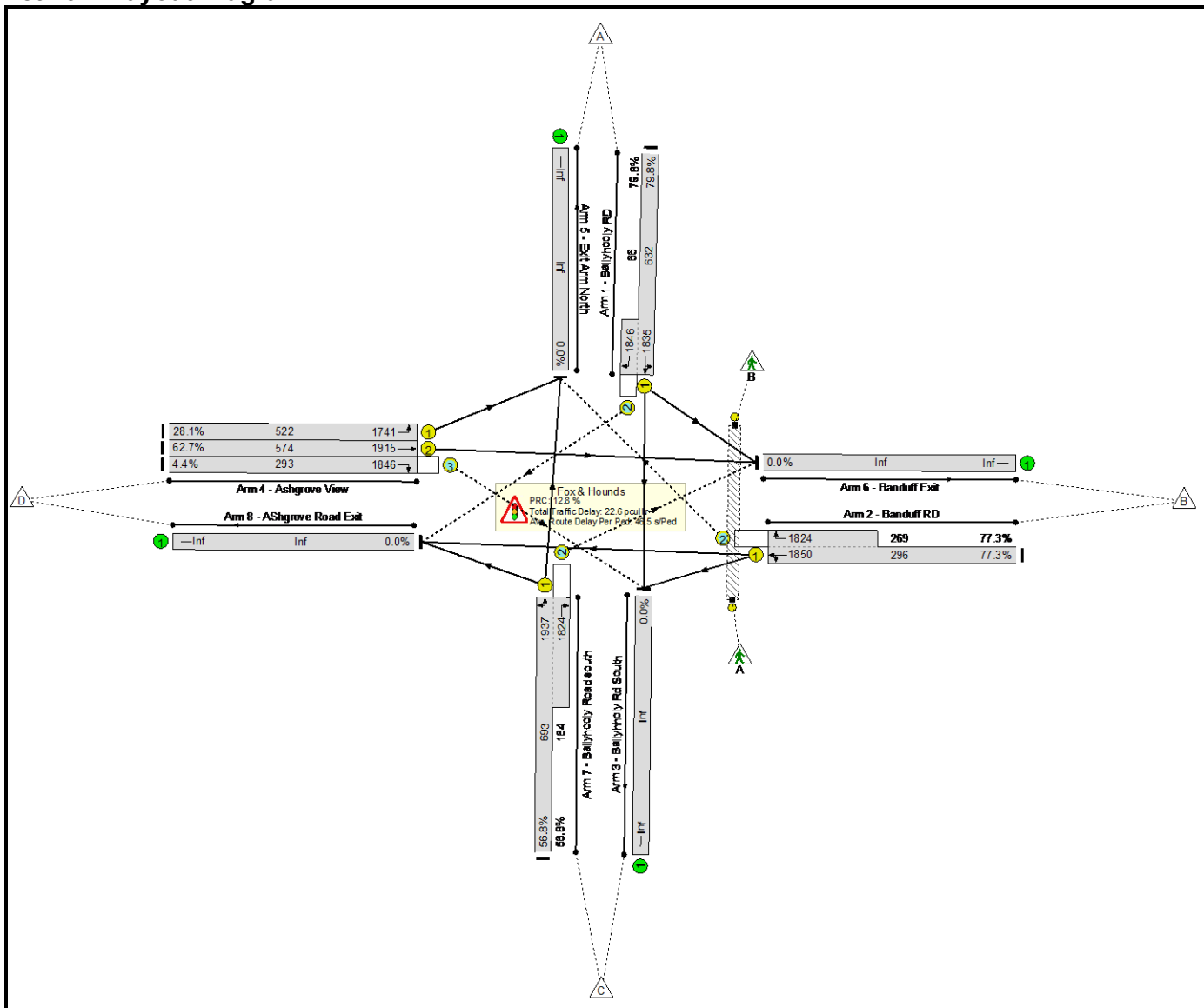
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	78.4%	332	16	8	19.4	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	78.4%	332	16	8	19.4	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	46	-	634	1861:1846	721+88	78.4 : 78.4%	69	0	0	6.5	36.9	17.7		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	33	7	586	1854:1824	493+255	78.3 : 78.3%	180	15	5	7.5	46.2	12.1		
4/1	Ashgrove View Left	U	C		1	26	-	59	1741	427	13.8%	-	-	-	0.6	37.3	1.5		
4/2	Ashgrove View Ahead	U	C		1	26	-	198	1915	470	42.1%	-	-	-	2.3	41.5	5.4		
4/3	Ashgrove View Right	O	D		1	28	-	12	1846	112	10.7%	12	0	0	0.2	66.9	0.3		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	50	4	315	1938:1824	751+230	32.0 : 32.6%	72	1	2	2.3	25.9	4.7		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		14.8		PRC Over All Lanes (%):		14.8		Total Delay for Signalled Lanes (pcuHr):		19.42		Total Delay Over All Lanes(pcuHr):		19.42		Cycle Time (s): 110	

Basic Results Summary

Scenario 6: '2022 PM with dev' (FG6: 'Fox & Hounds PM 2022 with dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

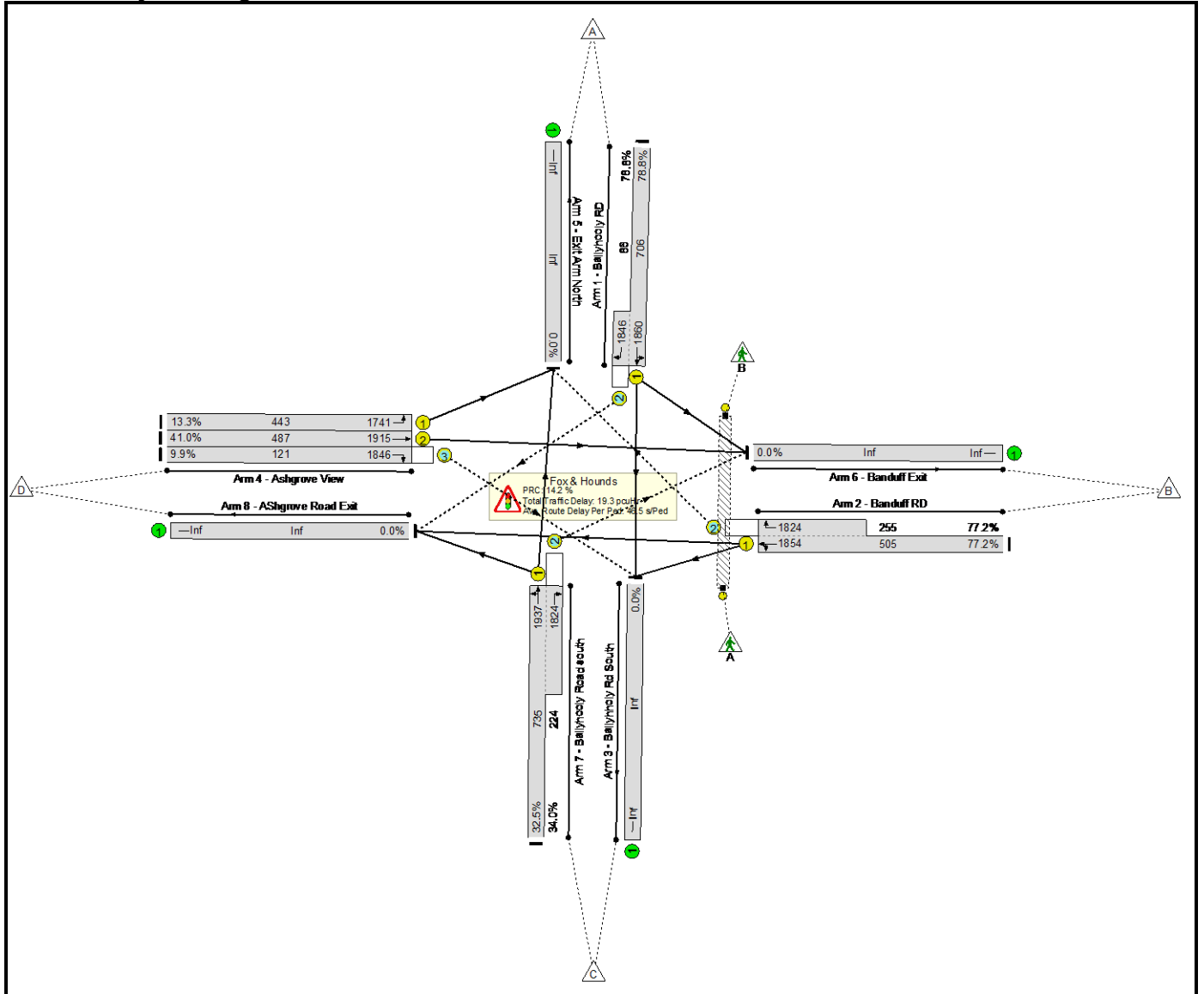
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	79.8%	276	83	8	22.6	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	79.8%	276	83	8	22.6	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	40	-	557	1835:1846	632+66	79.8 : 79.8%	53	0	0	6.7	43.4	16.4		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	39	7	437	1850:1824	296+269	77.3 : 77.3%	121	81	6	5.8	47.8	7.5		
4/1	Ashgrove View Left	U	C		1	32	-	147	1741	522	28.1%	-	-	-	1.4	34.2	3.6		
4/2	Ashgrove View Ahead	U	C		1	32	-	360	1915	574	62.7%	-	-	-	4.2	41.5	10.2		
4/3	Ashgrove View Right	O	D		1	34	-	13	1846	293	4.4%	13	0	0	0.1	41.2	0.3		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	44	4	487	1937:1824	693+164	56.8 : 56.8%	89	2	3	4.4	32.7	9.5		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		12.8		PRC Over All Lanes (%):		12.8		Total Delay for Signalled Lanes (pcuHr):		22.64		Total Delay Over All Lanes(pcuHr):		22.64		Cycle Time (s): 110	

Basic Results Summary

Scenario 7: '2023 AM no dev' (FG7: 'Fox & Hounds AM 2023 no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

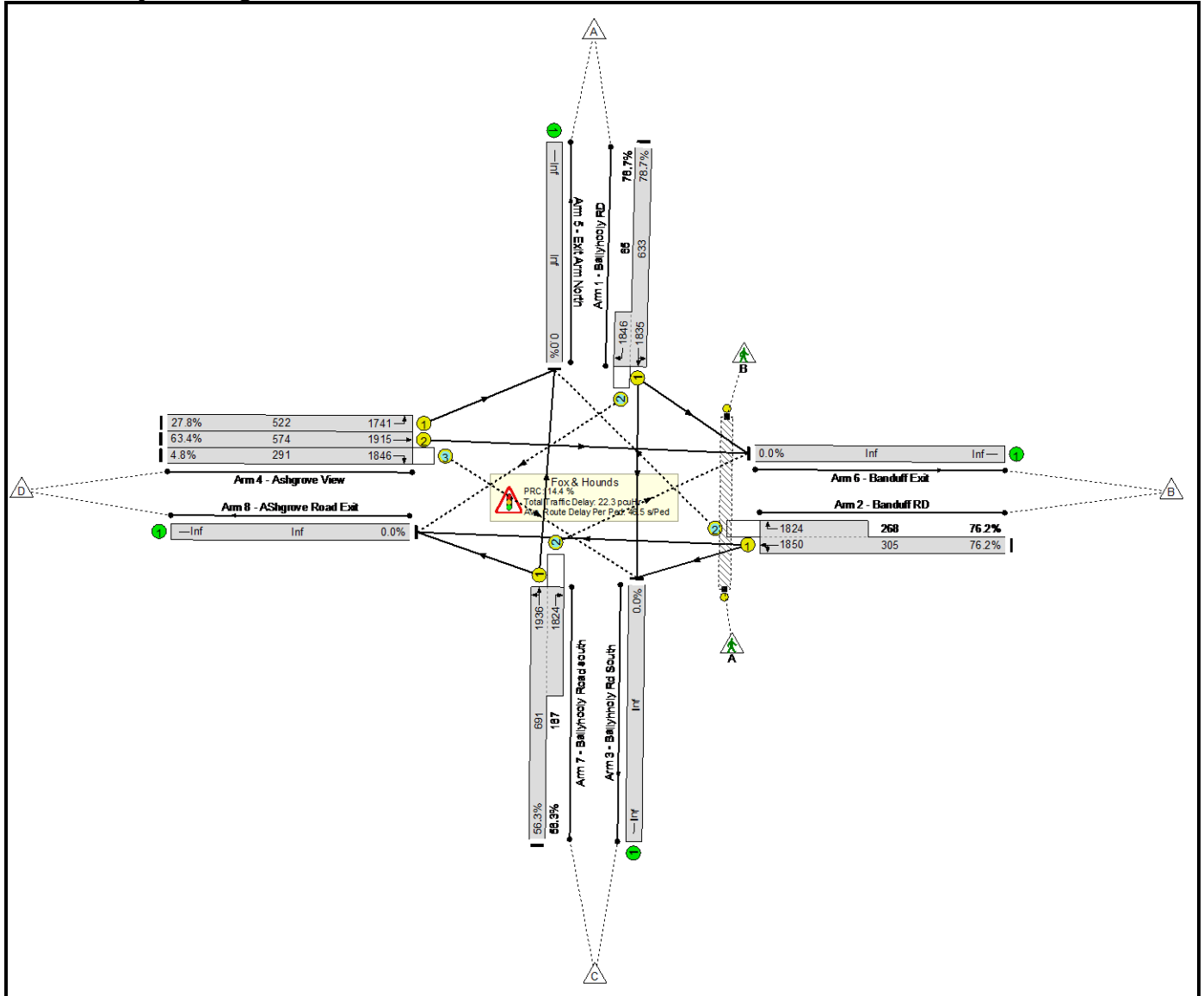
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	78.8%	335	10	7	19.3	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	78.8%	335	10	7	19.3	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	45	-	624	1860:1846	706+86	78.8 : 78.8%	68	0	0	6.6	38.0	17.7		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	34	7	587	1854:1824	505+255	77.2 : 77.2%	183	9	5	7.3	44.6	12.0		
4/1	Ashgrove View Left	U	C		1	27	-	59	1741	443	13.3%	-	-	-	0.6	36.3	1.5		
4/2	Ashgrove View Ahead	U	C		1	27	-	200	1915	487	41.0%	-	-	-	2.2	40.4	5.4		
4/3	Ashgrove View Right	O	D		1	29	-	12	1846	121	9.9%	12	0	0	0.2	64.5	0.3		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	49	4	315	1937:1824	735+224	32.5 : 34.0%	73	1	2	2.3	26.7	4.8		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		14.2		PRC Over All Lanes (%):		14.2		Total Delay for Signalled Lanes (pcuHr):		19.25		Total Delay Over All Lanes(pcuHr):		19.25		Cycle Time (s): 110	

Basic Results Summary

Scenario 8: '2023 PM no dev' (FG8: 'Fox & Hounds PM 2023 no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram





Basic Results Summary

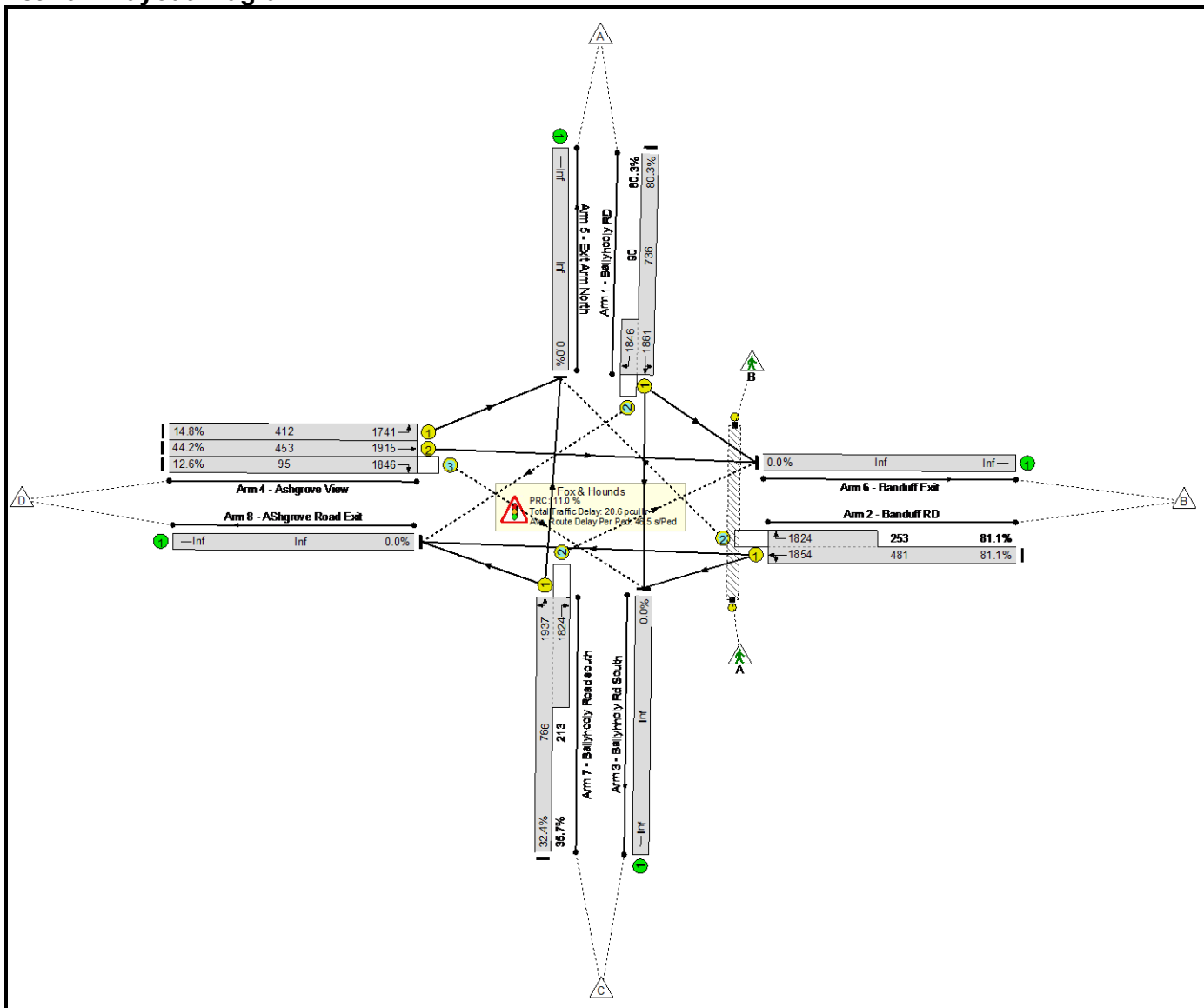
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	78.7%	274	81	8	22.3	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	78.7%	274	81	8	22.3	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	40	-	549	1835:1846	633+65	78.7 : 78.7%	51	0	0	6.5	42.6	16.1		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	39	7	436	1850:1824	305+268	76.2 : 76.2%	119	79	6	5.7	46.9	7.3		
4/1	Ashgrove View Left	U	C		1	32	-	145	1741	522	27.8%	-	-	-	1.4	34.2	3.5		
4/2	Ashgrove View Ahead	U	C		1	32	-	364	1915	574	63.4%	-	-	-	4.2	41.8	10.5		
4/3	Ashgrove View Right	O	D		1	34	-	14	1846	291	4.8%	14	0	0	0.2	41.4	0.3		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	44	4	483	1936:1824	691+167	56.3 : 56.3%	90	2	3	4.4	32.6	9.4		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		14.4		PRC Over All Lanes (%):		14.4		Total Delay for Signalled Lanes (pcuHr):		22.30		Total Delay Over All Lanes(pcuHr):		22.30		Cycle Time (s): 110	

Basic Results Summary

Scenario 9: '2023 AM with dev' (FG9: 'Fox & Hounds AM 2023 with dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

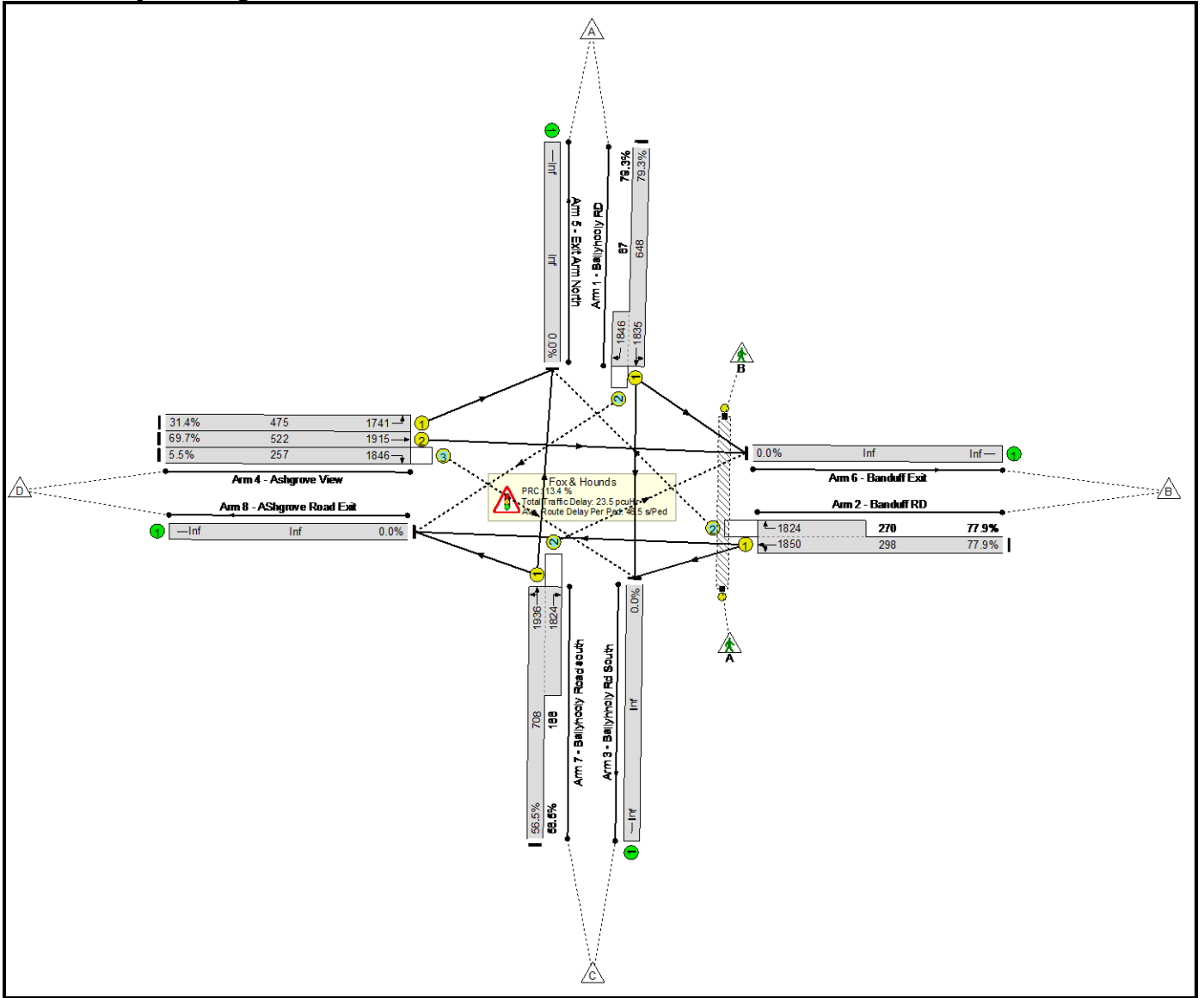
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	81.1%	324	33	8	20.6	-	-
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	81.1%	324	33	8	20.6	-	-
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	47	-	663	1861:1846	736+90	80.3 : 80.3%	72	0	0	6.9	37.4	18.9
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	32	7	595	1854:1824	481+253	81.1 : 81.1%	168	31	6	8.1	49.0	12.9
4/1	Ashgrove View Left	U	C		1	25	-	61	1741	412	14.8%	-	-	-	0.7	38.4	1.6
4/2	Ashgrove View Ahead	U	C		1	25	-	200	1915	453	44.2%	-	-	-	2.4	42.9	5.6
4/3	Ashgrove View Right	O	D		1	27	-	12	1846	95	12.6%	12	0	0	0.2	72.2	0.3
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	51	4	324	1937:1824	766+213	32.4 : 35.7%	73	1	2	2.3	25.7	4.8
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		11.0		Total Delay for Signalled Lanes (pcuHr):		20.58		Cycle Time (s):		110					
		PRC Over All Lanes (%):		11.0		Total Delay Over All Lanes(pcuHr):		20.58									

Basic Results Summary

Scenario 10: '2023 PM with dev' (FG10: 'Fox & Hounds PM 2023 with dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

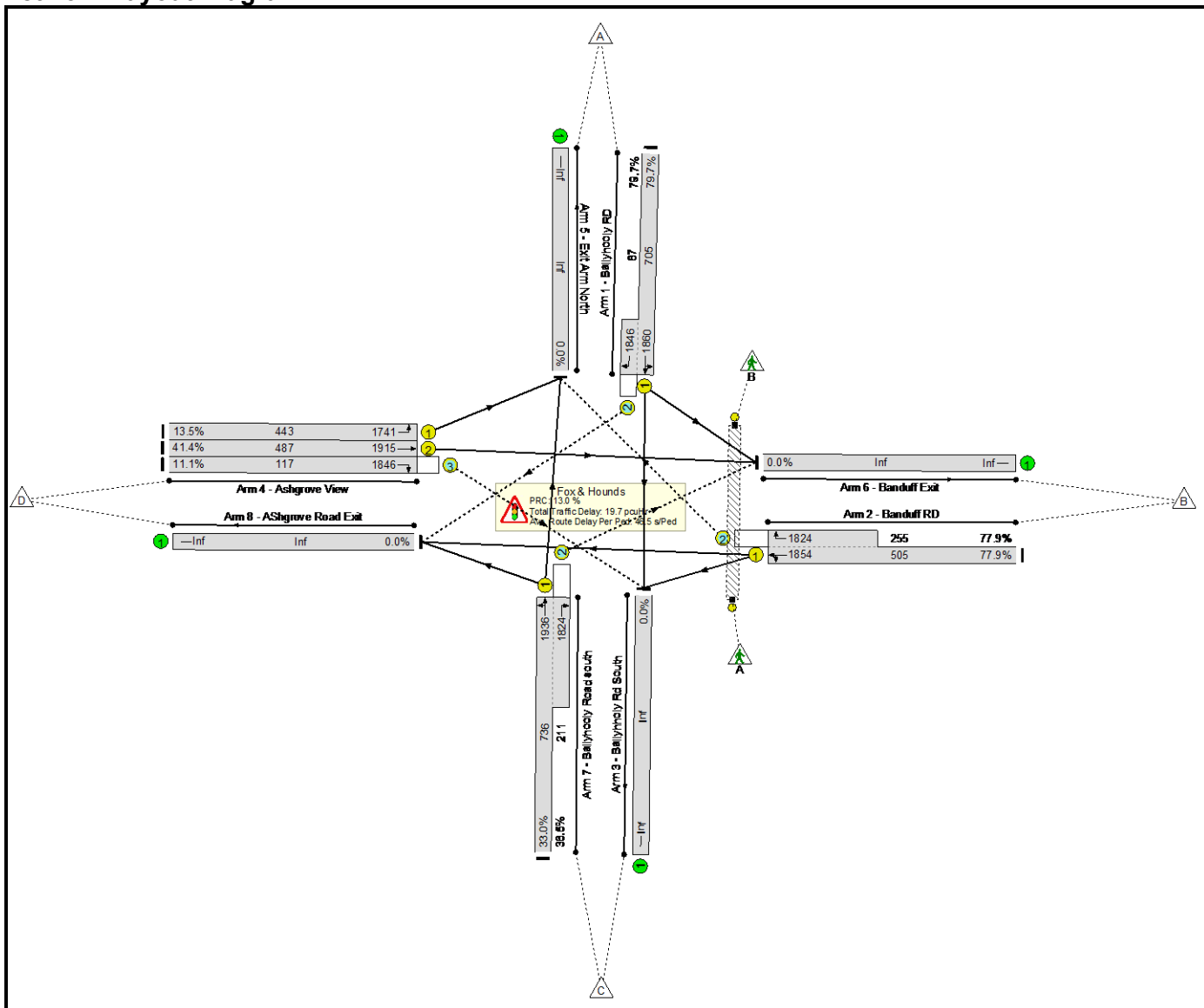
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	79.3%	245	118	9	23.5	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	79.3%	245	118	9	23.5	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	41	-	567	1835:1846	648+67	79.3 : 79.3%	53	0	0	6.6	42.2	16.6		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	38	9	442	1850:1824	298+270	77.9 : 77.9%	88	116	6	6.0	49.1	7.7		
4/1	Ashgrove View Left	U	C		1	29	-	149	1741	475	31.4%	-	-	-	1.5	37.3	3.8		
4/2	Ashgrove View Ahead	U	C		1	29	-	364	1915	522	69.7%	-	-	-	4.8	47.1	11.0		
4/3	Ashgrove View Right	O	D		1	31	-	14	1846	257	5.5%	14	0	0	0.2	44.9	0.3		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	45	4	494	1936:1824	708+166	56.5 : 56.5%	90	2	3	4.4	32.0	9.5		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		13.4		PRC Over All Lanes (%):		13.4		Total Delay for Signalled Lanes (pcuHr):		23.54		Total Delay Over All Lanes(pcuHr):		23.54		Cycle Time (s): 110	

Basic Results Summary

Scenario 11: '2024 AM no dev' (FG11: 'Fox & Hounds AM 2024 no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

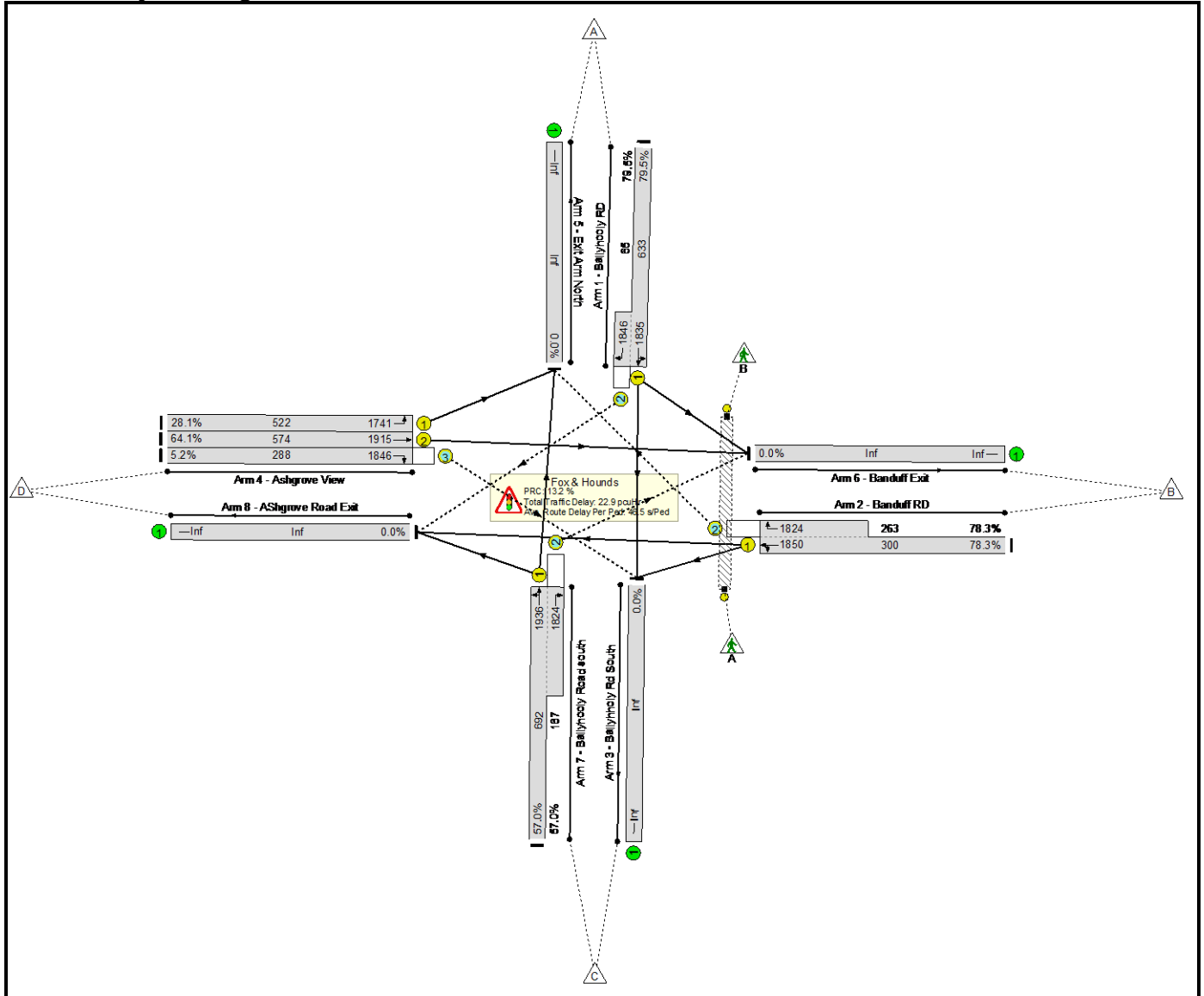
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>79.7%</b>	<b>340</b>	<b>10</b>	<b>8</b>	<b>19.7</b>	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	<b>79.7%</b>	<b>340</b>	<b>10</b>	<b>8</b>	<b>19.7</b>	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	45	-	631	1860:1846	705+87	79.7 : 79.7%	69	0	0	6.8	38.6	18.0		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	34	7	593	1854:1824	505+255	77.9 : 77.9%	185	9	5	7.4	45.1	12.4		
4/1	Ashgrove View Left	U	C		1	27	-	60	1741	443	13.5%	-	-	-	0.6	36.4	1.5		
4/2	Ashgrove View Ahead	U	C		1	27	-	202	1915	487	41.4%	-	-	-	2.3	40.5	5.5		
4/3	Ashgrove View Right	O	D		1	29	-	13	1846	117	11.1%	13	0	0	0.2	65.5	0.4		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	49	4	320	1936:1824	736+211	33.0 : 36.5%	74	1	2	2.4	27.0	4.8		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		13.0		PRC Over All Lanes (%):		13.0		Total Delay for Signalled Lanes (pcuHr):		19.70		Total Delay Over All Lanes(pcuHr):		19.70		Cycle Time (s): 110	

Basic Results Summary

Scenario 12: '2024 PM no dev' (FG12: 'Fox & Hounds PM 2024 no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram





Basic Results Summary

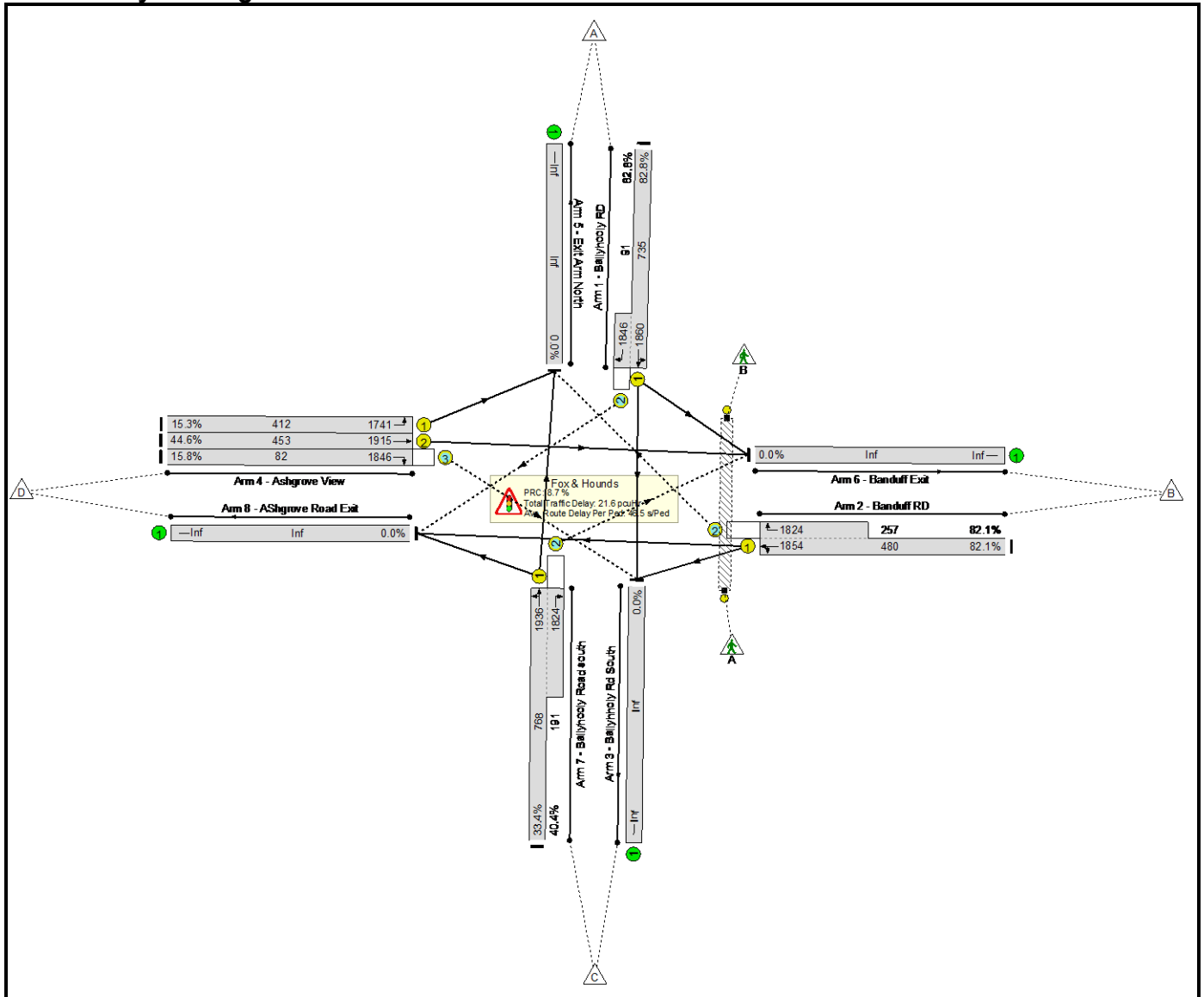
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	79.5%	272	85	11	22.9	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	79.5%	272	85	11	22.9	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	40	-	555	1835:1846	633+65	79.5 : 79.5%	52	0	0	6.7	43.2	16.3		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	39	7	441	1850:1824	300+263	78.3 : 78.3%	115	83	8	5.9	48.6	7.6		
4/1	Ashgrove View Left	U	C		1	32	-	147	1741	522	28.1%	-	-	-	1.4	34.2	3.6		
4/2	Ashgrove View Ahead	U	C		1	32	-	368	1915	574	64.1%	-	-	-	4.3	42.0	10.6		
4/3	Ashgrove View Right	O	D		1	34	-	15	1846	288	5.2%	15	0	0	0.2	41.7	0.3		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	44	4	489	1936:1824	692+167	57.0 : 57.0%	91	2	3	4.5	32.8	9.5		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		13.2		PRC Over All Lanes (%):		13.2		Total Delay for Signalled Lanes (pcuHr):		22.93		Total Delay Over All Lanes(pcuHr):		22.93		Cycle Time (s): 110	

Basic Results Summary

Scenario 13: '2024 AM with dev' (FG13: 'Fox & Hounds AM 2024 with dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

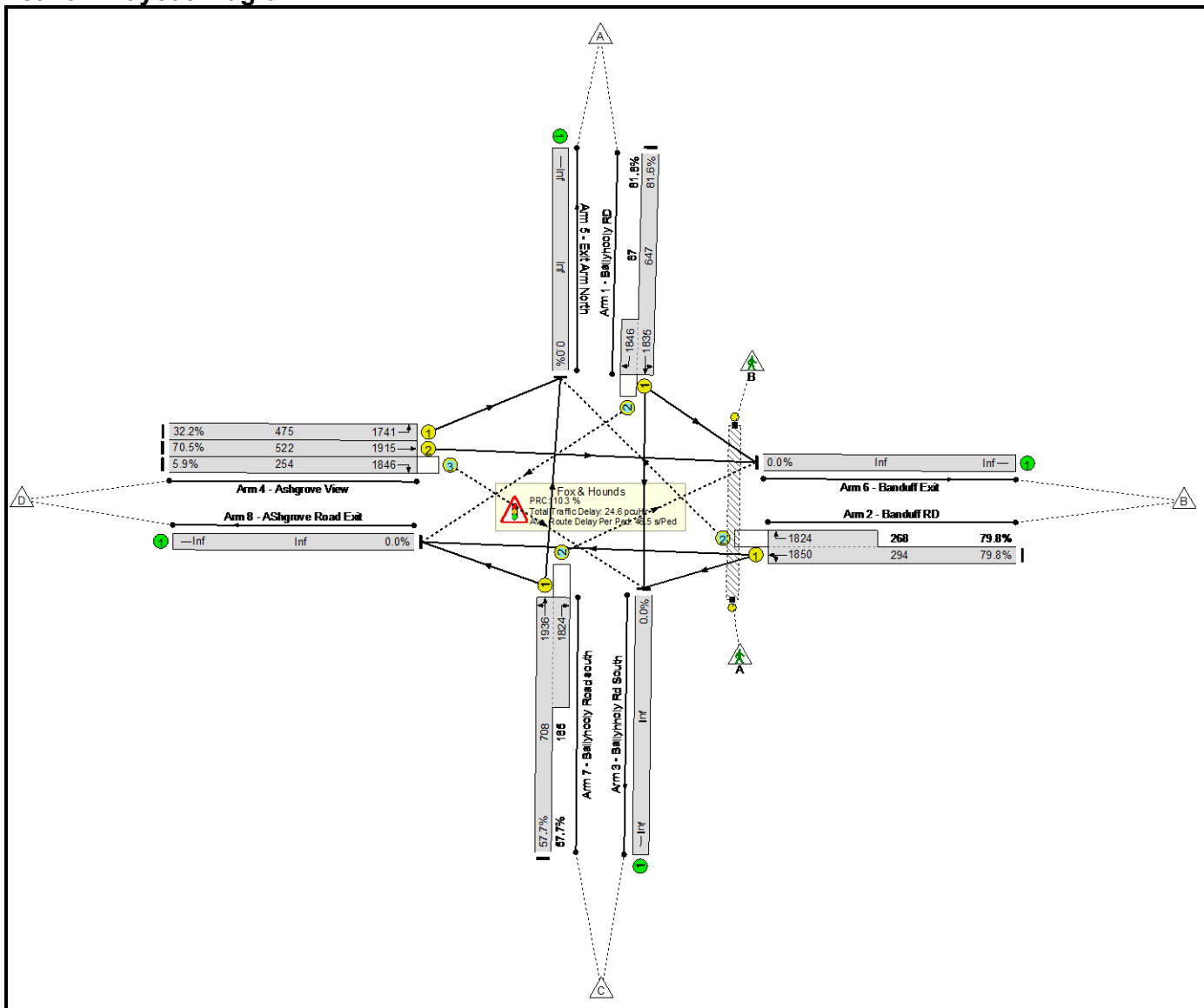
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	82.8%	329	39	8	21.6	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	82.8%	329	39	8	21.6	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	47	-	684	1860:1846	735+91	82.8 : 82.8%	75	0	0	7.5	39.4	20.0		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	32	7	605	1854:1824	480+257	82.1 : 82.1%	167	38	6	8.4	49.8	13.4		
4/1	Ashgrove View Left	U	C		1	25	-	63	1741	412	15.3%	-	-	-	0.7	38.5	1.6		
4/2	Ashgrove View Ahead	U	C		1	25	-	202	1915	453	44.6%	-	-	-	2.4	43.0	5.6		
4/3	Ashgrove View Right	O	D		1	27	-	13	1846	82	15.8%	13	0	0	0.3	76.9	0.4		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	51	4	333	1936:1824	768+191	33.4 : 40.4%	74	1	2	2.4	26.2	5.0		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		8.7		PRC Over All Lanes (%):		8.7		Total Delay for Signalled Lanes (pcuHr):		21.64		Total Delay Over All Lanes(pcuHr):		21.64		Cycle Time (s): 110	

Basic Results Summary

Scenario 14: '2024 PM with dev' (FG14: 'Fox & Hounds PM 2024 with dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

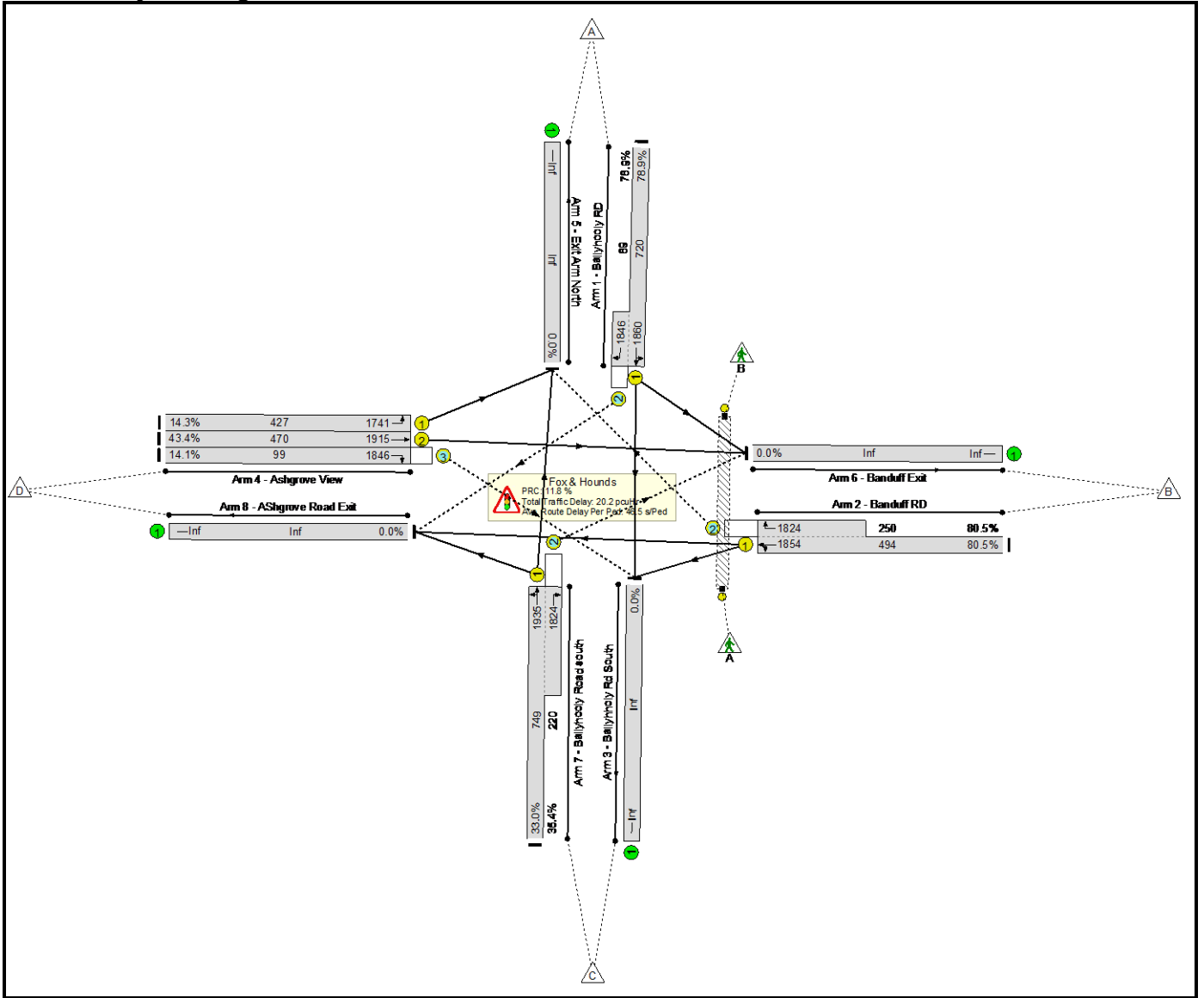
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	81.6%	246	119	14	24.6	-	-
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	81.6%	246	119	14	24.6	-	-
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	41	-	583	1835:1846	647+67	81.6 : 81.6%	55	0	0	7.1	43.9	17.5
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	38	9	449	1850:1824	294+268	79.8 : 79.8%	87	116	11	6.3	50.6	8.1
4/1	Ashgrove View Left	U	C		1	29	-	153	1741	475	32.2%	-	-	-	1.6	37.5	3.9
4/2	Ashgrove View Ahead	U	C		1	29	-	368	1915	522	70.5%	-	-	-	4.9	47.5	11.3
4/3	Ashgrove View Right	O	D		1	31	-	15	1846	254	5.9%	15	0	0	0.2	45.2	0.4
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	45	4	504	1936:1824	708+165	57.7 : 57.7%	89	3	3	4.5	32.5	9.9
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		10.3		Total Delay for Signalled Lanes (pcuHr):		24.60		Cycle Time (s):		110					
		PRC Over All Lanes (%):		10.3		Total Delay Over All Lanes(pcuHr):		24.60									

Basic Results Summary

Scenario 15: '2025 AM no dev' (FG15: 'Fox & Hounds AM 2025 no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

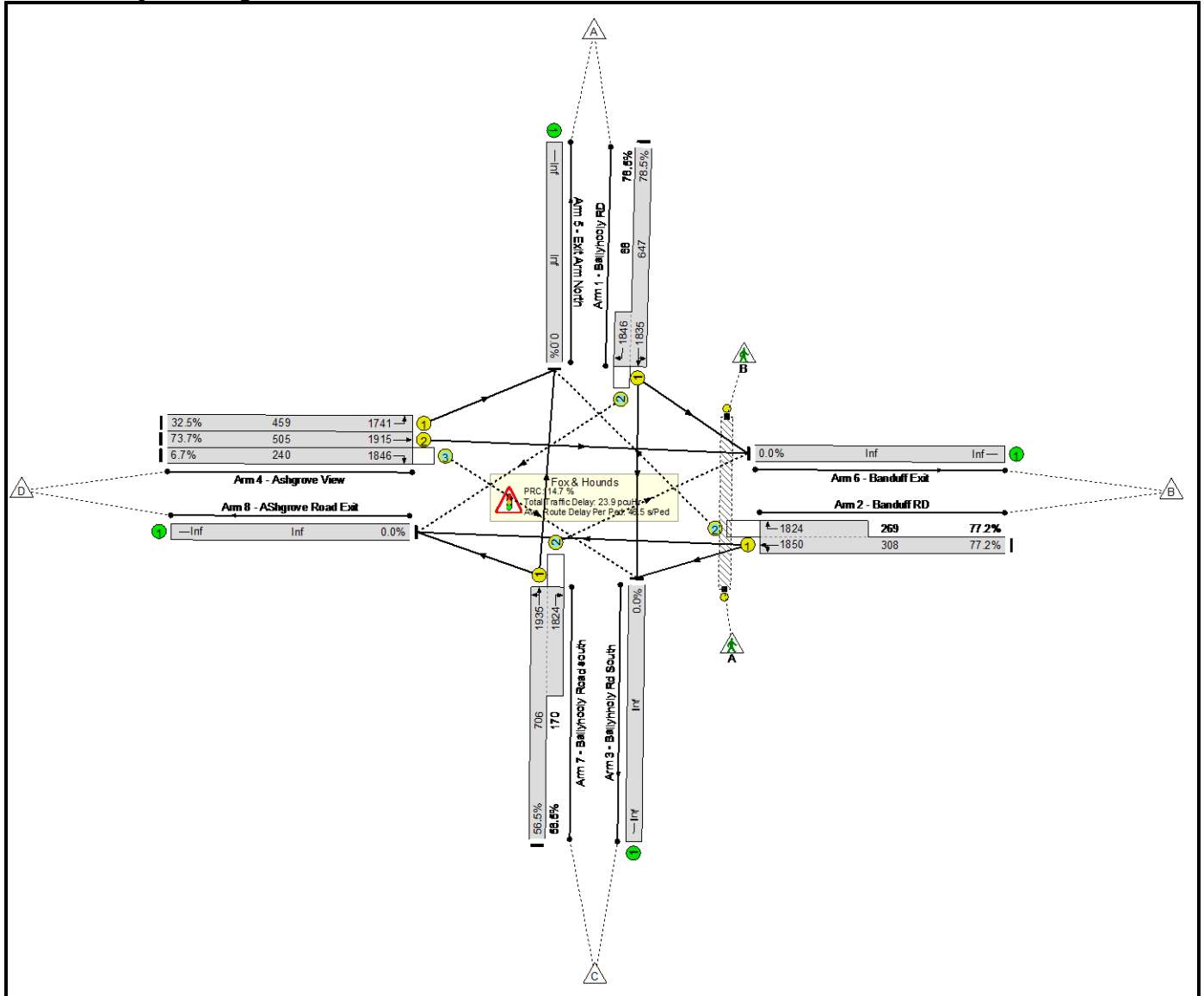
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>80.5%</b>	<b>336</b>	<b>19</b>	<b>8</b>	<b>20.2</b>	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	<b>80.5%</b>	<b>336</b>	<b>19</b>	<b>8</b>	<b>20.2</b>	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	46	-	638	1860:1846	720+89	78.9 : 78.9%	70	0	0	6.6	37.3	17.9		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	33	7	599	1854:1824	494+250	80.5 : 80.5%	178	18	5	7.9	47.7	13.2		
4/1	Ashgrove View Left	U	C		1	26	-	61	1741	427	14.3%	-	-	-	0.6	37.4	1.5		
4/2	Ashgrove View Ahead	U	C		1	26	-	204	1915	470	43.4%	-	-	-	2.4	41.8	5.6		
4/3	Ashgrove View Right	O	D		1	28	-	14	1846	99	14.1%	14	0	0	0.3	71.2	0.4		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	50	4	325	1935:1824	749+220	33.0 : 35.4%	74	1	2	2.4	26.3	4.8		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		11.8		PRC Over All Lanes (%):		11.8		Total Delay for Signalled Lanes (pcuHr):		20.18		Total Delay Over All Lanes(pcuHr):		20.18		Cycle Time (s): 110	

Basic Results Summary

Scenario 16: '2025 PM no dev' (FG16: 'Fox & Hounds PM 2025 no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram





Basic Results Summary

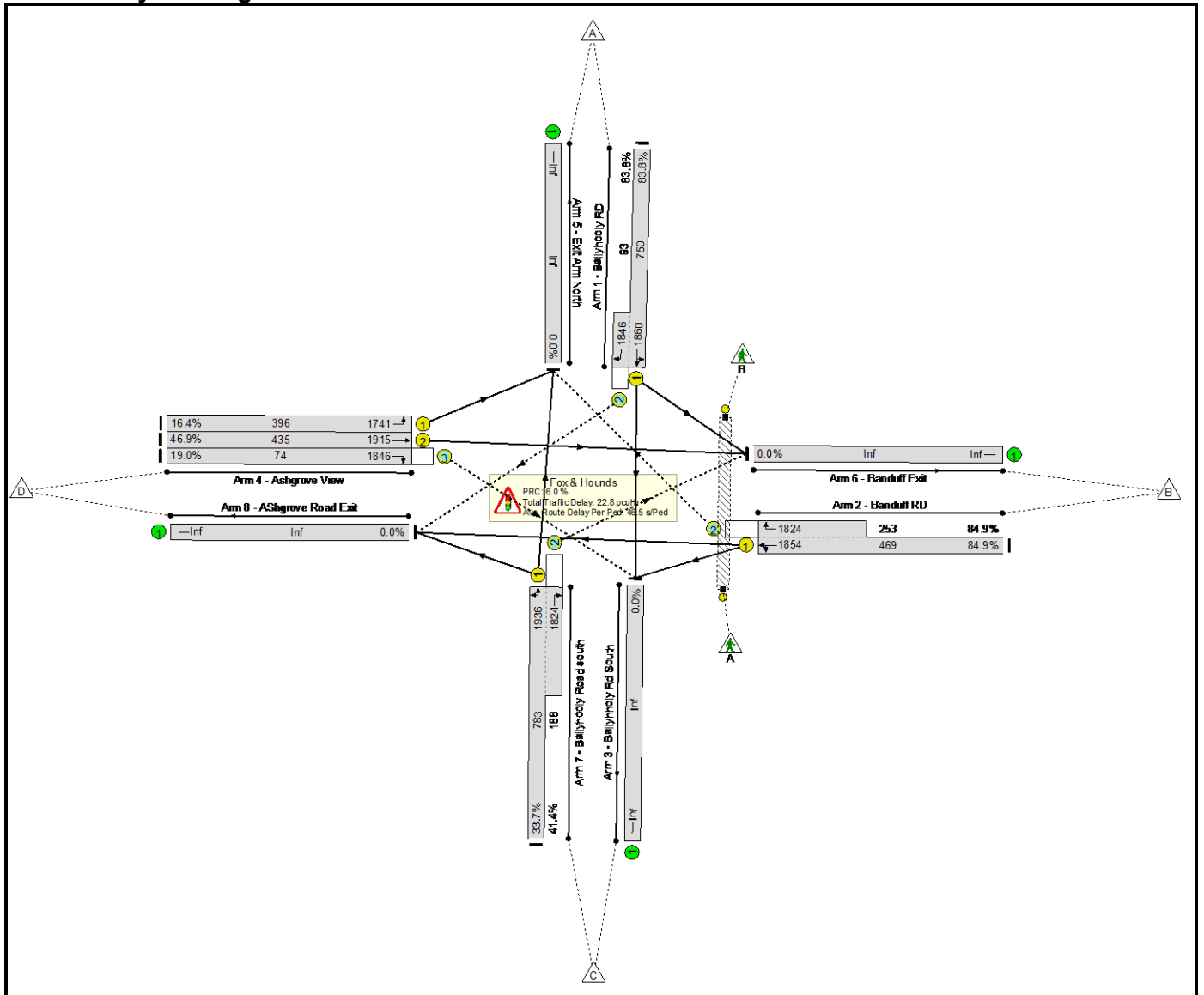
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	78.5%	232	133	8	23.9	-	-
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	78.5%	232	133	8	23.9	-	-
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	41	-	561	1835:1846	647+68	78.5 : 78.5%	53	0	0	6.5	41.6	16.2
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	38	10	446	1850:1824	308+269	77.2 : 77.2%	71	131	6	6.0	48.5	7.6
4/1	Ashgrove View Left	U	C		1	28	-	149	1741	459	32.5%	-	-	-	1.6	38.4	3.9
4/2	Ashgrove View Ahead	U	C		1	28	-	372	1915	505	73.7%	-	-	-	5.2	50.3	11.7
4/3	Ashgrove View Right	O	D		1	30	-	16	1846	240	6.7%	16	0	0	0.2	46.7	0.4
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	45	4	495	1935:1824	706+170	56.5 : 56.5%	92	2	3	4.4	32.0	9.5
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		14.7		Total Delay for Signalled Lanes (pcuHr):		23.88		Cycle Time (s):		110					
		PRC Over All Lanes (%):		14.7		Total Delay Over All Lanes(pcuHr):		23.88									

Basic Results Summary

Scenario 17: '2025 AM with dev' (FG17: 'Fox & Hounds AM 2025 with dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

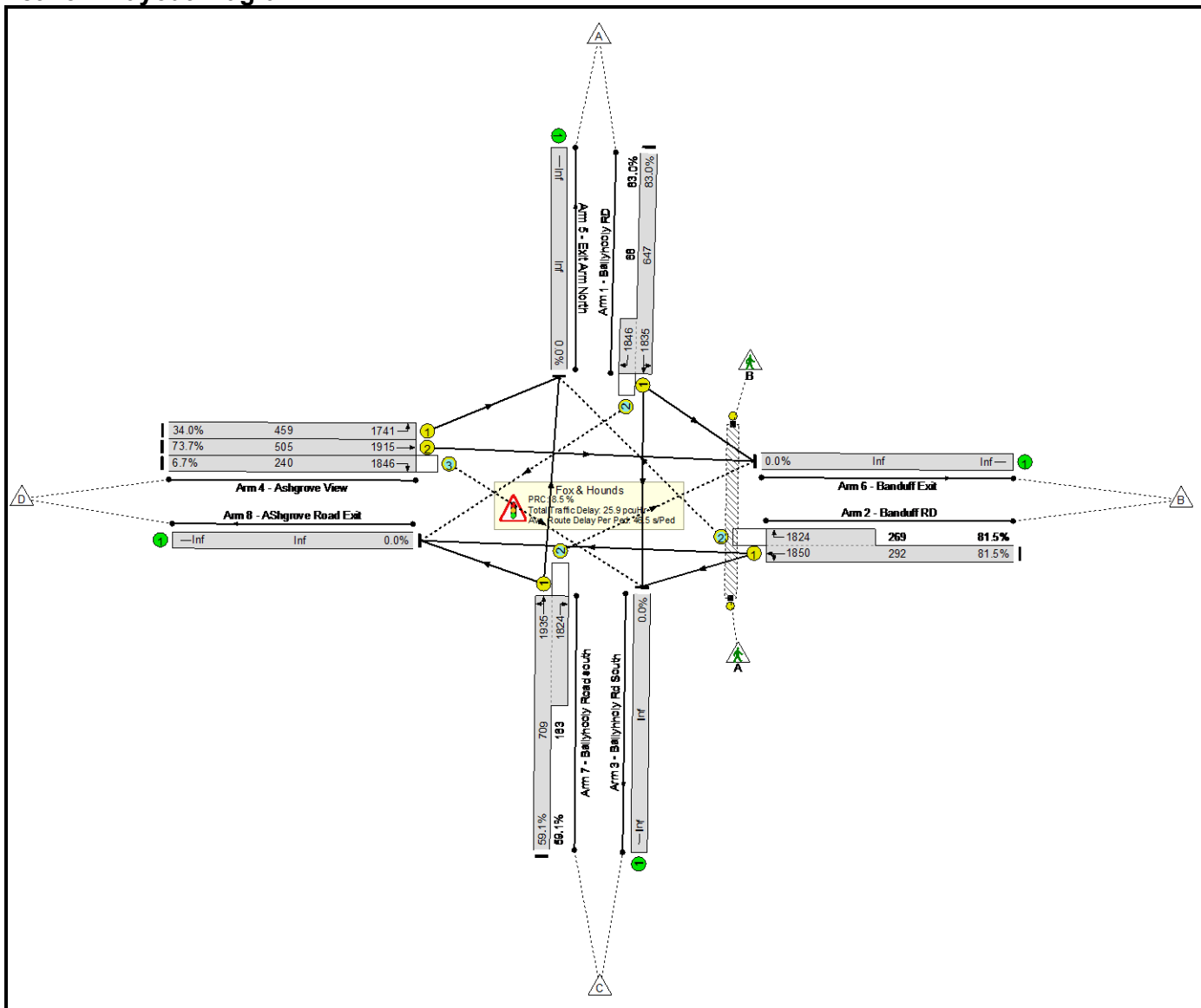
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>84.9%</b>	<b>320</b>	<b>57</b>	<b>8</b>	<b>22.8</b>	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	<b>84.9%</b>	<b>320</b>	<b>57</b>	<b>8</b>	<b>22.8</b>	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	48	-	706	1860:1846	750+93	83.8 : 83.8%	78	0	0	7.7	39.4	20.7		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	31	7	613	1854:1824	469+253	84.9 : 84.9%	154	55	6	9.1	53.5	14.4		
4/1	Ashgrove View Left	U	C		1	24	-	65	1741	396	16.4%	-	-	-	0.7	39.6	1.7		
4/2	Ashgrove View Ahead	U	C		1	24	-	204	1915	435	46.9%	-	-	-	2.5	44.5	5.8		
4/3	Ashgrove View Right	O	D		1	26	-	14	1846	74	19.0%	14	0	0	0.3	82.8	0.4		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	52	4	342	1936:1824	783+188	33.7 : 41.4%	74	1	2	2.4	25.8	5.1		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		6.0		PRC Over All Lanes (%):		6.0		Total Delay for Signalled Lanes (pcuHr):		22.84		Total Delay Over All Lanes(pcuHr):		22.84		Cycle Time (s): 110	

Basic Results Summary

Scenario 18: '2025 PM with dev' (FG18: 'Fox & Hounds PM 2025 with dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

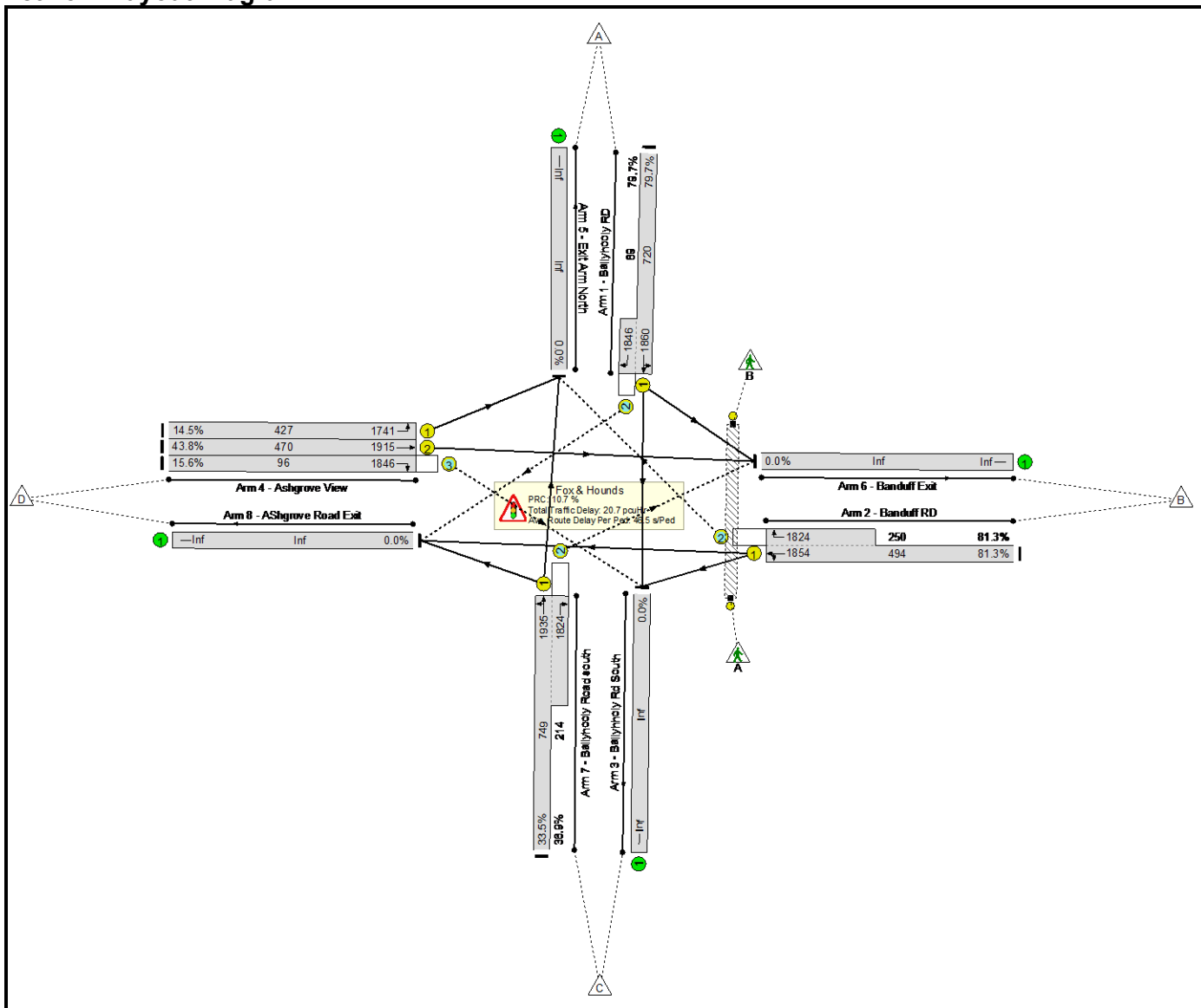
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	83.0%	226	143	18	25.9	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	83.0%	226	143	18	25.9	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	41	-	593	1835:1846	647+68	83.0 : 83.0%	56	0	0	7.4	45.2	18.1		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	38	10	457	1850:1824	292+269	81.5 : 81.5%	71	133	16	6.6	52.2	8.4		
4/1	Ashgrove View Left	U	C		1	28	-	156	1741	459	34.0%	-	-	-	1.7	38.7	4.1		
4/2	Ashgrove View Ahead	U	C		1	28	-	372	1915	505	73.7%	-	-	-	5.2	50.3	11.7		
4/3	Ashgrove View Right	O	D		1	30	-	16	1846	240	6.7%	16	0	0	0.2	46.7	0.4		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	45	4	515	1935:1824	709+163	59.1 : 59.1%	83	10	3	4.7	32.8	10.1		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		8.5		PRC Over All Lanes (%):		8.5		Total Delay for Signalled Lanes (pcuHr):		25.85		Total Delay Over All Lanes(pcuHr):		25.85		Cycle Time (s): 110	

Basic Results Summary

Scenario 19: '2026 AM no dev' (FG19: 'Fox & Hounds AM 2026 no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

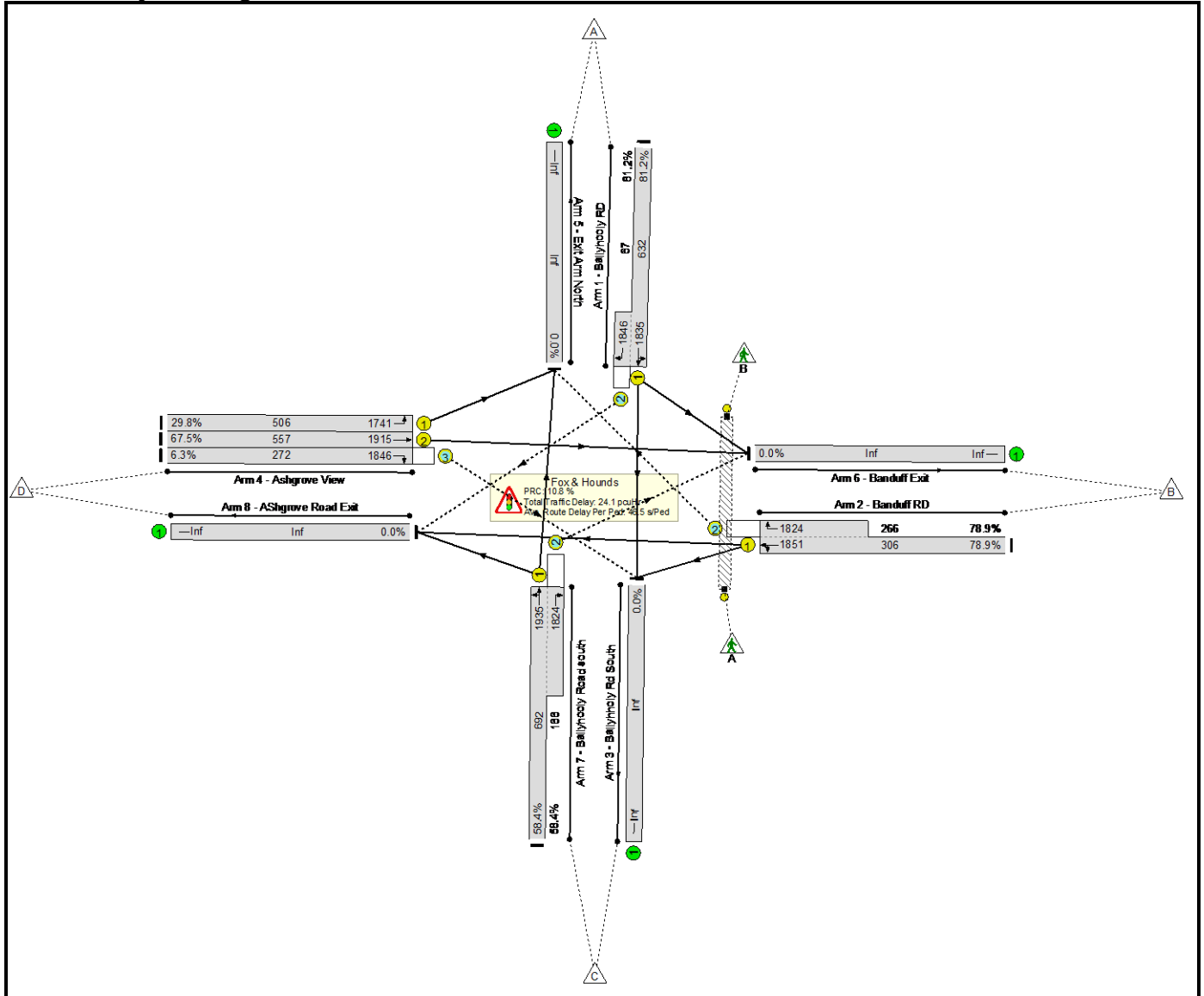
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	81.3%	339	22	8	20.7	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	81.3%	339	22	8	20.7	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	46	-	645	1860:1846	720+89	79.7 : 79.7%	71	0	0	6.8	37.8	18.3		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	33	7	605	1854:1824	494+250	81.3 : 81.3%	177	20	6	8.1	48.2	13.5		
4/1	Ashgrove View Left	U	C		1	26	-	62	1741	427	14.5%	-	-	-	0.6	37.4	1.6		
4/2	Ashgrove View Ahead	U	C		1	26	-	206	1915	470	43.8%	-	-	-	2.4	41.9	5.7		
4/3	Ashgrove View Right	O	D		1	28	-	15	1846	96	15.6%	15	0	0	0.3	72.5	0.4		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	50	4	330	1935:1824	749+214	33.5 : 36.9%	75	1	2	2.4	26.4	4.9		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		10.7		PRC Over All Lanes (%):		10.7		Total Delay for Signalled Lanes (pcuHr):		20.65		Total Delay Over All Lanes(pcuHr):		20.65		Cycle Time (s): 110	

Basic Results Summary

Scenario 20: '2026 PM no dev' (FG20: 'Fox & Hounds PM 2026 no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram





Basic Results Summary

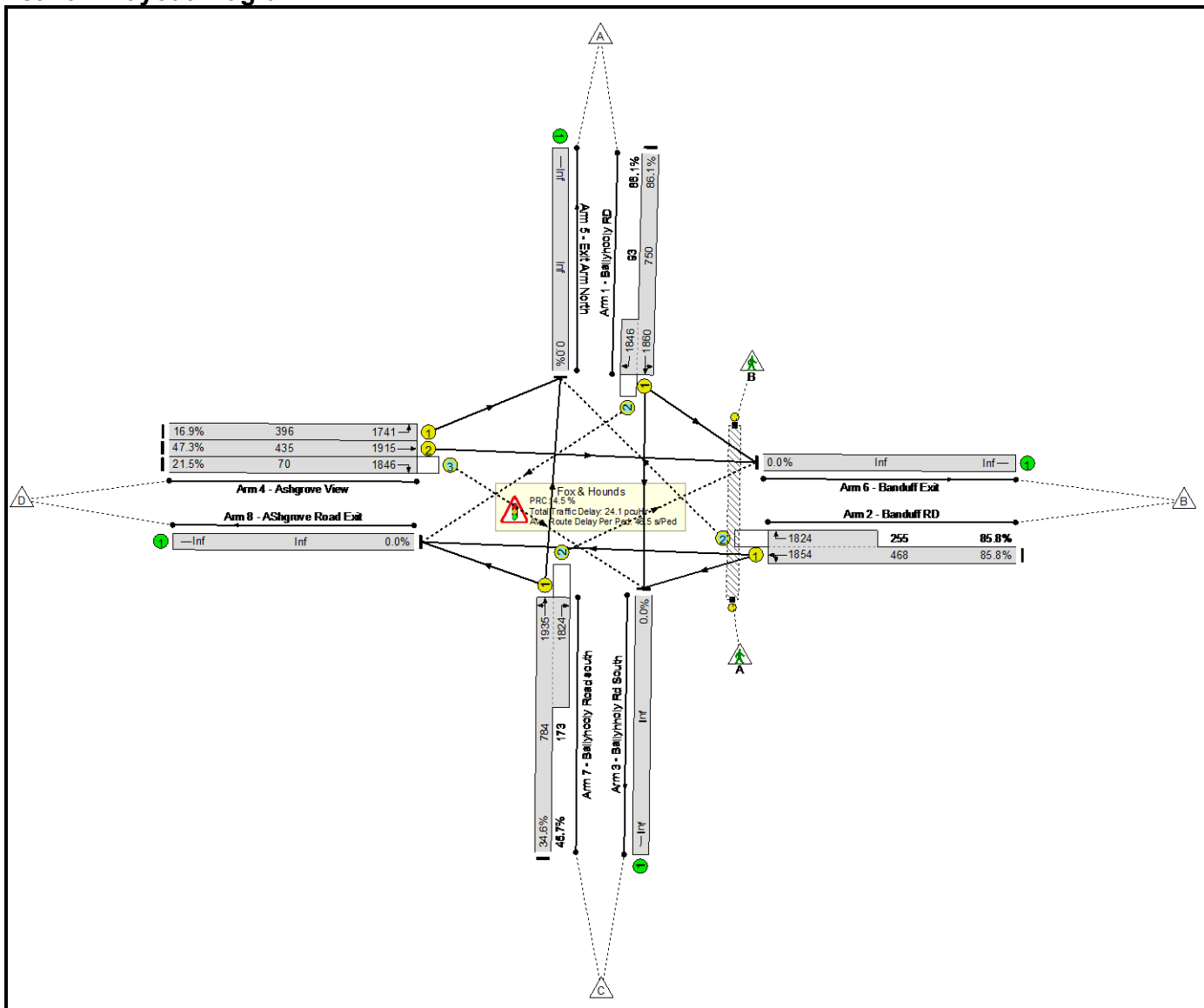
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	81.2%	261	105	12	24.1	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	81.2%	261	105	12	24.1	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	40	-	567	1835:1846	632+67	81.2 : 81.2%	54	0	0	7.0	44.5	17.0		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	39	8	451	1851:1824	306+266	78.9 : 78.9%	101	99	9	6.1	48.9	7.8		
4/1	Ashgrove View Left	U	C		1	31	-	151	1741	506	29.8%	-	-	-	1.5	35.4	3.8		
4/2	Ashgrove View Ahead	U	C		1	31	-	376	1915	557	67.5%	-	-	-	4.6	44.2	11.2		
4/3	Ashgrove View Right	O	D		1	33	-	17	1846	272	6.3%	17	0	0	0.2	43.3	0.4		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	44	4	501	1935:1824	692+166	58.4 : 58.4%	89	5	3	4.6	33.3	9.9		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		10.8		PRC Over All Lanes (%):		10.8		Total Delay for Signalled Lanes (pcuHr):		24.08		Total Delay Over All Lanes(pcuHr):		24.08		Cycle Time (s): 110	

Basic Results Summary

Scenario 21: '2026 AM with dev' (FG21: 'Fox & Hounds AM 2026 with dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

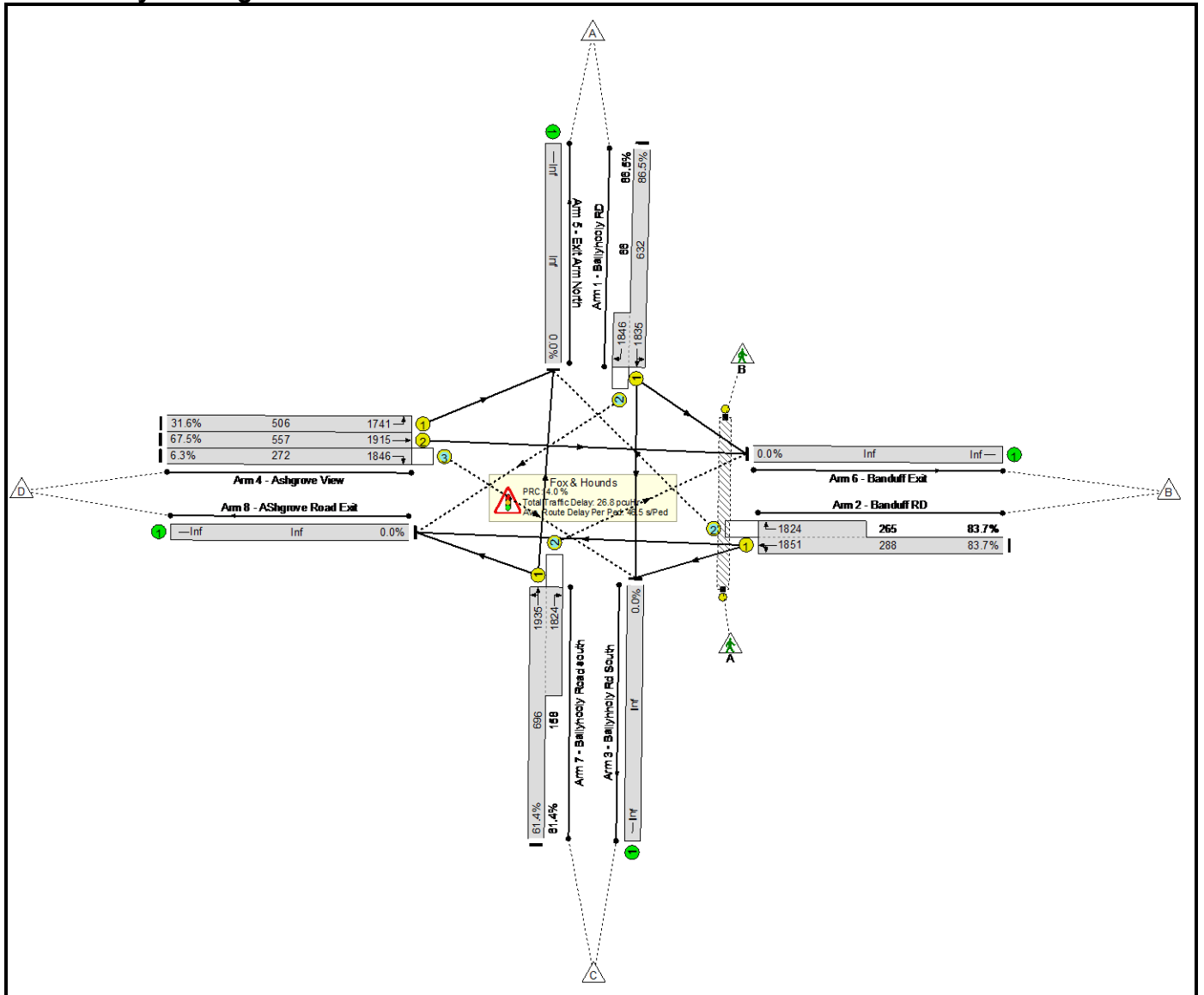
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>86.1%</b>	<b>321</b>	<b>64</b>	<b>8</b>	<b>24.1</b>	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	<b>86.1%</b>	<b>321</b>	<b>64</b>	<b>8</b>	<b>24.1</b>	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	48	-	726	1860:1846	750+93	86.1 : 86.1%	80	0	0	8.4	41.9	22.1		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	31	7	621	1854:1824	468+255	85.8 : 85.8%	151	62	6	9.4	54.6	14.8		
4/1	Ashgrove View Left	U	C		1	24	-	67	1741	396	16.9%	-	-	-	0.7	39.7	1.7		
4/2	Ashgrove View Ahead	U	C		1	24	-	206	1915	435	47.3%	-	-	-	2.6	44.6	5.9		
4/3	Ashgrove View Right	O	D		1	26	-	15	1846	70	21.5%	15	0	0	0.4	85.9	0.5		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	52	4	350	1935:1824	784+173	34.6 : 45.7%	74	3	2	2.6	26.4	5.3		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		4.5		PRC Over All Lanes (%):		4.5		Total Delay for Signalled Lanes (pcuHr):		24.07		Total Delay Over All Lanes(pcuHr):		24.07		Cycle Time (s): 110	

Basic Results Summary

Scenario 22: '2026 PM with dev' (FG22: 'Fox & Hounds PM 2026 with dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

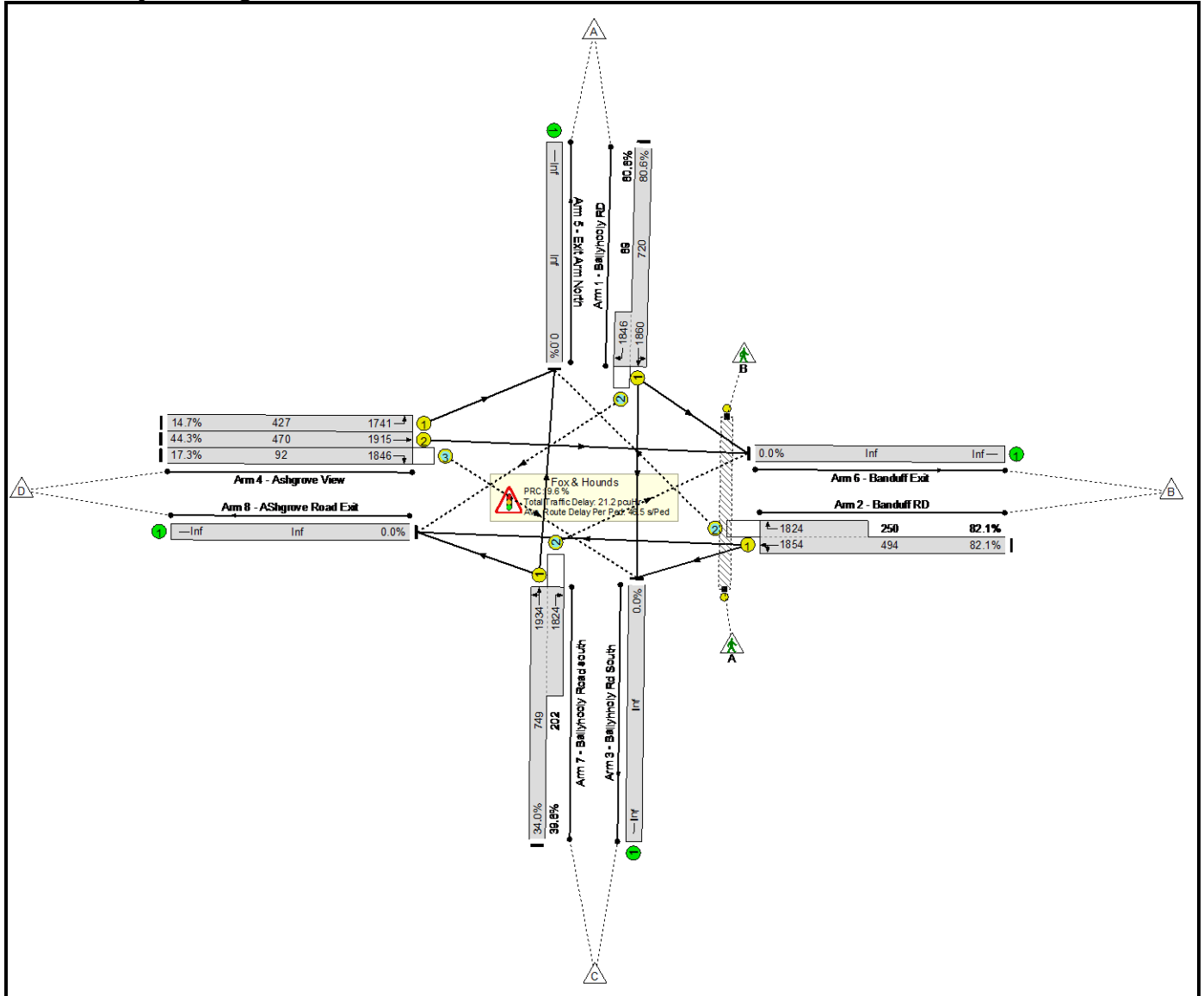
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	86.5%	236	131	25	26.8	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	86.5%	236	131	25	26.8	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	40	-	604	1835:1846	632+66	86.5 : 86.5%	57	0	0	8.4	50.2	19.4		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	39	8	463	1851:1824	288+265	83.7 : 83.7%	100	99	22	6.9	54.0	8.9		
4/1	Ashgrove View Left	U	C		1	31	-	160	1741	506	31.6%	-	-	-	1.6	35.6	4.0		
4/2	Ashgrove View Ahead	U	C		1	31	-	376	1915	557	67.5%	-	-	-	4.6	44.2	11.2		
4/3	Ashgrove View Right	O	D		1	33	-	17	1846	272	6.3%	17	0	0	0.2	43.3	0.4		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	44	4	524	1935:1824	696+158	61.4 : 61.4%	62	32	3	5.0	34.4	10.6		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		4.0		PRC Over All Lanes (%):		4.0		Total Delay for Signalled Lanes (pcuHr):		26.77		Total Delay Over All Lanes(pcuHr):		26.77		Cycle Time (s): 110	

Basic Results Summary

Scenario 23: '2027 AM no dev' (FG23: 'Fox & Hounds AM 2027 no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

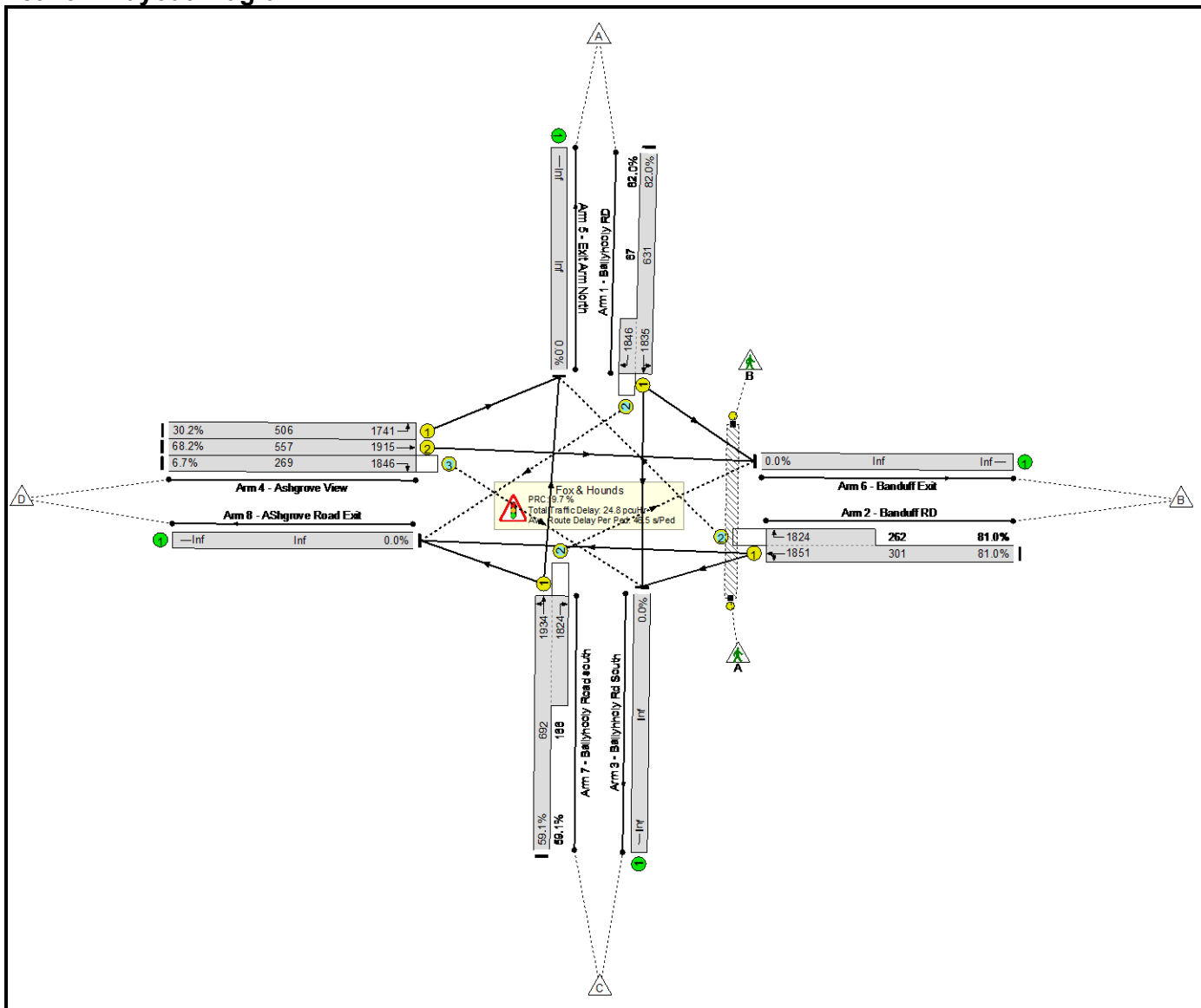
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>82.1%</b>	<b>339</b>	<b>26</b>	<b>8</b>	<b>21.2</b>	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	<b>82.1%</b>	<b>339</b>	<b>26</b>	<b>8</b>	<b>21.2</b>	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	46	-	652	1860:1846	720+89	80.6 : 80.6%	72	0	0	7.0	38.4	18.6		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	33	7	611	1854:1824	494+250	82.1 : 82.1%	175	25	6	8.3	48.9	13.9		
4/1	Ashgrove View Left	U	C		1	26	-	63	1741	427	14.7%	-	-	-	0.7	37.4	1.6		
4/2	Ashgrove View Ahead	U	C		1	26	-	208	1915	470	44.3%	-	-	-	2.4	42.0	5.8		
4/3	Ashgrove View Right	O	D		1	28	-	16	1846	92	17.3%	16	0	0	0.3	74.4	0.5		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	50	4	335	1934:1824	749+202	34.0 : 39.6%	76	1	2	2.5	26.7	5.0		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		9.6		PRC Over All Lanes (%):		9.6		Total Delay for Signalled Lanes (pcuHr):		21.16		Total Delay Over All Lanes(pcuHr):		21.16		Cycle Time (s): 110	

Basic Results Summary

Scenario 24: '2027 PM no dev' (FG24: 'Fox & Hounds PM 2027 no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram





Basic Results Summary

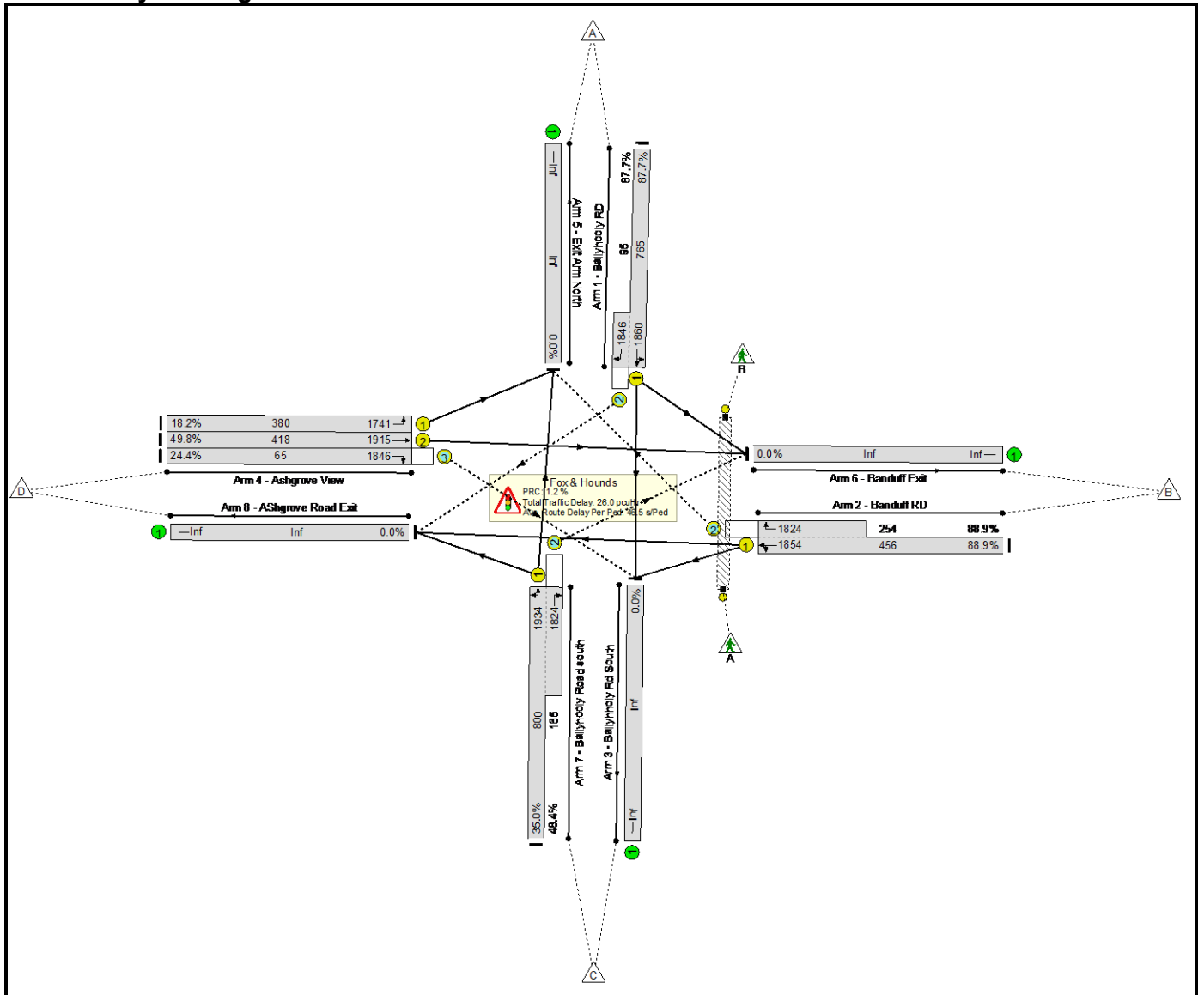
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>82.0%</b>	<b>256</b>	<b>108</b>	<b>18</b>	<b>24.8</b>	-	-
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	<b>82.0%</b>	<b>256</b>	<b>108</b>	<b>18</b>	<b>24.8</b>	-	-
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	40	-	573	1835:1846	631+67	82.0 : 82.0%	55	0	0	7.2	45.2	17.4
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	39	8	456	1851:1824	301+262	81.0 : 81.0%	97	99	16	6.5	50.9	8.2
4/1	Ashgrove View Left	U	C		1	31	-	153	1741	506	30.2%	-	-	-	1.5	35.4	3.8
4/2	Ashgrove View Ahead	U	C		1	31	-	380	1915	557	68.2%	-	-	-	4.7	44.5	11.3
4/3	Ashgrove View Right	O	D		1	33	-	18	1846	269	6.7%	18	0	0	0.2	43.7	0.4
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	44	4	507	1934:1824	692+166	59.1 : 59.1%	87	9	3	4.7	33.5	10.0
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6
C1 - Fox & Hounds Junction							PRC for Signalled Lanes (%): 9.7		Total Delay for Signalled Lanes (pcuHr): 24.80		Cycle Time (s): 110						
							PRC Over All Lanes (%): 9.7		Total Delay Over All Lanes(pcuHr): 24.80								

Basic Results Summary

Scenario 25: '2027 AM with dev' (FG25: 'Fox & Hounds AM 2027 with dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

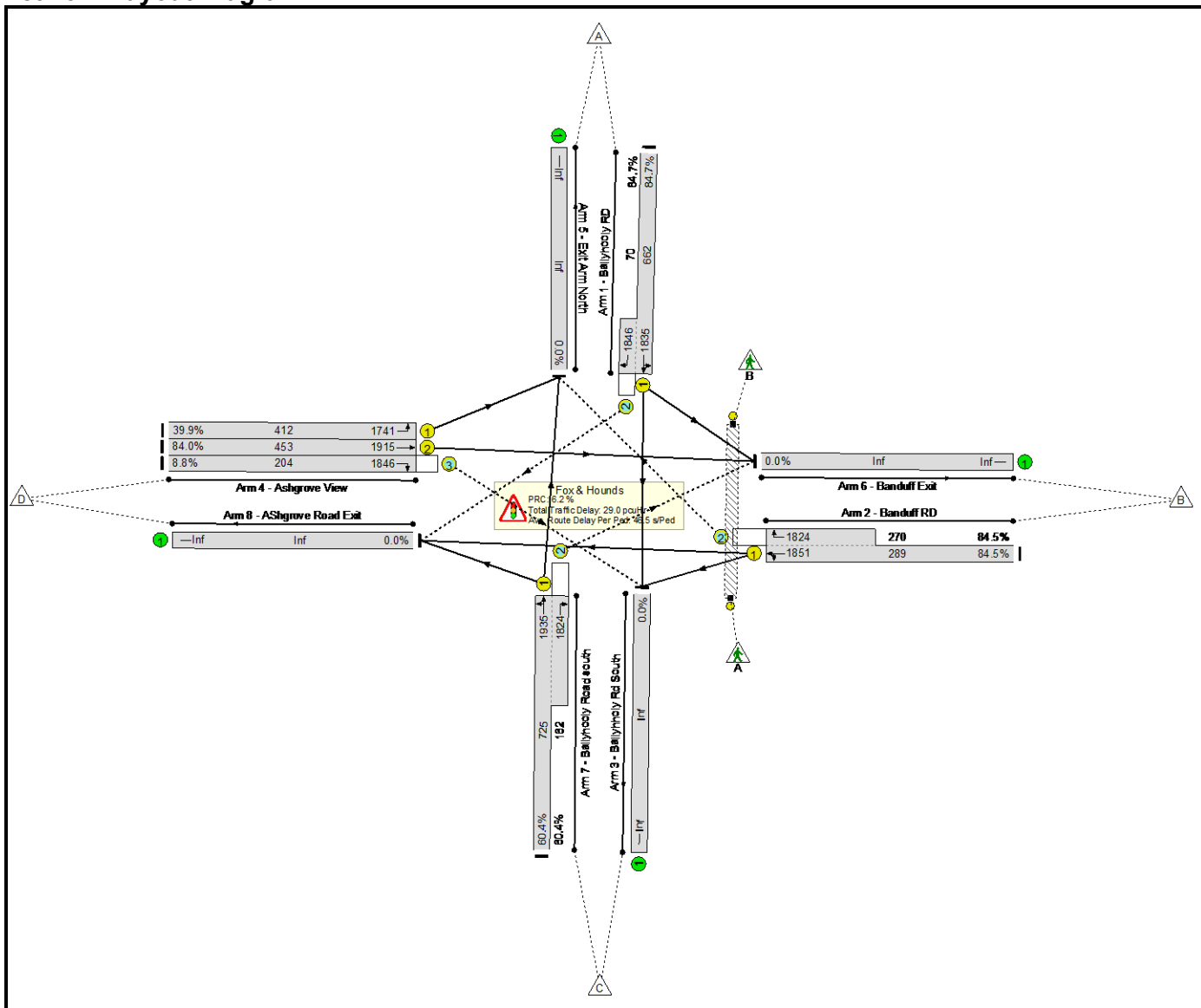
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	88.9%	302	94	9	26.0	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	88.9%	302	94	9	26.0	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	49	-	754	1860:1846	765+95	87.7 : 87.7%	83	0	0	9.0	43.0	23.5		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	30	7	632	1854:1824	456+254	88.9 : 88.9%	137	83	6	10.6	60.1	16.1		
4/1	Ashgrove View Left	U	C		1	23	-	69	1741	380	18.2%	-	-	-	0.8	40.8	1.8		
4/2	Ashgrove View Ahead	U	C		1	23	-	208	1915	418	49.8%	-	-	-	2.7	46.3	6.0		
4/3	Ashgrove View Right	O	D		1	25	-	16	1846	65	24.4%	16	0	0	0.4	91.1	0.5		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	53	4	360	1934:1824	800+165	35.0 : 48.4%	67	11	2	2.6	26.1	5.4		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		1.2		PRC Over All Lanes (%):		1.2		Total Delay for Signalled Lanes (pcuHr):		26.02		Total Delay Over All Lanes(pcuHr):		26.02		Cycle Time (s): 110	

Basic Results Summary

Scenario 26: '2027 PM with dev' (FG26: 'Fox & Hounds PM 2027 with dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

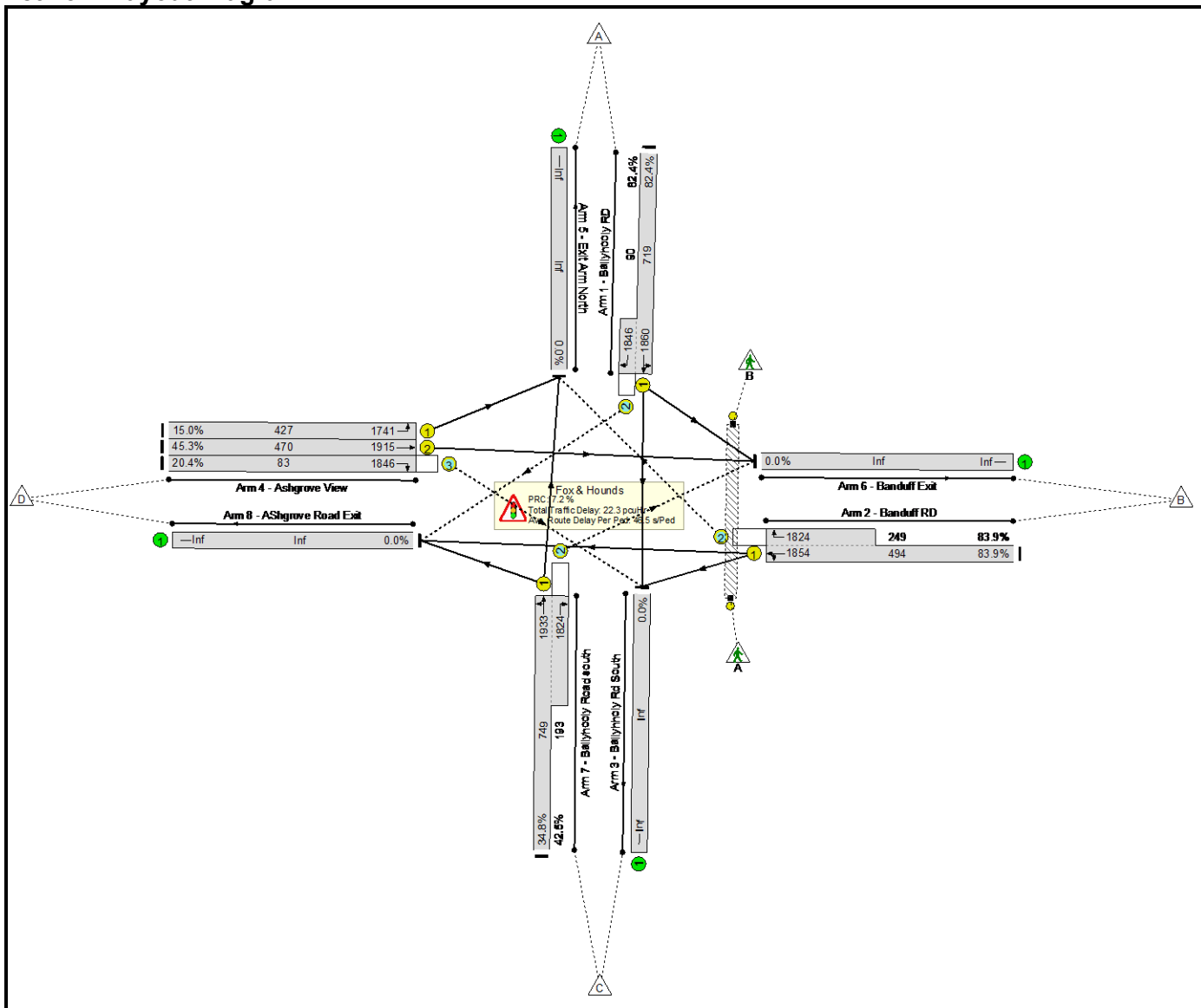
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>84.7%</b>	<b>191</b>	<b>186</b>	<b>26</b>	<b>29.0</b>	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	<b>84.7%</b>	<b>191</b>	<b>186</b>	<b>26</b>	<b>29.0</b>	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	42	-	620	1835:1846	662+70	84.7 : 84.7%	59	0	0	7.9	46.1	19.2		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	37	12	472	1851:1824	289+270	84.5 : 84.5%	38	166	24	7.4	56.1	9.2		
4/1	Ashgrove View Left	U	C		1	25	-	164	1741	412	39.9%	-	-	-	1.9	42.7	4.5		
4/2	Ashgrove View Ahead	U	C		1	25	-	380	1915	453	84.0%	-	-	-	6.7	63.2	13.4		
4/3	Ashgrove View Right	O	D		1	27	-	18	1846	204	8.8%	18	0	0	0.3	51.4	0.5		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	46	4	536	1935:1824	725+162	60.4 : 60.4%	75	20	3	4.9	32.6	10.6		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		6.2		PRC Over All Lanes (%):		6.2		Total Delay for Signalled Lanes (pcuHr):		29.03		Total Delay Over All Lanes(pcuHr):		29.03		Cycle Time (s): 110	

Basic Results Summary

Scenario 27: '2029 AM no dev' (FG27: 'Fox & Hounds AM 2029 no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

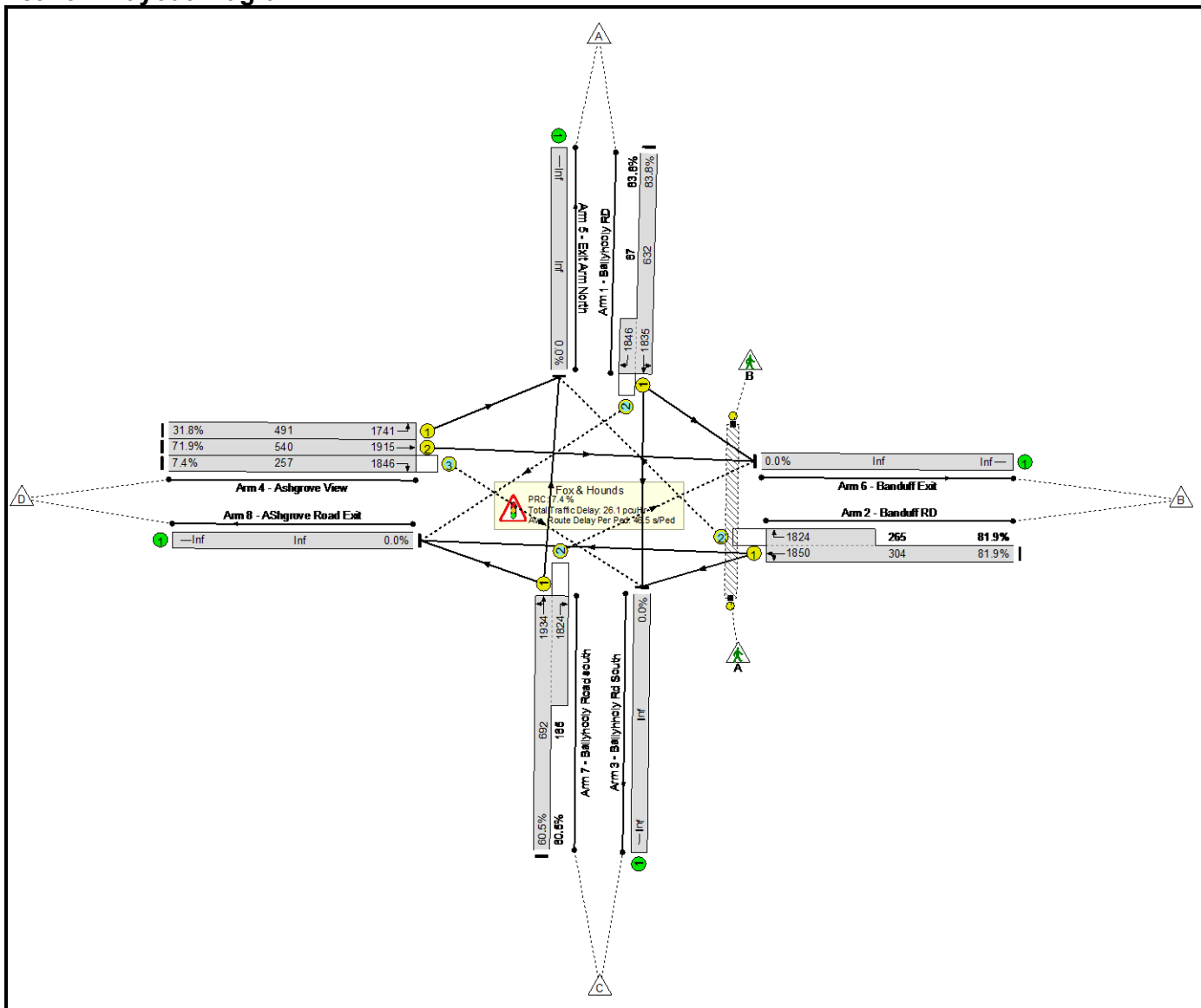
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	83.9%	338	36	8	22.3	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	83.9%	338	36	8	22.3	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	46	-	667	1860:1846	719+90	82.4 : 82.4%	74	0	0	7.4	39.9	19.4		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	33	7	624	1854:1824	494+249	83.9 : 83.9%	169	34	6	8.8	50.6	14.8		
4/1	Ashgrove View Left	U	C		1	26	-	64	1741	427	15.0%	-	-	-	0.7	37.5	1.6		
4/2	Ashgrove View Ahead	U	C		1	26	-	213	1915	470	45.3%	-	-	-	2.5	42.2	5.9		
4/3	Ashgrove View Right	O	D		1	28	-	17	1846	83	20.4%	17	0	0	0.4	78.8	0.5		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	50	4	343	1933:1824	749+193	34.8 : 42.5%	78	1	2	2.6	27.1	5.2		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		7.2		PRC Over All Lanes (%):		7.2		Total Delay for Signalled Lanes (pcuHr):		22.28		Total Delay Over All Lanes(pcuHr):		22.28		Cycle Time (s): 110	

Basic Results Summary

Scenario 28: '2029 PM no dev' (FG28: 'Fox & Hounds PM 2029 no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram





Basic Results Summary

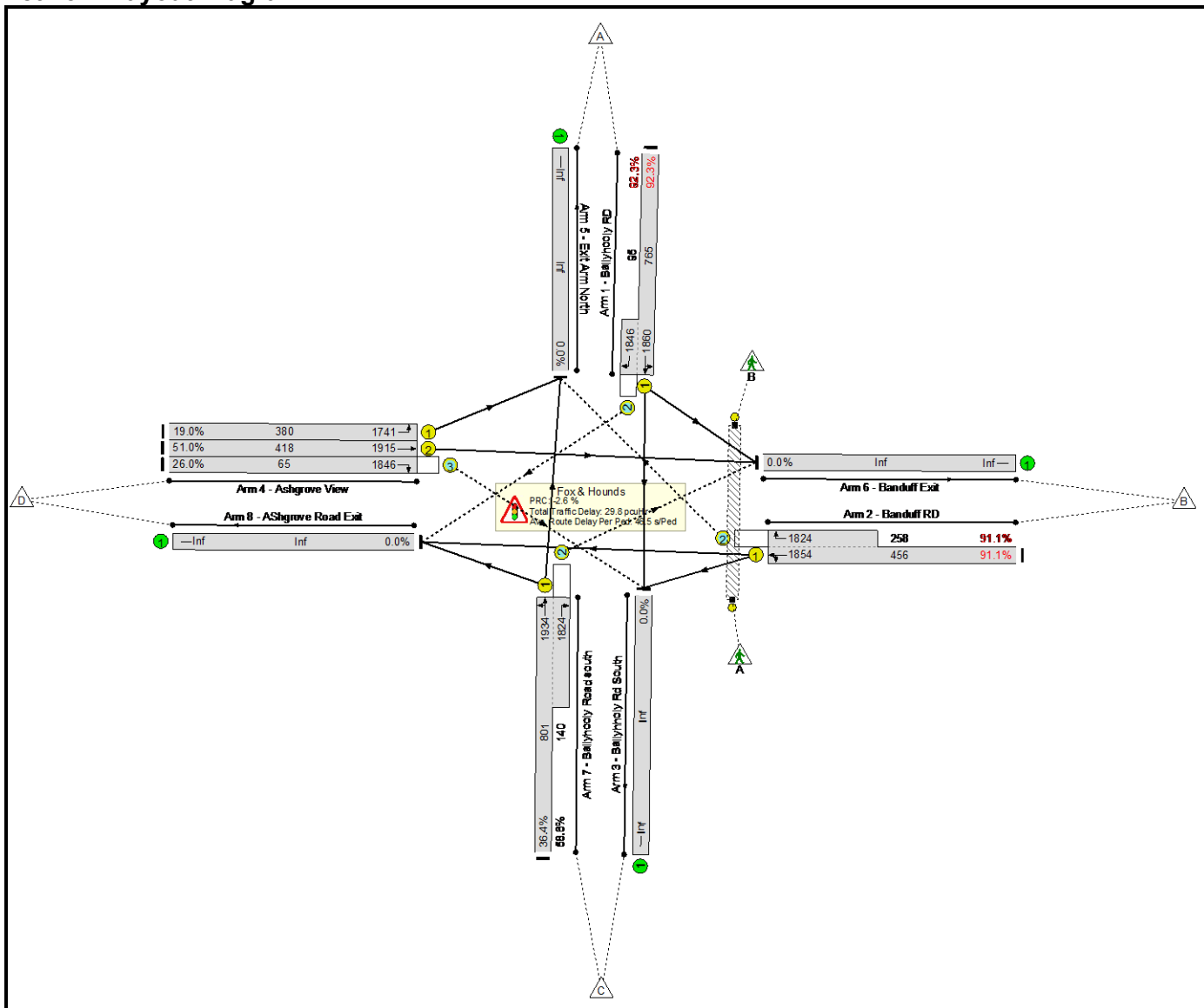
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	83.8%	237	135	20	26.1	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	83.8%	237	135	20	26.1	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	40	-	585	1835:1846	632+67	83.8 : 83.8%	56	0	0	7.6	46.9	18.2		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	39	9	466	1850:1824	304+265	81.9 : 81.9%	83	116	17	6.7	51.7	8.4		
4/1	Ashgrove View Left	U	C		1	30	-	156	1741	491	31.8%	-	-	-	1.6	36.5	4.0		
4/2	Ashgrove View Ahead	U	C		1	30	-	388	1915	540	71.9%	-	-	-	5.1	47.3	11.9		
4/3	Ashgrove View Right	O	D		1	32	-	19	1846	257	7.4%	19	0	0	0.2	45.1	0.4		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	44	4	519	1934:1824	692+165	60.5 : 60.5%	78	19	3	4.9	34.0	10.3		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		7.4		PRC Over All Lanes (%):		7.4		Total Delay for Signalled Lanes (pcuHr):		26.12		Total Delay Over All Lanes(pcuHr):		26.12		Cycle Time (s): 110	

Basic Results Summary

Scenario 29: '2029 AM with dev' (FG29: 'Fox & Hounds AM 2029 with dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

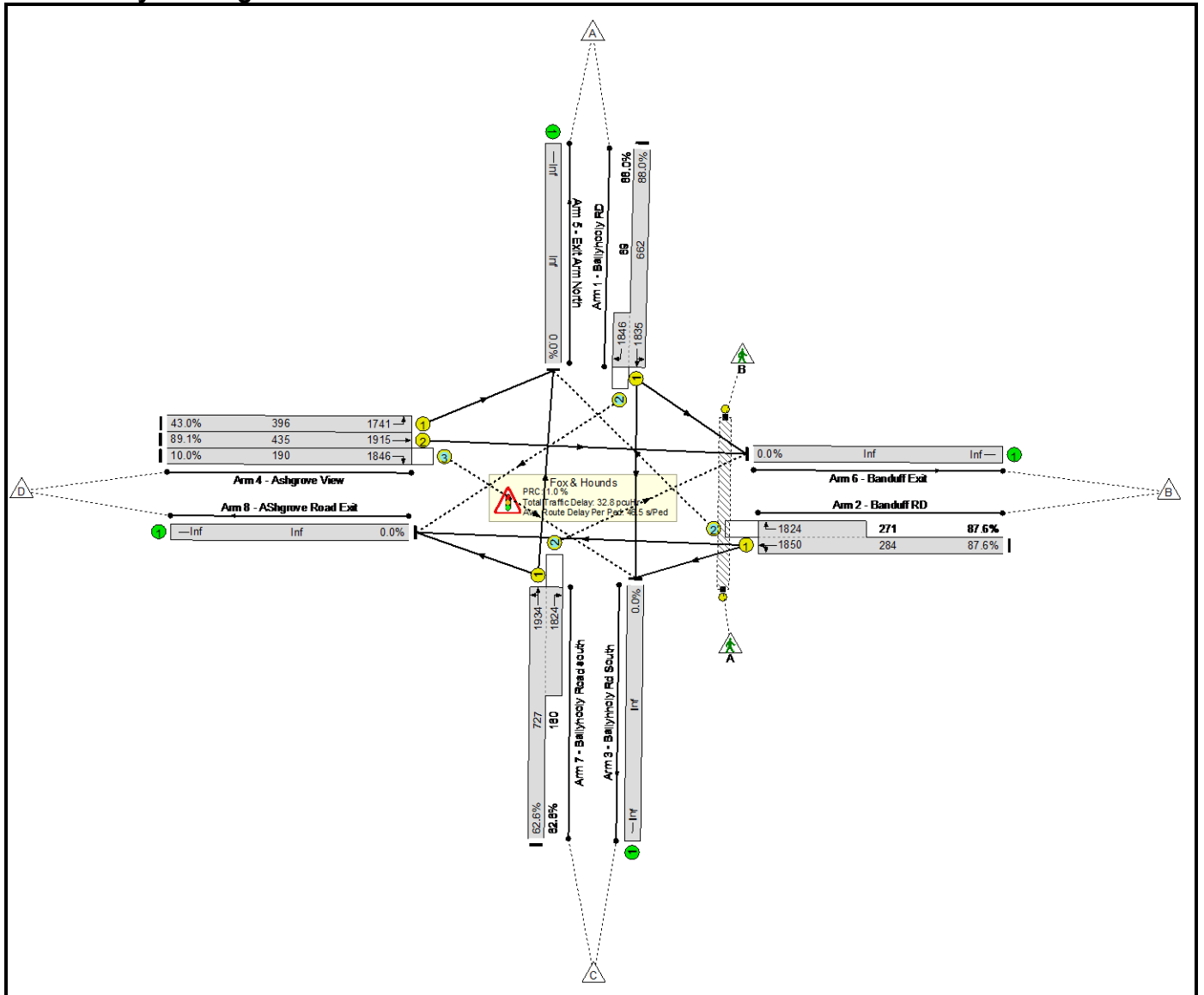
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)				
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>92.3%</b>	<b>280</b>	<b>116</b>	<b>26</b>	<b>29.8</b>	-	-				
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	<b>92.3%</b>	<b>280</b>	<b>116</b>	<b>26</b>	<b>29.8</b>	-	-				
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	49	-	794	1860:1846	765+95	92.3 : 92.3%	88	0	0	11.4	51.6	27.3				
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	30	7	650	1854:1824	456+258	91.1 : 91.1%	133	83	19	11.6	64.3	17.6				
4/1	Ashgrove View Left	U	C		1	23	-	72	1741	380	19.0%	-	-	-	0.8	40.9	1.9				
4/2	Ashgrove View Ahead	U	C		1	23	-	213	1915	418	51.0%	-	-	-	2.8	46.6	6.2				
4/3	Ashgrove View Right	O	D		1	25	-	17	1846	65	26.0%	17	0	0	0.4	92.6	0.6				
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	53	4	374	1934:1824	801+140	36.4 : 58.6%	41	33	7	2.8	27.0	5.6				
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6				
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		-2.6		Total Delay for Signalled Lanes (pcuHr):		29.80		Cycle Time (s):		110		PRC Over All Lanes (%):		-2.6		Total Delay Over All Lanes(pcuHr):		29.80	

Basic Results Summary

Scenario 30: '2029 PM with dev' (FG30: 'Fox & Hounds PM 2029 with dev', 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)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>89.1%</b>	<b>161</b>	<b>216</b>	<b>40</b>	<b>32.8</b>	-	-		
<b>Fox &amp; Hounds</b>	-	-	-		-	-	-	-	-	-	<b>89.1%</b>	<b>161</b>	<b>216</b>	<b>40</b>	<b>32.8</b>	-	-		
1/1+1/2	Ballyhooly RD Ahead Left Right	U+O	E		1	42	-	644	1835:1846	662+69	88.0 : 88.0%	61	0	0	9.0	50.5	21.0		
2/1+2/2	Banduff RD Left Right Ahead	U+O	B	I	1	37	13	486	1850:1824	284+271	87.6 : 87.6%	23	182	32	8.2	60.7	10.2		
4/1	Ashgrove View Left	U	C		1	24	-	170	1741	396	43.0%	-	-	-	2.1	44.4	4.8		
4/2	Ashgrove View Ahead	U	C		1	24	-	388	1915	435	89.1%	-	-	-	8.0	74.3	15.0		
4/3	Ashgrove View Right	O	D		1	26	-	19	1846	190	10.0%	19	0	0	0.3	53.4	0.5		
7/1+7/2	Ballyhooly Road south Ahead Right Left	U+O	A	H	1	46	4	555	1934:1824	727+160	62.6 : 62.6%	58	33	8	5.2	33.5	11.5		
Ped Link: P1	Unnamed Ped Link	-	G		1	10	-	20	-	6545	0.3%	-	-	-	0.3	46.5	0.6		
C1 - Fox & Hounds Junction		PRC for Signalled Lanes (%):		1.0		PRC Over All Lanes (%):		1.0		Total Delay for Signalled Lanes (pcuHr):		32.76		Total Delay Over All Lanes(pcuHr):		32.76		Cycle Time (s): 110	

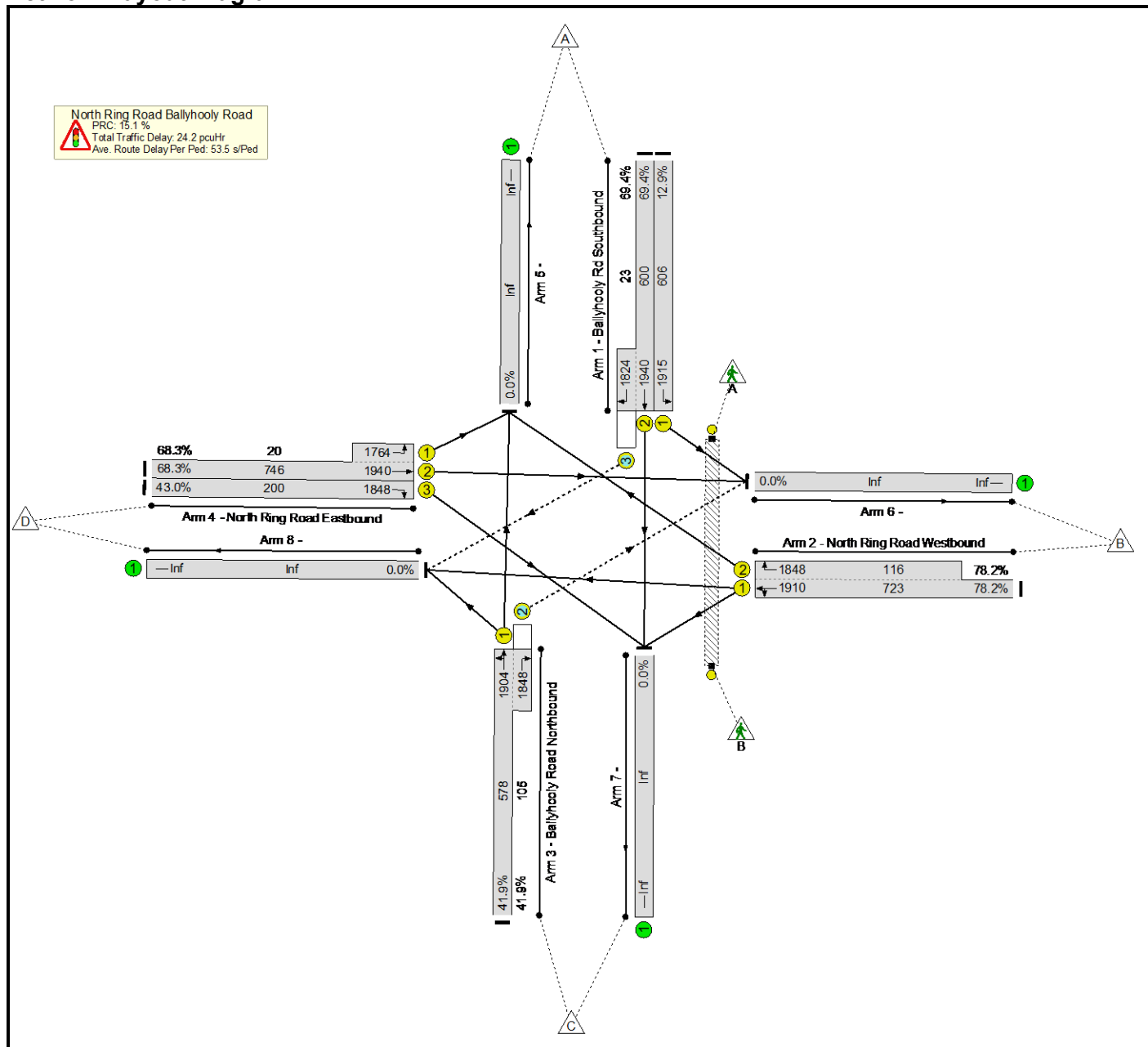
Basic Results Summary  
**Basic Results Summary**

**User and Project Details**

<b>Project:</b>	Longview Estate
<b>Title:</b>	
<b>Location:</b>	Ballyvolane
<b>Client:</b>	Longview Developments Ltd.
<b>Date Started:</b>	25.09.2019
<b>Additional detail:</b>	
<b>File name:</b>	North Ring Road Junction with upgrade works.lsg3x
<b>Author:</b>	Ken Manley
<b>Company:</b>	MHL Consulting Engineers
<b>Address:</b>	

Scenario 1: '2019 AM' (FG1: '2019 AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

**Network Results**

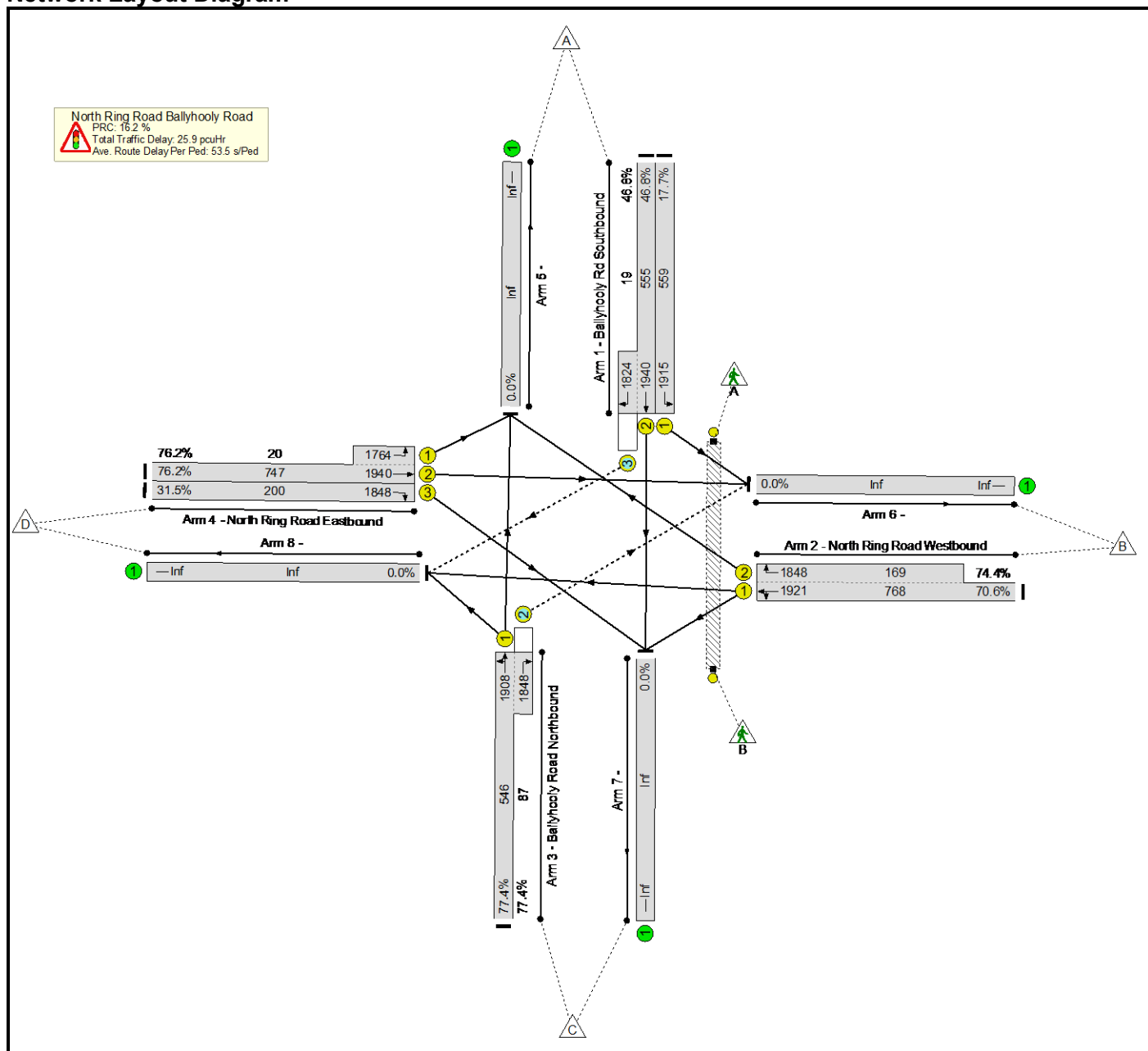
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)				
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>78.2%</b>	<b>58</b>	<b>1</b>	<b>1</b>	<b>24.2</b>	-	-				
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	<b>78.2%</b>	<b>58</b>	<b>1</b>	<b>1</b>	<b>24.2</b>	-	-				
1/1	Ballyhooley Rd Southbound Left	U	A		1	37	-	78	1915	606	12.9%	-	-	-	0.7	32.6	1.9				
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	37	-	433	1940:1824	600+23	69.4 : 69.4%	16	0	0	5.4	45.2	13.4				
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	46:7	-	656	1910:1848	723+116	78.2 : 78.2%	-	-	-	8.1	44.4	17.9				
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	40	-	286	1904:1848	578+105	41.9 : 41.9%	42	1	1	2.9	36.5	6.6				
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	46	-	524	1940:1764	746+20	68.3 : 68.3%	-	-	-	5.5	37.5	15.3				
4/3	North Ring Road Eastbound Right	U	G		1	12	-	86	1848	200	43.0%	-	-	-	1.6	65.7	3.0				
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6				
C1 - North Ring		PRC for Signalled Lanes (%):		15.1		Total Delay for Signalled Lanes (pcuHr):		24.16		Cycle Time (s):		120		PRC Over All Lanes (%):		15.1		Total Delay Over All Lanes(pcuHr):		24.16	



Basic Results Summary

Scenario 2: '2019 PM' (FG2: '2019 PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

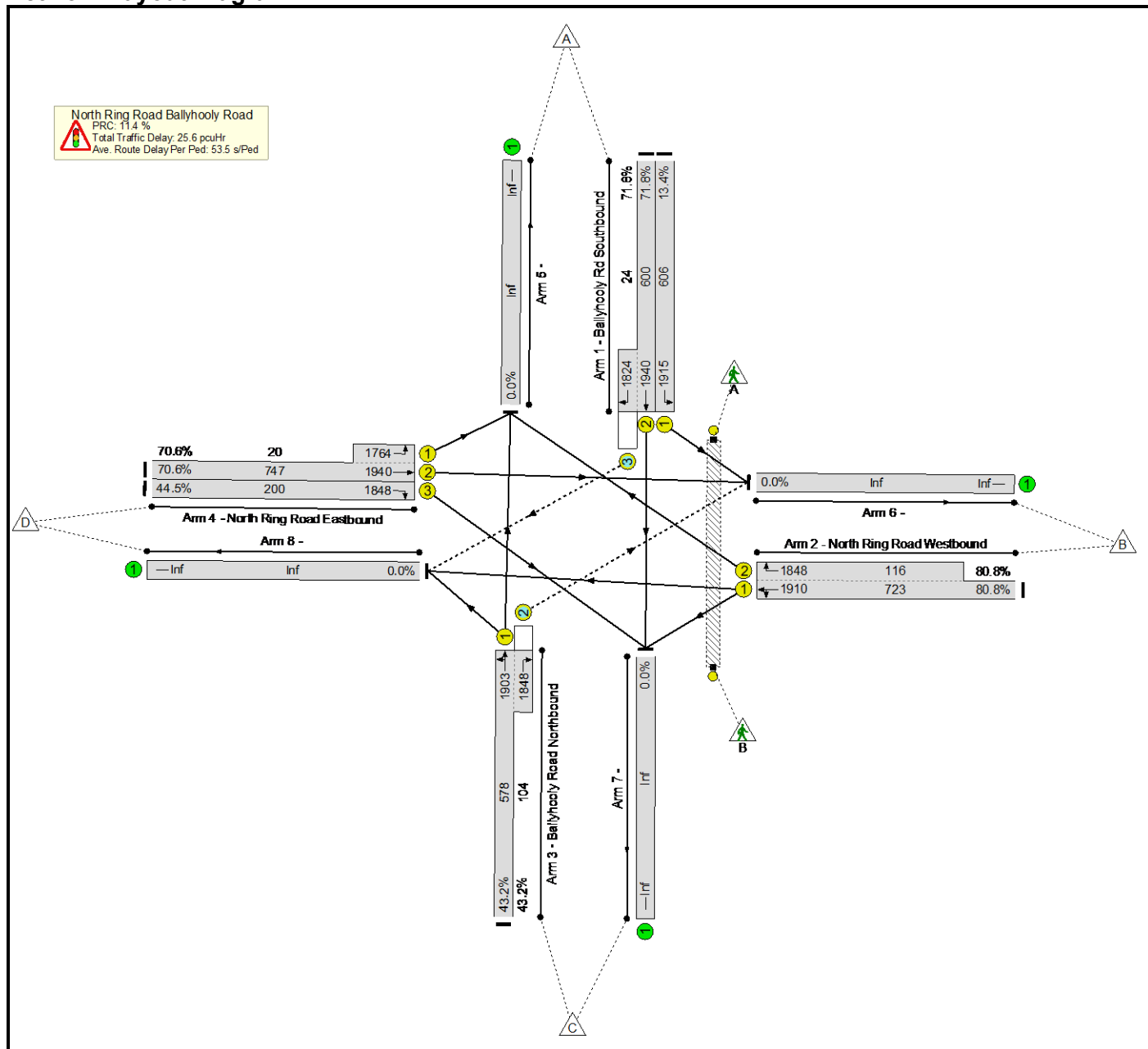
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)	
<b>Network</b>	-	-	-		-	-	-	-	-	-	77.4%	73	2	1	25.9	-	-	
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	77.4%	73	2	1	25.9	-	-	
1/1	Ballyhooley Rd Southbound Left	U	A		1	34	-	99	1915	559	17.7%	-	-	-	1.0	35.7	2.6	
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	34	-	269	1940:1824	555+19	46.8 : 46.8%	9	0	0	3.1	41.2	7.5	
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	49:10	-	668	1921:1848	768+169	70.6 : 74.4%	-	-	-	7.4	39.7	15.8	
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	37	-	490	1908:1848	546+87	77.4 : 77.4%	64	2	1	6.7	49.2	15.4	
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	46	-	584	1940:1764	747+20	76.2 : 76.2%	-	-	-	6.7	41.1	18.1	
4/3	North Ring Road Eastbound Right	U	G		1	12	-	63	1848	200	31.5%	-	-	-	1.1	62.5	2.2	
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6	
C1 - North Ring					PRC for Signalled Lanes (%): 16.2		16.2		Total Delay for Signalled Lanes (pcuHr): 25.90			25.90		Cycle Time (s): 120				
					PRC Over All Lanes (%):				Total Delay Over All Lanes(pcuHr):									

Basic Results Summary

Scenario 3: '2022 AM No Dev' (FG3: '2022 no dev AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

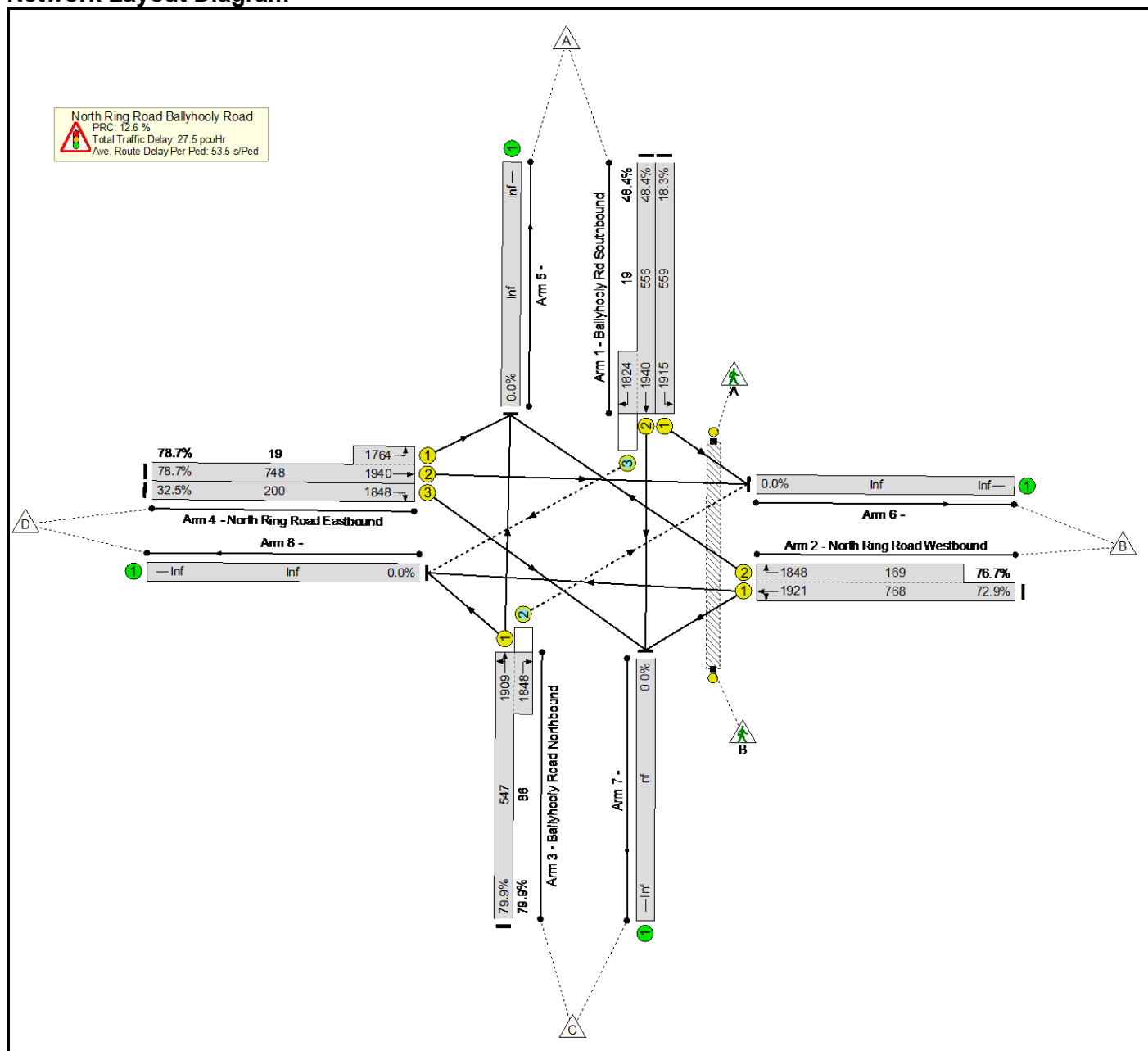
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)				
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>80.8%</b>	<b>60</b>	<b>1</b>	<b>1</b>	<b>25.6</b>	-	-				
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	<b>80.8%</b>	<b>60</b>	<b>1</b>	<b>1</b>	<b>25.6</b>	-	-				
1/1	Ballyhooley Rd Southbound Left	U	A		1	37	-	81	1915	606	13.4%	-	-	-	0.7	32.7	2.0				
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	37	-	448	1940:1824	600+24	71.8 : 71.8%	17	0	0	5.8	46.3	14.1				
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	46:7	-	678	1910:1848	723+116	80.8 : 80.8%	-	-	-	8.7	46.1	19.1				
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	40	-	295	1903:1848	578+104	43.2 : 43.2%	43	1	1	3.0	36.8	6.9				
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	46	-	541	1940:1764	747+20	70.6 : 70.6%	-	-	-	5.8	38.4	16.1				
4/3	North Ring Road Eastbound Right	U	G		1	12	-	89	1848	200	44.5%	-	-	-	1.6	66.2	3.2				
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6				
C1 - North Ring		PRC for Signalled Lanes (%):		11.4		Total Delay for Signalled Lanes (pcuHr):		25.60		Cycle Time (s):		120		PRC Over All Lanes (%):		11.4		Total Delay Over All Lanes(pcuHr):		25.60	

Basic Results Summary

Scenario 4: '2022 PM No Dev' (FG4: '2022 no dev PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

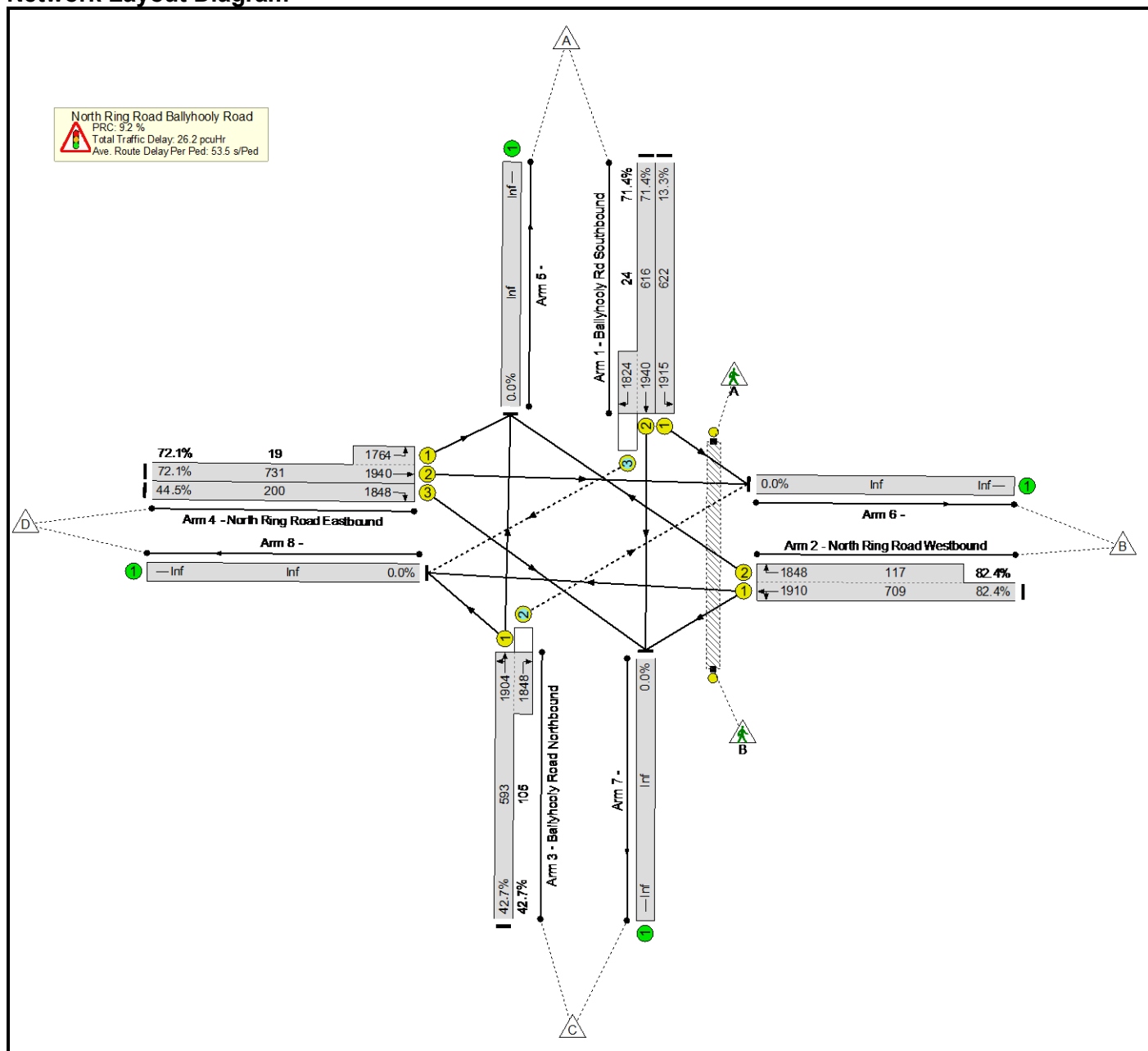
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)	
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>79.9%</b>	<b>75</b>	<b>2</b>	<b>1</b>	<b>27.5</b>	-	-	
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	<b>79.9%</b>	<b>75</b>	<b>2</b>	<b>1</b>	<b>27.5</b>	-	-	
1/1	Ballyhooley Rd Southbound Left	U	A		1	34	-	102	1915	559	18.3%	-	-	-	1.0	35.8	2.6	
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	34	-	278	1940:1824	556+19	48.4 : 48.4%	9	0	0	3.2	41.6	7.9	
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	49:10	-	690	1921:1848	768+169	72.9 : 76.7%	-	-	-	7.8	40.6	16.6	
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	37	-	506	1909:1848	547+86	79.9 : 79.9%	66	2	1	7.2	51.1	16.5	
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	46	-	603	1940:1764	748+19	78.7 : 78.7%	-	-	-	7.1	42.7	19.3	
4/3	North Ring Road Eastbound Right	U	G		1	12	-	65	1848	200	32.5%	-	-	-	1.1	62.7	2.2	
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6	
C1 - North Ring					PRC for Signalled Lanes (%): 12.6		12.6		Total Delay for Signalled Lanes (pcuHr): 27.47			27.47		Cycle Time (s): 120				
					PRC Over All Lanes (%):				Total Delay Over All Lanes(pcuHr):									

Basic Results Summary

Scenario 5: '2022 AM with Dev' (FG5: '2022 with dev AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

**Network Results**

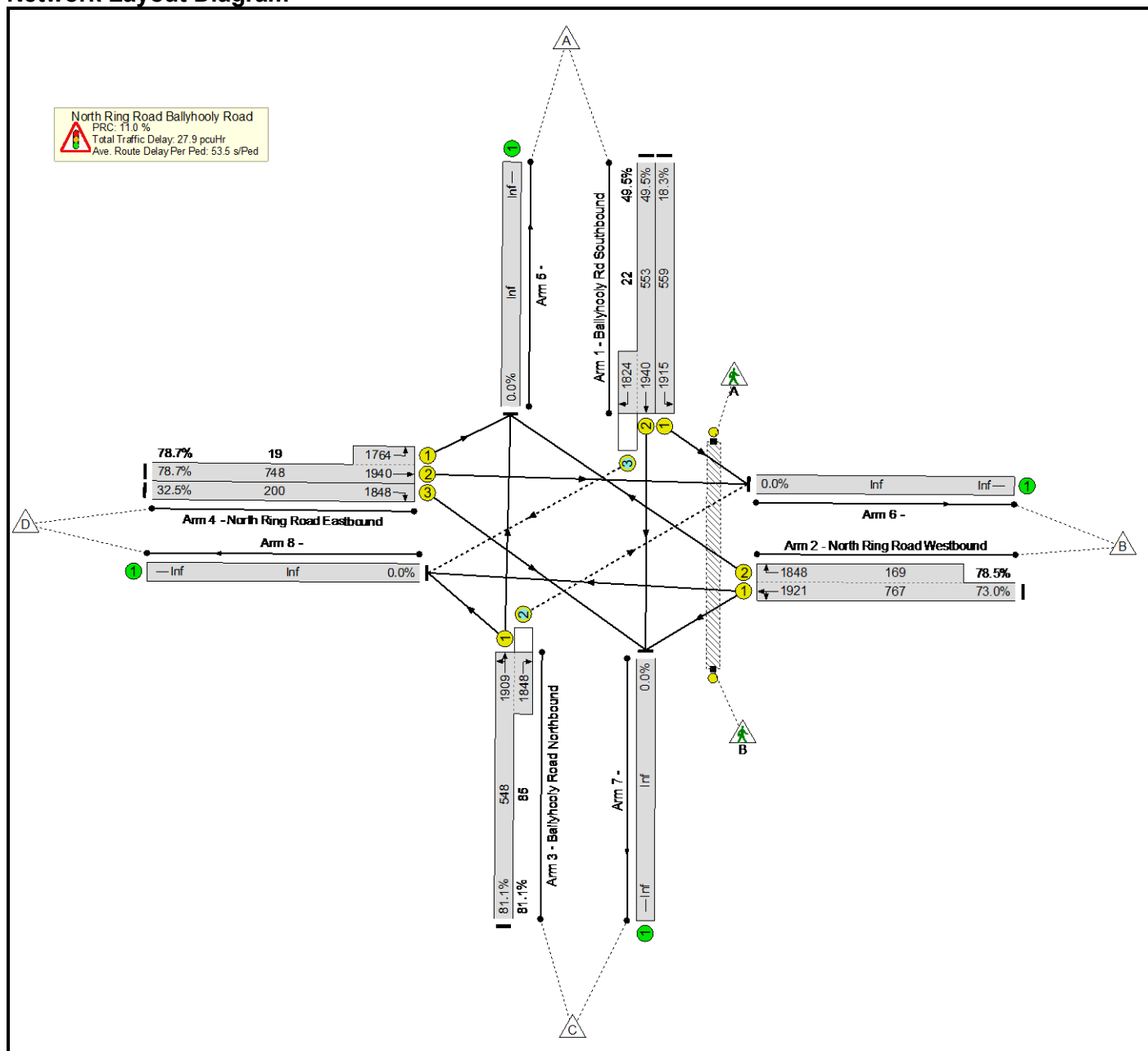
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	82.4%	60	1	1	26.2	-	-		
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	82.4%	60	1	1	26.2	-	-		
1/1	Ballyhooley Rd Southbound Left	U	A		1	38	-	83	1915	622	13.3%	-	-	-	0.7	31.9	2.0		
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	38	-	457	1940:1824	616+24	71.4 : 71.4%	17	0	0	5.7	45.3	14.4		
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	45:7	-	680	1910:1848	709+117	82.4 : 82.4%	-	-	-	9.1	48.0	19.5		
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	41	-	298	1904:1848	593+105	42.7 : 42.7%	43	1	1	3.0	36.0	6.8		
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	45	-	541	1940:1764	731+19	72.1 : 72.1%	-	-	-	6.0	39.8	16.3		
4/3	North Ring Road Eastbound Right	U	G		1	12	-	89	1848	200	44.5%	-	-	-	1.6	66.2	3.2		
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6		
C1 - North Ring		PRC for Signalled Lanes (%):		9.2		PRC Over All Lanes (%):		9.2		Total Delay for Signalled Lanes (pcuHr):		26.15		Total Delay Over All Lanes(pcuHr):		26.15		Cycle Time (s): 120	



Basic Results Summary

Scenario 6: '2022 PM with Dev' (FG6: '2022 with dev PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

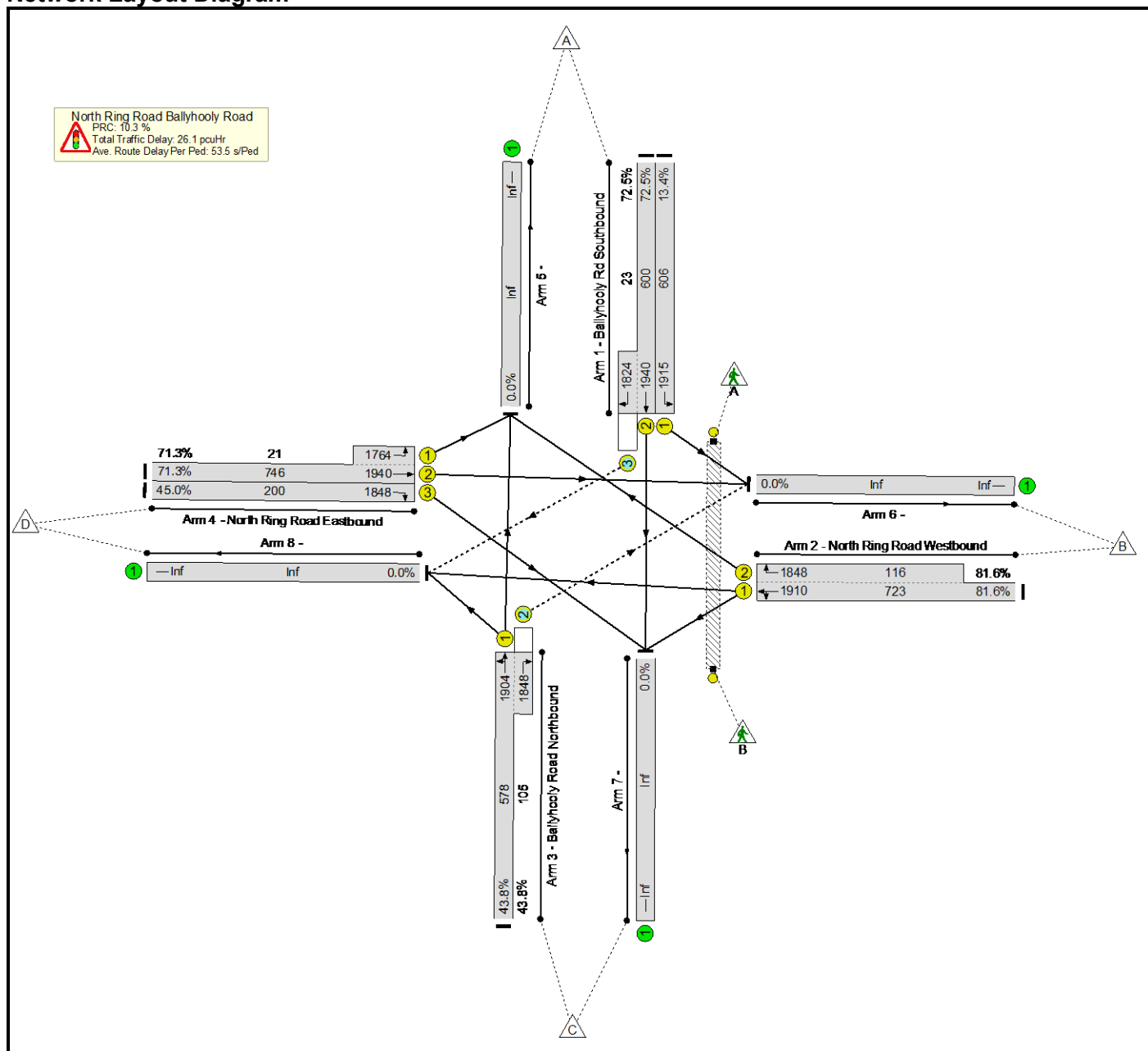
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	81.1%	77	2	1	27.9	-	-		
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	81.1%	77	2	1	27.9	-	-		
1/1	Ballyhooley Rd Southbound Left	U	A		1	34	-	102	1915	559	18.3%	-	-	-	1.0	35.8	2.6		
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	34	-	285	1940:1824	553+22	49.5 : 49.5%	11	0	0	3.3	42.0	8.0		
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	49:10	-	693	1921:1848	767+169	73.0 : 78.5%	-	-	-	7.9	40.8	16.7		
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	37	-	513	1909:1848	548+85	81.1 : 81.1%	66	2	1	7.4	52.0	16.8		
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	46	-	603	1940:1764	748+19	78.7 : 78.7%	-	-	-	7.1	42.7	19.3		
4/3	North Ring Road Eastbound Right	U	G		1	12	-	65	1848	200	32.5%	-	-	-	1.1	62.7	2.2		
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6		
C1 - North Ring		PRC for Signalled Lanes (%):		11.0		PRC Over All Lanes (%):		11.0		Total Delay for Signalled Lanes (pcuHr):		27.90		Total Delay Over All Lanes(pcuHr):		27.90		Cycle Time (s): 120	

Basic Results Summary

Scenario 7: '2023 AM No Dev' (FG7: '2023 no dev AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

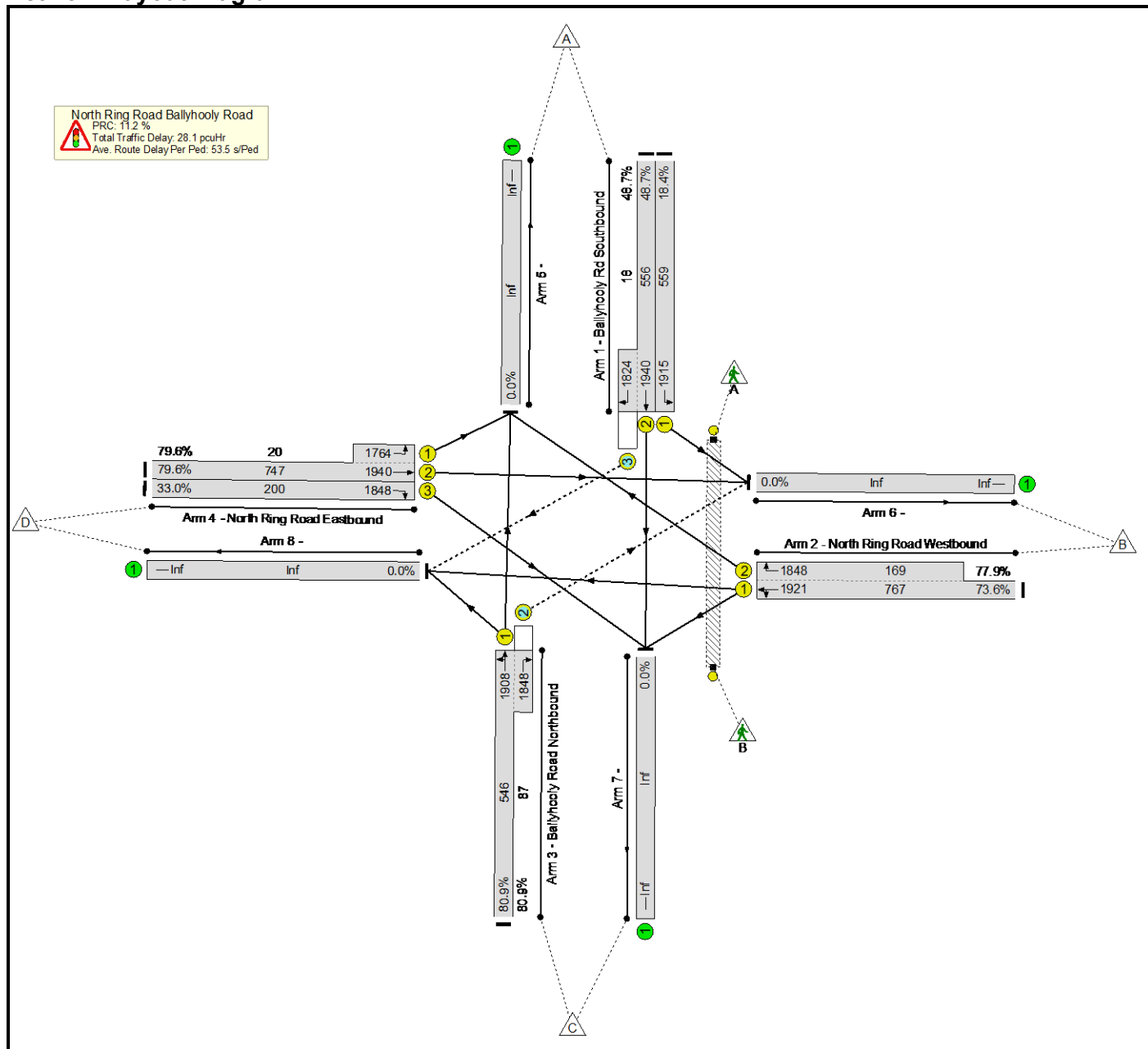
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)				
<b>Network</b>	-	-	-		-	-	-	-	-	-	81.6%	61	1	1	26.1	-	-				
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	81.6%	61	1	1	26.1	-	-				
1/1	Ballyhooley Rd Southbound Left	U	A		1	37	-	81	1915	606	13.4%	-	-	-	0.7	32.7	2.0				
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	37	-	452	1940:1824	600+23	72.5 : 72.5%	17	0	0	5.9	46.6	14.4				
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	46:7	-	685	1910:1848	723+116	81.6 : 81.6%	-	-	-	8.9	46.7	19.4				
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	40	-	299	1904:1848	578+105	43.8 : 43.8%	44	1	1	3.1	37.0	7.0				
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	46	-	547	1940:1764	746+21	71.3 : 71.3%	-	-	-	5.9	38.7	16.3				
4/3	North Ring Road Eastbound Right	U	G		1	12	-	90	1848	200	45.0%	-	-	-	1.7	66.4	3.2				
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6				
C1 - North Ring		PRC for Signalled Lanes (%):		10.3		Total Delay for Signalled Lanes (pcuHr):		26.08		Cycle Time (s):		120		PRC Over All Lanes (%):		10.3		Total Delay Over All Lanes(pcuHr):		26.08	

Basic Results Summary

Scenario 8: '2023 PM No Dev' (FG8: '2023 no dev PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

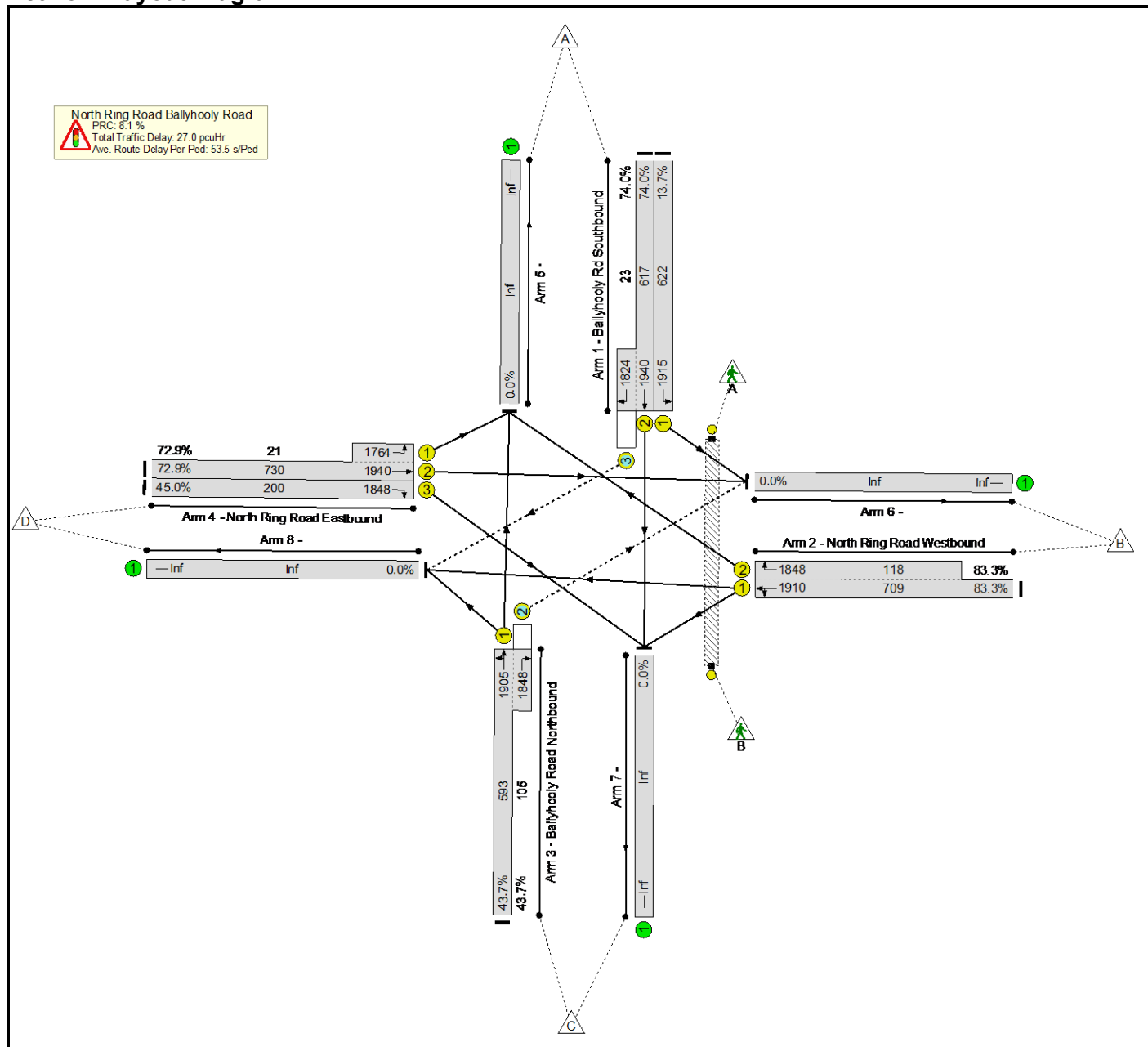
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>80.9%</b>	<b>76</b>	<b>2</b>	<b>1</b>	<b>28.1</b>	-	-		
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	<b>80.9%</b>	<b>76</b>	<b>2</b>	<b>1</b>	<b>28.1</b>	-	-		
1/1	Ballyhooley Rd Southbound Left	U	A		1	34	-	103	1915	559	18.4%	-	-	-	1.0	35.8	2.7		
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	34	-	280	1940:1824	556+18	48.7 : 48.7%	9	0	0	3.2	41.7	7.9		
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	49:10	-	697	1921:1848	767+169	73.6 : 77.9%	-	-	-	7.9	41.0	17.0		
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	37	-	512	1908:1848	546+87	80.9 : 80.9%	67	2	1	7.4	51.9	16.8		
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	46	-	610	1940:1764	747+20	79.6 : 79.6%	-	-	-	7.3	43.3	19.6		
4/3	North Ring Road Eastbound Right	U	G		1	12	-	66	1848	200	33.0%	-	-	-	1.2	62.8	2.3		
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6		
C1 - North Ring		PRC for Signalled Lanes (%):		11.2		PRC Over All Lanes (%):		11.2		Total Delay for Signalled Lanes (pcuHr):		28.06		Total Delay Over All Lanes(pcuHr):		28.06		Cycle Time (s): 120	

Basic Results Summary

Scenario 9: '2023 AM with Dev' (FG9: '2023 with dev AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

**Network Results**

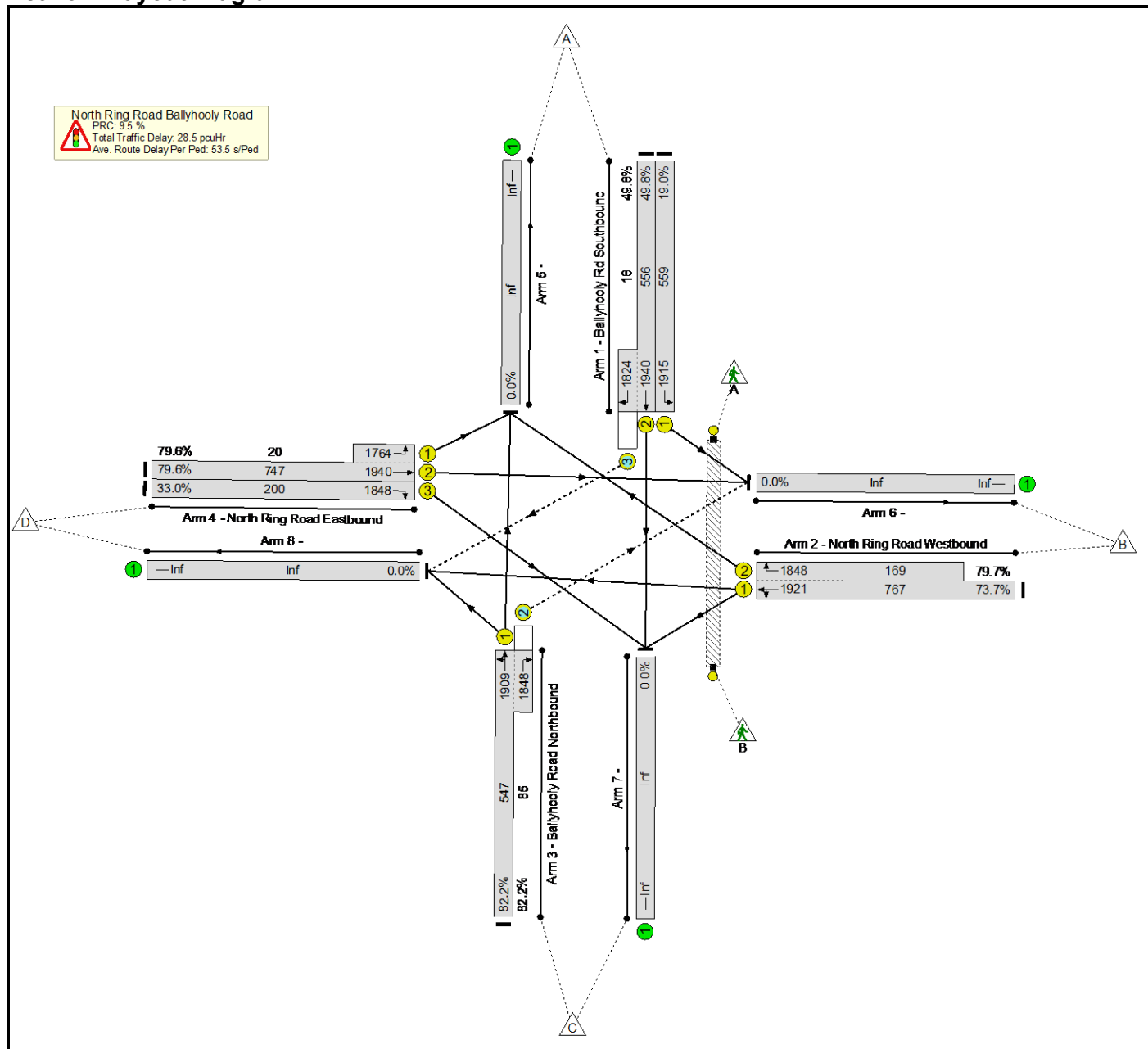
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	83.3%	61	1	1	27.0	-	-		
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	83.3%	61	1	1	27.0	-	-		
1/1	Ballyhooley Rd Southbound Left	U	A		1	38	-	85	1915	622	13.7%	-	-	-	0.8	32.0	2.1		
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	38	-	473	1940:1824	617+23	74.0 : 74.0%	17	0	0	6.1	46.6	15.1		
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	45:7	-	688	1910:1848	709+118	83.3 : 83.3%	-	-	-	9.3	48.7	19.9		
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	41	-	305	1905:1848	593+105	43.7 : 43.7%	44	1	1	3.1	36.3	7.1		
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	45	-	547	1940:1764	730+21	72.9 : 72.9%	-	-	-	6.1	40.2	16.7		
4/3	North Ring Road Eastbound Right	U	G		1	12	-	90	1848	200	45.0%	-	-	-	1.7	66.4	3.2		
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6		
C1 - North Ring		PRC for Signalled Lanes (%):		8.1		PRC Over All Lanes (%):		8.1		Total Delay for Signalled Lanes (pcuHr):		27.03		Total Delay Over All Lanes(pcuHr):		27.03		Cycle Time (s): 120	



Basic Results Summary

Scenario 10: '2023 PM with Dev' (FG10: '2023 with dev PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

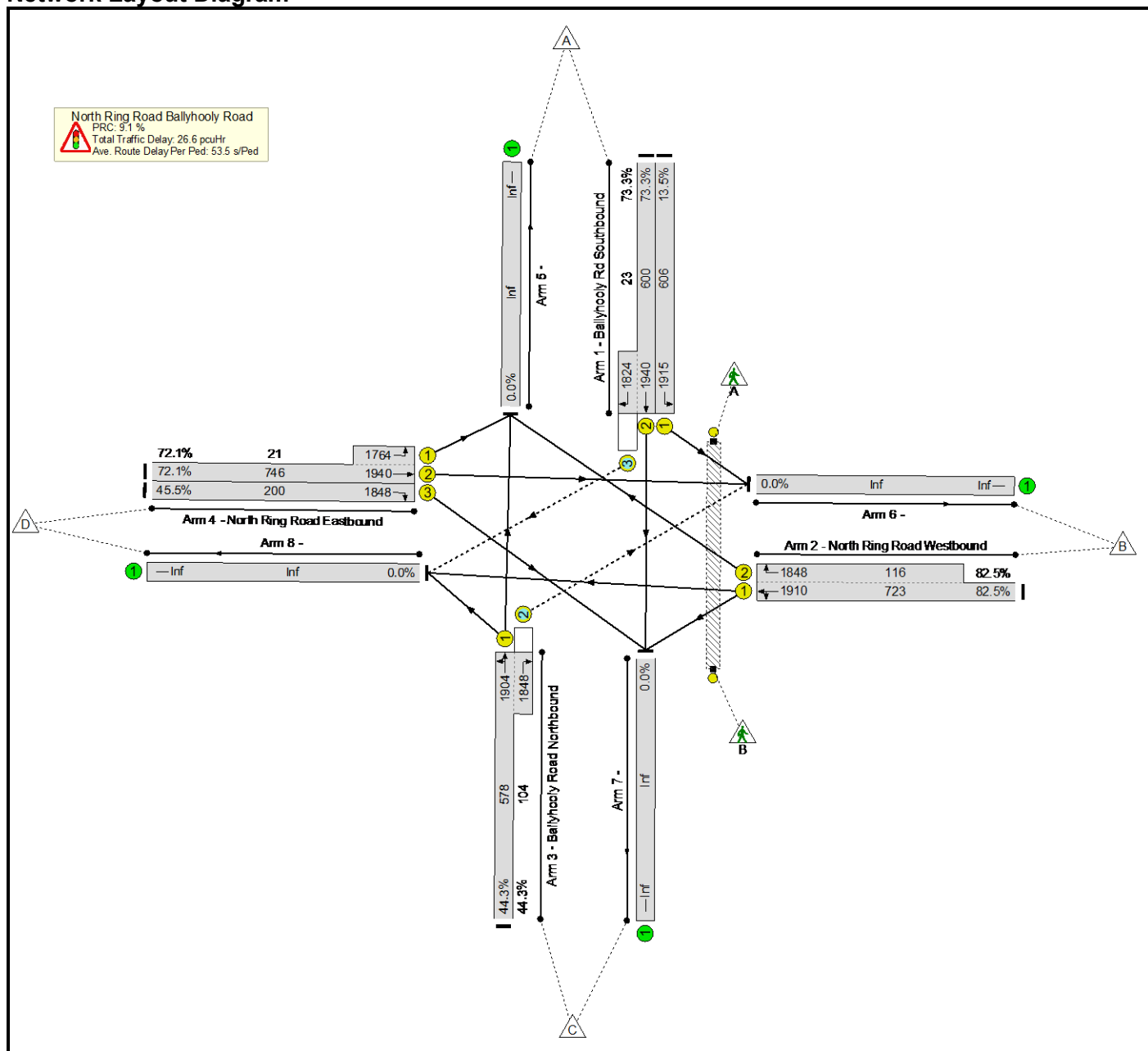
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	82.2%	76	2	1	28.5	-	-		
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	82.2%	76	2	1	28.5	-	-		
1/1	Ballyhooley Rd Southbound Left	U	A		1	34	-	106	1915	559	19.0%	-	-	-	1.1	35.8	2.7		
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	34	-	286	1940:1824	556+18	49.8 : 49.8%	9	0	0	3.3	42.0	8.2		
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	49:10	-	700	1921:1848	767+169	73.7 : 79.7%	-	-	-	8.0	41.2	17.0		
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	37	-	520	1909:1848	547+85	82.2 : 82.2%	67	2	1	7.7	53.1	17.3		
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	46	-	610	1940:1764	747+20	79.6 : 79.6%	-	-	-	7.3	43.3	19.6		
4/3	North Ring Road Eastbound Right	U	G		1	12	-	66	1848	200	33.0%	-	-	-	1.2	62.8	2.3		
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6		
C1 - North Ring		PRC for Signalled Lanes (%):		9.5		PRC Over All Lanes (%):		9.5		Total Delay for Signalled Lanes (pcuHr):		28.55		Total Delay Over All Lanes(pcuHr):		28.55		Cycle Time (s): 120	

Basic Results Summary

Scenario 11: '2024 AM No Dev' (FG11: '2024 no dev AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

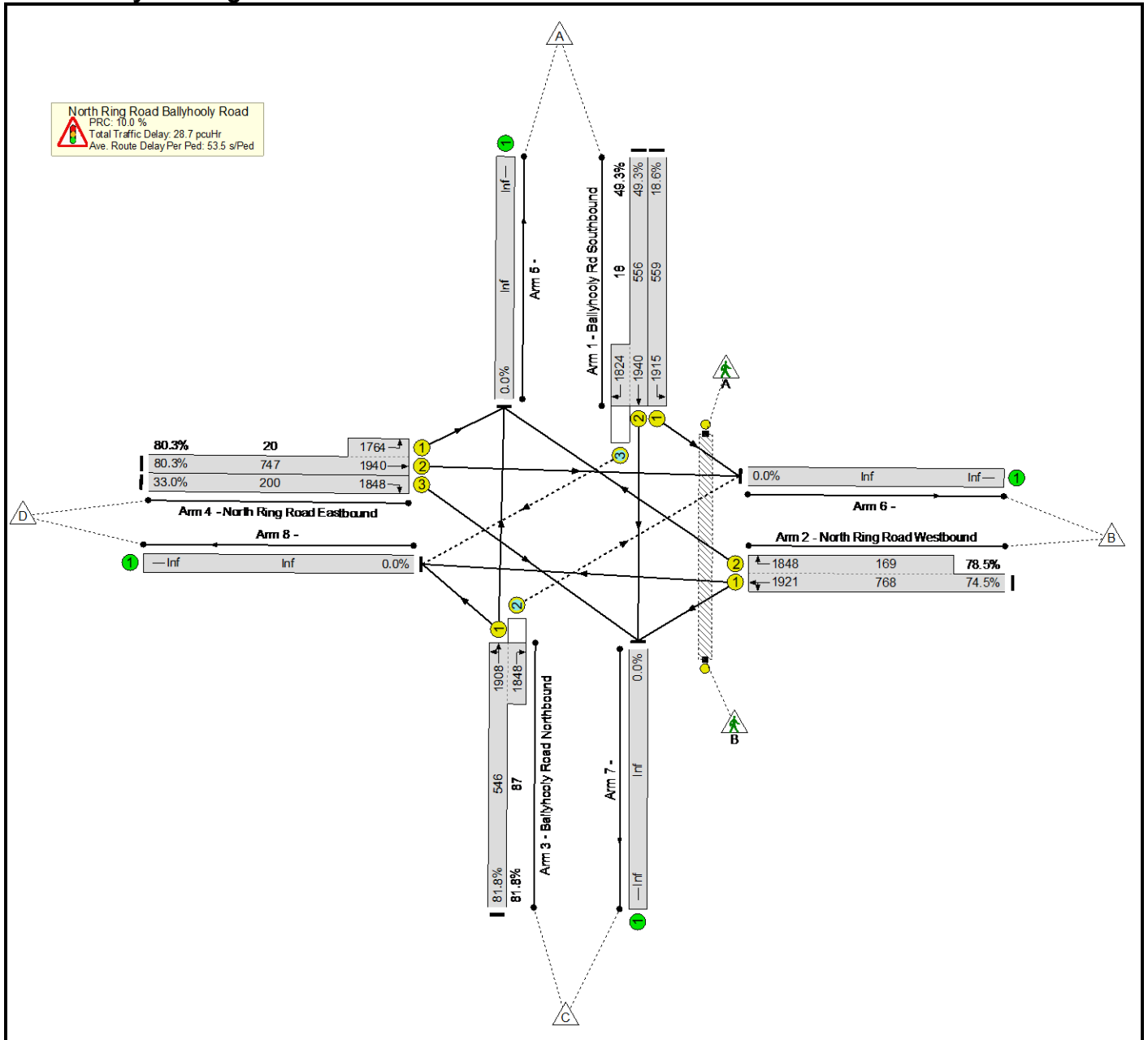
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>82.5%</b>	<b>61</b>	<b>1</b>	<b>1</b>	<b>26.6</b>	-	-		
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	<b>82.5%</b>	<b>61</b>	<b>1</b>	<b>1</b>	<b>26.6</b>	-	-		
1/1	Ballyhooley Rd Southbound Left	U	A		1	37	-	82	1915	606	13.5%	-	-	-	0.7	32.7	2.0		
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	37	-	457	1940:1824	600+23	73.3 : 73.3%	17	0	0	6.0	47.1	14.6		
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	46:7	-	692	1910:1848	723+116	82.5 : 82.5%	-	-	-	9.1	47.3	19.8		
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	40	-	302	1904:1848	578+104	44.3 : 44.3%	44	1	1	3.1	37.1	7.1		
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	46	-	553	1940:1764	746+21	72.1 : 72.1%	-	-	-	6.0	39.1	16.7		
4/3	North Ring Road Eastbound Right	U	G		1	12	-	91	1848	200	45.5%	-	-	-	1.7	66.6	3.2		
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6		
C1 - North Ring		PRC for Signalled Lanes (%):		9.1		PRC Over All Lanes (%):		9.1		Total Delay for Signalled Lanes (pcuHr):		26.61		Total Delay Over All Lanes(pcuHr):		26.61		Cycle Time (s): 120	

Basic Results Summary

Scenario 12: '2024 PM No Dev' (FG12: '2024 no dev PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

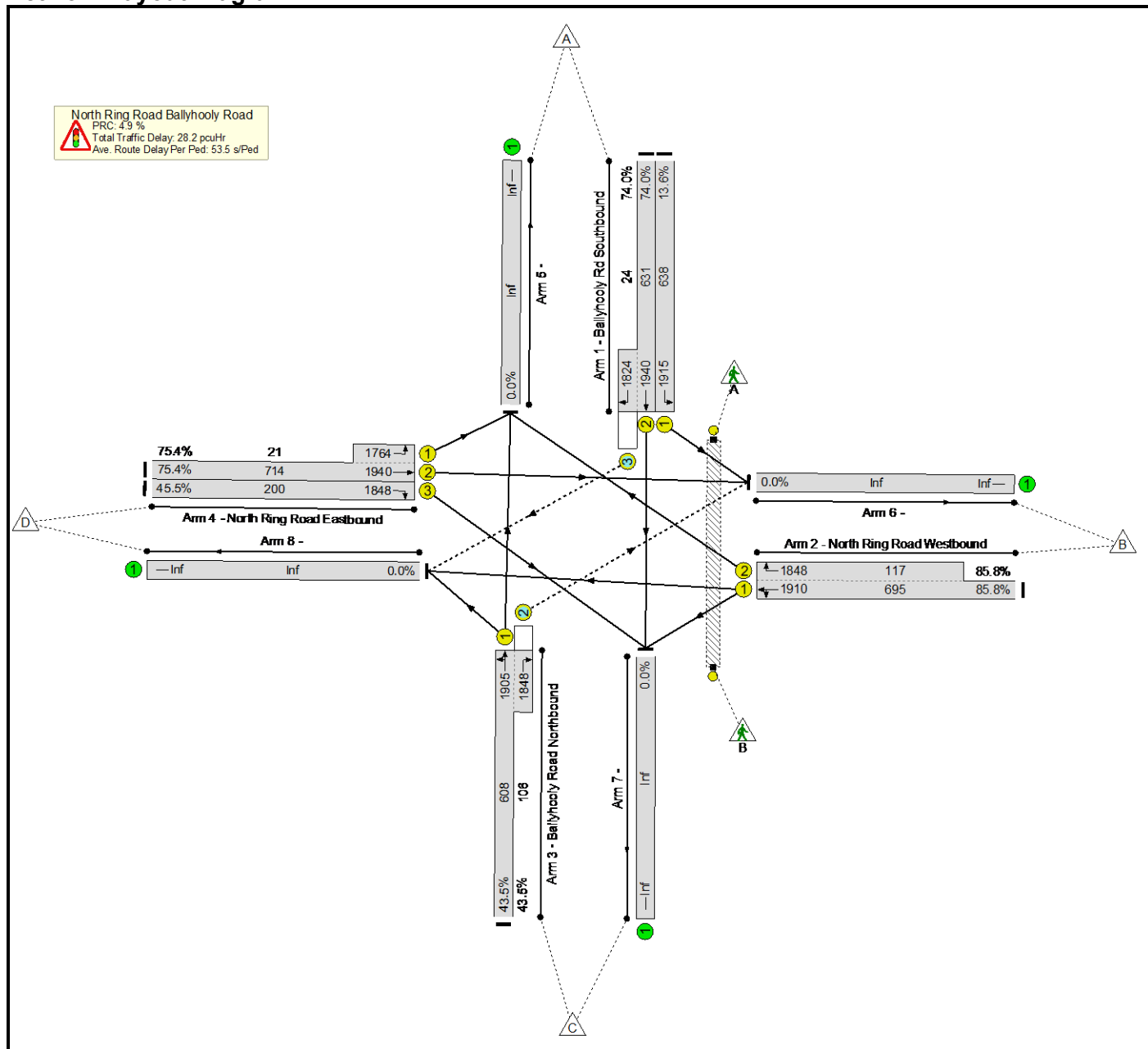
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)	
<b>Network</b>	-	-	-		-	-	-	-	-	-	81.8%	77	2	1	28.7	-	-	
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	81.8%	77	2	1	28.7	-	-	
1/1	Ballyhooley Rd Southbound Left	U	A		1	34	-	104	1915	559	18.6%	-	-	-	1.0	35.8	2.7	
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	34	-	283	1940:1824	556+18	49.3 : 49.3%	9	0	0	3.3	41.8	8.0	
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	49:10	-	705	1921:1848	768+169	74.5 : 78.5%	-	-	-	8.1	41.3	17.2	
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	37	-	518	1908:1848	546+87	81.8 : 81.8%	68	2	1	7.6	52.7	17.2	
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	46	-	616	1940:1764	747+20	80.3 : 80.3%	-	-	-	7.5	43.8	20.0	
4/3	North Ring Road Eastbound Right	U	G		1	12	-	66	1848	200	33.0%	-	-	-	1.2	62.8	2.3	
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6	
C1 - North Ring					PRC for Signalled Lanes (%): 10.0		10.0		Total Delay for Signalled Lanes (pcuHr): 28.65			28.65		Cycle Time (s): 120				
					PRC Over All Lanes (%):				Total Delay Over All Lanes(pcuHr):									

Basic Results Summary

Scenario 13: '2024 AM with Dev' (FG13: '2024 with dev AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

**Network Results**

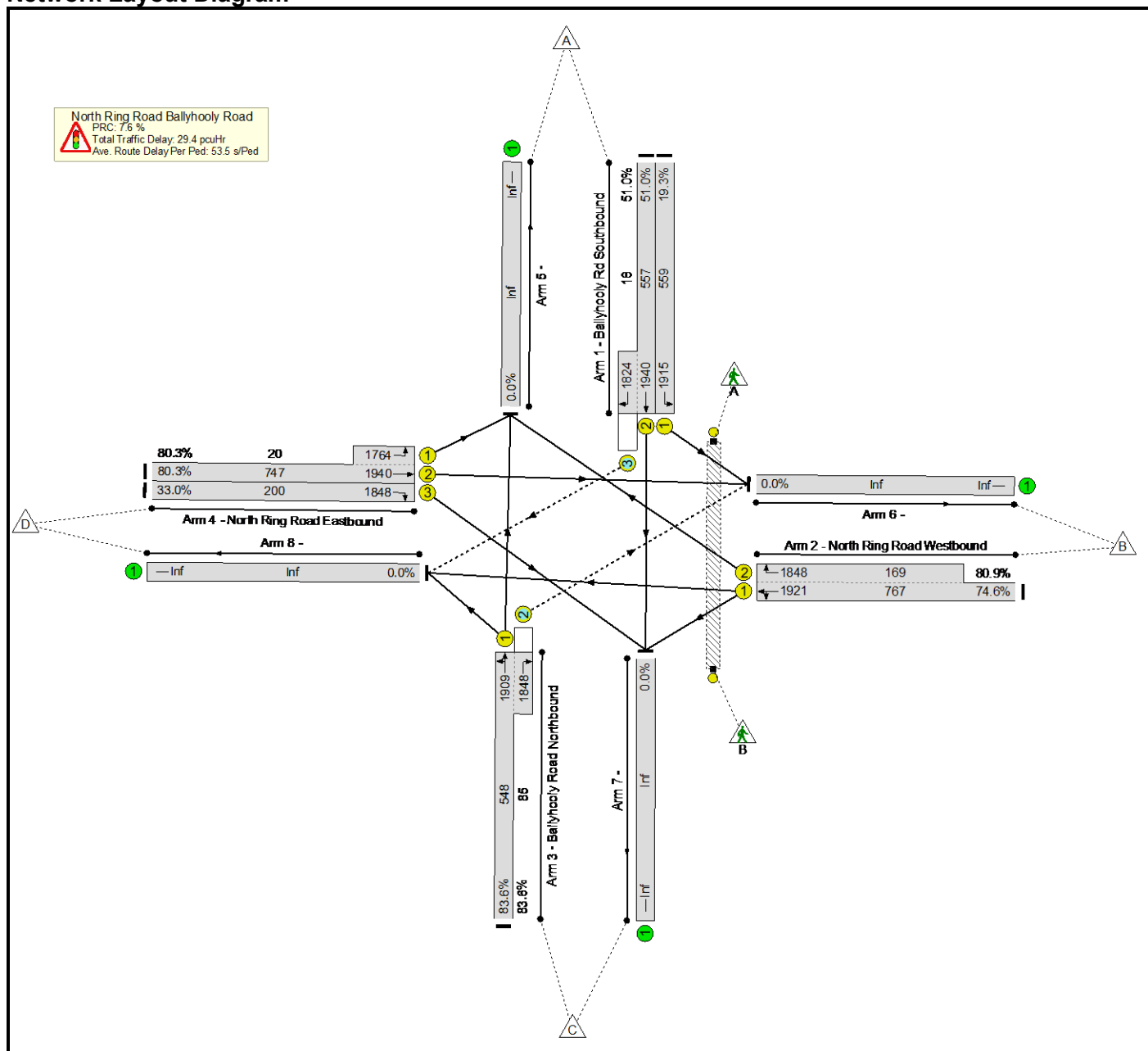
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>85.8%</b>	<b>62</b>	<b>1</b>	<b>1</b>	<b>28.2</b>	-	-	
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	<b>85.8%</b>	<b>62</b>	<b>1</b>	<b>1</b>	<b>28.2</b>	-	-	
1/1	Ballyhooley Rd Southbound Left	U	A		1	39	-	87	1915	638	13.6%	-	-	-	0.8	31.2	2.1	
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	39	-	485	1940:1824	631+24	74.0 : 74.0%	18	0	0	6.2	45.7	15.4	
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	44:7	-	696	1910:1848	695+117	85.8 : 85.8%	-	-	-	10.0	52.0	20.9	
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	42	-	310	1905:1848	608+106	43.5 : 43.5%	44	1	1	3.1	35.5	7.2	
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	44	-	554	1940:1764	714+21	75.4 : 75.4%	-	-	-	6.5	42.3	17.4	
4/3	North Ring Road Eastbound Right	U	G		1	12	-	91	1848	200	45.5%	-	-	-	1.7	66.6	3.2	
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6	
C1 - North Ring				PRC for Signalled Lanes (%):		4.9		Total Delay for Signalled Lanes (pcuHr):				28.20		Cycle Time (s): 120				
				PRC Over All Lanes (%):		4.9		Total Delay Over All Lanes(pcuHr):				28.20						



Basic Results Summary

Scenario 14: '2024 PM with Dev' (FG14: '2024 with dev PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

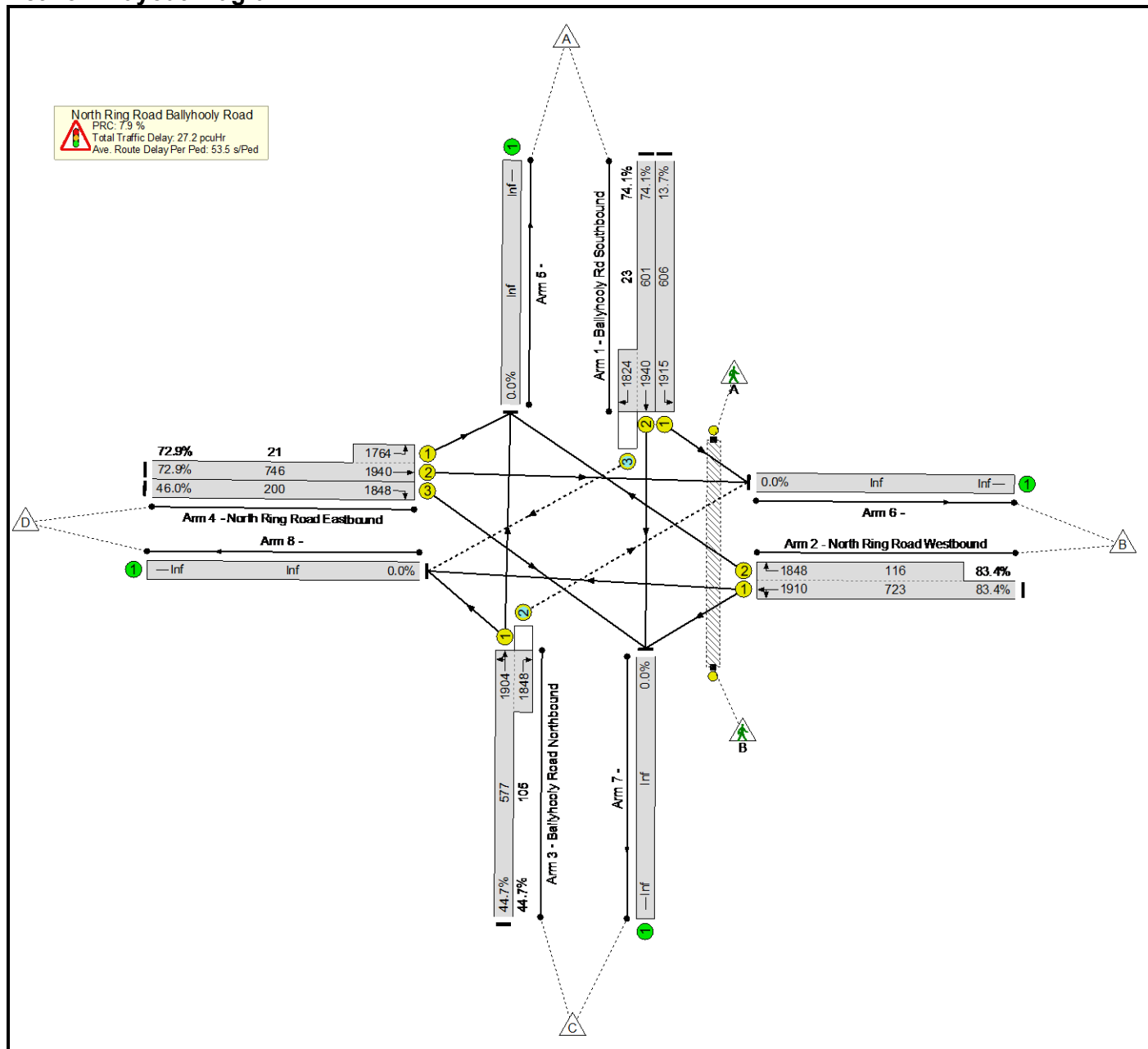
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>83.6%</b>	<b>77</b>	<b>2</b>	<b>1</b>	<b>29.4</b>	-	-		
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	<b>83.6%</b>	<b>77</b>	<b>2</b>	<b>1</b>	<b>29.4</b>	-	-		
1/1	Ballyhooley Rd Southbound Left	U	A		1	34	-	108	1915	559	19.3%	-	-	-	1.1	35.9	2.8		
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	34	-	293	1940:1824	557+18	51.0 : 51.0%	9	0	0	3.4	42.3	8.4		
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	49:10	-	709	1921:1848	767+169	74.6 : 80.9%	-	-	-	8.2	41.6	17.3		
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	37	-	529	1909:1848	548+85	83.6 : 83.6%	68	2	1	8.0	54.6	17.8		
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	46	-	616	1940:1764	747+20	80.3 : 80.3%	-	-	-	7.5	43.8	20.0		
4/3	North Ring Road Eastbound Right	U	G		1	12	-	66	1848	200	33.0%	-	-	-	1.2	62.8	2.3		
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6		
C1 - North Ring		PRC for Signalled Lanes (%):		7.6		PRC Over All Lanes (%):		7.6		Total Delay for Signalled Lanes (pcuHr):		29.39		Total Delay Over All Lanes(pcuHr):		29.39		Cycle Time (s): 120	

Basic Results Summary

Scenario 15: '2025 AM No Dev' (FG15: '2025 no dev AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

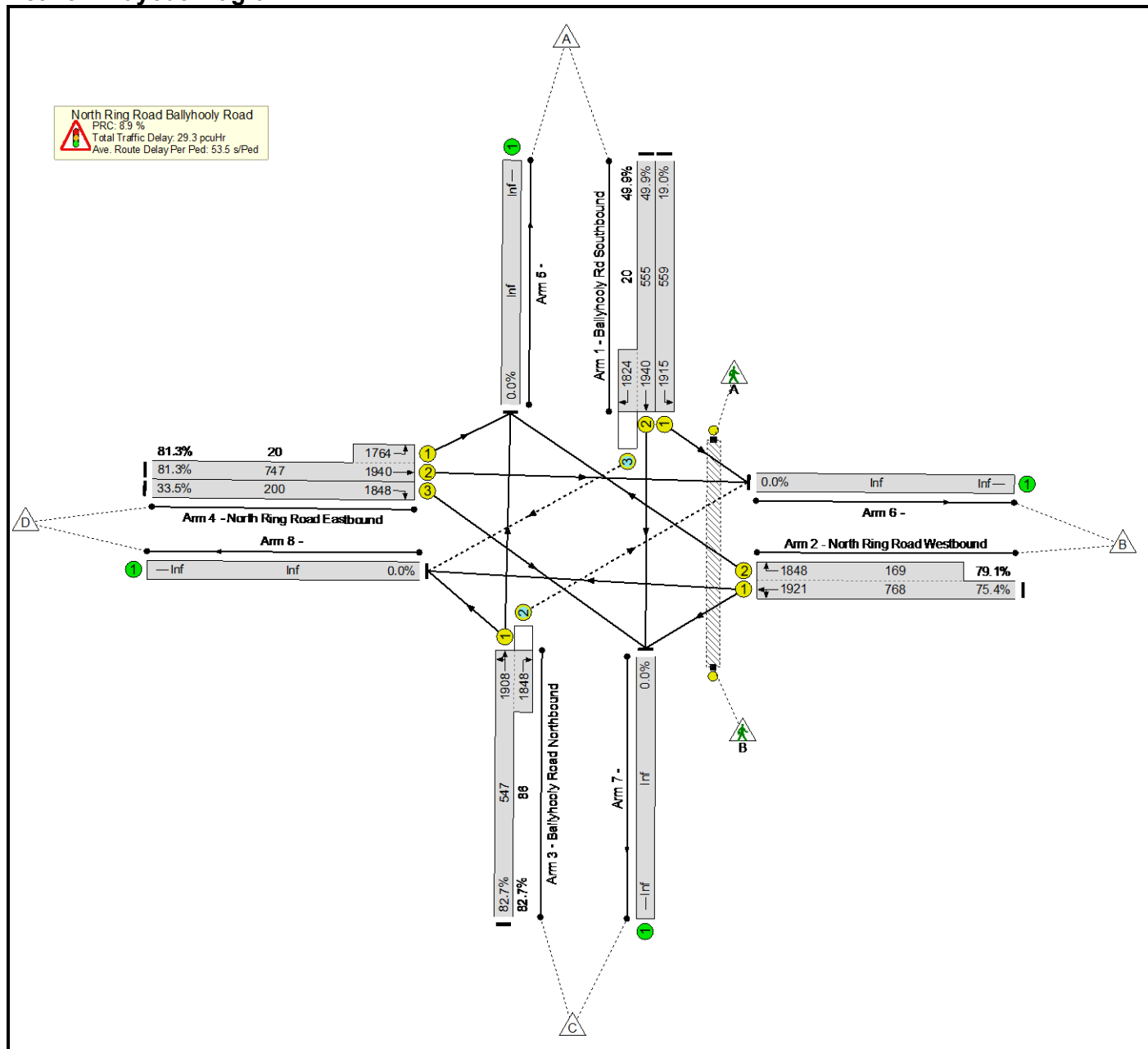
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	83.4%	62	1	1	27.2	-	-
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	83.4%	62	1	1	27.2	-	-
1/1	Ballyhooley Rd Southbound Left	U	A		1	37	-	83	1915	606	13.7%	-	-	-	0.8	32.7	2.0
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	37	-	462	1940:1824	601+23	74.1 : 74.1%	17	0	0	6.1	47.5	14.8
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	46:7	-	700	1910:1848	723+116	83.4 : 83.4%	-	-	-	9.4	48.1	20.2
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	40	-	305	1904:1848	577+105	44.7 : 44.7%	45	1	1	3.2	37.2	7.2
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	46	-	559	1940:1764	746+21	72.9 : 72.9%	-	-	-	6.1	39.4	16.9
4/3	North Ring Road Eastbound Right	U	G		1	12	-	92	1848	200	46.0%	-	-	-	1.7	66.7	3.3
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6
<p>C1 - North Ring      PRC for Signalled Lanes (%): 7.9      Total Delay for Signalled Lanes (pcuHr): 27.19      Cycle Time (s): 120                      PRC Over All Lanes (%): 7.9      Total Delay Over All Lanes(pcuHr): 27.19</p>																	

Basic Results Summary

Scenario 16: '2025 PM No Dev' (FG16: '2025 no dev PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

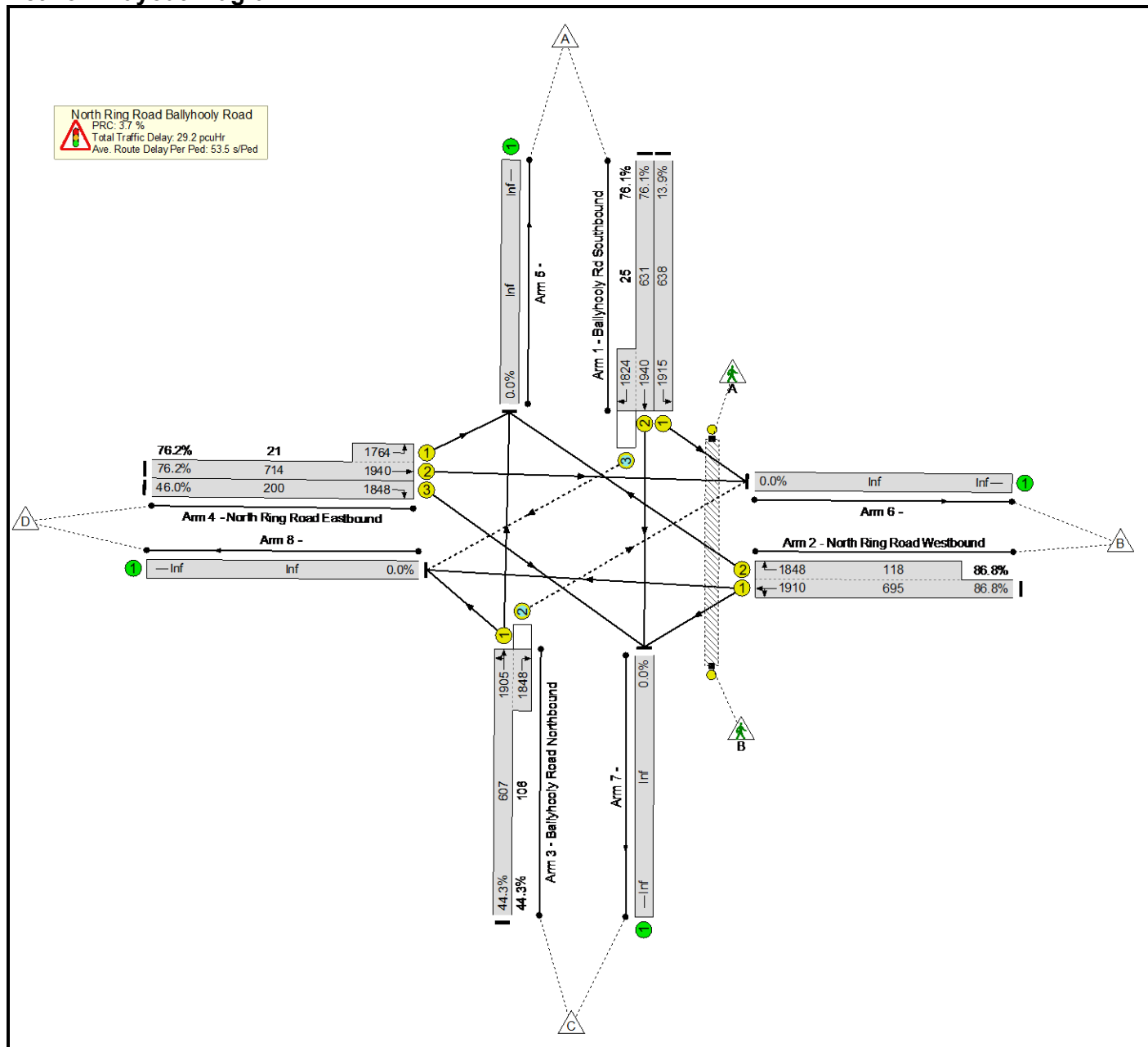
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	82.7%	78	2	1	29.3	-	-		
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	82.7%	78	2	1	29.3	-	-		
1/1	Ballyhooley Rd Southbound Left	U	A		1	34	-	106	1915	559	19.0%	-	-	-	1.1	35.8	2.7		
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	34	-	287	1940:1824	555+20	49.9 : 49.9%	10	0	0	3.4	42.1	8.2		
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	49:10	-	713	1921:1848	768+169	75.4 : 79.1%	-	-	-	8.3	41.7	17.7		
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	37	-	523	1908:1848	547+86	82.7 : 82.7%	68	2	1	7.8	53.5	17.5		
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	46	-	623	1940:1764	747+20	81.3 : 81.3%	-	-	-	7.7	44.5	20.3		
4/3	North Ring Road Eastbound Right	U	G		1	12	-	67	1848	200	33.5%	-	-	-	1.2	63.0	2.3		
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6		
C1 - North Ring		PRC for Signalled Lanes (%):		8.9		PRC Over All Lanes (%):		8.9		Total Delay for Signalled Lanes (pcuHr):		29.32		Total Delay Over All Lanes(pcuHr):		29.32		Cycle Time (s): 120	

Basic Results Summary

Scenario 17: '2025 AM with Dev' (FG17: '2025 with dev AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

**Network Results**

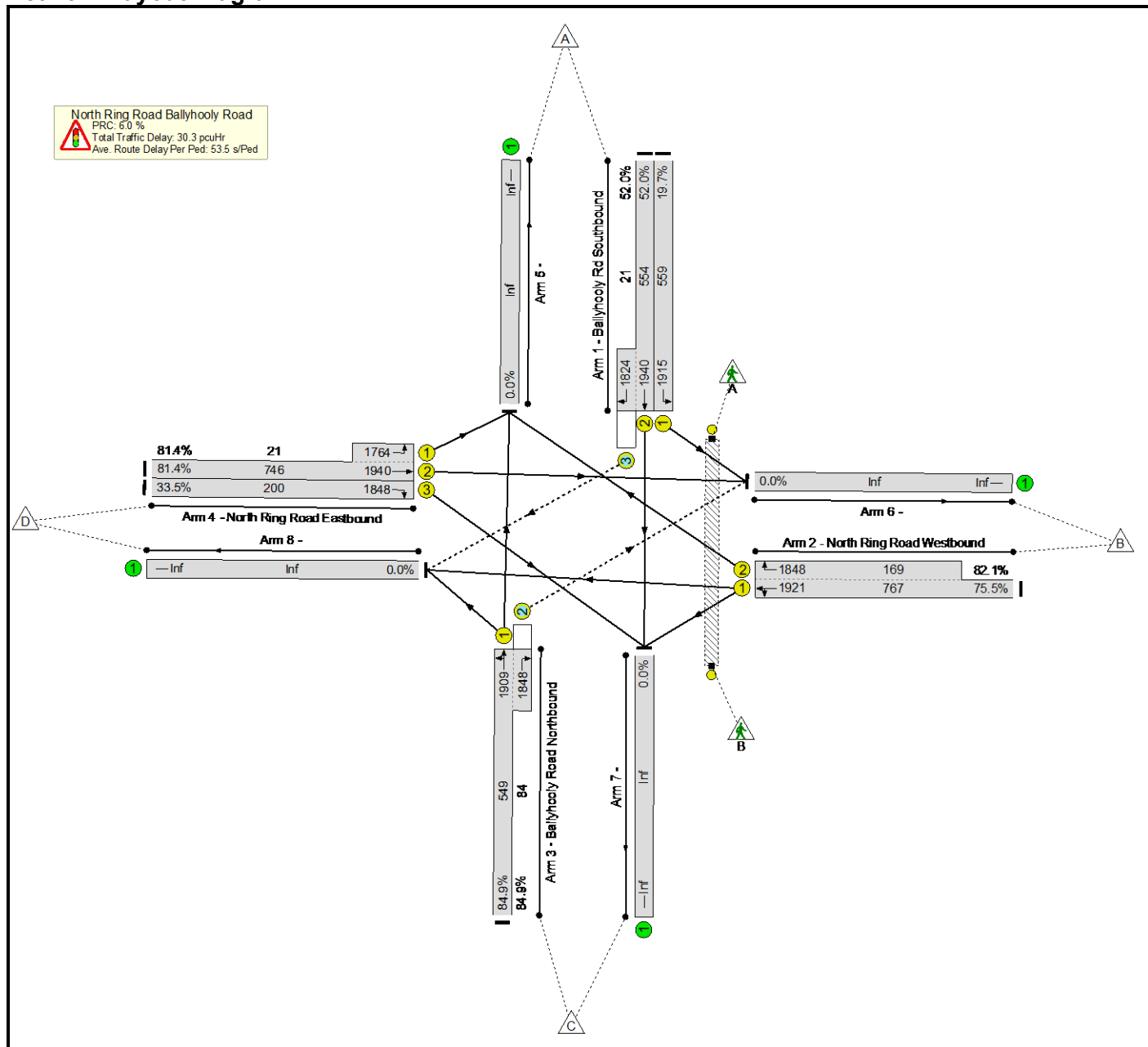
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>86.8%</b>	<b>64</b>	<b>1</b>	<b>1</b>	<b>29.2</b>	-	-
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	<b>86.8%</b>	<b>64</b>	<b>1</b>	<b>1</b>	<b>29.2</b>	-	-
1/1	Ballyhooley Rd Southbound Left	U	A		1	39	-	89	1915	638	13.9%	-	-	-	0.8	31.2	2.1
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	39	-	499	1940:1824	631+25	76.1 : 76.1%	19	0	0	6.5	46.9	16.1
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	44:7	-	705	1910:1848	695+118	86.8 : 86.8%	-	-	-	10.4	53.2	21.4
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	42	-	316	1905:1848	607+106	44.3 : 44.3%	45	1	1	3.1	35.8	7.3
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	44	-	560	1940:1764	714+21	76.2 : 76.2%	-	-	-	6.6	42.7	17.6
4/3	North Ring Road Eastbound Right	U	G		1	12	-	92	1848	200	46.0%	-	-	-	1.7	66.7	3.3
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6
<p>C1 - North Ring      PRC for Signalled Lanes (%): 3.7      Total Delay for Signalled Lanes (pcuHr): 29.18      Cycle Time (s): 120                      PRC Over All Lanes (%): 3.7      Total Delay Over All Lanes(pcuHr): 29.18</p>																	



Basic Results Summary

Scenario 18: '2025 PM with Dev' (FG18: '2025 with dev PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

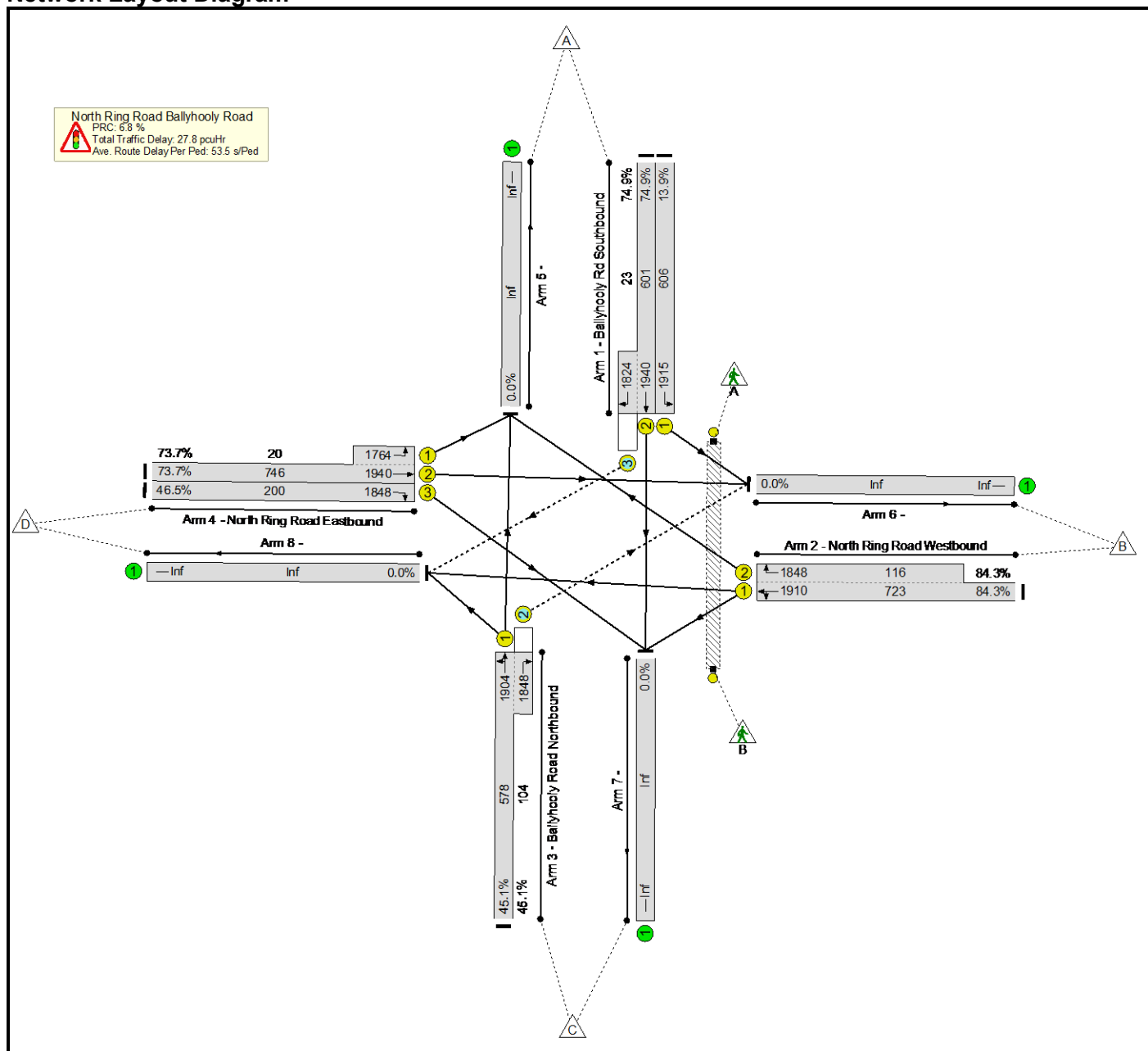
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>84.9%</b>	<b>79</b>	<b>2</b>	<b>1</b>	<b>30.3</b>	-	-
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	<b>84.9%</b>	<b>79</b>	<b>2</b>	<b>1</b>	<b>30.3</b>	-	-
1/1	Ballyhooley Rd Southbound Left	U	A		1	34	-	110	1915	559	19.7%	-	-	-	1.1	36.0	2.9
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	34	-	299	1940:1824	554+21	52.0 : 52.0%	11	0	0	3.5	42.6	8.6
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	49:10	-	718	1921:1848	767+169	75.5 : 82.1%	-	-	-	8.4	42.1	17.7
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	37	-	537	1909:1848	549+84	84.9 : 84.9%	68	2	1	8.4	56.1	18.5
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	46	-	624	1940:1764	746+21	81.4 : 81.4%	-	-	-	7.7	44.6	20.4
4/3	North Ring Road Eastbound Right	U	G		1	12	-	67	1848	200	33.5%	-	-	-	1.2	63.0	2.3
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6
<p>C1 - North Ring      PRC for Signalled Lanes (%): 6.0      Total Delay for Signalled Lanes (pcuHr): 30.30      Cycle Time (s): 120                      PRC Over All Lanes (%): 6.0      Total Delay Over All Lanes(pcuHr): 30.30</p>																	

Basic Results Summary

Scenario 19: '2026 AM No Dev' (FG19: '2026 no dev AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

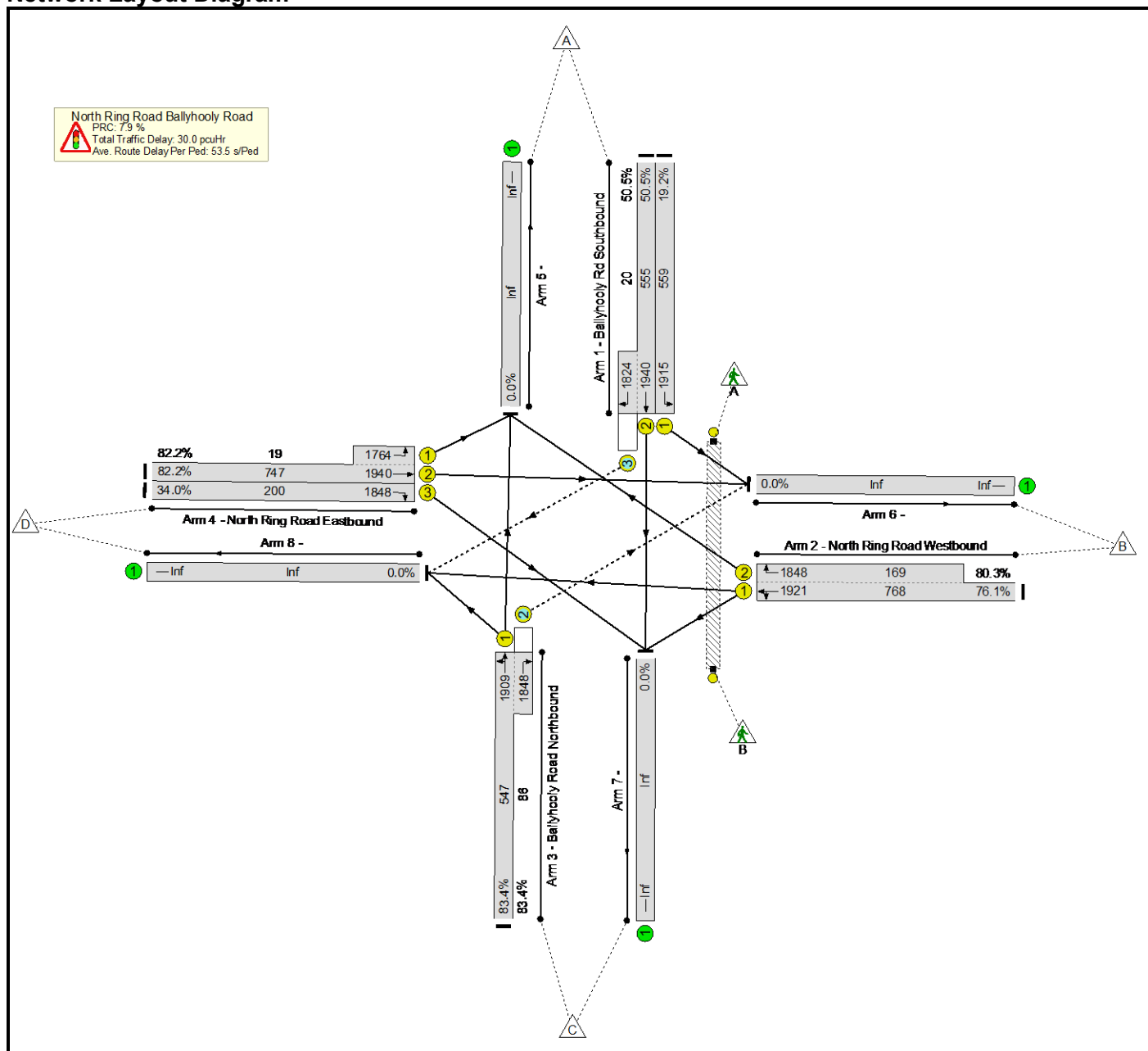
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>84.3%</b>	<b>62</b>	<b>1</b>	<b>1</b>	<b>27.8</b>	-	-		
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	<b>84.3%</b>	<b>62</b>	<b>1</b>	<b>1</b>	<b>27.8</b>	-	-		
1/1	Ballyhooley Rd Southbound Left	U	A		1	37	-	84	1915	606	13.9%	-	-	-	0.8	32.8	2.1		
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	37	-	467	1940:1824	601+23	74.9 : 74.9%	17	0	0	6.2	48.0	15.2		
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	46:7	-	707	1910:1848	723+116	84.3 : 84.3%	-	-	-	9.6	48.8	20.7		
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	40	-	308	1904:1848	578+104	45.1 : 45.1%	45	1	1	3.2	37.3	7.3		
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	46	-	565	1940:1764	746+20	73.7 : 73.7%	-	-	-	6.2	39.8	17.3		
4/3	North Ring Road Eastbound Right	U	G		1	12	-	93	1848	200	46.5%	-	-	-	1.7	66.9	3.3		
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6		
C1 - North Ring		PRC for Signalled Lanes (%):		6.8		PRC Over All Lanes (%):		6.8		Total Delay for Signalled Lanes (pcuHr):		27.75		Total Delay Over All Lanes(pcuHr):		27.75		Cycle Time (s): 120	

Basic Results Summary

Scenario 20: '2026 PM No Dev' (FG20: '2026 no dev PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

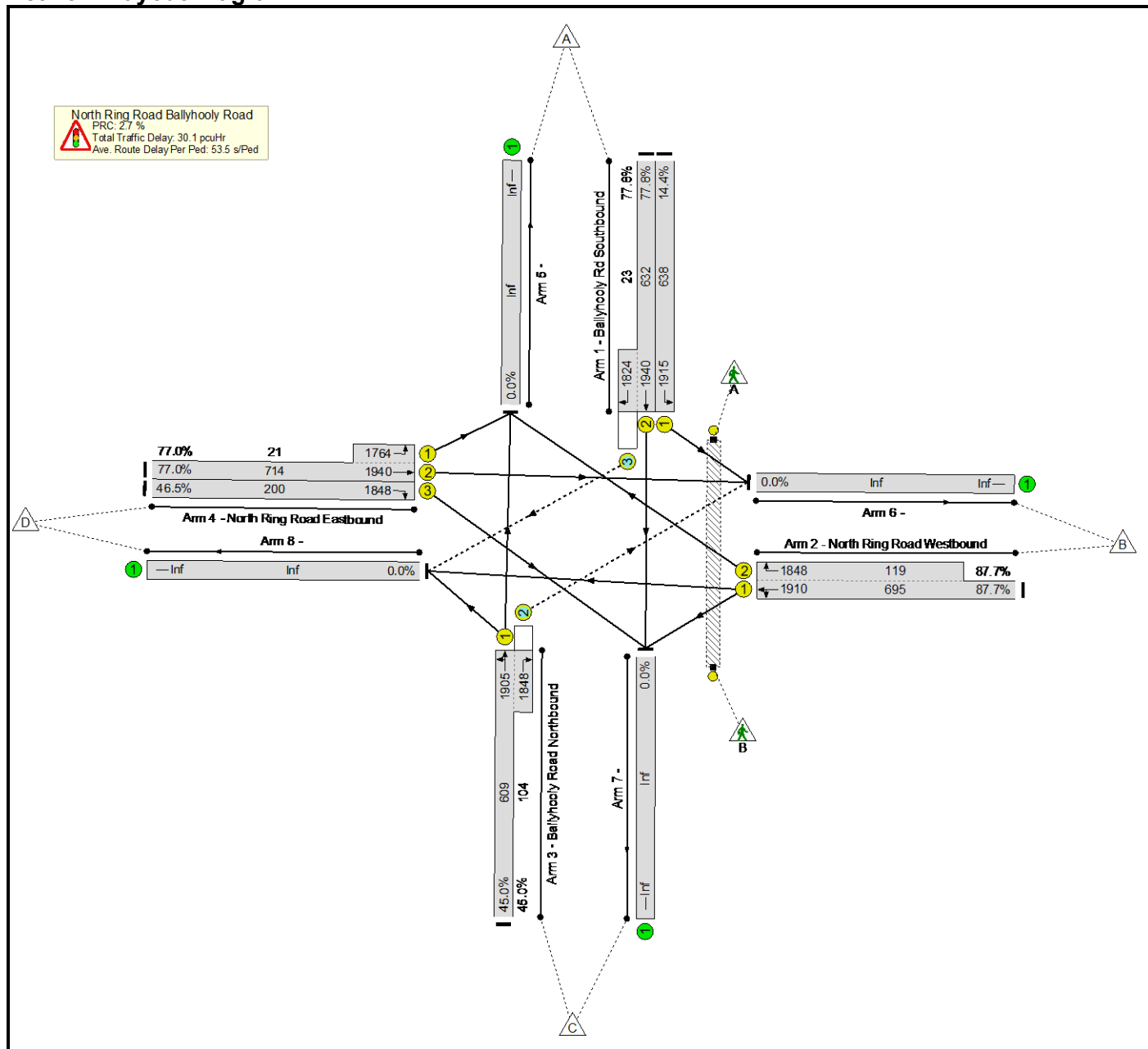
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>83.4%</b>	<b>79</b>	<b>2</b>	<b>1</b>	<b>30.0</b>	-	-
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	<b>83.4%</b>	<b>79</b>	<b>2</b>	<b>1</b>	<b>30.0</b>	-	-
1/1	Ballyhooley Rd Southbound Left	U	A		1	34	-	107	1915	559	19.2%	-	-	-	1.1	35.9	2.8
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	34	-	290	1940:1824	555+20	50.5 : 50.5%	10	0	0	3.4	42.2	8.3
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	49:10	-	720	1921:1848	768+169	76.1 : 80.3%	-	-	-	8.4	42.1	17.9
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	37	-	528	1909:1848	547+86	83.4 : 83.4%	69	2	1	8.0	54.3	17.7
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	46	-	630	1940:1764	747+19	82.2 : 82.2%	-	-	-	7.9	45.3	20.8
4/3	North Ring Road Eastbound Right	U	G		1	12	-	68	1848	200	34.0%	-	-	-	1.2	63.1	2.4
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6
<p>C1 - North Ring      PRC for Signalled Lanes (%): 7.9      Total Delay for Signalled Lanes (pcuHr): 29.96      Cycle Time (s): 120                      PRC Over All Lanes (%): 7.9      Total Delay Over All Lanes(pcuHr): 29.96</p>																	

Basic Results Summary

Scenario 21: '2026 AM with Dev' (FG21: '2026 with dev AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

**Network Results**

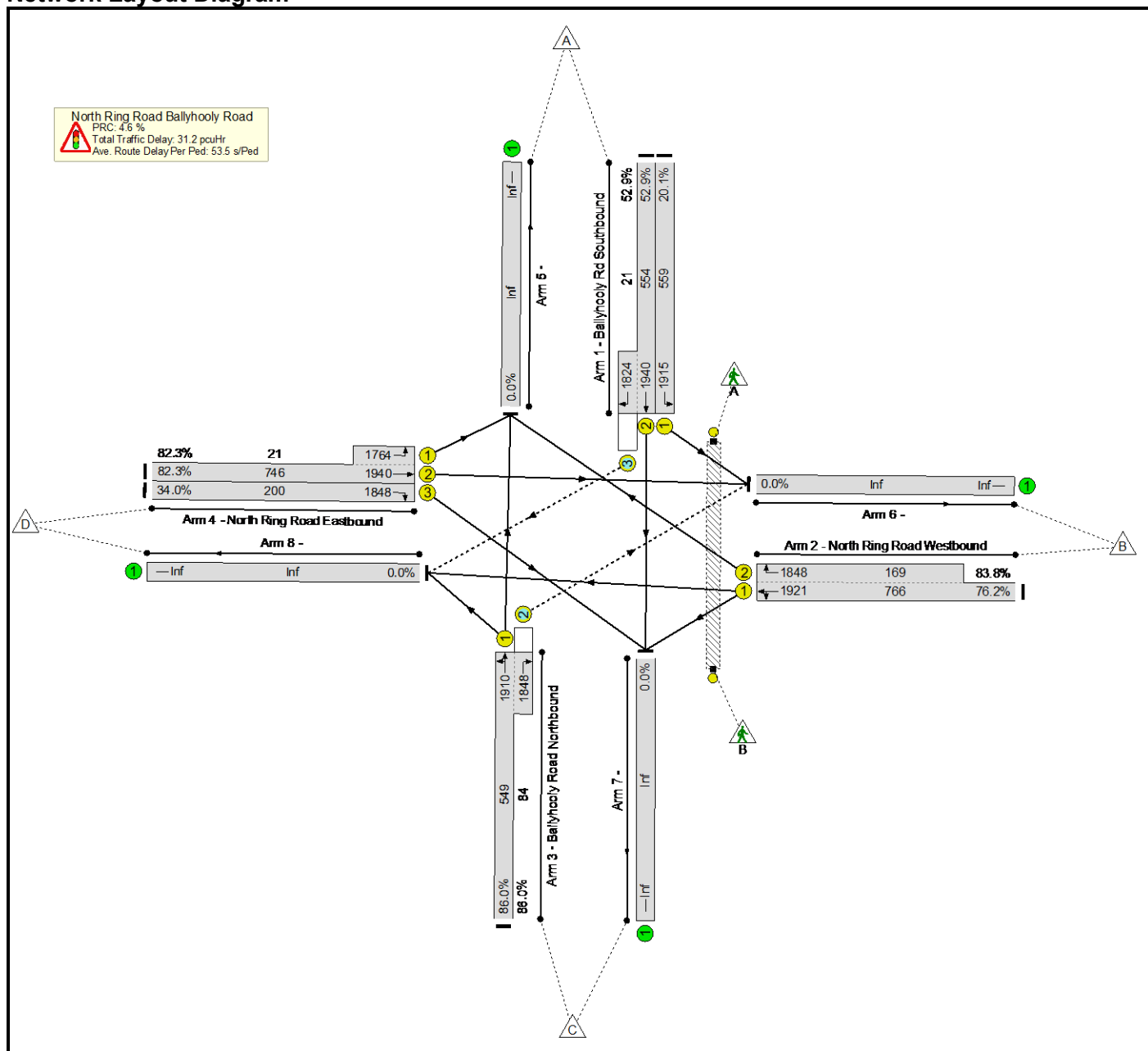
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	-		-	-	-	-	-	-	87.7%	63	1	1	30.1	-	-
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	87.7%	63	1	1	30.1	-	-
1/1	Ballyhooley Rd Southbound Left	U	A		1	39	-	92	1915	638	14.4%	-	-	-	0.8	31.3	2.2
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	39	-	510	1940:1824	632+23	77.8 : 77.8%	18	0	0	6.8	48.0	16.7
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	44:7	-	713	1910:1848	695+119	87.7 : 87.7%	-	-	-	10.8	54.3	21.9
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	42	-	321	1905:1848	609+104	45.0 : 45.0%	45	1	1	3.2	36.0	7.6
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	44	-	566	1940:1764	714+21	77.0 : 77.0%	-	-	-	6.8	43.2	18.0
4/3	North Ring Road Eastbound Right	U	G		1	12	-	93	1848	200	46.5%	-	-	-	1.7	66.9	3.3
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6
<p>C1 - North Ring      PRC for Signalled Lanes (%): 2.7      Total Delay for Signalled Lanes (pcuHr): 30.09      Cycle Time (s): 120                      PRC Over All Lanes (%): 2.7      Total Delay Over All Lanes(pcuHr): 30.09</p>																	



Basic Results Summary

Scenario 22: '2026 PM with Dev' (FG22: '2026 with dev PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

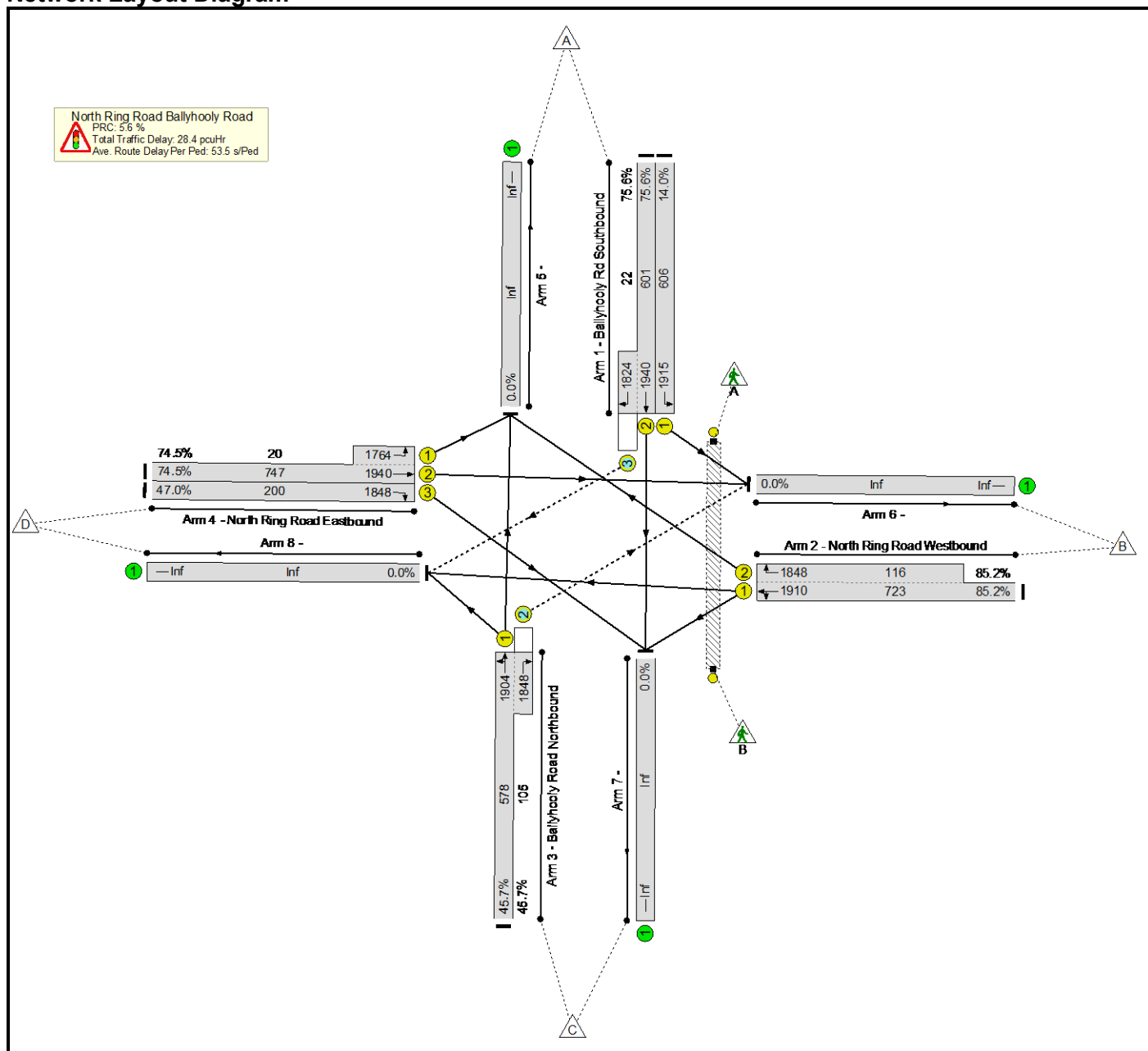
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>86.0%</b>	<b>80</b>	<b>2</b>	<b>1</b>	<b>31.2</b>	-	-
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	<b>86.0%</b>	<b>80</b>	<b>2</b>	<b>1</b>	<b>31.2</b>	-	-
1/1	Ballyhooley Rd Southbound Left	U	A		1	34	-	112	1915	559	20.1%	-	-	-	1.1	36.0	2.9
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	34	-	304	1940:1824	554+21	52.9 : 52.9%	11	0	0	3.6	42.9	8.8
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	49:10	-	726	1921:1848	766+169	76.2 : 83.8%	-	-	-	8.6	42.5	17.9
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	37	-	544	1910:1848	549+84	86.0 : 86.0%	69	2	1	8.7	57.5	19.0
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	46	-	631	1940:1764	746+21	82.3 : 82.3%	-	-	-	8.0	45.4	20.9
4/3	North Ring Road Eastbound Right	U	G		1	12	-	68	1848	200	34.0%	-	-	-	1.2	63.1	2.4
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6
C1 - North Ring				PRC for Signalled Lanes (%):		4.6		Total Delay for Signalled Lanes (pcuHr):			31.15		Cycle Time (s): 120				
				PRC Over All Lanes (%):		4.6		Total Delay Over All Lanes(pcuHr):			31.15						

Basic Results Summary

Scenario 23: '2027 AM No Dev' (FG23: '2027 no dev AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

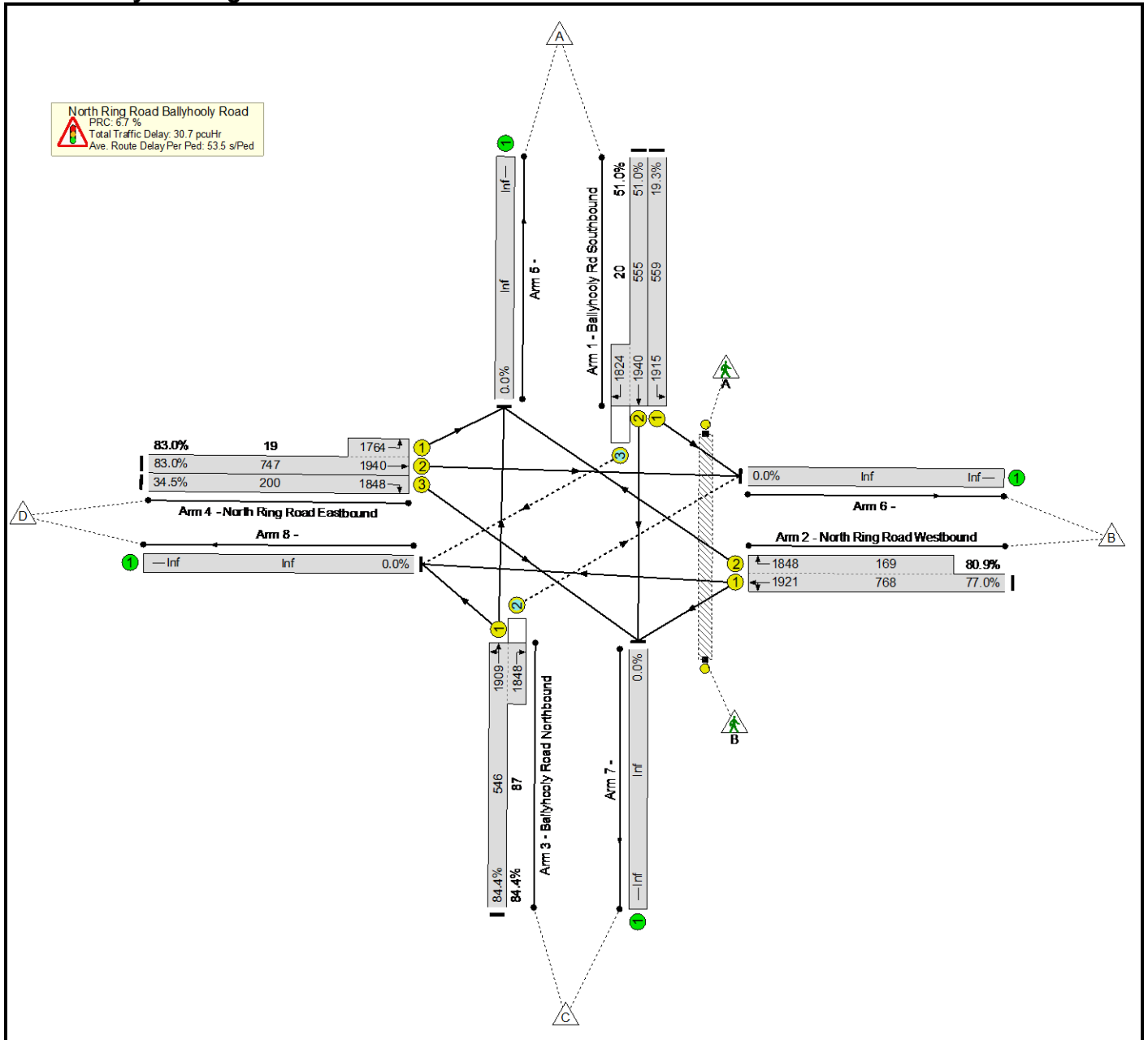
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	85.2%	63	1	1	28.4	-	-		
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	85.2%	63	1	1	28.4	-	-		
1/1	Ballyhooley Rd Southbound Left	U	A		1	37	-	85	1915	606	14.0%	-	-	-	0.8	32.8	2.1		
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	37	-	471	1940:1824	601+22	75.6 : 75.6%	17	0	0	6.3	48.4	15.3		
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	46:7	-	715	1910:1848	723+116	85.2 : 85.2%	-	-	-	9.9	49.8	21.1		
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	40	-	312	1904:1848	578+105	45.7 : 45.7%	46	1	1	3.3	37.5	7.4		
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	46	-	571	1940:1764	747+20	74.5 : 74.5%	-	-	-	6.4	40.2	17.5		
4/3	North Ring Road Eastbound Right	U	G		1	12	-	94	1848	200	47.0%	-	-	-	1.8	67.1	3.4		
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6		
C1 - North Ring		PRC for Signalled Lanes (%):		5.6		PRC Over All Lanes (%):		5.6		Total Delay for Signalled Lanes (pcuHr):		28.37		Total Delay Over All Lanes(pcuHr):		28.37		Cycle Time (s): 120	

Basic Results Summary

Scenario 24: '2027 PM No Dev' (FG24: '2027 no dev PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

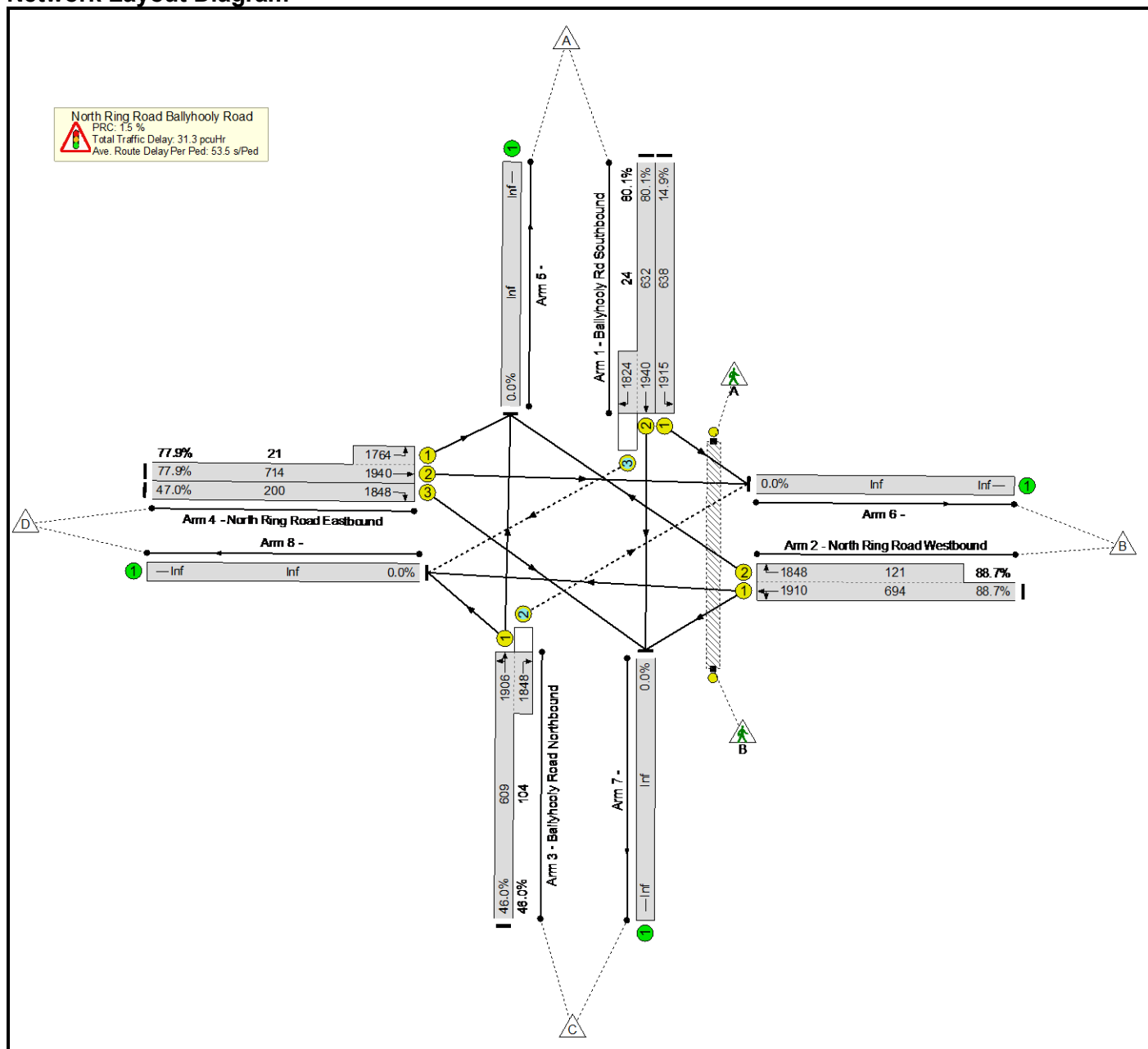
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>84.4%</b>	<b>80</b>	<b>2</b>	<b>1</b>	<b>30.7</b>	-	-		
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	<b>84.4%</b>	<b>80</b>	<b>2</b>	<b>1</b>	<b>30.7</b>	-	-		
1/1	Ballyhooley Rd Southbound Left	U	A		1	34	-	108	1915	559	19.3%	-	-	-	1.1	35.9	2.8		
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	34	-	293	1940:1824	555+20	51.0 : 51.0%	10	0	0	3.4	42.3	8.4		
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	49:10	-	728	1921:1848	768+169	77.0 : 80.9%	-	-	-	8.6	42.5	18.3		
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	37	-	534	1909:1848	546+87	84.4 : 84.4%	70	2	1	8.2	55.4	18.2		
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	46	-	636	1940:1764	747+19	83.0 : 83.0%	-	-	-	8.1	46.0	21.1		
4/3	North Ring Road Eastbound Right	U	G		1	12	-	69	1848	200	34.5%	-	-	-	1.2	63.2	2.4		
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6		
C1 - North Ring		PRC for Signalled Lanes (%):		6.7		PRC Over All Lanes (%):		6.7		Total Delay for Signalled Lanes (pcuHr):		30.66		Total Delay Over All Lanes(pcuHr):		30.66		Cycle Time (s): 120	

Basic Results Summary

Scenario 25: '2027 AM with Dev' (FG25: '2027 with dev AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

**Network Results**

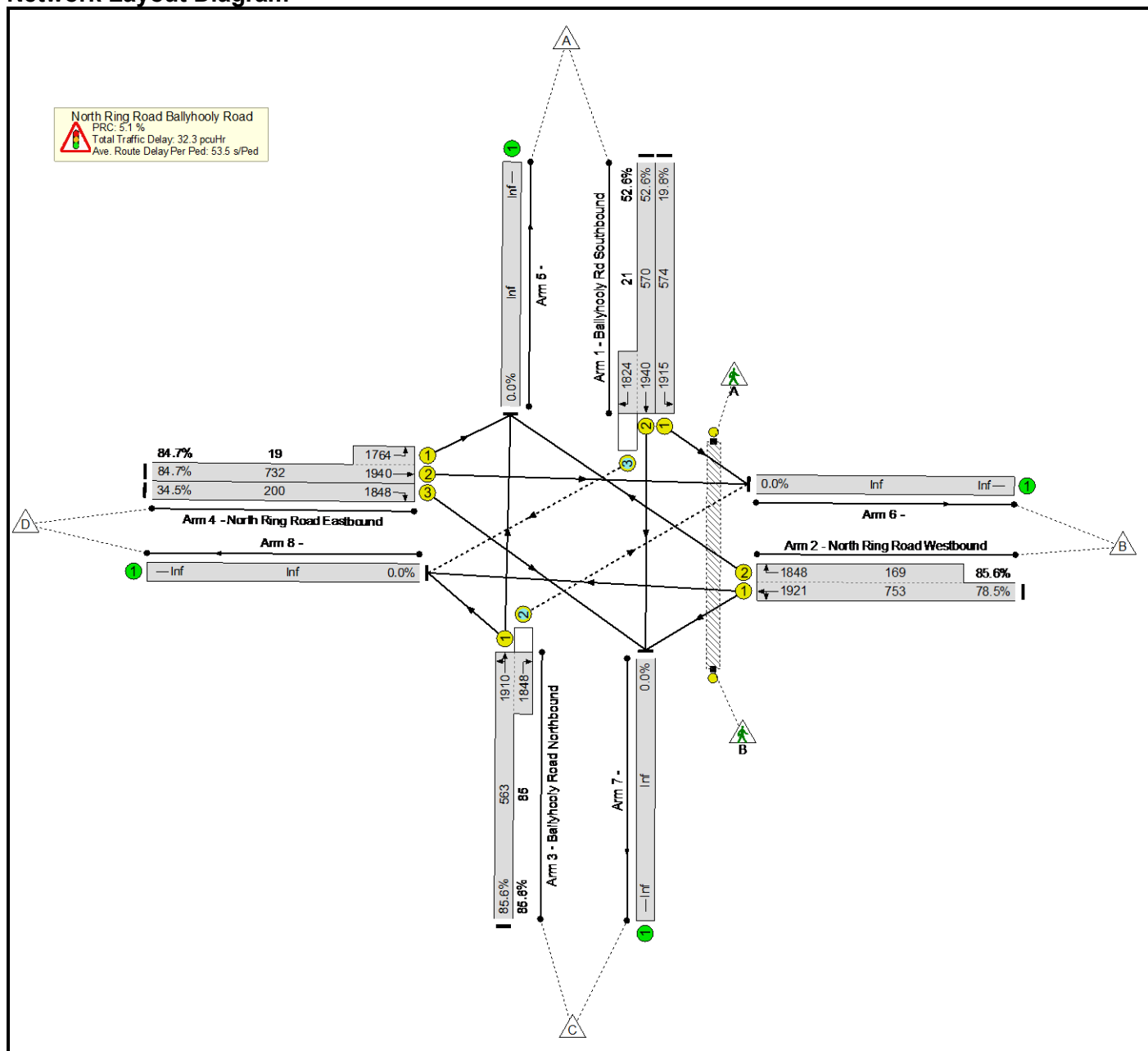
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	88.7%	65	1	1	31.3	-	-		
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	88.7%	65	1	1	31.3	-	-		
1/1	Ballyhooley Rd Southbound Left	U	A		1	39	-	95	1915	638	14.9%	-	-	-	0.8	31.4	2.3		
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	39	-	525	1940:1824	632+24	80.1 : 80.1%	19	0	0	7.2	49.7	17.5		
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	44:7	-	723	1910:1848	694+121	88.7 : 88.7%	-	-	-	11.2	55.8	22.5		
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	42	-	328	1906:1848	609+104	46.0 : 46.0%	46	1	1	3.3	36.4	7.8		
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	44	-	572	1940:1764	714+21	77.9 : 77.9%	-	-	-	6.9	43.7	18.3		
4/3	North Ring Road Eastbound Right	U	G		1	12	-	94	1848	200	47.0%	-	-	-	1.8	67.1	3.4		
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6		
C1 - North Ring		PRC for Signalled Lanes (%):		1.5		PRC Over All Lanes (%):		1.5		Total Delay for Signalled Lanes (pcuHr):		31.30		Total Delay Over All Lanes(pcuHr):		31.30		Cycle Time (s): 120	



Basic Results Summary

Scenario 26: '2027 PM with Dev' (FG26: '2027 with dev PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

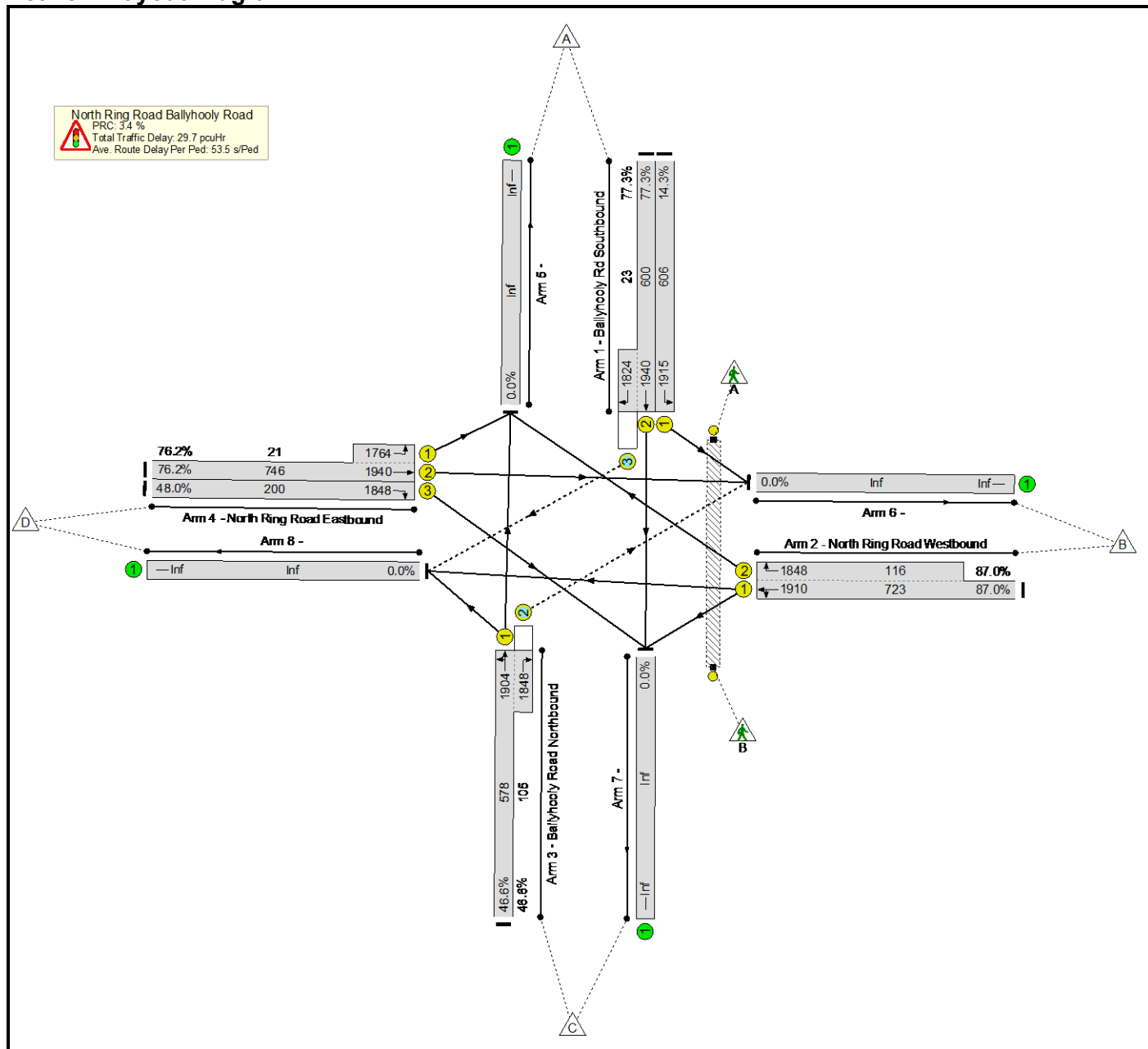
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>85.6%</b>	<b>81</b>	<b>2</b>	<b>1</b>	<b>32.3</b>	-	-		
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	<b>85.6%</b>	<b>81</b>	<b>2</b>	<b>1</b>	<b>32.3</b>	-	-		
1/1	Ballyhooley Rd Southbound Left	U	A		1	35	-	114	1915	574	19.8%	-	-	-	1.1	35.2	2.9		
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	35	-	311	1940:1824	570+21	52.6 : 52.6%	11	0	0	3.6	42.0	8.9		
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	48:10	-	736	1921:1848	753+169	78.5 : 85.6%	-	-	-	9.1	44.4	18.7		
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	38	-	555	1910:1848	563+85	85.6 : 85.6%	70	2	1	8.6	56.0	19.2		
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	45	-	636	1940:1764	732+19	84.7 : 84.7%	-	-	-	8.6	48.6	21.8		
4/3	North Ring Road Eastbound Right	U	G		1	12	-	69	1848	200	34.5%	-	-	-	1.2	63.2	2.4		
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6		
C1 - North Ring		PRC for Signalled Lanes (%):		5.1		PRC Over All Lanes (%):		5.1		Total Delay for Signalled Lanes (pcuHr):		32.25		Total Delay Over All Lanes(pcuHr):		32.25		Cycle Time (s): 120	

Basic Results Summary

Scenario 27: '2029 AM No Dev' (FG27: '2029 no dev AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

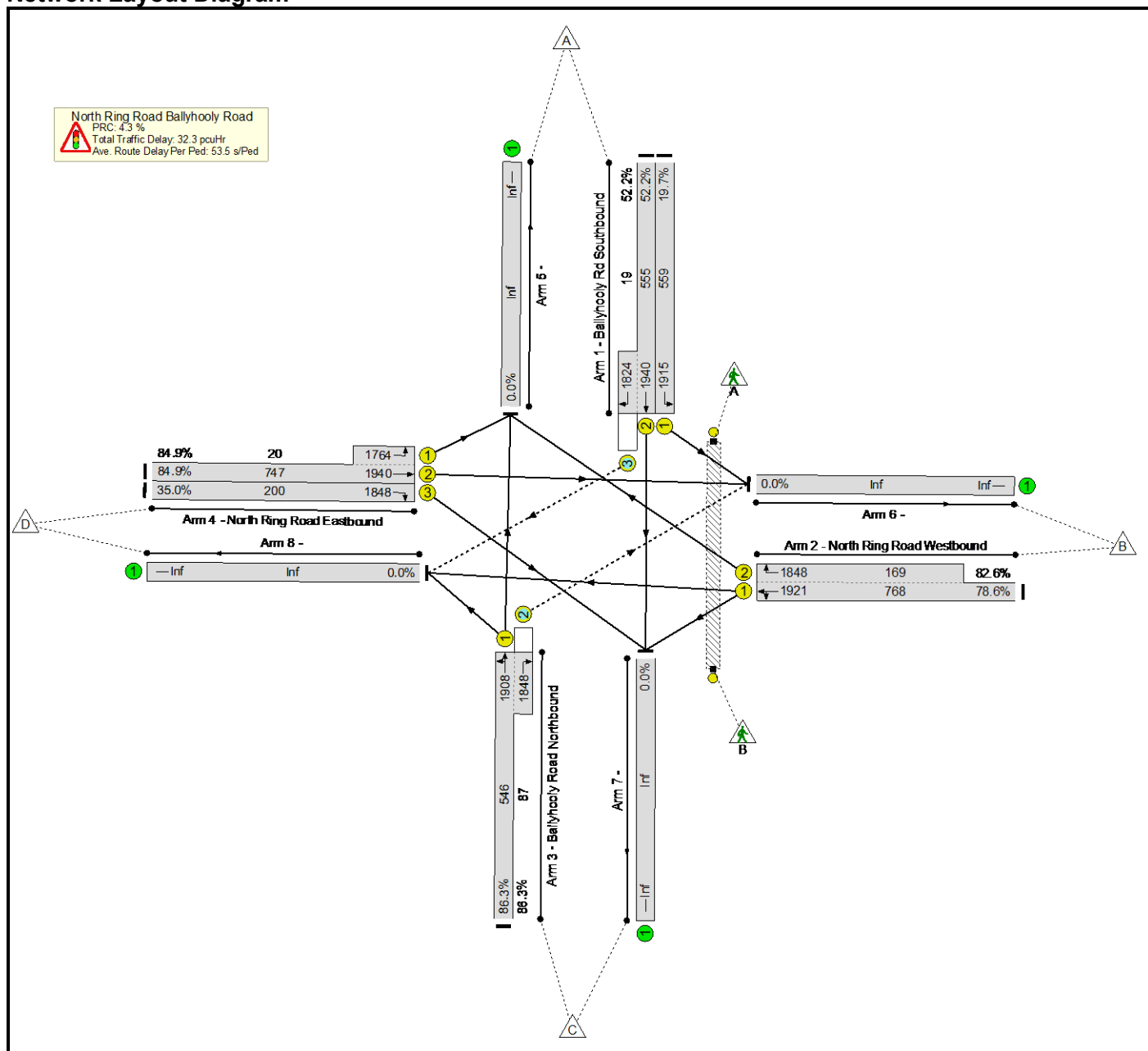
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	87.0%	65	1	1	29.7	-	-		
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	87.0%	65	1	1	29.7	-	-		
1/1	Ballyhooley Rd Southbound Left	U	A		1	37	-	87	1915	606	14.3%	-	-	-	0.8	32.8	2.1		
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	37	-	482	1940:1824	600+23	77.3 : 77.3%	18	0	0	6.6	49.5	15.9		
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	46:7	-	730	1910:1848	723+116	87.0 : 87.0%	-	-	-	10.5	51.8	22.0		
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	40	-	318	1904:1848	578+105	46.6 : 46.6%	47	1	1	3.3	37.8	7.7		
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	46	-	584	1940:1764	746+21	76.2 : 76.2%	-	-	-	6.7	41.1	18.1		
4/3	North Ring Road Eastbound Right	U	G		1	12	-	96	1848	200	48.0%	-	-	-	1.8	67.5	3.4		
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6		
C1 - North Ring		PRC for Signalled Lanes (%):		3.4		PRC Over All Lanes (%):		3.4		Total Delay for Signalled Lanes (pcuHr):		29.73		Total Delay Over All Lanes(pcuHr):		29.73		Cycle Time (s): 120	

Basic Results Summary

Scenario 28: '2029 PM No Dev' (FG28: '2029 no dev PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

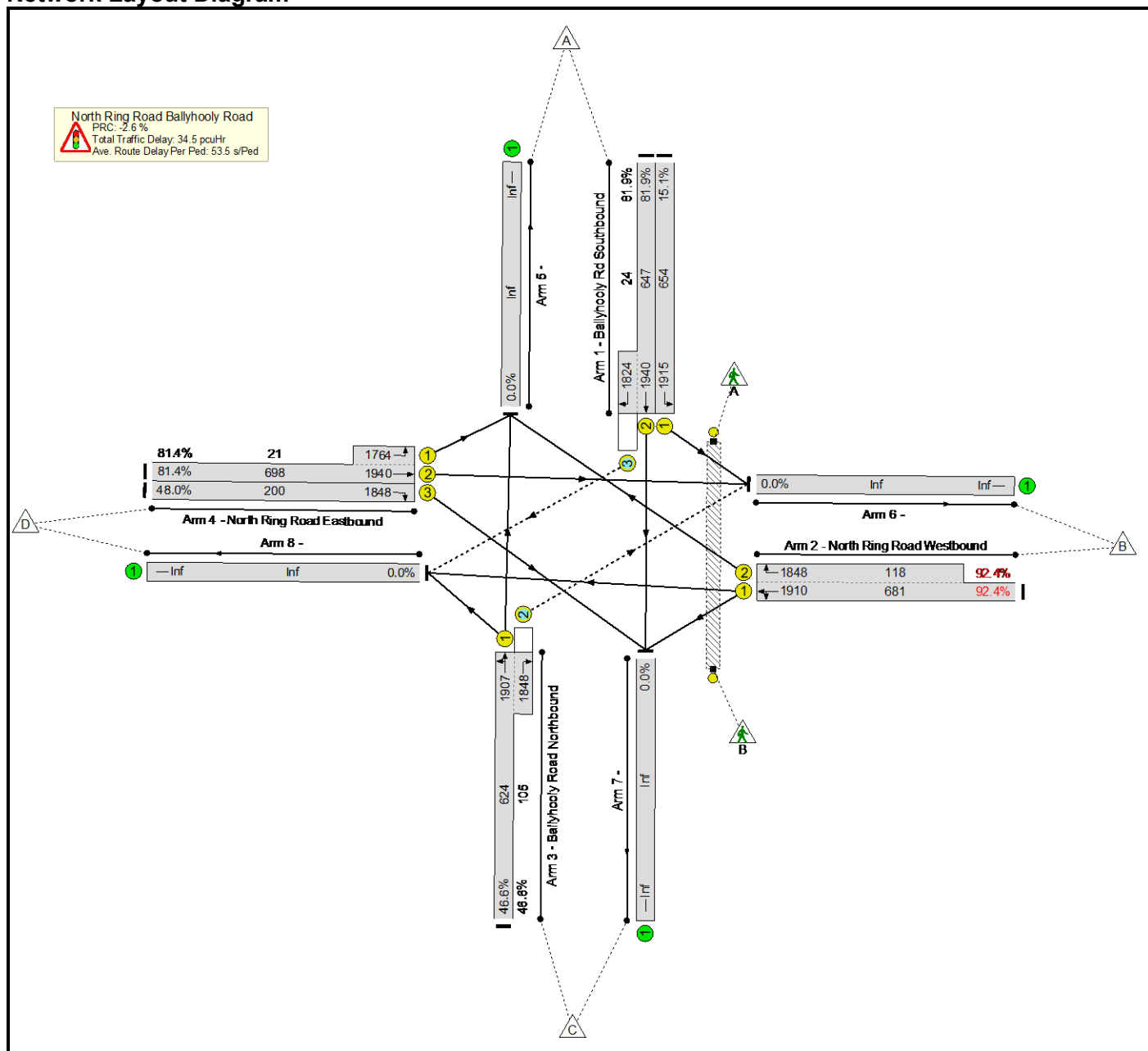
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)	
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>86.3%</b>	<b>82</b>	<b>2</b>	<b>1</b>	<b>32.3</b>	-	-	
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	<b>86.3%</b>	<b>82</b>	<b>2</b>	<b>1</b>	<b>32.3</b>	-	-	
1/1	Ballyhooley Rd Southbound Left	U	A		1	34	-	110	1915	559	19.7%	-	-	-	1.1	36.0	2.9	
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	34	-	300	1940:1824	555+19	52.2 : 52.2%	10	0	0	3.6	42.6	8.6	
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	49:10	-	743	1921:1848	768+169	78.6 : 82.6%	-	-	-	8.9	43.3	19.0	
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	37	-	546	1908:1848	546+87	86.3 : 86.3%	72	2	1	8.8	57.8	19.1	
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	46	-	651	1940:1764	747+20	84.9 : 84.9%	-	-	-	8.7	47.9	22.3	
4/3	North Ring Road Eastbound Right	U	G		1	12	-	70	1848	200	35.0%	-	-	-	1.2	63.4	2.4	
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6	
C1 - North Ring				PRC for Signalled Lanes (%):		4.3		Total Delay for Signalled Lanes (pcuHr):				32.27		Cycle Time (s): 120				
				PRC Over All Lanes (%):		4.3		Total Delay Over All Lanes(pcuHr):				32.27						

Basic Results Summary

Scenario 29: '2029 AM with Dev' (FG29: '2029 with dev AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

**Network Results**

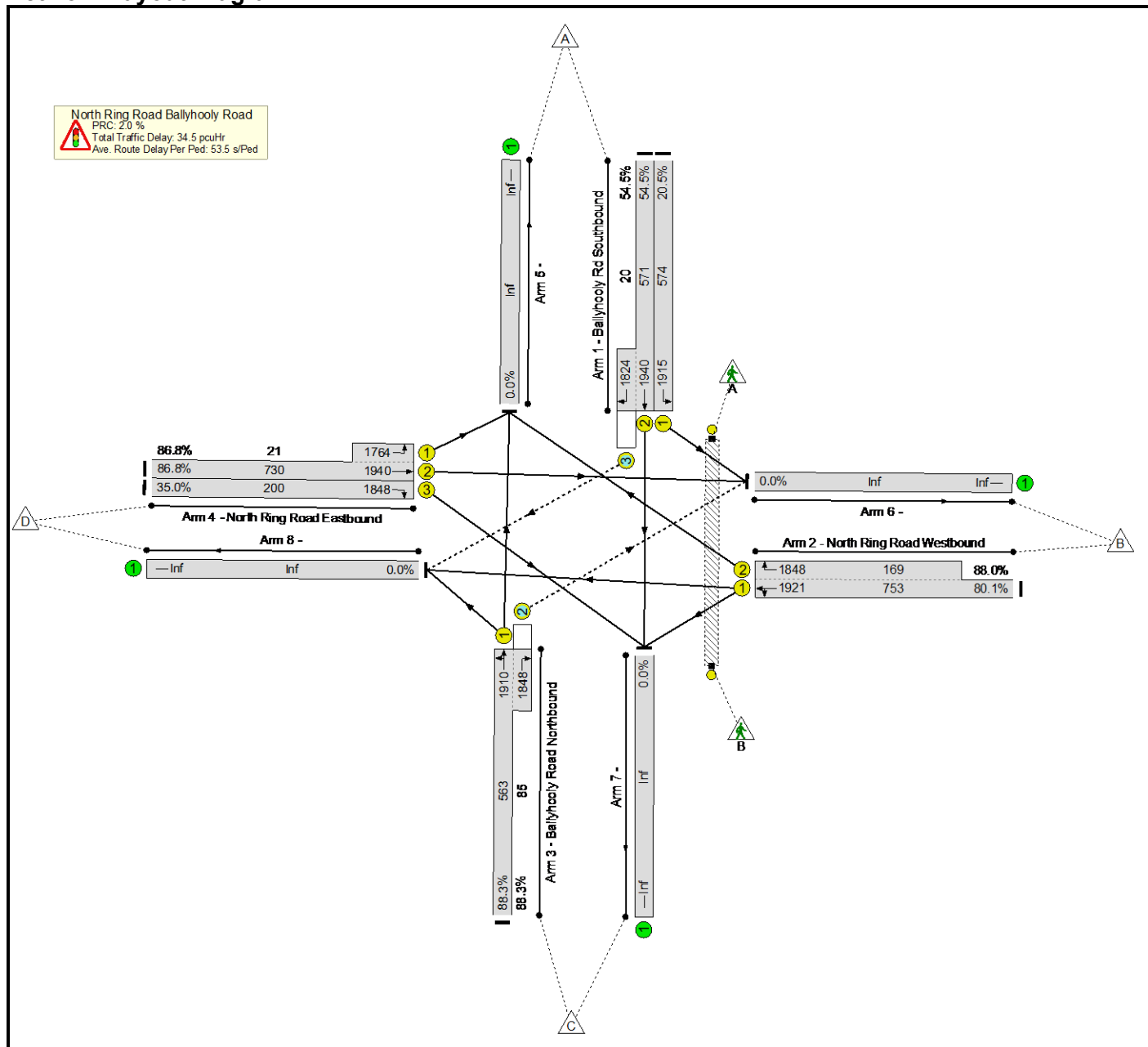
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
<b>Network</b>	-	-	-		-	-	-	-	-	-	92.4%	67	1	1	34.5	-	-	
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	92.4%	67	1	1	34.5	-	-	
1/1	Ballyhooley Rd Southbound Left	U	A		1	40	-	99	1915	654	15.1%	-	-	-	0.8	30.7	2.4	
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	40	-	550	1940:1824	647+24	81.9 : 81.9%	20	0	0	7.7	50.3	18.6	
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	43:7	-	738	1910:1848	681+118	92.4 : 92.4%	-	-	-	13.1	64.0	24.9	
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	43	-	340	1907:1848	624+105	46.6 : 46.6%	47	1	1	3.4	35.9	8.1	
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	43	-	585	1940:1764	698+21	81.4 : 81.4%	-	-	-	7.7	47.1	19.5	
4/3	North Ring Road Eastbound Right	U	G		1	12	-	96	1848	200	48.0%	-	-	-	1.8	67.5	3.4	
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6	
C1 - North Ring				PRC for Signalled Lanes (%):		-2.6		Total Delay for Signalled Lanes (pcuHr):				34.51		Cycle Time (s): 120				
				PRC Over All Lanes (%):		-2.6		Total Delay Over All Lanes(pcuHr):				34.51						



Basic Results Summary

Scenario 30: '2029 PM with Dev' (FG30: '2029 with dev PM', 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)	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)		
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>88.3%</b>	<b>83</b>	<b>2</b>	<b>1</b>	<b>34.5</b>	-	-		
<b>North Ring Road Ballyhooley Road</b>	-	-	-		-	-	-	-	-	-	<b>88.3%</b>	<b>83</b>	<b>2</b>	<b>1</b>	<b>34.5</b>	-	-		
1/1	Ballyhooley Rd Southbound Left	U	A		1	35	-	118	1915	574	20.5%	-	-	-	1.2	35.3	3.0		
1/2+1/3	Ballyhooley Rd Southbound Ahead Right	U+O	A		1	35	-	322	1940:1824	571+20	54.5 : 54.5%	11	0	0	3.8	42.5	9.4		
2/1+2/2	North Ring Road Westbound Right Left Ahead	U	B C		1	48:10	-	752	1921:1848	753+169	80.1 : 88.0%	-	-	-	9.5	45.5	19.4		
3/1+3/2	Ballyhooley Road Northbound Ahead Right Left	U+O	D		1	38	-	572	1910:1848	563+85	88.3 : 88.3%	72	2	1	9.5	59.9	20.6		
4/2+4/1	North Ring Road Eastbound Left Ahead	U	F		1	45	-	652	1940:1764	730+21	86.8 : 86.8%	-	-	-	9.3	51.1	22.9		
4/3	North Ring Road Eastbound Right	U	G		1	12	-	70	1848	200	35.0%	-	-	-	1.2	63.4	2.4		
Ped Link: P1	North Ring Road	-	H		1	8	-	20	-	4800	0.4%	-	-	-	0.3	53.5	0.6		
C1 - North Ring		PRC for Signalled Lanes (%):		2.0		PRC Over All Lanes (%):		2.0		Total Delay for Signalled Lanes (pcuHr):		34.49		Total Delay Over All Lanes(pcuHr):		34.49		Cycle Time (s): 120	

Junctions 9
PICADY 9 - Priority Intersection Module
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Filename: Site 12 AM PM 2019.j9

Path: N:\HOUS\_DEV\PH\_Ballyvolane\TIA\Picady 2019\TModelling 2019\Site 12\_Upper Dublin Hill Junction

Report generation date: 20/11/2019 16:10:18

- »Existing Junction - 2022 no dev, AM
- »Existing Junction - 2019, PM
- »Existing Junction - 2022 No Dev, PM
- »Existing Junction - 2019 [D4], AM
- »Existing Junction - 2022 with dev , AM
- »Existing Junction - 2022 with Dev, PM
- »Existing Junction - 2023 no dev [D7], AM
- »Existing Junction - 2023 No Dev, PM
- »Existing Junction - 2023 with dev , AM
- »Existing Junction - 2023 with Dev , PM
- »Existing Junction - 2024 no dev , AM
- »Existing Junction - 2024 No Dev , PM
- »Existing Junction - 2024 with dev , AM
- »Existing Junction - 2024 with Dev , PM
- »Existing Junction - 2025 no dev , AM
- »Existing Junction - 2025 No Dev , PM
- »Existing Junction - 2025 with dev, AM
- »Existing Junction - 2025 with Dev, PM
- »Existing Junction - 2026 no dev , AM
- »Existing Junction - 2026 No Dev , PM
- »Existing Junction - 2026 with dev, AM
- »Existing Junction - 2026 with Dev , PM
- »Existing Junction - 2027 no dev , AM
- »Existing Junction - 2027 No Dev , PM
- »Existing Junction - 2027 with dev, AM
- »Existing Junction - 2027 with Dev , PM
- »Existing Junction - 2029 no dev , AM
- »Existing Junction - 2029 No Dev , PM
- »Existing Junction - 2029 with dev, AM
- »Existing Junction - 2029 with Dev , PM

**Summary of junction performance**

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
<b>Existing Junction - 2022 no dev</b>								
Stream B-C	1.0	16.42	0.50	C				
Stream B-A	0.8	27.86	0.44	D				
Stream C-AB	0.7	8.85	0.32	A				

Existing Junction - 2019							
Stream B-C				0.7	17.89	0.40	C
Stream B-A				1.8	32.90	0.66	D
Stream C-AB				1.0	6.96	0.38	A
Existing Junction - 2022 No Dev							
Stream B-C				0.8	20.91	0.45	C
Stream B-A				2.2	38.47	0.70	E
Stream C-AB				1.1	7.14	0.40	A
Existing Junction - 2019 [D4]							
Stream B-C	0.9	15.00	0.47	C			
Stream B-A	0.7	25.26	0.41	D			
Stream C-AB	0.6	8.67	0.30	A			
Existing Junction - 2022 with dev							
Stream B-C	1.0	16.81	0.51	C			
Stream B-A	0.8	28.73	0.45	D			
Stream C-AB	0.7	9.09	0.34	A			
Existing Junction - 2022 with Dev							
Stream B-C				0.9	22.05	0.48	C
Stream B-A				2.3	40.35	0.71	E
Stream C-AB				1.1	7.26	0.41	A
Existing Junction - 2023 no dev [D7]							
Stream B-C	1.0	17.11	0.52	C			
Stream B-A	0.8	29.12	0.45	D			
Stream C-AB	0.7	8.96	0.33	A			
Existing Junction - 2023 No Dev							
Stream B-C				0.9	22.32	0.47	C
Stream B-A				2.3	40.94	0.72	E
Stream C-AB				1.1	7.21	0.41	A
Existing Junction - 2023 with dev							
Stream B-C	1.1	18.09	0.54	C			
Stream B-A	0.9	31.41	0.47	D			
Stream C-AB	0.8	9.61	0.37	A			
Existing Junction - 2023 with Dev							
Stream B-C				1.0	23.97	0.50	C
Stream B-A				2.5	43.55	0.73	E
Stream C-AB				1.1	7.38	0.42	A
Existing Junction - 2024 no dev							
Stream B-C	1.1	17.72	0.53	C			
Stream B-A	0.8	30.24	0.47	D			
Stream C-AB	0.7	9.03	0.33	A			
Existing Junction - 2024 No Dev							
Stream B-C				0.9	23.99	0.49	C
Stream B-A				2.5	43.61	0.73	E
Stream C-AB				1.1	7.26	0.42	A
Existing Junction - 2024 with dev							
Stream B-C	1.2	19.23	0.56	C			
Stream B-A	0.9	33.76	0.49	D			
Stream C-AB	0.9	10.00	0.40	A			
Existing Junction - 2024 with Dev							
Stream B-C				1.1	27.08	0.54	D
Stream B-A				2.7	48.26	0.75	E
Stream C-AB				1.2	7.53	0.44	A
Existing Junction - 2025 no dev							
Stream B-C	1.1	18.43	0.54	C			
Stream B-A	0.9	31.54	0.48	D			

Stream C-AB	0.7	9.10	0.34	A				
<b>Existing Junction - 2025 No Dev</b>								
Stream B-C					1.0	26.49	0.52	D
Stream B-A					2.7	47.41	0.75	E
Stream C-AB					1.2	7.34	0.42	A
<b>Existing Junction - 2025 with dev</b>								
Stream B-C	1.3	20.79	0.58	C				
Stream B-A	1.0	36.87	0.52	E				
Stream C-AB	1.0	10.41	0.42	B				
<b>Existing Junction - 2025 with Dev</b>								
Stream B-C					1.3	31.39	0.58	D
Stream B-A					3.1	54.07	0.78	F
Stream C-AB					1.3	7.66	0.45	A
<b>Existing Junction - 2026 no dev</b>								
Stream B-C	1.2	19.20	0.55	C				
Stream B-A	0.9	32.93	0.49	D				
Stream C-AB	0.7	9.18	0.34	A				
<b>Existing Junction - 2026 No Dev</b>								
Stream B-C					1.2	29.27	0.55	D
Stream B-A					3.0	51.33	0.77	F
Stream C-AB					1.2	7.42	0.43	A
<b>Existing Junction - 2026 with dev</b>								
Stream B-C	1.5	22.22	0.60	C				
Stream B-A	1.1	39.73	0.54	E				
Stream C-AB	1.1	10.76	0.44	B				
<b>Existing Junction - 2026 with Dev</b>								
Stream B-C					1.6	37.24	0.63	E
Stream B-A					3.5	61.00	0.81	F
Stream C-AB					1.3	7.84	0.46	A
<b>Existing Junction - 2027 no dev</b>								
Stream B-C	1.3	20.00	0.56	C				
Stream B-A	1.0	34.37	0.51	D				
Stream C-AB	0.8	9.25	0.35	A				
<b>Existing Junction - 2027 No Dev</b>								
Stream B-C					1.3	32.25	0.57	D
Stream B-A					3.2	55.17	0.79	F
Stream C-AB					1.2	7.47	0.44	A
<b>Existing Junction - 2027 with dev</b>								
Stream B-C	1.6	24.55	0.63	C				
Stream B-A	1.3	44.41	0.57	E				
Stream C-AB	1.2	11.39	0.47	B				
<b>Existing Junction - 2027 with Dev</b>								
Stream B-C					1.9	44.10	0.68	E
Stream B-A					3.9	67.60	0.83	F
Stream C-AB					1.4	8.02	0.48	A
<b>Existing Junction - 2029 no dev</b>								
Stream B-C	1.4	22.28	0.60	C				
Stream B-A	1.1	38.49	0.54	E				
Stream C-AB	0.8	9.46	0.36	A				
<b>Existing Junction - 2029 No Dev</b>								
Stream B-C					1.7	42.95	0.65	E
Stream B-A					3.9	66.55	0.83	F
Stream C-AB					1.3	7.66	0.45	A
<b>Existing Junction - 2029 with dev</b>								
Stream B-C	2.1	31.32	0.70	D				

Stream B-A	1.6	57.34	0.64	F				
Stream C-AB	1.5	12.62	0.52	B				
<b>Existing Junction - 2029 with Dev</b>								
Stream B-C					3.9	85.09	0.86	F
Stream B-A					5.6	94.59	0.90	F
Stream C-AB					1.6	8.38	0.50	A

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

## File summary

### File Description

<b>Title</b>	(untitled)
<b>Location</b>	
<b>Site number</b>	
<b>Date</b>	20/09/2019
<b>Version</b>	
<b>Status</b>	(new file)
<b>Identifier</b>	
<b>Client</b>	
<b>Jobnumber</b>	
<b>Enumerator</b>	MHL\NOMahony
<b>Description</b>	

## Units

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

## Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

### Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022 no dev	AM	ONE HOUR	08:00	09:30	15
D2	2019	PM	ONE HOUR	17:00	18:30	15
D3	2022 No Dev	PM	ONE HOUR	17:00	18:30	15
D4	2019 [D4]	AM	ONE HOUR	08:00	09:30	15
D5	2022 with dev	AM	ONE HOUR	08:00	09:30	15
D6	2022 with Dev	PM	ONE HOUR	17:00	18:30	15
D7	2023 no dev [D7]	AM	ONE HOUR	08:00	09:30	15
D8	2023 No Dev	PM	ONE HOUR	17:00	18:30	15
D9	2023 with dev	AM	ONE HOUR	08:00	09:30	15
D10	2023 with Dev	PM	ONE HOUR	17:00	18:30	15
D11	2024 no dev	AM	ONE HOUR	08:00	09:30	15
D12	2024 No Dev	PM	ONE HOUR	17:00	18:30	15
D13	2024 with dev	AM	ONE HOUR	08:00	09:30	15
D14	2024 with Dev	PM	ONE HOUR	17:00	18:30	15
D15	2025 no dev	AM	ONE HOUR	08:00	09:30	15
D16	2025 No Dev	PM	ONE HOUR	17:00	18:30	15
D17	2025 with dev	AM	ONE HOUR	08:00	09:30	15
D18	2025 with Dev	PM	ONE HOUR	17:00	18:30	15
D19	2026 no dev	AM	ONE HOUR	08:00	09:30	15
D20	2026 No Dev	PM	ONE HOUR	17:00	18:30	15
D21	2026 with dev	AM	ONE HOUR	08:00	09:30	15
D22	2026 with Dev	PM	ONE HOUR	17:00	18:30	15
D23	2027 no dev	AM	ONE HOUR	08:00	09:30	15
D24	2027 No Dev	PM	ONE HOUR	17:00	18:30	15
D25	2027 with dev	AM	ONE HOUR	08:00	09:30	15
D26	2027 with Dev	PM	ONE HOUR	17:00	18:30	15
D27	2029 no dev	AM	ONE HOUR	08:00	09:30	15
D28	2029 No Dev	PM	ONE HOUR	17:00	18:30	15
D29	2029 with dev	AM	ONE HOUR	08:00	09:30	15
D30	2029 with Dev	PM	ONE HOUR	17:00	18:30	15

### Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Existing Junction	100.000

# Existing Junction - 2022 no dev, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	5.59	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Arms

### Arms

Arm	Name	Description	Arm type
A	Upper Dublin Hill		Major
B	Kilbarry Link Road		Minor
C	Lower Dublin Hill		Major

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00			180.0	✓	0.00

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

### Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	6.50	6.00	3.50	3.50	3.50	✓	1.00	90	90

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	496	0.090	0.228	0.144	0.326
1	B-C	736	0.113	0.285	-	-
1	C-B	678	0.263	0.263	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022 no dev	AM	ONE HOUR	08:00	09:30	15



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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	706	100.000
B		✓	292	100.000
C		✓	316	100.000

## Origin-Destination Data

### Demand (Veh/hr)

From	To		
	A	B	C
A	0	196	510
B	92	0	200
C	210	106	0

## Vehicle Mix

### Heavy Vehicle Percentages

From	To		
	A	B	C
A	0	4	1
B	4	0	3
C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.50	16.42	1.0	C
B-A	0.44	27.86	0.8	D
C-AB	0.32	8.85	0.7	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	151	552	0.273	149	0.4	8.909	A
B-A	69	321	0.216	68	0.3	14.168	B
C-AB	109	597	0.182	107	0.3	7.339	A
C-A	129			129			
A-B	148			148			
A-C	384			384			

**08:15 - 08:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	180	511	0.352	179	0.5	10.832	B
B-A	83	286	0.289	82	0.4	17.620	C
C-AB	140	598	0.234	139	0.4	7.879	A
C-A	144			144			
A-B	176			176			
A-C	458			458			

**08:30 - 08:45**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	220	441	0.499	218	1.0	16.027	C
B-A	101	231	0.438	100	0.7	27.164	D
C-AB	191	599	0.319	190	0.6	8.835	A
C-A	157			157			
A-B	216			216			
A-C	562			562			

**08:45 - 09:00**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	220	439	0.501	220	1.0	16.420	C
B-A	101	230	0.440	101	0.8	27.864	D
C-AB	191	600	0.319	191	0.7	8.846	A
C-A	157			157			
A-B	216			216			
A-C	562			562			

**09:00 - 09:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	180	509	0.353	182	0.6	11.062	B
B-A	83	285	0.290	84	0.4	18.001	C
C-AB	140	598	0.234	141	0.4	7.876	A
C-A	144			144			
A-B	176			176			
A-C	458			458			

**09:15 - 09:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	151	550	0.274	151	0.4	9.039	A
B-A	69	321	0.216	70	0.3	14.372	B
C-AB	109	598	0.182	109	0.3	7.371	A
C-A	129			129			
A-B	148			148			
A-C	384			384			

# Existing Junction - 2019, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	8.63	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2019	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	381	100.000
B		✓	312	100.000
C		✓	524	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	131	250
	B	188	0	124
	C	375	149	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.40	17.89	0.7	C
B-A	0.66	32.90	1.8	D
C-AB	0.38	6.96	1.0	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	93	487	0.192	92	0.2	9.107	A
B-A	142	398	0.355	139	0.5	13.794	B
C-AB	175	783	0.224	174	0.4	5.906	A
C-A	219			219			
A-B	99			99			
A-C	188			188			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	111	440	0.254	111	0.3	10.941	B
B-A	169	365	0.462	168	0.8	18.104	C
C-AB	231	808	0.286	230	0.6	6.242	A
C-A	240			240			
A-B	118			118			
A-C	225			225			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	137	344	0.396	135	0.6	17.115	C
B-A	207	316	0.655	203	1.7	30.946	D
C-AB	323	843	0.383	322	1.0	6.920	A
C-A	254			254			
A-B	144			144			
A-C	275			275			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	137	337	0.405	136	0.7	17.891	C
B-A	207	315	0.657	207	1.8	32.905	D
C-AB	324	844	0.384	324	1.0	6.958	A
C-A	253			253			
A-B	144			144			
A-C	275			275			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	111	433	0.257	113	0.4	11.285	B
B-A	169	365	0.464	173	0.9	19.098	C
C-AB	232	808	0.286	233	0.6	6.290	A
C-A	240			240			
A-B	118			118			
A-C	225			225			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	93	483	0.193	94	0.2	9.249	A
B-A	142	398	0.356	143	0.6	14.208	B
C-AB	176	783	0.225	177	0.4	5.956	A
C-A	218			218			
A-B	99			99			
A-C	188			188			

# Existing Junction - 2022 No Dev, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	9.91	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2022 No Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	393	100.000
B		✓	322	100.000
C		✓	541	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	135	258
	B	194	0	128
	C	387	154	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.45	20.91	0.8	C
B-A	0.70	38.47	2.2	E
C-AB	0.40	7.14	1.1	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	96	481	0.200	95	0.2	9.322	A
B-A	146	393	0.372	144	0.6	14.313	B
C-AB	184	787	0.234	182	0.4	5.950	A
C-A	223			223			
A-B	102			102			
A-C	194			194			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	115	429	0.268	115	0.4	11.442	B
B-A	174	359	0.486	173	0.9	19.244	C
C-AB	243	813	0.299	242	0.6	6.324	A
C-A	243			243			
A-B	121			121			
A-C	232			232			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	141	322	0.438	139	0.8	19.546	C
B-A	214	307	0.696	209	2.0	35.304	E
C-AB	342	850	0.403	340	1.0	7.090	A
C-A	254			254			
A-B	149			149			
A-C	284			284			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	141	313	0.451	141	0.8	20.911	C
B-A	214	305	0.699	213	2.2	38.467	E
C-AB	343	850	0.403	343	1.1	7.136	A
C-A	253			253			
A-B	149			149			
A-C	284			284			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	115	420	0.274	117	0.4	11.932	B
B-A	174	358	0.488	179	1.0	20.665	C
C-AB	244	814	0.300	246	0.7	6.374	A
C-A	242			242			
A-B	121			121			
A-C	232			232			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	96	476	0.202	97	0.3	9.497	A
B-A	146	392	0.372	148	0.6	14.806	B
C-AB	185	787	0.235	186	0.5	6.002	A
C-A	222			222			
A-B	102			102			
A-C	194			194			



# Existing Junction - 2019 [D4], AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	5.16	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2019 [D4]	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	684	100.000
B		✓	283	100.000
C		✓	306	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	190	494
	B	89	0	194
	C	203	103	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.47	15.00	0.9	C
B-A	0.41	25.26	0.7	D
C-AB	0.30	8.67	0.6	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	146	558	0.262	145	0.4	8.686	A
B-A	67	326	0.205	66	0.3	13.773	B
C-AB	104	597	0.175	103	0.3	7.281	A
C-A	126			126			
A-B	143			143			
A-C	372			372			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	174	519	0.336	174	0.5	10.407	B
B-A	80	293	0.273	80	0.4	16.847	C
C-AB	134	597	0.224	133	0.4	7.783	A
C-A	141			141			
A-B	171			171			
A-C	444			444			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	214	455	0.469	212	0.9	14.733	B
B-A	98	241	0.407	97	0.7	24.784	C
C-AB	182	598	0.304	181	0.6	8.658	A
C-A	155			155			
A-B	209			209			
A-C	544			544			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	214	453	0.471	214	0.9	15.004	C
B-A	98	240	0.408	98	0.7	25.263	D
C-AB	182	599	0.304	182	0.6	8.666	A
C-A	155			155			
A-B	209			209			
A-C	544			544			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	174	517	0.337	176	0.5	10.582	B
B-A	80	292	0.274	81	0.4	17.140	C
C-AB	134	598	0.224	135	0.4	7.780	A
C-A	141			141			
A-B	171			171			
A-C	444			444			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	146	556	0.263	147	0.4	8.801	A
B-A	67	326	0.205	67	0.3	13.946	B
C-AB	105	598	0.175	105	0.3	7.305	A
C-A	126			126			
A-B	143			143			
A-C	372			372			

# Existing Junction - 2022 with dev , AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	5.81	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2022 with dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	706	100.000
B		✓	295	100.000
C		✓	322	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	196	510
	B	92	0	203
	C	210	112	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.51	16.81	1.0	C
B-A	0.45	28.73	0.8	D
C-AB	0.34	9.09	0.7	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	153	552	0.277	151	0.4	8.957	A
B-A	69	319	0.217	68	0.3	14.309	B
C-AB	115	597	0.192	113	0.3	7.433	A
C-A	128			128			
A-B	148			148			
A-C	384			384			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	182	510	0.358	182	0.5	10.932	B
B-A	83	283	0.292	82	0.4	17.881	C
C-AB	148	598	0.247	147	0.4	8.016	A
C-A	142			142			
A-B	176			176			
A-C	458			458			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	224	440	0.508	222	1.0	16.376	C
B-A	101	227	0.446	100	0.8	27.949	D
C-AB	202	599	0.337	201	0.7	9.073	A
C-A	153			153			
A-B	216			216			
A-C	562			562			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	224	437	0.511	223	1.0	16.812	C
B-A	101	226	0.448	101	0.8	28.731	D
C-AB	202	600	0.337	202	0.7	9.091	A
C-A	152			152			
A-B	216			216			
A-C	562			562			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	182	508	0.359	184	0.6	11.180	B
B-A	83	282	0.293	84	0.4	18.295	C
C-AB	148	598	0.248	149	0.4	8.019	A
C-A	141			141			
A-B	176			176			
A-C	458			458			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	153	550	0.278	154	0.4	9.095	A
B-A	69	318	0.218	70	0.3	14.521	B
C-AB	115	598	0.193	116	0.3	7.463	A
C-A	127			127			
A-B	148			148			
A-C	384			384			

# Existing Junction - 2022 with Dev, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	10.42	B

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2022 with Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	393	100.000
B		✓	328	100.000
C		✓	545	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	135	258
	B	194	0	134
	C	387	158	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.48	22.05	0.9	C
B-A	0.71	40.35	2.3	E
C-AB	0.41	7.26	1.1	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	101	483	0.209	100	0.3	9.362	A
B-A	146	390	0.374	144	0.6	14.458	B
C-AB	189	787	0.240	187	0.5	5.997	A
C-A	221			221			
A-B	102			102			
A-C	194			194			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	120	430	0.280	120	0.4	11.581	B
B-A	174	356	0.490	173	0.9	19.570	C
C-AB	249	813	0.307	249	0.7	6.392	A
C-A	241			241			
A-B	121			121			
A-C	232			232			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	148	320	0.460	146	0.8	20.412	C
B-A	214	302	0.706	209	2.1	36.708	E
C-AB	351	850	0.413	349	1.1	7.213	A
C-A	249			249			
A-B	149			149			
A-C	284			284			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	148	310	0.476	147	0.9	22.052	C
B-A	214	301	0.710	213	2.3	40.354	E
C-AB	352	850	0.414	352	1.1	7.263	A
C-A	248			248			
A-B	149			149			
A-C	284			284			



**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	120	421	0.286	122	0.4	12.137	B
B-A	174	354	0.492	179	1.0	21.137	C
C-AB	250	814	0.308	252	0.7	6.448	A
C-A	240			240			
A-B	121			121			
A-C	232			232			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	101	479	0.211	101	0.3	9.549	A
B-A	146	390	0.375	148	0.6	14.972	B
C-AB	190	788	0.241	191	0.5	6.054	A
C-A	220			220			
A-B	102			102			
A-C	194			194			

# Existing Junction - 2023 no dev [D7], AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	5.82	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2023 no dev [D7]	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	714	100.000
B		✓	296	100.000
C		✓	320	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	198	516
	B	93	0	203
	C	212	108	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.52	17.11	1.0	C
B-A	0.45	29.12	0.8	D
C-AB	0.33	8.96	0.7	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	153	550	0.278	151	0.4	9.006	A
B-A	70	319	0.220	69	0.3	14.342	B
C-AB	111	597	0.186	110	0.3	7.380	A
C-A	130			130			
A-B	149			149			
A-C	388			388			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	182	508	0.359	182	0.6	11.022	B
B-A	84	283	0.296	83	0.4	17.967	C
C-AB	143	597	0.239	143	0.4	7.941	A
C-A	145			145			
A-B	178			178			
A-C	464			464			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	224	436	0.513	222	1.0	16.648	C
B-A	102	227	0.452	101	0.8	28.298	D
C-AB	196	599	0.327	195	0.7	8.944	A
C-A	157			157			
A-B	218			218			
A-C	568			568			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	224	434	0.516	223	1.0	17.113	C
B-A	102	226	0.454	102	0.8	29.122	D
C-AB	196	599	0.327	196	0.7	8.957	A
C-A	156			156			
A-B	218			218			
A-C	568			568			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	182	505	0.361	184	0.6	11.276	B
B-A	84	282	0.296	85	0.4	18.396	C
C-AB	143	598	0.240	144	0.4	7.939	A
C-A	144			144			
A-B	178			178			
A-C	464			464			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	153	548	0.279	154	0.4	9.145	A
B-A	70	318	0.220	71	0.3	14.558	B
C-AB	111	598	0.186	112	0.3	7.409	A
C-A	129			129			
A-B	149			149			
A-C	388			388			

# Existing Junction - 2023 No Dev, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	10.46	B

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2023 No Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	398	100.000
B		✓	325	100.000
C		✓	548	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	137	261
	B	196	0	129
	C	392	156	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.47	22.32	0.9	C
B-A	0.72	40.94	2.3	E
C-AB	0.41	7.21	1.1	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	97	478	0.203	96	0.3	9.401	A
B-A	148	391	0.377	145	0.6	14.508	B
C-AB	188	788	0.238	186	0.4	5.969	A
C-A	225			225			
A-B	103			103			
A-C	196			196			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	116	425	0.273	115	0.4	11.631	B
B-A	176	356	0.495	175	0.9	19.689	C
C-AB	248	815	0.305	247	0.6	6.357	A
C-A	244			244			
A-B	123			123			
A-C	235			235			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	142	313	0.453	140	0.8	20.613	C
B-A	216	303	0.712	211	2.2	37.144	E
C-AB	350	852	0.411	348	1.1	7.164	A
C-A	253			253			
A-B	151			151			
A-C	287			287			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	142	303	0.469	142	0.9	22.318	C
B-A	216	302	0.715	215	2.3	40.935	E
C-AB	351	853	0.411	351	1.1	7.213	A
C-A	253			253			
A-B	151			151			
A-C	287			287			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	116	415	0.280	118	0.4	12.195	B
B-A	176	355	0.496	181	1.0	21.316	C
C-AB	249	816	0.305	251	0.7	6.410	A
C-A	244			244			
A-B	123			123			
A-C	235			235			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	97	474	0.205	98	0.3	9.590	A
B-A	148	390	0.378	149	0.6	15.032	C
C-AB	189	789	0.239	190	0.5	6.025	A
C-A	224			224			
A-B	103			103			
A-C	196			196			

# Existing Junction - 2023 with dev , AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	6.36	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2023 with dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	714	100.000
B		✓	302	100.000
C		✓	335	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	198	516
	B	93	0	209
	C	212	123	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0



## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.54	18.09	1.1	C
B-A	0.47	31.41	0.9	D
C-AB	0.37	9.61	0.8	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	157	549	0.286	156	0.4	9.110	A
B-A	70	313	0.224	69	0.3	14.679	B
C-AB	126	597	0.212	125	0.3	7.616	A
C-A	126			126			
A-B	149			149			
A-C	388			388			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	188	507	0.371	187	0.6	11.246	B
B-A	84	276	0.303	83	0.4	18.604	C
C-AB	163	597	0.273	162	0.5	8.301	A
C-A	138			138			
A-B	178			178			
A-C	464			464			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	230	432	0.533	228	1.1	17.499	C
B-A	102	218	0.470	101	0.8	30.336	D
C-AB	223	599	0.372	222	0.8	9.584	A
C-A	146			146			
A-B	218			218			
A-C	568			568			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	230	429	0.537	230	1.1	18.086	C
B-A	102	217	0.473	102	0.9	31.408	D
C-AB	223	600	0.372	223	0.8	9.613	A
C-A	146			146			
A-B	218			218			
A-C	568			568			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	188	504	0.373	190	0.6	11.547	B
B-A	84	275	0.304	85	0.4	19.119	C
C-AB	163	598	0.273	165	0.5	8.313	A
C-A	138			138			
A-B	178			178			
A-C	464			464			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	157	548	0.287	158	0.4	9.259	A
B-A	70	313	0.224	71	0.3	14.922	B
C-AB	127	598	0.212	128	0.4	7.660	A
C-A	125			125			
A-B	149			149			
A-C	388			388			

# Existing Junction - 2023 with Dev , PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	11.17	B

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2023 with Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	398	100.000
B		✓	332	100.000
C		✓	553	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	137	261
	B	196	0	136
	C	392	161	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.50	23.97	1.0	C
B-A	0.73	43.55	2.5	E
C-AB	0.42	7.38	1.1	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	102	481	0.213	101	0.3	9.453	A
B-A	148	388	0.380	145	0.6	14.689	B
C-AB	194	788	0.246	192	0.5	6.029	A
C-A	223			223			
A-B	103			103			
A-C	196			196			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	122	426	0.287	122	0.4	11.808	B
B-A	176	352	0.500	175	1.0	20.098	C
C-AB	256	815	0.314	255	0.7	6.448	A
C-A	241			241			
A-B	123			123			
A-C	235			235			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	150	311	0.482	148	0.9	21.804	C
B-A	216	298	0.724	211	2.3	39.021	E
C-AB	361	852	0.424	359	1.1	7.324	A
C-A	248			248			
A-B	151			151			
A-C	287			287			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	150	299	0.500	149	1.0	23.967	C
B-A	216	296	0.729	215	2.5	43.548	E
C-AB	362	853	0.424	362	1.1	7.377	A
C-A	247			247			
A-B	151			151			
A-C	287			287			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	122	415	0.294	124	0.4	12.464	B
B-A	176	351	0.502	182	1.1	21.945	C
C-AB	257	816	0.315	259	0.7	6.508	A
C-A	240			240			
A-B	123			123			
A-C	235			235			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	102	476	0.215	103	0.3	9.656	A
B-A	148	387	0.381	149	0.6	15.242	C
C-AB	195	789	0.247	196	0.5	6.085	A
C-A	222			222			
A-B	103			103			
A-C	196			196			

# Existing Junction - 2024 no dev , AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	6.00	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2024 no dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	722	100.000
B		✓	299	100.000
C		✓	323	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	201	521
	B	94	0	205
	C	214	109	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.53	17.72	1.1	C
B-A	0.47	30.24	0.8	D
C-AB	0.33	9.03	0.7	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	154	547	0.282	153	0.4	9.086	A
B-A	71	317	0.223	70	0.3	14.483	B
C-AB	112	597	0.188	111	0.3	7.405	A
C-A	131			131			
A-B	151			151			
A-C	392			392			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	184	505	0.365	184	0.6	11.181	B
B-A	85	281	0.301	84	0.4	18.254	C
C-AB	145	597	0.243	145	0.4	7.977	A
C-A	145			145			
A-B	181			181			
A-C	468			468			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	226	431	0.524	224	1.1	17.193	C
B-A	103	223	0.464	102	0.8	29.290	D
C-AB	199	599	0.332	198	0.7	9.015	A
C-A	157			157			
A-B	221			221			
A-C	574			574			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	226	428	0.527	226	1.1	17.724	C
B-A	103	222	0.466	103	0.8	30.236	D
C-AB	199	599	0.332	199	0.7	9.032	A
C-A	157			157			
A-B	221			221			
A-C	574			574			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	184	502	0.367	186	0.6	11.460	B
B-A	85	280	0.302	86	0.4	18.724	C
C-AB	145	598	0.243	146	0.4	7.981	A
C-A	145			145			
A-B	181			181			
A-C	468			468			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	154	546	0.283	155	0.4	9.230	A
B-A	71	317	0.223	71	0.3	14.712	B
C-AB	113	597	0.189	113	0.3	7.438	A
C-A	130			130			
A-B	151			151			
A-C	392			392			



# Existing Junction - 2024 No Dev , PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	11.09	B

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2024 No Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	402	100.000
B		✓	329	100.000
C		✓	553	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	138	264
	B	198	0	131
	C	396	157	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.49	23.99	0.9	C
B-A	0.73	43.61	2.5	E
C-AB	0.42	7.26	1.1	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	99	476	0.207	98	0.3	9.484	A
B-A	149	389	0.383	147	0.6	14.697	B
C-AB	190	790	0.240	188	0.5	5.977	A
C-A	226			226			
A-B	104			104			
A-C	199			199			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	118	421	0.280	117	0.4	11.835	B
B-A	178	354	0.503	177	1.0	20.126	C
C-AB	251	816	0.308	251	0.7	6.374	A
C-A	246			246			
A-B	124			124			
A-C	237			237			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	144	305	0.472	142	0.9	21.839	C
B-A	218	300	0.727	213	2.3	39.071	E
C-AB	355	854	0.416	353	1.1	7.207	A
C-A	254			254			
A-B	152			152			
A-C	291			291			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	144	294	0.491	144	0.9	23.986	C
B-A	218	298	0.731	217	2.5	43.613	E
C-AB	356	855	0.416	356	1.1	7.256	A
C-A	253			253			
A-B	152			152			
A-C	291			291			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	118	410	0.287	120	0.4	12.487	B
B-A	178	352	0.505	184	1.1	21.991	C
C-AB	252	817	0.309	254	0.7	6.429	A
C-A	245			245			
A-B	124			124			
A-C	237			237			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	99	471	0.209	99	0.3	9.684	A
B-A	149	388	0.384	151	0.6	15.258	C
C-AB	191	791	0.241	192	0.5	6.034	A
C-A	225			225			
A-B	104			104			
A-C	199			199			

# Existing Junction - 2024 with dev , AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	6.82	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2024 with dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	722	100.000
B		✓	307	100.000
C		✓	344	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	201	521
	B	94	0	213
	C	214	130	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.56	19.23	1.2	C
B-A	0.49	33.76	0.9	D
C-AB	0.40	10.00	0.9	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	160	547	0.293	159	0.4	9.230	A
B-A	71	309	0.229	70	0.3	14.959	B
C-AB	134	597	0.225	133	0.4	7.743	A
C-A	125			125			
A-B	151			151			
A-C	392			392			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	191	503	0.381	191	0.6	11.498	B
B-A	85	271	0.312	84	0.4	19.171	C
C-AB	173	597	0.290	172	0.5	8.505	A
C-A	136			136			
A-B	181			181			
A-C	468			468			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	235	425	0.552	232	1.2	18.484	C
B-A	103	211	0.491	102	0.9	32.384	D
C-AB	237	599	0.396	236	0.9	9.959	A
C-A	142			142			
A-B	221			221			
A-C	574			574			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	235	421	0.557	234	1.2	19.230	C
B-A	103	210	0.494	103	0.9	33.760	D
C-AB	238	600	0.396	238	0.9	9.997	A
C-A	141			141			
A-B	221			221			
A-C	574			574			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	191	500	0.383	194	0.6	11.851	B
B-A	85	270	0.313	86	0.5	19.784	C
C-AB	174	598	0.290	175	0.6	8.522	A
C-A	136			136			
A-B	181			181			
A-C	468			468			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	160	545	0.294	161	0.4	9.392	A
B-A	71	309	0.229	71	0.3	15.225	C
C-AB	135	597	0.225	135	0.4	7.793	A
C-A	124			124			
A-B	151			151			
A-C	392			392			

# Existing Junction - 2024 with Dev , PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	12.34	B

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2024 with Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	402	100.000
B		✓	339	100.000
C		✓	561	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	138	264
	B	198	0	141
	C	396	165	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.54	27.08	1.1	D
B-A	0.75	48.26	2.7	E
C-AB	0.44	7.53	1.2	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	106	480	0.221	105	0.3	9.566	A
B-A	149	385	0.388	147	0.6	14.975	B
C-AB	200	790	0.253	198	0.5	6.072	A
C-A	223			223			
A-B	104			104			
A-C	199			199			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	127	423	0.300	126	0.4	12.117	B
B-A	178	348	0.511	176	1.0	20.777	C
C-AB	264	816	0.324	263	0.7	6.521	A
C-A	240			240			
A-B	124			124			
A-C	237			237			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	155	301	0.516	153	1.0	23.949	C
B-A	218	292	0.747	212	2.5	42.256	E
C-AB	373	854	0.437	371	1.2	7.473	A
C-A	244			244			
A-B	152			152			
A-C	291			291			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	155	287	0.541	155	1.1	27.080	D
B-A	218	290	0.753	217	2.7	48.259	E
C-AB	374	855	0.437	374	1.2	7.534	A
C-A	244			244			
A-B	152			152			
A-C	291			291			



**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	127	410	0.309	129	0.5	12.941	B
B-A	178	346	0.514	185	1.1	23.062	C
C-AB	265	818	0.324	267	0.7	6.587	A
C-A	239			239			
A-B	124			124			
A-C	237			237			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	106	475	0.223	107	0.3	9.791	A
B-A	149	384	0.389	151	0.7	15.585	C
C-AB	201	791	0.254	202	0.5	6.133	A
C-A	222			222			
A-B	104			104			
A-C	199			199			

# Existing Junction - 2025 no dev , AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	6.21	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D15	2025 no dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	730	100.000
B		✓	302	100.000
C		✓	327	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	203	527
	B	95	0	207
	C	217	110	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.54	18.43	1.1	C
B-A	0.48	31.54	0.9	D
C-AB	0.34	9.10	0.7	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	156	545	0.286	154	0.4	9.171	A
B-A	72	315	0.227	70	0.3	14.641	B
C-AB	114	597	0.191	113	0.3	7.425	A
C-A	132			132			
A-B	153			153			
A-C	397			397			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	186	502	0.371	185	0.6	11.351	B
B-A	85	278	0.307	85	0.4	18.574	C
C-AB	147	598	0.246	147	0.4	8.009	A
C-A	147			147			
A-B	182			182			
A-C	474			474			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	228	426	0.535	226	1.1	17.811	C
B-A	105	219	0.477	103	0.9	30.435	D
C-AB	202	600	0.337	201	0.7	9.080	A
C-A	158			158			
A-B	224			224			
A-C	580			580			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	228	423	0.539	228	1.1	18.428	C
B-A	105	218	0.479	104	0.9	31.538	D
C-AB	203	600	0.338	203	0.7	9.096	A
C-A	157			157			
A-B	224			224			
A-C	580			580			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	186	499	0.373	188	0.6	11.661	B
B-A	85	277	0.308	87	0.5	19.097	C
C-AB	148	598	0.247	149	0.5	8.012	A
C-A	146			146			
A-B	182			182			
A-C	474			474			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	156	544	0.287	157	0.4	9.324	A
B-A	72	315	0.227	72	0.3	14.878	B
C-AB	114	598	0.192	115	0.3	7.455	A
C-A	132			132			
A-B	153			153			
A-C	397			397			

# Existing Junction - 2025 No Dev , PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	12.01	B

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D16	2025 No Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	407	100.000
B		✓	333	100.000
C		✓	559	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	140	267
	B	201	0	132
	C	400	159	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.52	26.49	1.0	D
B-A	0.75	47.41	2.7	E
C-AB	0.42	7.34	1.2	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	99	473	0.210	98	0.3	9.593	A
B-A	151	387	0.391	149	0.6	14.937	B
C-AB	193	791	0.244	191	0.5	5.999	A
C-A	228			228			
A-B	105			105			
A-C	201			201			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	119	415	0.286	118	0.4	12.095	B
B-A	181	351	0.514	179	1.0	20.697	C
C-AB	256	818	0.313	255	0.7	6.410	A
C-A	246			246			
A-B	126			126			
A-C	240			240			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	145	294	0.495	143	0.9	23.576	C
B-A	221	296	0.747	215	2.5	41.696	E
C-AB	363	856	0.423	361	1.1	7.284	A
C-A	253			253			
A-B	154			154			
A-C	294			294			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	145	280	0.519	145	1.0	26.487	D
B-A	221	294	0.752	220	2.7	47.415	E
C-AB	363	857	0.424	363	1.2	7.340	A
C-A	252			252			
A-B	154			154			
A-C	294			294			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	119	403	0.295	121	0.4	12.881	B
B-A	181	350	0.517	187	1.1	22.927	C
C-AB	257	819	0.314	259	0.7	6.473	A
C-A	245			245			
A-B	126			126			
A-C	240			240			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	99	468	0.213	100	0.3	9.810	A
B-A	151	387	0.392	153	0.7	15.545	C
C-AB	194	792	0.245	195	0.5	6.055	A
C-A	227			227			
A-B	105			105			
A-C	201			201			

# Existing Junction - 2025 with dev, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	7.40	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D17	2025 with dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	730	100.000
B		✓	313	100.000
C		✓	354	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	203	527
	B	95	0	218
	C	217	137	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0



## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.58	20.79	1.3	C
B-A	0.52	36.87	1.0	E
C-AB	0.42	10.41	1.0	B
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	164	545	0.301	162	0.4	9.374	A
B-A	72	305	0.235	70	0.3	15.281	C
C-AB	142	597	0.238	140	0.4	7.868	A
C-A	125			125			
A-B	153			153			
A-C	397			397			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	196	499	0.393	195	0.6	11.807	B
B-A	85	266	0.322	85	0.5	19.843	C
C-AB	183	598	0.307	183	0.6	8.707	A
C-A	135			135			
A-B	182			182			
A-C	474			474			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	240	417	0.576	237	1.3	19.797	C
B-A	105	203	0.515	102	1.0	35.018	E
C-AB	252	600	0.420	250	1.0	10.360	B
C-A	138			138			
A-B	224			224			
A-C	580			580			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	240	412	0.582	240	1.3	20.790	C
B-A	105	202	0.519	104	1.0	36.869	E
C-AB	253	600	0.421	253	1.0	10.414	B
C-A	137			137			
A-B	224			224			
A-C	580			580			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	196	496	0.396	199	0.7	12.235	B
B-A	85	264	0.323	88	0.5	20.597	C
C-AB	184	599	0.308	186	0.6	8.740	A
C-A	134			134			
A-B	182			182			
A-C	474			474			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	164	543	0.302	165	0.4	9.550	A
B-A	72	304	0.235	72	0.3	15.574	C
C-AB	143	598	0.239	143	0.4	7.924	A
C-A	124			124			
A-B	153			153			
A-C	397			397			

# Existing Junction - 2025 with Dev, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	13.82	B

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D18	2025 with Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	407	100.000
B		✓	345	100.000
C		✓	568	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	140	267
	B	201	0	144
	C	400	168	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.58	31.39	1.3	D
B-A	0.78	54.07	3.1	F
C-AB	0.45	7.66	1.3	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	108	477	0.227	107	0.3	9.700	A
B-A	151	382	0.396	149	0.6	15.274	C
C-AB	204	791	0.258	202	0.5	6.109	A
C-A	223			223			
A-B	105			105			
A-C	201			201			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	129	417	0.310	129	0.4	12.462	B
B-A	181	345	0.524	179	1.1	21.505	C
C-AB	271	818	0.331	270	0.7	6.582	A
C-A	240			240			
A-B	126			126			
A-C	240			240			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	159	288	0.550	156	1.1	26.649	D
B-A	221	287	0.772	214	2.8	45.986	E
C-AB	383	856	0.447	381	1.2	7.596	A
C-A	242			242			
A-B	154			154			
A-C	294			294			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	159	271	0.584	158	1.3	31.388	D
B-A	221	284	0.779	220	3.1	54.071	F
C-AB	384	857	0.448	384	1.3	7.661	A
C-A	241			241			
A-B	154			154			
A-C	294			294			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	129	402	0.322	133	0.5	13.525	B
B-A	181	342	0.528	188	1.2	24.396	C
C-AB	272	819	0.332	274	0.8	6.652	A
C-A	239			239			
A-B	126			126			
A-C	240			240			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	108	472	0.230	109	0.3	9.945	A
B-A	151	381	0.397	153	0.7	15.946	C
C-AB	205	792	0.259	206	0.5	6.171	A
C-A	222			222			
A-B	105			105			
A-C	201			201			

# Existing Junction - 2026 no dev , AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	6.44	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D19	2026 no dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	738	100.000
B		✓	305	100.000
C		✓	330	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	205	533
	B	96	0	209
	C	219	111	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.55	19.20	1.2	C
B-A	0.49	32.93	0.9	D
C-AB	0.34	9.18	0.7	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	157	543	0.290	156	0.4	9.258	A
B-A	72	313	0.231	71	0.3	14.792	B
C-AB	115	597	0.193	114	0.3	7.452	A
C-A	133			133			
A-B	154			154			
A-C	401			401			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	188	499	0.377	187	0.6	11.528	B
B-A	86	276	0.313	86	0.4	18.897	C
C-AB	149	597	0.250	149	0.4	8.050	A
C-A	147			147			
A-B	184			184			
A-C	479			479			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	230	420	0.547	228	1.2	18.477	C
B-A	106	216	0.490	104	0.9	31.647	D
C-AB	205	599	0.343	204	0.7	9.156	A
C-A	158			158			
A-B	226			226			
A-C	587			587			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	230	417	0.552	230	1.2	19.197	C
B-A	106	215	0.493	106	0.9	32.931	D
C-AB	206	600	0.343	206	0.7	9.175	A
C-A	158			158			
A-B	226			226			
A-C	587			587			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	188	496	0.379	190	0.6	11.872	B
B-A	86	275	0.314	88	0.5	19.479	C
C-AB	150	598	0.250	151	0.5	8.056	A
C-A	147			147			
A-B	184			184			
A-C	479			479			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	157	541	0.291	158	0.4	9.418	A
B-A	72	313	0.231	73	0.3	15.044	C
C-AB	116	597	0.194	117	0.3	7.482	A
C-A	132			132			
A-B	154			154			
A-C	401			401			



# Existing Junction - 2026 No Dev , PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	12.96	B

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D20	2026 No Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	411	100.000
B		✓	337	100.000
C		✓	565	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	141	270
	B	203	0	134
	C	404	161	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.55	29.27	1.2	D
B-A	0.77	51.33	3.0	F
C-AB	0.43	7.42	1.2	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	101	470	0.214	100	0.3	9.684	A
B-A	153	385	0.397	150	0.6	15.155	C
C-AB	197	792	0.248	195	0.5	6.018	A
C-A	229			229			
A-B	106			106			
A-C	203			203			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	120	411	0.293	120	0.4	12.335	B
B-A	182	349	0.523	181	1.0	21.224	C
C-AB	261	819	0.319	260	0.7	6.446	A
C-A	247			247			
A-B	127			127			
A-C	243			243			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	148	285	0.518	145	1.0	25.385	D
B-A	224	292	0.764	217	2.7	44.275	E
C-AB	370	859	0.431	368	1.2	7.363	A
C-A	252			252			
A-B	155			155			
A-C	297			297			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	148	269	0.548	147	1.2	29.274	D
B-A	224	290	0.770	222	3.0	51.329	F
C-AB	371	859	0.432	371	1.2	7.423	A
C-A	251			251			
A-B	155			155			
A-C	297			297			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	120	397	0.303	123	0.4	13.269	B
B-A	182	347	0.526	190	1.2	23.849	C
C-AB	262	821	0.319	264	0.7	6.510	A
C-A	246			246			
A-B	127			127			
A-C	243			243			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	101	465	0.217	102	0.3	9.918	A
B-A	153	384	0.398	155	0.7	15.807	C
C-AB	198	793	0.249	199	0.5	6.078	A
C-A	228			228			
A-B	106			106			
A-C	203			203			

# Existing Junction - 2026 with dev, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	7.91	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D21	2026 with dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	738	100.000
B		✓	317	100.000
C		✓	361	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	205	533
	B	96	0	221
	C	219	142	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.60	22.22	1.5	C
B-A	0.54	39.73	1.1	E
C-AB	0.44	10.76	1.1	B
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	166	542	0.307	165	0.4	9.487	A
B-A	72	302	0.240	71	0.3	15.537	C
C-AB	148	597	0.247	146	0.4	7.969	A
C-A	124			124			
A-B	154			154			
A-C	401			401			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	199	495	0.401	198	0.7	12.058	B
B-A	86	261	0.330	86	0.5	20.392	C
C-AB	191	597	0.320	190	0.6	8.873	A
C-A	133			133			
A-B	184			184			
A-C	479			479			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	243	409	0.594	240	1.4	20.949	C
B-A	106	197	0.535	103	1.1	37.370	E
C-AB	263	600	0.438	261	1.1	10.690	B
C-A	135			135			
A-B	226			226			
A-C	587			587			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	243	404	0.602	243	1.5	22.222	C
B-A	106	196	0.541	105	1.1	39.733	E
C-AB	264	600	0.439	263	1.1	10.760	B
C-A	134			134			
A-B	226			226			
A-C	587			587			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	199	491	0.404	202	0.7	12.560	B
B-A	86	260	0.332	89	0.5	21.281	C
C-AB	192	599	0.320	194	0.6	8.914	A
C-A	133			133			
A-B	184			184			
A-C	479			479			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	166	540	0.308	167	0.5	9.676	A
B-A	72	301	0.240	73	0.3	15.853	C
C-AB	148	598	0.248	149	0.4	8.033	A
C-A	123			123			
A-B	154			154			
A-C	401			401			

# Existing Junction - 2026 with Dev , PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	15.67	C

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D22	2026 with Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	411	100.000
B		✓	351	100.000
C		✓	576	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	141	270
	B	203	0	148
	C	404	172	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.63	37.24	1.6	E
B-A	0.81	61.00	3.5	F
C-AB	0.46	7.84	1.3	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	111	477	0.234	110	0.3	9.789	A
B-A	153	382	0.400	150	0.6	15.362	C
C-AB	210	792	0.265	208	0.5	6.155	A
C-A	223			223			
A-B	106			106			
A-C	203			203			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	133	413	0.322	132	0.5	12.799	B
B-A	182	341	0.536	181	1.1	22.236	C
C-AB	279	820	0.340	278	0.8	6.658	A
C-A	239			239			
A-B	127			127			
A-C	243			243			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	163	277	0.589	160	1.3	29.887	D
B-A	224	281	0.796	216	3.1	50.108	F
C-AB	395	859	0.461	393	1.3	7.761	A
C-A	239			239			
A-B	155			155			
A-C	297			297			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	163	257	0.634	162	1.6	37.243	E
B-A	224	277	0.805	222	3.5	61.000	F
C-AB	397	860	0.461	396	1.3	7.835	A
C-A	238			238			
A-B	155			155			
A-C	297			297			



**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	133	395	0.337	137	0.5	14.190	B
B-A	182	338	0.540	192	1.2	25.934	D
C-AB	280	821	0.341	282	0.8	6.735	A
C-A	238			238			
A-B	127			127			
A-C	243			243			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	111	470	0.237	112	0.3	10.090	B
B-A	153	378	0.405	155	0.7	16.308	C
C-AB	211	793	0.266	212	0.5	6.224	A
C-A	222			222			
A-B	106			106			
A-C	203			203			

# Existing Junction - 2027 no dev , AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	6.68	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D23	2027 no dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	745	100.000
B		✓	308	100.000
C		✓	333	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	207	538
	B	97	0	211
	C	221	112	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.56	20.00	1.3	C
B-A	0.51	34.37	1.0	D
C-AB	0.35	9.25	0.8	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	159	541	0.294	157	0.4	9.341	A
B-A	73	312	0.234	72	0.3	14.940	B
C-AB	117	597	0.196	116	0.3	7.471	A
C-A	134			134			
A-B	156			156			
A-C	405			405			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	190	496	0.383	189	0.6	11.702	B
B-A	87	273	0.319	87	0.5	19.209	C
C-AB	151	597	0.253	151	0.5	8.087	A
C-A	148			148			
A-B	186			186			
A-C	484			484			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	232	415	0.559	230	1.2	19.161	C
B-A	107	212	0.503	105	0.9	32.880	D
C-AB	209	599	0.348	207	0.8	9.226	A
C-A	158			158			
A-B	228			228			
A-C	592			592			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	232	412	0.564	232	1.3	19.998	C
B-A	107	211	0.506	107	1.0	34.372	D
C-AB	209	600	0.348	209	0.8	9.248	A
C-A	158			158			
A-B	228			228			
A-C	592			592			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	190	492	0.385	192	0.6	12.084	B
B-A	87	272	0.320	89	0.5	19.853	C
C-AB	152	598	0.254	153	0.5	8.094	A
C-A	148			148			
A-B	186			186			
A-C	484			484			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	159	539	0.295	160	0.4	9.509	A
B-A	73	311	0.235	74	0.3	15.204	C
C-AB	117	597	0.197	118	0.3	7.506	A
C-A	133			133			
A-B	156			156			
A-C	405			405			

# Existing Junction - 2027 No Dev , PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	13.90	B

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D24	2027 No Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	415	100.000
B		✓	340	100.000
C		✓	571	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	143	272
	B	205	0	135
	C	409	162	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.57	32.25	1.3	D
B-A	0.79	55.17	3.2	F
C-AB	0.44	7.47	1.2	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	102	468	0.217	101	0.3	9.769	A
B-A	154	384	0.402	152	0.7	15.345	C
C-AB	199	794	0.251	197	0.5	6.024	A
C-A	231			231			
A-B	108			108			
A-C	205			205			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	121	407	0.298	121	0.4	12.550	B
B-A	184	347	0.532	183	1.1	21.695	C
C-AB	265	822	0.322	264	0.7	6.462	A
C-A	249			249			
A-B	129			129			
A-C	245			245			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	149	276	0.539	146	1.1	27.189	D
B-A	226	289	0.780	219	2.9	46.691	E
C-AB	376	861	0.437	374	1.2	7.409	A
C-A	253			253			
A-B	157			157			
A-C	299			299			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	149	259	0.575	148	1.3	32.255	D
B-A	226	287	0.787	224	3.2	55.168	F
C-AB	377	862	0.437	377	1.2	7.468	A
C-A	252			252			
A-B	157			157			
A-C	299			299			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	121	392	0.310	125	0.5	13.642	B
B-A	184	345	0.535	192	1.2	24.745	C
C-AB	266	823	0.323	268	0.7	6.528	A
C-A	248			248			
A-B	129			129			
A-C	245			245			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	102	463	0.220	102	0.3	10.015	B
B-A	154	383	0.403	156	0.7	16.038	C
C-AB	200	795	0.252	201	0.5	6.085	A
C-A	230			230			
A-B	108			108			
A-C	205			205			

# Existing Junction - 2027 with dev, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	8.79	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D25	2027 with dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	745	100.000
B		✓	323	100.000
C		✓	372	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	207	538
	B	97	0	226
	C	221	151	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0



## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.63	24.55	1.6	C
B-A	0.57	44.41	1.3	E
C-AB	0.47	11.39	1.2	B
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	170	540	0.315	168	0.5	9.640	A
B-A	73	297	0.246	72	0.3	15.901	C
C-AB	158	597	0.264	156	0.5	8.145	A
C-A	122			122			
A-B	156			156			
A-C	405			405			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	203	491	0.413	202	0.7	12.407	B
B-A	87	256	0.341	86	0.5	21.191	C
C-AB	204	597	0.342	203	0.7	9.164	A
C-A	130			130			
A-B	186			186			
A-C	484			484			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	249	400	0.622	245	1.5	22.751	C
B-A	107	189	0.564	104	1.2	41.062	E
C-AB	281	600	0.469	279	1.2	11.297	B
C-A	128			128			
A-B	228			228			
A-C	592			592			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	249	394	0.631	248	1.6	24.551	C
B-A	107	187	0.572	106	1.3	44.412	E
C-AB	282	601	0.470	282	1.2	11.390	B
C-A	127			127			
A-B	228			228			
A-C	592			592			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	203	486	0.418	207	0.7	13.034	B
B-A	87	254	0.343	90	0.5	22.322	C
C-AB	205	599	0.342	207	0.7	9.225	A
C-A	129			129			
A-B	186			186			
A-C	484			484			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	170	538	0.316	171	0.5	9.848	A
B-A	73	296	0.247	74	0.3	16.255	C
C-AB	158	598	0.265	159	0.5	8.219	A
C-A	122			122			
A-B	156			156			
A-C	405			405			

# Existing Junction - 2027 with Dev , PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	17.59	C

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D26	2027 with Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	415	100.000
B		✓	358	100.000
C		✓	585	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	143	272
	B	205	0	153
	C	409	176	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.68	44.10	1.9	E
B-A	0.83	67.60	3.9	F
C-AB	0.48	8.02	1.4	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	115	475	0.242	114	0.3	9.928	A
B-A	154	378	0.408	152	0.7	15.730	C
C-AB	216	794	0.273	214	0.5	6.201	A
C-A	224			224			
A-B	108			108			
A-C	205			205			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	138	411	0.335	137	0.5	13.118	B
B-A	184	339	0.544	182	1.1	22.760	C
C-AB	288	822	0.350	287	0.8	6.738	A
C-A	238			238			
A-B	129			129			
A-C	245			245			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	168	268	0.627	164	1.5	33.343	D
B-A	226	277	0.816	217	3.4	53.828	F
C-AB	409	862	0.474	406	1.4	7.933	A
C-A	235			235			
A-B	157			157			
A-C	299			299			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	168	246	0.684	167	1.9	44.099	E
B-A	226	273	0.827	223	3.9	67.596	F
C-AB	410	863	0.475	410	1.4	8.016	A
C-A	234			234			
A-B	157			157			
A-C	299			299			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	138	388	0.354	143	0.6	15.007	C
B-A	184	333	0.554	195	1.3	27.741	D
C-AB	289	823	0.351	291	0.8	6.822	A
C-A	237			237			
A-B	129			129			
A-C	245			245			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	115	469	0.246	116	0.3	10.223	B
B-A	154	377	0.409	157	0.7	16.502	C
C-AB	218	795	0.274	219	0.6	6.274	A
C-A	223			223			
A-B	108			108			
A-C	205			205			

# Existing Junction - 2029 no dev , AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	7.36	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D27	2029 no dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	762	100.000
B		✓	315	100.000
C		✓	341	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	212	550
	B	99	0	216
	C	226	115	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.60	22.28	1.4	C
B-A	0.54	38.49	1.1	E
C-AB	0.36	9.46	0.8	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	163	536	0.303	161	0.4	9.545	A
B-A	75	307	0.243	73	0.3	15.313	C
C-AB	121	597	0.203	120	0.3	7.538	A
C-A	136			136			
A-B	160			160			
A-C	414			414			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	194	489	0.397	193	0.6	12.138	B
B-A	89	267	0.333	88	0.5	20.019	C
C-AB	157	597	0.263	157	0.5	8.193	A
C-A	149			149			
A-B	191			191			
A-C	494			494			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	238	403	0.590	235	1.4	21.050	C
B-A	109	204	0.535	107	1.1	36.309	E
C-AB	217	600	0.363	216	0.8	9.431	A
C-A	158			158			
A-B	233			233			
A-C	606			606			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	238	399	0.597	238	1.4	22.282	C
B-A	109	202	0.540	109	1.1	38.493	E
C-AB	218	600	0.363	218	0.8	9.459	A
C-A	158			158			
A-B	233			233			
A-C	606			606			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	194	485	0.400	197	0.7	12.631	B
B-A	89	266	0.334	91	0.5	20.856	C
C-AB	158	598	0.264	159	0.5	8.202	A
C-A	149			149			
A-B	191			191			
A-C	494			494			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	163	534	0.304	164	0.4	9.733	A
B-A	75	307	0.243	75	0.3	15.614	C
C-AB	122	597	0.204	122	0.3	7.577	A
C-A	135			135			
A-B	160			160			
A-C	414			414			



# Existing Junction - 2029 No Dev , PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	16.89	C

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D28	2029 No Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	424	100.000
B		✓	347	100.000
C		✓	584	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	146	278
	B	209	0	138
	C	418	166	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.65	42.95	1.7	E
B-A	0.83	66.55	3.9	F
C-AB	0.45	7.66	1.3	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	104	463	0.224	103	0.3	9.962	A
B-A	157	380	0.414	155	0.7	15.808	C
C-AB	206	797	0.259	204	0.5	6.067	A
C-A	233			233			
A-B	110			110			
A-C	209			209			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	124	398	0.312	123	0.4	13.095	B
B-A	188	341	0.550	186	1.2	22.877	C
C-AB	275	826	0.333	274	0.8	6.542	A
C-A	250			250			
A-B	131			131			
A-C	250			250			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	152	255	0.596	148	1.4	32.724	D
B-A	230	282	0.817	221	3.4	53.268	F
C-AB	392	866	0.453	390	1.3	7.584	A
C-A	251			251			
A-B	161			161			
A-C	306			306			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	152	232	0.654	151	1.7	42.954	E
B-A	230	278	0.827	228	3.9	66.551	F
C-AB	394	867	0.454	393	1.3	7.656	A
C-A	249			249			
A-B	161			161			
A-C	306			306			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	124	378	0.329	129	0.5	14.737	B
B-A	188	338	0.555	198	1.3	27.351	D
C-AB	276	827	0.334	278	0.8	6.616	A
C-A	249			249			
A-B	131			131			
A-C	250			250			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	104	457	0.227	105	0.3	10.247	B
B-A	157	379	0.416	160	0.7	16.615	C
C-AB	208	798	0.260	209	0.5	6.131	A
C-A	232			232			
A-B	110			110			
A-C	209			209			

# Existing Junction - 2029 with dev, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	11.07	B

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D29	2029 with dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	762	100.000
B		✓	334	100.000
C		✓	391	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	212	550
	B	99	0	235
	C	226	165	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.70	31.32	2.1	D
B-A	0.64	57.34	1.6	F
C-AB	0.52	12.62	1.5	B
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	177	535	0.331	175	0.5	9.952	A
B-A	75	288	0.258	73	0.3	16.619	C
C-AB	174	597	0.291	172	0.5	8.447	A
C-A	121			121			
A-B	160			160			
A-C	414			414			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	211	483	0.438	210	0.8	13.156	B
B-A	89	245	0.364	88	0.6	22.859	C
C-AB	226	598	0.378	225	0.8	9.689	A
C-A	126			126			
A-B	191			191			
A-C	494			494			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	259	381	0.680	254	1.9	27.459	D
B-A	109	174	0.628	105	1.5	50.305	F
C-AB	312	600	0.520	310	1.4	12.462	B
C-A	118			118			
A-B	233			233			
A-C	606			606			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	259	371	0.697	258	2.1	31.321	D
B-A	109	170	0.641	108	1.6	57.339	F
C-AB	313	601	0.521	313	1.5	12.624	B
C-A	117			117			
A-B	233			233			
A-C	606			606			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	211	475	0.445	217	0.8	14.189	B
B-A	89	242	0.367	93	0.6	24.742	C
C-AB	227	599	0.378	229	0.8	9.794	A
C-A	125			125			
A-B	191			191			
A-C	494			494			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	177	532	0.332	178	0.5	10.206	B
B-A	75	287	0.259	76	0.4	17.061	C
C-AB	175	598	0.292	176	0.5	8.545	A
C-A	120			120			
A-B	160			160			
A-C	414			414			

# Existing Junction - 2029 with Dev , PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	26.80	D

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D30	2029 with Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	424	100.000
B		✓	370	100.000
C		✓	601	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	146	278
	B	209	0	161
	C	418	183	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.86	85.09	3.9	F
B-A	0.90	94.59	5.6	F
C-AB	0.50	8.38	1.6	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	121	471	0.257	120	0.3	10.213	B
B-A	157	371	0.424	154	0.7	16.441	C
C-AB	228	797	0.286	225	0.6	6.284	A
C-A	225			225			
A-B	110			110			
A-C	209			209			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	145	400	0.362	144	0.6	13.994	B
B-A	188	330	0.570	186	1.3	24.639	C
C-AB	303	826	0.367	302	0.9	6.891	A
C-A	237			237			
A-B	131			131			
A-C	250			250			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	177	241	0.735	170	2.3	47.035	E
B-A	230	263	0.874	218	4.3	66.419	F
C-AB	433	867	0.499	430	1.5	8.277	A
C-A	229			229			
A-B	161			161			
A-C	306			306			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	177	207	0.857	171	3.9	85.090	F
B-A	230	257	0.896	225	5.6	94.587	F
C-AB	434	868	0.500	434	1.6	8.380	A
C-A	228			228			
A-B	161			161			
A-C	306			306			



18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	145	368	0.394	158	0.7	18.160	C
B-A	188	322	0.583	204	1.5	33.943	D
C-AB	305	827	0.369	308	0.9	6.991	A
C-A	235			235			
A-B	131			131			
A-C	250			250			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	121	464	0.261	122	0.4	10.587	B
B-A	157	370	0.426	160	0.8	17.414	C
C-AB	229	798	0.287	230	0.6	6.369	A
C-A	223			223			
A-B	110			110			
A-C	209			209			

<b>Junctions 9</b>
<b>PICADY 9 - Priority Intersection Module</b>
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**Filename:** Site 3 Banduff Rathcooney Road Junction.j9

**Path:** N:\HOUS\_DEV\PH\_Ballyvolane\TIA\Picady 2019\TModelling 2019\Site 12\_Upper Dublin Hill Junction

**Report generation date:** 20/11/2019 16:24:22

- »Existing Junction - 2022 no dev, AM
- »Existing Junction - 2019, PM
- »Existing Junction - 2022 No Dev, PM
- »Existing Junction - 2019 [D4], AM
- »Existing Junction - 2022 with dev , AM
- »Existing Junction - 2022 with Dev, PM
- »Existing Junction - 2023 no dev [D7], AM
- »Existing Junction - 2023 No Dev, PM
- »Existing Junction - 2023 with dev , AM
- »Existing Junction - 2023 with Dev , PM
- »Existing Junction - 2024 no dev , AM
- »Existing Junction - 2024 No Dev , PM
- »Existing Junction - 2024 with dev , AM
- »Existing Junction - 2024 with Dev , PM
- »Existing Junction - 2025 no dev , AM
- »Existing Junction - 2025 No Dev , PM
- »Existing Junction - 2025 with dev, AM
- »Existing Junction - 2025 with Dev, PM
- »Existing Junction - 2026 no dev , AM
- »Existing Junction - 2026 No Dev , PM
- »Existing Junction - 2026 with dev, AM
- »Existing Junction - 2026 with Dev , PM
- »Existing Junction - 2027 no dev , AM
- »Existing Junction - 2027 No Dev , PM
- »Existing Junction - 2027 with dev, AM
- »Existing Junction - 2027 with Dev , PM
- »Existing Junction - 2029 no dev , AM
- »Existing Junction - 2029 No Dev , PM
- »Existing Junction - 2029 with dev, AM
- »Existing Junction - 2029 with Dev , PM

**Summary of junction performance**

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
<b>Existing Junction - 2022 no dev</b>								
Stream B-C	1.1	11.83	0.53	B				
Stream B-A	0.0	19.19	0.01	C				
Stream C-AB	4.9	39.07	0.84	E				

Existing Junction - 2019							
Stream B-C					0.7	9.07	0.41 A
Stream B-A					0.0	0.00	0.00 A
Stream C-AB					16.3	86.56	0.98 F
Existing Junction - 2022 No Dev							
Stream B-C					0.7	9.31	0.43 A
Stream B-A					0.0	0.00	0.00 A
Stream C-AB					22.7	113.22	1.02 F
Existing Junction - 2019 [D4]							
Stream B-C	1.0	11.32	0.51	B			
Stream B-A	0.0	18.20	0.01	C			
Stream C-AB	4.1	33.20	0.81	D			
Existing Junction - 2022 with dev							
Stream B-C	1.1	11.95	0.53	B			
Stream B-A	0.0	19.49	0.01	C			
Stream C-AB	5.3	41.62	0.86	E			
Existing Junction - 2022 with Dev							
Stream B-C					0.8	9.43	0.43 A
Stream B-A					0.0	0.00	0.00 A
Stream C-AB					24.2	119.27	1.02 F
Existing Junction - 2023 no dev [D7]							
Stream B-C	1.1	12.00	0.53	B			
Stream B-A	0.0	19.52	0.01	C			
Stream C-AB	5.2	41.25	0.85	E			
Existing Junction - 2023 No Dev							
Stream B-C					0.8	9.40	0.43 A
Stream B-A					0.0	0.00	0.00 A
Stream C-AB					25.3	123.69	1.03 F
Existing Junction - 2023 with dev							
Stream B-C	1.2	12.23	0.54	B			
Stream B-A	0.0	20.15	0.01	C			
Stream C-AB	6.0	46.67	0.88	E			
Existing Junction - 2023 with Dev							
Stream B-C					0.8	9.52	0.44 A
Stream B-A					0.0	0.00	0.00 A
Stream C-AB					28.3	135.29	1.04 F
Existing Junction - 2024 no dev							
Stream B-C	1.2	12.21	0.54	B			
Stream B-A	0.0	19.93	0.01	C			
Stream C-AB	5.7	44.14	0.87	E			
Existing Junction - 2024 No Dev							
Stream B-C					0.8	9.50	0.44 A
Stream B-A					0.0	0.00	0.00 A
Stream C-AB					28.5	135.87	1.04 F
Existing Junction - 2024 with dev							
Stream B-C	1.2	12.57	0.55	B			
Stream B-A	0.0	20.91	0.01	C			
Stream C-AB	7.0	53.32	0.90	F			
Existing Junction - 2024 with Dev							
Stream B-C					0.8	9.66	0.45 A
Stream B-A					0.0	0.00	0.00 A
Stream C-AB					33.4	155.01	1.06 F
Existing Junction - 2025 no dev							
Stream B-C	1.2	12.39	0.55	B			
Stream B-A	0.0	20.29	0.01	C			

Stream C-AB	6.1	46.81	0.88	E				
<b>Existing Junction - 2025 No Dev</b>								
Stream B-C					0.8	9.59	0.44	A
Stream B-A					0.0	0.00	0.00	A
Stream C-AB					31.5	147.75	1.05	F
<b>Existing Junction - 2025 with dev</b>								
Stream B-C	1.3	12.82	0.56	B				
Stream B-A	0.0	21.54	0.01	C				
Stream C-AB	8.0	59.54	0.91	F				
<b>Existing Junction - 2025 with Dev</b>								
Stream B-C					0.8	9.82	0.45	A
Stream B-A					0.0	0.00	0.00	A
Stream C-AB					37.9	172.41	1.07	F
<b>Existing Junction - 2026 no dev</b>								
Stream B-C	1.2	12.59	0.55	B				
Stream B-A	0.0	20.76	0.01	C				
Stream C-AB	6.6	50.72	0.89	F				
<b>Existing Junction - 2026 No Dev</b>								
Stream B-C					0.8	9.69	0.45	A
Stream B-A					0.0	0.00	0.00	A
Stream C-AB					35.0	161.31	1.07	F
<b>Existing Junction - 2026 with dev</b>								
Stream B-C	1.3	13.15	0.57	B				
Stream B-A	0.0	22.40	0.01	C				
Stream C-AB	9.5	69.05	0.93	F				
<b>Existing Junction - 2026 with Dev</b>								
Stream B-C					0.8	9.96	0.46	A
Stream B-A					0.0	0.00	0.00	A
Stream C-AB					42.9	191.44	1.09	F
<b>Existing Junction - 2027 no dev</b>								
Stream B-C	1.3	12.83	0.56	B				
Stream B-A	0.0	21.23	0.01	C				
Stream C-AB	7.1	54.19	0.90	F				
<b>Existing Junction - 2027 No Dev</b>								
Stream B-C					0.8	9.79	0.45	A
Stream B-A					0.0	0.00	0.00	A
Stream C-AB					38.5	174.45	1.08	F
<b>Existing Junction - 2027 with dev</b>								
Stream B-C	1.4	13.57	0.58	B				
Stream B-A	0.0	23.52	0.01	C				
Stream C-AB	11.5	81.29	0.96	F				
<b>Existing Junction - 2027 with Dev</b>								
Stream B-C					0.9	10.14	0.47	B
Stream B-A					0.0	0.00	0.00	A
Stream C-AB					48.9	217.40	1.11	F
<b>Existing Junction - 2029 no dev</b>								
Stream B-C	1.3	13.28	0.58	B				
Stream B-A	0.0	22.20	0.01	C				
Stream C-AB	8.4	62.76	0.92	F				
<b>Existing Junction - 2029 No Dev</b>								
Stream B-C					0.9	10.00	0.46	B
Stream B-A					0.0	0.00	0.00	A
Stream C-AB					46.6	205.81	1.10	F
<b>Existing Junction - 2029 with dev</b>								
Stream B-C	1.5	14.30	0.60	B				

Stream B-A	0.0	25.53	0.02	D				
Stream C-AB	15.7	105.04	0.99	F				
<b>Existing Junction - 2029 with Dev</b>								
Stream B-C					0.9	10.48	0.49	B
Stream B-A					0.0	0.00	0.00	A
Stream C-AB					60.6	287.52	1.14	F

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

### File summary

#### File Description

Title	(untitled)
Location	
Site number	
Date	20/09/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MHL\NOMahony
Description	

### Units

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

### Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

### Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022 no dev	AM	ONE HOUR	08:00	09:30	15
D2	2019	PM	ONE HOUR	17:00	18:30	15
D3	2022 No Dev	PM	ONE HOUR	17:00	18:30	15
D4	2019 [D4]	AM	ONE HOUR	08:00	09:30	15
D5	2022 with dev	AM	ONE HOUR	08:00	09:30	15
D6	2022 with Dev	PM	ONE HOUR	17:00	18:30	15
D7	2023 no dev [D7]	AM	ONE HOUR	08:00	09:30	15
D8	2023 No Dev	PM	ONE HOUR	17:00	18:30	15
D9	2023 with dev	AM	ONE HOUR	08:00	09:30	15
D10	2023 with Dev	PM	ONE HOUR	17:00	18:30	15
D11	2024 no dev	AM	ONE HOUR	08:00	09:30	15
D12	2024 No Dev	PM	ONE HOUR	17:00	18:30	15
D13	2024 with dev	AM	ONE HOUR	08:00	09:30	15
D14	2024 with Dev	PM	ONE HOUR	17:00	18:30	15
D15	2025 no dev	AM	ONE HOUR	08:00	09:30	15
D16	2025 No Dev	PM	ONE HOUR	17:00	18:30	15
D17	2025 with dev	AM	ONE HOUR	08:00	09:30	15
D18	2025 with Dev	PM	ONE HOUR	17:00	18:30	15
D19	2026 no dev	AM	ONE HOUR	08:00	09:30	15
D20	2026 No Dev	PM	ONE HOUR	17:00	18:30	15
D21	2026 with dev	AM	ONE HOUR	08:00	09:30	15
D22	2026 with Dev	PM	ONE HOUR	17:00	18:30	15
D23	2027 no dev	AM	ONE HOUR	08:00	09:30	15
D24	2027 No Dev	PM	ONE HOUR	17:00	18:30	15
D25	2027 with dev	AM	ONE HOUR	08:00	09:30	15
D26	2027 with Dev	PM	ONE HOUR	17:00	18:30	15
D27	2029 no dev	AM	ONE HOUR	08:00	09:30	15
D28	2029 No Dev	PM	ONE HOUR	17:00	18:30	15
D29	2029 with dev	AM	ONE HOUR	08:00	09:30	15
D30	2029 with Dev	PM	ONE HOUR	17:00	18:30	15

### Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Existing Junction	100.000

# Existing Junction - 2022 no dev, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	20.54	C

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Arms

### Arms

Arm	Name	Description	Arm type
A	Upper Dublin Hill		Major
B	Kilbarry Link Road		Minor
C	Lower Dublin Hill		Major

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00			180.0	✓	0.00

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

### Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	6.50	6.00	3.50	3.50	3.50	✓	1.00	90	90

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	455	0.083	0.210	0.132	0.300
1	B-C	756	0.116	0.293	-	-
1	C-B	678	0.263	0.263	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022 no dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	278	100.000
B		✓	312	100.000
C		✓	435	100.000

## Origin-Destination Data

### Demand (Veh/hr)

From	To		
	A	B	C
A	0	7	271
B	2	0	310
C	31	404	0

## Vehicle Mix

### Heavy Vehicle Percentages

From	To		
	A	B	C
A	0	4	1
B	4	0	3
C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.53	11.83	1.1	B
B-A	0.01	19.19	0.0	C
C-AB	0.84	39.07	4.9	E
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	233	673	0.347	231	0.5	8.104	A
B-A	2	283	0.005	1	0.0	12.781	B
C-AB	317	577	0.550	312	1.2	13.386	B
C-A	11			11			
A-B	5			5			
A-C	204			204			



08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	279	662	0.421	278	0.7	9.359	A
B-A	2	246	0.007	2	0.0	14.742	B
C-AB	382	570	0.670	379	2.0	18.553	C
C-A	9			9			
A-B	6			6			
A-C	244			244			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	341	645	0.529	340	1.1	11.721	B
B-A	2	193	0.011	2	0.0	18.875	C
C-AB	474	562	0.844	464	4.5	33.957	D
C-A	5			5			
A-B	8			8			
A-C	298			298			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	341	645	0.529	341	1.1	11.834	B
B-A	2	190	0.012	2	0.0	19.187	C
C-AB	475	562	0.844	473	4.9	39.070	E
C-A	4			4			
A-B	8			8			
A-C	298			298			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	279	662	0.421	280	0.7	9.471	A
B-A	2	241	0.007	2	0.0	15.034	C
C-AB	383	571	0.670	394	2.2	21.387	C
C-A	8			8			
A-B	6			6			
A-C	244			244			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	233	673	0.347	234	0.5	8.212	A
B-A	2	280	0.005	2	0.0	12.926	B
C-AB	317	577	0.550	321	1.3	14.253	B
C-A	10			10			
A-B	5			5			
A-C	204			204			

# Existing Junction - 2019, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	53.39	F

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2019	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	145	100.000
B		✓	253	100.000
C		✓	626	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	7	138
	B	0	0	253
	C	100	526	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.41	9.07	0.7	A
B-A	0.00	0.00	0.0	A
C-AB	0.98	86.56	16.3	F
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	190	689	0.276	189	0.4	7.172	A
B-A	0	283	0.000	0	0.0	0.000	A
C-AB	444	691	0.644	437	1.8	13.874	B
C-A	27			27			
A-B	5			5			
A-C	104			104			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	227	684	0.333	227	0.5	7.876	A
B-A	0	253	0.000	0	0.0	0.000	A
C-AB	544	695	0.783	538	3.5	22.152	C
C-A	19			19			
A-B	6			6			
A-C	124			124			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	279	675	0.412	278	0.7	9.034	A
B-A	0	214	0.000	0	0.0	0.000	A
C-AB	689	701	0.983	654	12.2	56.263	F
C-A	0			0			
A-B	8			8			
A-C	152			152			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	279	675	0.412	279	0.7	9.067	A
B-A	0	205	0.000	0	0.0	0.000	A
C-AB	689	702	0.982	673	16.3	86.565	F
C-A	0			0			
A-B	8			8			
A-C	152			152			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	227	684	0.333	228	0.5	7.920	A
B-A	0	239	0.000	0	0.0	0.000	A
C-AB	552	701	0.787	599	4.5	44.678	E
C-A	11			11			
A-B	6			6			
A-C	124			124			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	190	689	0.276	191	0.4	7.228	A
B-A	0	278	0.000	0	0.0	0.000	A
C-AB	446	692	0.645	457	2.0	15.927	C
C-A	25			25			
A-B	5			5			
A-C	104			104			

# Existing Junction - 2022 No Dev, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	69.42	F

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2022 No Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	150	100.000
B		✓	261	100.000
C		✓	646	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	7	143
	B	0	0	261
	C	103	543	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.43	9.31	0.7	A
B-A	0.00	0.00	0.0	A
C-AB	1.02	113.22	22.7	F
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	196	688	0.285	195	0.4	7.272	A
B-A	0	278	0.000	0	0.0	0.000	A
C-AB	460	691	0.666	452	2.0	14.682	B
C-A	26			26			
A-B	5			5			
A-C	108			108			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	235	682	0.344	234	0.5	8.024	A
B-A	0	248	0.000	0	0.0	0.000	A
C-AB	564	696	0.811	556	4.0	24.726	C
C-A	16			16			
A-B	6			6			
A-C	129			129			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	287	674	0.426	287	0.7	9.271	A
B-A	0	206	0.000	0	0.0	0.000	A
C-AB	711	700	1.017	665	15.6	67.573	F
C-A	0			0			
A-B	8			8			
A-C	157			157			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	287	674	0.426	287	0.7	9.311	A
B-A	0	194	0.000	0	0.0	0.000	A
C-AB	711	700	1.016	683	22.7	113.216	F
C-A	0			0			
A-B	8			8			
A-C	157			157			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	235	682	0.344	235	0.5	8.073	A
B-A	0	227	0.000	0	0.0	0.000	A
C-AB	576	705	0.817	643	5.9	71.100	F
C-A	5			5			
A-B	6			6			
A-C	129			129			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	196	688	0.285	197	0.4	7.333	A
B-A	0	272	0.000	0	0.0	0.000	A
C-AB	463	693	0.668	478	2.3	17.805	C
C-A	23			23			
A-B	5			5			
A-C	108			108			

# Existing Junction - 2019 [D4], AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	17.81	C

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2019 [D4]	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	269	100.000
B		✓	302	100.000
C		✓	421	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	7	262
	B	2	0	300
	C	30	391	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0



## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.51	11.32	1.0	B
B-A	0.01	18.20	0.0	C
C-AB	0.81	33.20	4.1	D
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	226	675	0.334	224	0.5	7.938	A
B-A	2	289	0.005	1	0.0	12.528	B
C-AB	306	578	0.530	302	1.1	12.857	B
C-A	11			11			
A-B	5			5			
A-C	197			197			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	270	664	0.406	269	0.7	9.095	A
B-A	2	253	0.007	2	0.0	14.312	B
C-AB	369	572	0.646	366	1.8	17.349	C
C-A	9			9			
A-B	6			6			
A-C	236			236			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	330	648	0.510	329	1.0	11.224	B
B-A	2	203	0.011	2	0.0	17.964	C
C-AB	458	563	0.813	450	3.8	29.895	D
C-A	6			6			
A-B	8			8			
A-C	288			288			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	330	648	0.510	330	1.0	11.316	B
B-A	2	200	0.011	2	0.0	18.197	C
C-AB	458	564	0.813	457	4.1	33.204	D
C-A	5			5			
A-B	8			8			
A-C	288			288			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	270	664	0.406	271	0.7	9.190	A
B-A	2	249	0.007	2	0.0	14.537	B
C-AB	370	572	0.646	378	2.0	19.284	C
C-A	9			9			
A-B	6			6			
A-C	236			236			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	226	675	0.334	227	0.5	8.034	A
B-A	2	286	0.005	2	0.0	12.653	B
C-AB	307	578	0.530	310	1.2	13.566	B
C-A	10			10			
A-B	5			5			
A-C	197			197			

# Existing Junction - 2022 with dev , AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	21.74	C

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2022 with dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	280	100.000
B		✓	314	100.000
C		✓	440	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	7	273
	B	2	0	312
	C	31	409	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.53	11.95	1.1	B
B-A	0.01	19.49	0.0	C
C-AB	0.86	41.62	5.3	E
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	235	673	0.349	233	0.5	8.138	A
B-A	2	281	0.005	1	0.0	12.859	B
C-AB	321	576	0.557	316	1.2	13.591	B
C-A	10			10			
A-B	5			5			
A-C	206			206			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	280	661	0.424	280	0.7	9.416	A
B-A	2	244	0.007	2	0.0	14.873	B
C-AB	387	570	0.679	384	2.0	19.028	C
C-A	9			9			
A-B	6			6			
A-C	245			245			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	344	645	0.533	342	1.1	11.827	B
B-A	2	190	0.012	2	0.0	19.148	C
C-AB	480	561	0.855	469	4.8	35.626	E
C-A	4			4			
A-B	8			8			
A-C	301			301			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	344	645	0.533	343	1.1	11.946	B
B-A	2	187	0.012	2	0.0	19.494	C
C-AB	481	562	0.856	479	5.3	41.617	E
C-A	4			4			
A-B	8			8			
A-C	301			301			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	280	661	0.424	282	0.7	9.531	A
B-A	2	239	0.008	2	0.0	15.194	C
C-AB	388	571	0.679	400	2.3	22.310	C
C-A	8			8			
A-B	6			6			
A-C	245			245			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	235	673	0.349	236	0.5	8.247	A
B-A	2	278	0.005	2	0.0	13.010	B
C-AB	321	577	0.557	325	1.3	14.525	B
C-A	10			10			
A-B	5			5			
A-C	206			206			

# Existing Junction - 2022 with Dev, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	72.87	F

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2022 with Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	152	100.000
B		✓	265	100.000
C		✓	650	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	7	145
	B	0	0	265
	C	104	546	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.43	9.43	0.8	A
B-A	0.00	0.00	0.0	A
C-AB	1.02	119.27	24.2	F
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	200	688	0.290	198	0.4	7.323	A
B-A	0	277	0.000	0	0.0	0.000	A
C-AB	464	691	0.671	455	2.1	14.848	B
C-A	26			26			
A-B	5			5			
A-C	109			109			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	238	682	0.349	238	0.5	8.101	A
B-A	0	246	0.000	0	0.0	0.000	A
C-AB	568	696	0.817	560	4.1	25.292	D
C-A	16			16			
A-B	6			6			
A-C	130			130			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	292	673	0.433	291	0.8	9.391	A
B-A	0	205	0.000	0	0.0	0.000	A
C-AB	716	699	1.023	667	16.4	70.064	F
C-A	0			0			
A-B	8			8			
A-C	160			160			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	292	673	0.433	292	0.8	9.434	A
B-A	0	192	0.000	0	0.0	0.000	A
C-AB	716	700	1.023	684	24.2	119.268	F
C-A	0			0			
A-B	8			8			
A-C	160			160			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	238	682	0.349	239	0.5	8.147	A
B-A	0	224	0.000	0	0.0	0.000	A
C-AB	581	705	0.823	652	6.4	78.384	F
C-A	4			4			
A-B	6			6			
A-C	130			130			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	200	688	0.290	200	0.4	7.385	A
B-A	0	271	0.000	0	0.0	0.000	A
C-AB	466	694	0.672	483	2.3	18.309	C
C-A	23			23			
A-B	5			5			
A-C	109			109			



# Existing Junction - 2023 no dev [D7], AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	21.54	C

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2023 no dev [D7]	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	281	100.000
B		✓	315	100.000
C		✓	439	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	7	274
	B	2	0	313
	C	31	408	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.53	12.00	1.1	B
B-A	0.01	19.52	0.0	C
C-AB	0.85	41.25	5.2	E
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	236	673	0.350	234	0.5	8.156	A
B-A	2	281	0.005	1	0.0	12.862	B
C-AB	320	576	0.556	315	1.2	13.562	B
C-A	10			10			
A-B	5			5			
A-C	206			206			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	281	661	0.426	281	0.7	9.445	A
B-A	2	244	0.007	2	0.0	14.880	B
C-AB	386	570	0.677	383	2.0	18.961	C
C-A	9			9			
A-B	6			6			
A-C	246			246			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	345	644	0.535	343	1.1	11.883	B
B-A	2	190	0.012	2	0.0	19.176	C
C-AB	479	561	0.854	468	4.8	35.388	E
C-A	5			5			
A-B	8			8			
A-C	302			302			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	345	644	0.535	345	1.1	12.002	B
B-A	2	187	0.012	2	0.0	19.519	C
C-AB	480	561	0.854	478	5.2	41.245	E
C-A	4			4			
A-B	8			8			
A-C	302			302			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	281	661	0.426	283	0.8	9.563	A
B-A	2	239	0.008	2	0.0	15.199	C
C-AB	387	571	0.678	398	2.3	22.172	C
C-A	8			8			
A-B	6			6			
A-C	246			246			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	236	673	0.350	236	0.5	8.267	A
B-A	2	278	0.005	2	0.0	13.011	B
C-AB	321	577	0.556	324	1.3	14.486	B
C-A	10			10			
A-B	5			5			
A-C	206			206			

# Existing Junction - 2023 No Dev, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	75.78	F

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2023 No Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	151	100.000
B		✓	264	100.000
C		✓	653	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	7	144
	B	0	0	264
	C	104	549	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.43	9.40	0.8	A
B-A	0.00	0.00	0.0	A
C-AB	1.03	123.69	25.3	F
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	199	688	0.289	197	0.4	7.309	A
B-A	0	277	0.000	0	0.0	0.000	A
C-AB	466	691	0.674	458	2.1	14.981	B
C-A	26			26			
A-B	5			5			
A-C	108			108			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	237	682	0.348	237	0.5	8.077	A
B-A	0	246	0.000	0	0.0	0.000	A
C-AB	571	696	0.821	563	4.2	25.729	D
C-A	16			16			
A-B	6			6			
A-C	129			129			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	291	674	0.432	290	0.7	9.358	A
B-A	0	204	0.000	0	0.0	0.000	A
C-AB	719	699	1.028	668	17.0	71.886	F
C-A	0			0			
A-B	8			8			
A-C	159			159			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	291	674	0.432	291	0.8	9.399	A
B-A	0	191	0.000	0	0.0	0.000	A
C-AB	719	700	1.028	686	25.3	123.687	F
C-A	0			0			
A-B	8			8			
A-C	159			159			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	237	682	0.348	238	0.5	8.127	A
B-A	0	222	0.000	0	0.0	0.000	A
C-AB	584	706	0.828	659	6.7	84.031	F
C-A	3			3			
A-B	6			6			
A-C	129			129			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	199	688	0.289	199	0.4	7.374	A
B-A	0	270	0.000	0	0.0	0.000	A
C-AB	469	694	0.676	487	2.3	18.736	C
C-A	22			22			
A-B	5			5			
A-C	108			108			

# Existing Junction - 2023 with dev , AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	24.09	C

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2023 with dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	285	100.000
B		✓	319	100.000
C		✓	449	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	7	278
	B	2	0	317
	C	32	417	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.54	12.23	1.2	B
B-A	0.01	20.15	0.0	C
C-AB	0.88	46.67	6.0	E
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	239	672	0.355	236	0.5	8.226	A
B-A	2	278	0.005	1	0.0	13.015	B
C-AB	328	576	0.569	322	1.3	13.940	B
C-A	10			10			
A-B	5			5			
A-C	209			209			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	285	660	0.432	284	0.7	9.560	A
B-A	2	240	0.008	2	0.0	15.139	C
C-AB	395	570	0.694	392	2.2	19.882	C
C-A	9			9			
A-B	6			6			
A-C	250			250			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	349	643	0.543	347	1.2	12.104	B
B-A	2	185	0.012	2	0.0	19.728	C
C-AB	490	561	0.875	478	5.4	38.773	E
C-A	4			4			
A-B	8			8			
A-C	306			306			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	349	643	0.543	349	1.2	12.233	B
B-A	2	181	0.012	2	0.0	20.145	C
C-AB	491	561	0.875	489	6.0	46.669	E
C-A	3			3			
A-B	8			8			
A-C	306			306			



09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	285	660	0.432	287	0.8	9.684	A
B-A	2	234	0.008	2	0.0	15.527	C
C-AB	396	571	0.694	410	2.5	24.151	C
C-A	8			8			
A-B	6			6			
A-C	250			250			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	239	672	0.355	240	0.6	8.341	A
B-A	2	275	0.005	2	0.0	13.180	B
C-AB	328	576	0.569	332	1.4	15.005	C
C-A	10			10			
A-B	5			5			
A-C	209			209			

# Existing Junction - 2023 with Dev , PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	82.71	F

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2023 with Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	153	100.000
B		✓	268	100.000
C		✓	660	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	7	146
	B	0	0	268
	C	105	555	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.44	9.52	0.8	A
B-A	0.00	0.00	0.0	A
C-AB	1.04	135.29	28.3	F
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	202	688	0.293	200	0.4	7.361	A
B-A	0	275	0.000	0	0.0	0.000	A
C-AB	472	692	0.682	463	2.2	15.302	C
C-A	25			25			
A-B	5			5			
A-C	110			110			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	241	682	0.354	240	0.5	8.151	A
B-A	0	244	0.000	0	0.0	0.000	A
C-AB	579	696	0.831	569	4.5	26.847	D
C-A	15			15			
A-B	6			6			
A-C	131			131			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	295	673	0.438	294	0.8	9.479	A
B-A	0	201	0.000	0	0.0	0.000	A
C-AB	727	699	1.040	671	18.5	76.626	F
C-A	0			0			
A-B	8			8			
A-C	161			161			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	295	673	0.438	295	0.8	9.524	A
B-A	0	187	0.000	0	0.0	0.000	A
C-AB	727	699	1.040	687	28.3	135.290	F
C-A	0			0			
A-B	8			8			
A-C	161			161			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	241	682	0.354	242	0.6	8.203	A
B-A	0	217	0.000	0	0.0	0.000	A
C-AB	593	707	0.839	675	7.9	99.543	F
C-A	0.13			0.13			
A-B	6			6			
A-C	131			131			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	202	688	0.293	202	0.4	7.424	A
B-A	0	267	0.000	0	0.0	0.000	A
C-AB	475	695	0.684	497	2.5	20.060	C
C-A	22			22			
A-B	5			5			
A-C	110			110			

# Existing Junction - 2024 no dev , AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	22.92	C

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2024 no dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	283	100.000
B		✓	319	100.000
C		✓	445	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	7	276
	B	2	0	317
	C	32	413	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.54	12.21	1.2	B
B-A	0.01	19.93	0.0	C
C-AB	0.87	44.14	5.7	E
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	239	672	0.355	236	0.5	8.217	A
B-A	2	279	0.005	1	0.0	12.957	B
C-AB	324	576	0.563	319	1.3	13.766	B
C-A	11			11			
A-B	5			5			
A-C	208			208			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	285	660	0.432	284	0.7	9.547	A
B-A	2	241	0.007	2	0.0	15.046	C
C-AB	391	570	0.686	388	2.1	19.459	C
C-A	9			9			
A-B	6			6			
A-C	248			248			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	349	644	0.542	347	1.2	12.080	B
B-A	2	186	0.012	2	0.0	19.544	C
C-AB	486	561	0.866	474	5.1	37.216	E
C-A	4			4			
A-B	8			8			
A-C	304			304			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	349	644	0.542	349	1.2	12.206	B
B-A	2	183	0.012	2	0.0	19.929	C
C-AB	487	562	0.866	484	5.7	44.140	E
C-A	3			3			
A-B	8			8			
A-C	304			304			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	285	660	0.432	287	0.8	9.672	A
B-A	2	236	0.008	2	0.0	15.403	C
C-AB	392	571	0.687	405	2.4	23.215	C
C-A	8			8			
A-B	6			6			
A-C	248			248			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	239	672	0.355	240	0.6	8.333	A
B-A	2	276	0.005	2	0.0	13.116	B
C-AB	325	577	0.563	329	1.4	14.766	B
C-A	10			10			
A-B	5			5			
A-C	208			208			

# Existing Junction - 2024 No Dev , PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	83.16	F

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2024 No Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	153	100.000
B		✓	267	100.000
C		✓	661	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	7	146
	B	0	0	267
	C	106	555	0

## Vehicle Mix

### Heavy Vehicle Percentages

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



## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.44	9.50	0.8	A
B-A	0.00	0.00	0.0	A
C-AB	1.04	135.87	28.5	F
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	201	688	0.292	199	0.4	7.349	A
B-A	0	275	0.000	0	0.0	0.000	A
C-AB	472	692	0.683	464	2.2	15.305	C
C-A	25			25			
A-B	5			5			
A-C	110			110			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	240	682	0.352	240	0.5	8.134	A
B-A	0	244	0.000	0	0.0	0.000	A
C-AB	579	697	0.831	570	4.5	26.879	D
C-A	15			15			
A-B	6			6			
A-C	131			131			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	294	673	0.437	293	0.8	9.453	A
B-A	0	201	0.000	0	0.0	0.000	A
C-AB	728	699	1.041	671	18.6	76.841	F
C-A	0			0			
A-B	8			8			
A-C	161			161			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	294	673	0.437	294	0.8	9.496	A
B-A	0	186	0.000	0	0.0	0.000	A
C-AB	728	699	1.041	688	28.5	135.872	F
C-A	0			0			
A-B	8			8			
A-C	161			161			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	240	682	0.352	241	0.6	8.187	A
B-A	0	217	0.000	0	0.0	0.000	A
C-AB	594	708	0.839	676	7.9	100.362	F
C-A	0			0			
A-B	6			6			
A-C	131			131			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	201	688	0.292	202	0.4	7.415	A
B-A	0	267	0.000	0	0.0	0.000	A
C-AB	476	695	0.685	498	2.5	20.123	C
C-A	22			22			
A-B	5			5			
A-C	110			110			

# Existing Junction - 2024 with dev , AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	27.20	D

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2024 with dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	289	100.000
B		✓	325	100.000
C		✓	459	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	7	282
	B	2	0	323
	C	33	426	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.55	12.57	1.2	B
B-A	0.01	20.91	0.0	C
C-AB	0.90	53.32	7.0	F
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	243	671	0.362	241	0.6	8.326	A
B-A	2	275	0.005	1	0.0	13.184	B
C-AB	335	576	0.582	330	1.4	14.341	B
C-A	10			10			
A-B	5			5			
A-C	212			212			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	290	659	0.441	290	0.8	9.723	A
B-A	2	235	0.008	2	0.0	15.437	C
C-AB	404	569	0.710	400	2.3	20.895	C
C-A	8			8			
A-B	6			6			
A-C	254			254			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	356	642	0.554	354	1.2	12.426	B
B-A	2	179	0.012	2	0.0	20.391	C
C-AB	502	560	0.896	487	6.1	42.652	E
C-A	3			3			
A-B	8			8			
A-C	310			310			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	356	642	0.554	356	1.2	12.571	B
B-A	2	174	0.013	2	0.0	20.910	C
C-AB	503	561	0.897	500	7.0	53.317	F
C-A	2			2			
A-B	8			8			
A-C	310			310			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	290	659	0.441	292	0.8	9.862	A
B-A	2	228	0.008	2	0.0	15.913	C
C-AB	405	571	0.711	423	2.7	26.695	D
C-A	7			7			
A-B	6			6			
A-C	254			254			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	243	671	0.362	244	0.6	8.448	A
B-A	2	271	0.006	2	0.0	13.371	B
C-AB	336	576	0.582	341	1.5	15.581	C
C-A	10			10			
A-B	5			5			
A-C	212			212			

# Existing Junction - 2024 with Dev , PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	94.64	F

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2024 with Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	156	100.000
B		✓	272	100.000
C		✓	672	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	7	149
	B	0	0	272
	C	108	564	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.45	9.66	0.8	A
B-A	0.00	0.00	0.0	A
C-AB	1.06	155.01	33.4	F
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	205	687	0.298	203	0.4	7.413	A
B-A	0	273	0.000	0	0.0	0.000	A
C-AB	481	692	0.695	472	2.3	15.818	C
C-A	25			25			
A-B	5			5			
A-C	112			112			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	245	681	0.359	244	0.6	8.232	A
B-A	0	240	0.000	0	0.0	0.000	A
C-AB	590	697	0.847	580	4.9	28.742	D
C-A	14			14			
A-B	6			6			
A-C	134			134			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	299	672	0.446	299	0.8	9.613	A
B-A	0	197	0.000	0	0.0	0.000	A
C-AB	740	698	1.059	675	21.1	84.573	F
C-A	0			0			
A-B	8			8			
A-C	164			164			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	299	672	0.446	299	0.8	9.660	A
B-A	0	180	0.000	0	0.0	0.000	A
C-AB	740	699	1.059	690	33.4	155.008	F
C-A	0			0			
A-B	8			8			
A-C	164			164			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	245	681	0.359	245	0.6	8.288	A
B-A	0	209	0.000	0	0.0	0.000	A
C-AB	604	707	0.854	685	13.1	127.485	F
C-A	0			0			
A-B	6			6			
A-C	134			134			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	205	687	0.298	205	0.4	7.483	A
B-A	0	259	0.000	0	0.0	0.000	A
C-AB	487	698	0.698	529	2.7	26.102	D
C-A	19			19			
A-B	5			5			
A-C	112			112			



# Existing Junction - 2025 no dev , AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	24.14	C

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D15	2025 no dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	286	100.000
B		✓	322	100.000
C		✓	449	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	7	279
	B	2	0	320
	C	32	417	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.55	12.39	1.2	B
B-A	0.01	20.29	0.0	C
C-AB	0.88	46.81	6.1	E
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	241	672	0.359	239	0.6	8.272	A
B-A	2	278	0.005	1	0.0	13.040	B
C-AB	328	576	0.569	322	1.3	13.950	B
C-A	10			10			
A-B	5			5			
A-C	210			210			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	288	660	0.436	287	0.8	9.634	A
B-A	2	239	0.008	2	0.0	15.192	C
C-AB	395	569	0.694	392	2.2	19.905	C
C-A	9			9			
A-B	6			6			
A-C	251			251			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	352	643	0.548	351	1.2	12.250	B
B-A	2	183	0.012	2	0.0	19.864	C
C-AB	491	560	0.875	478	5.4	38.871	E
C-A	4			4			
A-B	8			8			
A-C	307			307			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	352	643	0.548	352	1.2	12.385	B
B-A	2	180	0.012	2	0.0	20.293	C
C-AB	491	561	0.876	489	6.1	46.809	E
C-A	3			3			
A-B	8			8			
A-C	307			307			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	288	660	0.436	289	0.8	9.766	A
B-A	2	233	0.008	2	0.0	15.583	C
C-AB	396	570	0.694	410	2.5	24.204	C
C-A	8			8			
A-B	6			6			
A-C	251			251			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	241	672	0.359	242	0.6	8.392	A
B-A	2	274	0.005	2	0.0	13.207	B
C-AB	328	576	0.569	332	1.4	15.017	C
C-A	10			10			
A-B	5			5			
A-C	210			210			

# Existing Junction - 2025 No Dev , PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	90.36	F

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D16	2025 No Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	154	100.000
B		✓	270	100.000
C		✓	668	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	7	147
	B	0	0	270
	C	107	561	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.44	9.59	0.8	A
B-A	0.00	0.00	0.0	A
C-AB	1.05	147.75	31.5	F
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	203	687	0.296	202	0.4	7.384	A
B-A	0	274	0.000	0	0.0	0.000	A
C-AB	478	692	0.690	469	2.2	15.628	C
C-A	25			25			
A-B	5			5			
A-C	111			111			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	243	681	0.356	242	0.5	8.189	A
B-A	0	242	0.000	0	0.0	0.000	A
C-AB	586	697	0.841	576	4.8	28.039	D
C-A	14			14			
A-B	6			6			
A-C	132			132			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	297	673	0.442	296	0.8	9.543	A
B-A	0	198	0.000	0	0.0	0.000	A
C-AB	735	699	1.053	674	20.1	81.647	F
C-A	0			0			
A-B	8			8			
A-C	162			162			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	297	673	0.442	297	0.8	9.588	A
B-A	0	183	0.000	0	0.0	0.000	A
C-AB	735	699	1.052	690	31.5	147.747	F
C-A	0			0			
A-B	8			8			
A-C	162			162			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	243	681	0.356	244	0.6	8.242	A
B-A	0	212	0.000	0	0.0	0.000	A
C-AB	601	708	0.849	687	9.9	117.025	F
C-A	0			0			
A-B	6			6			
A-C	132			132			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	203	687	0.296	204	0.4	7.450	A
B-A	0	263	0.000	0	0.0	0.000	A
C-AB	483	696	0.693	512	2.6	22.325	C
C-A	20			20			
A-B	5			5			
A-C	111			111			

# Existing Junction - 2025 with dev, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	30.08	D

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D17	2025 with dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	293	100.000
B		✓	329	100.000
C		✓	466	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	7	286
	B	2	0	327
	C	33	433	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.56	12.82	1.3	B
B-A	0.01	21.54	0.0	C
C-AB	0.91	59.54	8.0	F
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	246	670	0.367	244	0.6	8.401	A
B-A	2	272	0.006	1	0.0	13.319	B
C-AB	341	575	0.592	335	1.4	14.684	B
C-A	10			10			
A-B	5			5			
A-C	215			215			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	294	658	0.447	293	0.8	9.845	A
B-A	2	231	0.008	2	0.0	15.674	C
C-AB	411	569	0.723	407	2.5	21.763	C
C-A	8			8			
A-B	6			6			
A-C	257			257			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	360	641	0.562	358	1.2	12.668	B
B-A	2	174	0.013	2	0.0	20.930	C
C-AB	511	559	0.913	493	6.8	46.081	E
C-A	3			3			
A-B	8			8			
A-C	315			315			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	360	640	0.562	360	1.3	12.824	B
B-A	2	169	0.013	2	0.0	21.543	C
C-AB	512	560	0.913	507	8.0	59.538	F
C-A	1			1			
A-B	8			8			
A-C	315			315			



09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	294	658	0.447	296	0.8	9.991	A
B-A	2	224	0.008	2	0.0	16.237	C
C-AB	412	570	0.724	433	2.9	29.267	D
C-A	7			7			
A-B	6			6			
A-C	257			257			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	246	670	0.367	247	0.6	8.527	A
B-A	2	268	0.006	2	0.0	13.523	B
C-AB	341	576	0.593	347	1.5	16.082	C
C-A	10			10			
A-B	5			5			
A-C	215			215			

# Existing Junction - 2025 with Dev, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	105.09	F

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D18	2025 with Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	158	100.000
B		✓	277	100.000
C		✓	681	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	7	151
	B	0	0	277
	C	109	572	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.45	9.82	0.8	A
B-A	0.00	0.00	0.0	A
C-AB	1.07	172.41	37.9	F
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	209	687	0.304	207	0.4	7.476	A
B-A	0	271	0.000	0	0.0	0.000	A
C-AB	489	692	0.705	479	2.4	16.288	C
C-A	24			24			
A-B	5			5			
A-C	114			114			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	249	680	0.366	248	0.6	8.326	A
B-A	0	238	0.000	0	0.0	0.000	A
C-AB	600	698	0.860	588	5.3	30.512	D
C-A	12			12			
A-B	6			6			
A-C	136			136			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	305	671	0.454	304	0.8	9.770	A
B-A	0	193	0.000	0	0.0	0.000	A
C-AB	750	698	1.075	678	23.4	91.611	F
C-A	0			0			
A-B	8			8			
A-C	166			166			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	305	671	0.454	305	0.8	9.822	A
B-A	0	175	0.000	0	0.0	0.000	A
C-AB	750	698	1.075	691	37.9	172.409	F
C-A	0			0			
A-B	8			8			
A-C	166			166			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	249	680	0.366	250	0.6	8.385	A
B-A	0	201	0.000	0	0.0	0.000	A
C-AB	612	707	0.866	687	19.2	153.315	F
C-A	0			0			
A-B	6			6			
A-C	136			136			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	209	687	0.304	209	0.4	7.547	A
B-A	0	251	0.000	0	0.0	0.000	A
C-AB	498	700	0.711	563	2.9	36.733	E
C-A	15			15			
A-B	5			5			
A-C	114			114			

# Existing Junction - 2026 no dev , AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	25.90	D

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D19	2026 no dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	291	100.000
B		✓	325	100.000
C		✓	454	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	8	283
	B	2	0	323
	C	32	422	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.55	12.59	1.2	B
B-A	0.01	20.76	0.0	C
C-AB	0.89	50.72	6.6	F
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	243	671	0.363	241	0.6	8.332	A
B-A	2	275	0.005	1	0.0	13.146	B
C-AB	332	575	0.577	326	1.3	14.202	B
C-A	10			10			
A-B	6			6			
A-C	213			213			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	290	658	0.441	290	0.8	9.733	A
B-A	2	236	0.008	2	0.0	15.377	C
C-AB	400	568	0.704	396	2.3	20.521	C
C-A	8			8			
A-B	7			7			
A-C	254			254			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	356	641	0.554	354	1.2	12.445	B
B-A	2	180	0.012	2	0.0	20.275	C
C-AB	496	559	0.888	482	5.8	41.187	E
C-A	3			3			
A-B	9			9			
A-C	312			312			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	356	641	0.555	356	1.2	12.590	B
B-A	2	176	0.013	2	0.0	20.761	C
C-AB	497	560	0.888	494	6.6	50.720	F
C-A	2			2			
A-B	9			9			
A-C	312			312			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	290	658	0.441	292	0.8	9.872	A
B-A	2	229	0.008	2	0.0	15.818	C
C-AB	401	569	0.704	417	2.6	25.680	D
C-A	7			7			
A-B	7			7			
A-C	254			254			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	243	671	0.363	244	0.6	8.454	A
B-A	2	272	0.006	2	0.0	13.327	B
C-AB	332	575	0.577	337	1.4	15.370	C
C-A	10			10			
A-B	6			6			
A-C	213			213			

# Existing Junction - 2026 No Dev , PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	98.45	F

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D20	2026 No Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	157	100.000
B		✓	273	100.000
C		✓	675	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	8	149
	B	0	0	273
	C	108	567	0

## Vehicle Mix

### Heavy Vehicle Percentages

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



## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.45	9.69	0.8	A
B-A	0.00	0.00	0.0	A
C-AB	1.07	161.31	35.0	F
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	206	687	0.299	204	0.4	7.426	A
B-A	0	272	0.000	0	0.0	0.000	A
C-AB	484	692	0.699	474	2.3	15.993	C
C-A	24			24			
A-B	6			6			
A-C	112			112			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	245	681	0.361	245	0.6	8.251	A
B-A	0	240	0.000	0	0.0	0.000	A
C-AB	594	697	0.851	583	5.0	29.385	D
C-A	13			13			
A-B	7			7			
A-C	134			134			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	301	672	0.447	300	0.8	9.645	A
B-A	0	196	0.000	0	0.0	0.000	A
C-AB	743	698	1.065	676	21.9	87.130	F
C-A	0			0			
A-B	9			9			
A-C	164			164			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	301	672	0.447	301	0.8	9.692	A
B-A	0	178	0.000	0	0.0	0.000	A
C-AB	743	698	1.065	691	35.0	161.313	F
C-A	0			0			
A-B	9			9			
A-C	164			164			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	245	681	0.361	246	0.6	8.308	A
B-A	0	206	0.000	0	0.0	0.000	A
C-AB	607	707	0.858	686	15.3	136.734	F
C-A	0			0			
A-B	7			7			
A-C	134			134			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	206	687	0.299	206	0.4	7.494	A
B-A	0	256	0.000	0	0.0	0.000	A
C-AB	491	698	0.703	541	2.7	29.372	D
C-A	17			17			
A-B	6			6			
A-C	112			112			

# Existing Junction - 2026 with dev, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	34.47	D

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D21	2026 with dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	298	100.000
B		✓	334	100.000
C		✓	475	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	8	290
	B	2	0	332
	C	33	442	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.57	13.15	1.3	B
B-A	0.01	22.40	0.0	C
C-AB	0.93	69.05	9.5	F
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	250	669	0.373	248	0.6	8.492	A
B-A	2	268	0.006	1	0.0	13.490	B
C-AB	348	574	0.606	342	1.5	15.143	C
C-A	10			10			
A-B	6			6			
A-C	218			218			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	298	657	0.455	298	0.8	9.998	A
B-A	2	227	0.008	2	0.0	15.978	C
C-AB	420	567	0.739	415	2.7	22.983	C
C-A	7			7			
A-B	7			7			
A-C	261			261			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	366	639	0.572	364	1.3	12.976	B
B-A	2	169	0.013	2	0.0	21.637	C
C-AB	521	558	0.934	501	7.8	51.011	F
C-A	2			2			
A-B	9			9			
A-C	319			319			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	366	639	0.572	365	1.3	13.150	B
B-A	2	163	0.014	2	0.0	22.401	C
C-AB	523	559	0.935	516	9.5	69.048	F
C-A	0.36			0.36			
A-B	9			9			
A-C	319			319			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	298	657	0.455	300	0.8	10.156	B
B-A	2	218	0.008	2	0.0	16.684	C
C-AB	421	569	0.740	446	3.2	33.674	D
C-A	6			6			
A-B	7			7			
A-C	261			261			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	250	669	0.373	251	0.6	8.627	A
B-A	2	264	0.006	2	0.0	13.715	B
C-AB	348	575	0.606	355	1.6	16.794	C
C-A	9			9			
A-B	6			6			
A-C	218			218			

# Existing Junction - 2026 with Dev , PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	116.53	F

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D22	2026 with Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	161	100.000
B		✓	281	100.000
C		✓	690	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	8	153
	B	0	0	281
	C	110	580	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.46	9.96	0.8	A
B-A	0.00	0.00	0.0	A
C-AB	1.09	191.44	42.9	F
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	212	686	0.308	210	0.4	7.531	A
B-A	0	268	0.000	0	0.0	0.000	A
C-AB	496	692	0.716	486	2.5	16.802	C
C-A	23			23			
A-B	6			6			
A-C	115			115			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	253	680	0.372	252	0.6	8.406	A
B-A	0	235	0.000	0	0.0	0.000	A
C-AB	609	698	0.873	596	5.8	32.520	D
C-A	11			11			
A-B	7			7			
A-C	138			138			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	309	671	0.461	308	0.8	9.908	A
B-A	0	190	0.000	0	0.0	0.000	A
C-AB	760	696	1.091	679	25.9	99.348	F
C-A	0			0			
A-B	9			9			
A-C	168			168			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	309	671	0.461	309	0.8	9.962	A
B-A	0	169	0.000	0	0.0	0.000	A
C-AB	760	697	1.091	692	42.9	191.443	F
C-A	0			0			
A-B	9			9			
A-C	168			168			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	253	680	0.372	254	0.6	8.471	A
B-A	0	194	0.000	0	0.0	0.000	A
C-AB	620	706	0.879	688	25.9	182.133	F
C-A	0			0			
A-B	7			7			
A-C	138			138			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	212	686	0.308	212	0.5	7.604	A
B-A	0	242	0.000	0	0.0	0.000	A
C-AB	509	703	0.723	600	3.1	55.063	F
C-A	11			11			
A-B	6			6			
A-C	115			115			



# Existing Junction - 2027 no dev , AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	27.49	D

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D23	2027 no dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	294	100.000
B		✓	329	100.000
C		✓	459	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	8	286
	B	2	0	327
	C	33	426	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.56	12.83	1.3	B
B-A	0.01	21.23	0.0	C
C-AB	0.90	54.19	7.1	F
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	246	670	0.367	244	0.6	8.403	A
B-A	2	273	0.006	1	0.0	13.244	B
C-AB	335	575	0.583	330	1.4	14.393	B
C-A	10			10			
A-B	6			6			
A-C	215			215			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	294	658	0.447	293	0.8	9.848	A
B-A	2	233	0.008	2	0.0	15.552	C
C-AB	404	568	0.712	400	2.3	21.018	C
C-A	8			8			
A-B	7			7			
A-C	257			257			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	360	640	0.562	358	1.2	12.673	B
B-A	2	176	0.013	2	0.0	20.685	C
C-AB	502	559	0.898	487	6.2	43.158	E
C-A	3			3			
A-B	9			9			
A-C	315			315			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	360	640	0.562	360	1.3	12.829	B
B-A	2	172	0.013	2	0.0	21.227	C
C-AB	503	560	0.899	499	7.2	54.195	F
C-A	2			2			
A-B	9			9			
A-C	315			315			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	294	658	0.447	296	0.8	9.996	A
B-A	2	226	0.008	2	0.0	16.044	C
C-AB	406	569	0.712	423	2.7	27.029	D
C-A	7			7			
A-B	7			7			
A-C	257			257			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	246	670	0.367	247	0.6	8.531	A
B-A	2	270	0.006	2	0.0	13.432	B
C-AB	336	575	0.583	341	1.5	15.649	C
C-A	10			10			
A-B	6			6			
A-C	215			215			

# Existing Junction - 2027 No Dev , PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	106.47	F

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D24	2027 No Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	158	100.000
B		✓	276	100.000
C		✓	682	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	8	150
	B	0	0	276
	C	109	573	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.45	9.79	0.8	A
B-A	0.00	0.00	0.0	A
C-AB	1.08	174.45	38.5	F
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	208	687	0.303	206	0.4	7.466	A
B-A	0	270	0.000	0	0.0	0.000	A
C-AB	489	692	0.707	480	2.4	16.345	C
C-A	24			24			
A-B	6			6			
A-C	113			113			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	248	680	0.365	248	0.6	8.306	A
B-A	0	238	0.000	0	0.0	0.000	A
C-AB	601	698	0.861	589	5.4	30.727	D
C-A	12			12			
A-B	7			7			
A-C	135			135			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	304	672	0.452	303	0.8	9.738	A
B-A	0	193	0.000	0	0.0	0.000	A
C-AB	751	697	1.077	678	23.6	92.440	F
C-A	0			0			
A-B	9			9			
A-C	165			165			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	304	672	0.452	304	0.8	9.788	A
B-A	0	174	0.000	0	0.0	0.000	A
C-AB	751	698	1.076	692	38.5	174.451	F
C-A	0			0			
A-B	9			9			
A-C	165			165			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	248	680	0.365	249	0.6	8.366	A
B-A	0	201	0.000	0	0.0	0.000	A
C-AB	613	707	0.868	687	19.9	156.395	F
C-A	0			0			
A-B	7			7			
A-C	135			135			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	208	687	0.303	208	0.4	7.533	A
B-A	0	250	0.000	0	0.0	0.000	A
C-AB	499	701	0.712	567	2.9	38.348	E
C-A	15			15			
A-B	6			6			
A-C	113			113			

# Existing Junction - 2027 with dev, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	40.11	E

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D25	2027 with dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	304	100.000
B		✓	340	100.000
C		✓	486	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	8	296
	B	2	0	338
	C	35	451	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.58	13.57	1.4	B
B-A	0.01	23.52	0.0	C
C-AB	0.96	81.29	11.5	F
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	254	668	0.381	252	0.6	8.607	A
B-A	2	264	0.006	1	0.0	13.695	B
C-AB	356	574	0.620	350	1.6	15.634	C
C-A	10			10			
A-B	6			6			
A-C	223			223			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	304	655	0.464	303	0.8	10.193	B
B-A	2	222	0.008	2	0.0	16.350	C
C-AB	430	567	0.757	424	2.9	24.383	C
C-A	7			7			
A-B	7			7			
A-C	266			266			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	372	637	0.584	370	1.4	13.374	B
B-A	2	162	0.014	2	0.0	22.535	C
C-AB	534	558	0.957	510	9.1	56.977	F
C-A	0.85			0.85			
A-B	9			9			
A-C	326			326			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	372	637	0.584	372	1.4	13.572	B
B-A	2	155	0.014	2	0.0	23.516	C
C-AB	535	559	0.957	525	11.5	81.293	F
C-A	0			0			
A-B	9			9			
A-C	326			326			



09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	304	655	0.464	306	0.9	10.370	B
B-A	2	210	0.009	2	0.0	17.264	C
C-AB	432	570	0.758	463	3.6	40.468	E
C-A	5			5			
A-B	7			7			
A-C	266			266			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	254	668	0.381	255	0.6	8.750	A
B-A	2	259	0.006	2	0.0	13.954	B
C-AB	357	575	0.620	364	1.7	17.631	C
C-A	9			9			
A-B	6			6			
A-C	223			223			

# Existing Junction - 2027 with Dev , PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	132.19	F

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D26	2027 with Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	164	100.000
B		✓	286	100.000
C		✓	701	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	8	156
	B	0	0	286
	C	112	589	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.47	10.14	0.9	B
B-A	0.00	0.00	0.0	A
C-AB	1.11	217.40	48.9	F
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	215	685	0.314	214	0.5	7.599	A
B-A	0	266	0.000	0	0.0	0.000	A
C-AB	505	693	0.729	494	2.7	17.416	C
C-A	23			23			
A-B	6			6			
A-C	117			117			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	257	679	0.379	257	0.6	8.512	A
B-A	0	232	0.000	0	0.0	0.000	A
C-AB	621	698	0.889	606	6.4	35.053	E
C-A	10			10			
A-B	7			7			
A-C	140			140			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	315	670	0.470	314	0.9	10.084	B
B-A	0	185	0.000	0	0.0	0.000	A
C-AB	772	696	1.110	681	28.9	108.802	F
C-A	0			0			
A-B	9			9			
A-C	172			172			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	315	670	0.470	315	0.9	10.144	B
B-A	0	162	0.000	0	0.0	0.000	A
C-AB	772	696	1.109	692	48.9	214.507	F
C-A	0			0			
A-B	9			9			
A-C	172			172			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	257	679	0.379	258	0.6	8.579	A
B-A	0	184	0.000	0	0.0	0.000	A
C-AB	630	705	0.894	690	34.0	217.399	F
C-A	0			0			
A-B	7			7			
A-C	140			140			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	215	685	0.314	216	0.5	7.679	A
B-A	0	231	0.000	0	0.0	0.000	A
C-AB	522	707	0.738	643	3.6	86.747	F
C-A	6			6			
A-B	6			6			
A-C	117			117			

# Existing Junction - 2029 no dev , AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	31.40	D

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D27	2029 no dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	300	100.000
B		✓	336	100.000
C		✓	468	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	8	292
	B	2	0	334
	C	33	435	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.58	13.28	1.3	B
B-A	0.01	22.20	0.0	C
C-AB	0.92	62.76	8.4	F
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	251	669	0.376	249	0.6	8.530	A
B-A	2	269	0.006	1	0.0	13.439	B
C-AB	342	574	0.596	337	1.4	14.846	B
C-A	10			10			
A-B	6			6			
A-C	220			220			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	300	656	0.458	299	0.8	10.061	B
B-A	2	228	0.008	2	0.0	15.904	C
C-AB	413	567	0.728	409	2.5	22.189	C
C-A	8			8			
A-B	7			7			
A-C	263			263			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	368	638	0.576	366	1.3	13.104	B
B-A	2	169	0.013	2	0.0	21.521	C
C-AB	513	558	0.920	495	7.1	47.806	E
C-A	2			2			
A-B	9			9			
A-C	321			321			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	368	638	0.576	368	1.3	13.283	B
B-A	2	164	0.013	2	0.0	22.205	C
C-AB	514	559	0.921	509	8.5	62.764	F
C-A	1			1			
A-B	9			9			
A-C	321			321			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	300	656	0.458	302	0.9	10.227	B
B-A	2	220	0.008	2	0.0	16.522	C
C-AB	414	568	0.729	436	3.0	30.663	D
C-A	6			6			
A-B	7			7			
A-C	263			263			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	251	669	0.376	252	0.6	8.668	A
B-A	2	265	0.006	2	0.0	13.651	B
C-AB	343	574	0.597	349	1.6	16.326	C
C-A	10			10			
A-B	6			6			
A-C	220			220			

# Existing Junction - 2029 No Dev , PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	125.51	F

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D28	2029 No Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	162	100.000
B		✓	282	100.000
C		✓	697	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	8	154
	B	0	0	282
	C	111	586	0

## Vehicle Mix

### Heavy Vehicle Percentages

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



## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.46	10.00	0.9	B
B-A	0.00	0.00	0.0	A
C-AB	1.10	205.81	46.6	F
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	212	686	0.310	211	0.4	7.546	A
B-A	0	267	0.000	0	0.0	0.000	A
C-AB	502	693	0.724	491	2.6	17.189	C
C-A	23			23			
A-B	6			6			
A-C	116			116			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	254	679	0.373	253	0.6	8.430	A
B-A	0	233	0.000	0	0.0	0.000	A
C-AB	616	698	0.883	602	6.1	34.092	D
C-A	10			10			
A-B	7			7			
A-C	138			138			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	310	670	0.463	309	0.8	9.948	A
B-A	0	187	0.000	0	0.0	0.000	A
C-AB	767	696	1.103	681	27.8	105.225	F
C-A	0			0			
A-B	9			9			
A-C	170			170			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	310	670	0.463	310	0.9	10.001	B
B-A	0	165	0.000	0	0.0	0.000	A
C-AB	767	696	1.102	692	46.6	205.807	F
C-A	0			0			
A-B	9			9			
A-C	170			170			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	254	679	0.373	255	0.6	8.495	A
B-A	0	188	0.000	0	0.0	0.000	A
C-AB	627	705	0.889	689	30.9	204.127	F
C-A	0			0			
A-B	7			7			
A-C	138			138			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	212	686	0.310	213	0.5	7.622	A
B-A	0	235	0.000	0	0.0	0.000	A
C-AB	517	705	0.733	627	3.4	73.871	F
C-A	8			8			
A-B	6			6			
A-C	116			116			

# Existing Junction - 2029 with dev, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	51.06	F

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D29	2029 with dev	AM	ONE HOUR	08:00	09:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	312	100.000
B		✓	350	100.000
C		✓	501	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	8	304
	B	2	0	348
	C	35	466	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	4	1
	B	4	0	3
	C	3	11	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.60	14.30	1.5	B
B-A	0.02	25.53	0.0	D
C-AB	0.99	105.04	15.7	F
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	262	666	0.393	259	0.6	8.797	A
B-A	2	258	0.006	1	0.0	14.021	B
C-AB	368	573	0.642	361	1.7	16.510	C
C-A	9			9			
A-B	6			6			
A-C	229			229			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	313	653	0.479	312	0.9	10.516	B
B-A	2	214	0.008	2	0.0	16.955	C
C-AB	444	566	0.785	438	3.3	26.958	D
C-A	6			6			
A-B	7			7			
A-C	273			273			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	383	635	0.604	381	1.5	14.061	B
B-A	2	152	0.015	2	0.0	24.073	C
C-AB	552	556	0.993	519	11.5	67.771	F
C-A	0			0			
A-B	9			9			
A-C	335			335			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	383	634	0.604	383	1.5	14.303	B
B-A	2	143	0.015	2	0.0	25.527	D
C-AB	552	556	0.992	535	15.7	105.043	F
C-A	0			0			
A-B	9			9			
A-C	335			335			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	313	653	0.479	315	0.9	10.725	B
B-A	2	198	0.009	2	0.0	18.346	C
C-AB	447	569	0.786	492	4.4	58.482	F
C-A	3			3			
A-B	7			7			
A-C	273			273			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	262	666	0.393	263	0.7	8.956	A
B-A	2	252	0.006	2	0.0	14.352	B
C-AB	369	574	0.643	379	1.9	19.316	C
C-A	9			9			
A-B	6			6			
A-C	229			229			

# Existing Junction - 2029 with Dev , PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Upper Dublin Hill	T-Junction	Two-way	174.41	F

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D30	2029 with Dev	PM	ONE HOUR	17:00	18:30	15

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

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	169	100.000
B		✓	295	100.000
C		✓	721	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A	B	C
From	A	0	8	161
	B	0	0	295
	C	115	606	0

## Vehicle Mix

### Heavy Vehicle Percentages

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

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.49	10.48	0.9	B
B-A	0.00	0.00	0.0	A
C-AB	1.14	287.52	60.6	F
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	222	684	0.325	220	0.5	7.724	A
B-A	0	261	0.000	0	0.0	0.000	A
C-AB	521	693	0.752	509	3.0	18.664	C
C-A	21			21			
A-B	6			6			
A-C	121			121			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	265	678	0.391	265	0.6	8.702	A
B-A	0	226	0.000	0	0.0	0.000	A
C-AB	641	699	0.918	622	7.7	40.572	E
C-A	7			7			
A-B	7			7			
A-C	145			145			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	325	668	0.486	324	0.9	10.413	B
B-A	0	177	0.000	0	0.0	0.000	A
C-AB	794	694	1.144	684	35.2	128.139	F
C-A	0			0			
A-B	9			9			
A-C	177			177			

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	325	668	0.486	325	0.9	10.480	B
B-A	0	149	0.000	0	0.0	0.000	A
C-AB	794	694	1.144	692	60.6	260.436	F
C-A	0			0			
A-B	9			9			
A-C	177			177			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	265	678	0.391	266	0.7	8.779	A
B-A	0	167	0.000	0	0.0	0.000	A
C-AB	648	704	0.921	691	49.8	287.523	F
C-A	0			0			
A-B	7			7			
A-C	145			145			

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	222	684	0.325	223	0.5	7.809	A
B-A	0	210	0.000	0	0.0	0.000	A
C-AB	543	710	0.764	695	11.7	165.248	F
C-A	0			0			
A-B	6			6			
A-C	121			121			



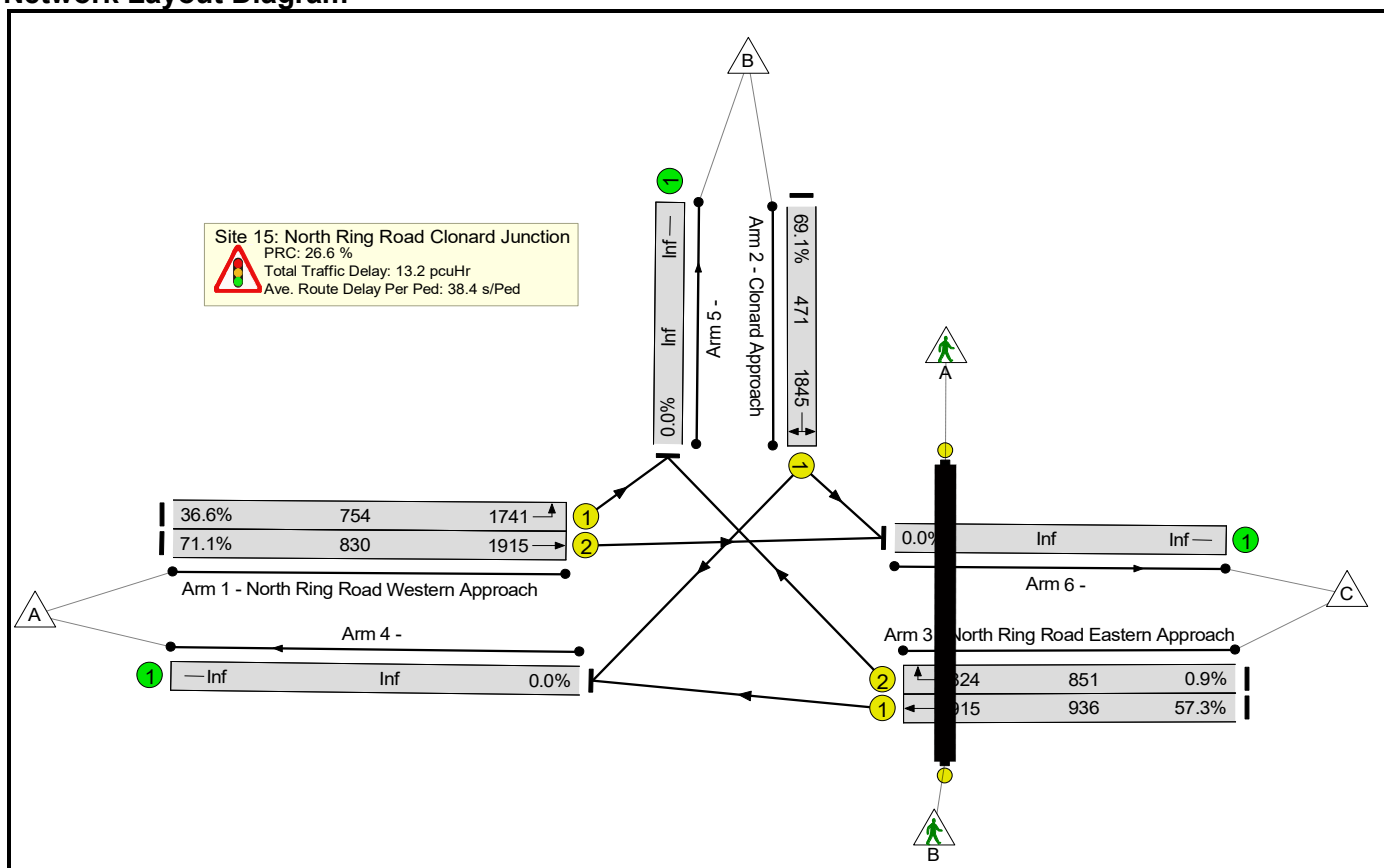
Basic Results Summary  
**Basic Results Summary**

**User and Project Details**

<b>Project:</b>	
<b>Title:</b>	
<b>Location:</b>	
<b>Additional detail:</b>	
<b>File name:</b>	Site 15 North Ring Road Clonard Junction.lsg3x
<b>Author:</b>	
<b>Company:</b>	
<b>Address:</b>	

**Scenario 1: '2019 AM'** (FG1: '2019 AM', Plan 1: 'Network Control Plan 1')

**Network Layout Diagram**



Basic Results Summary

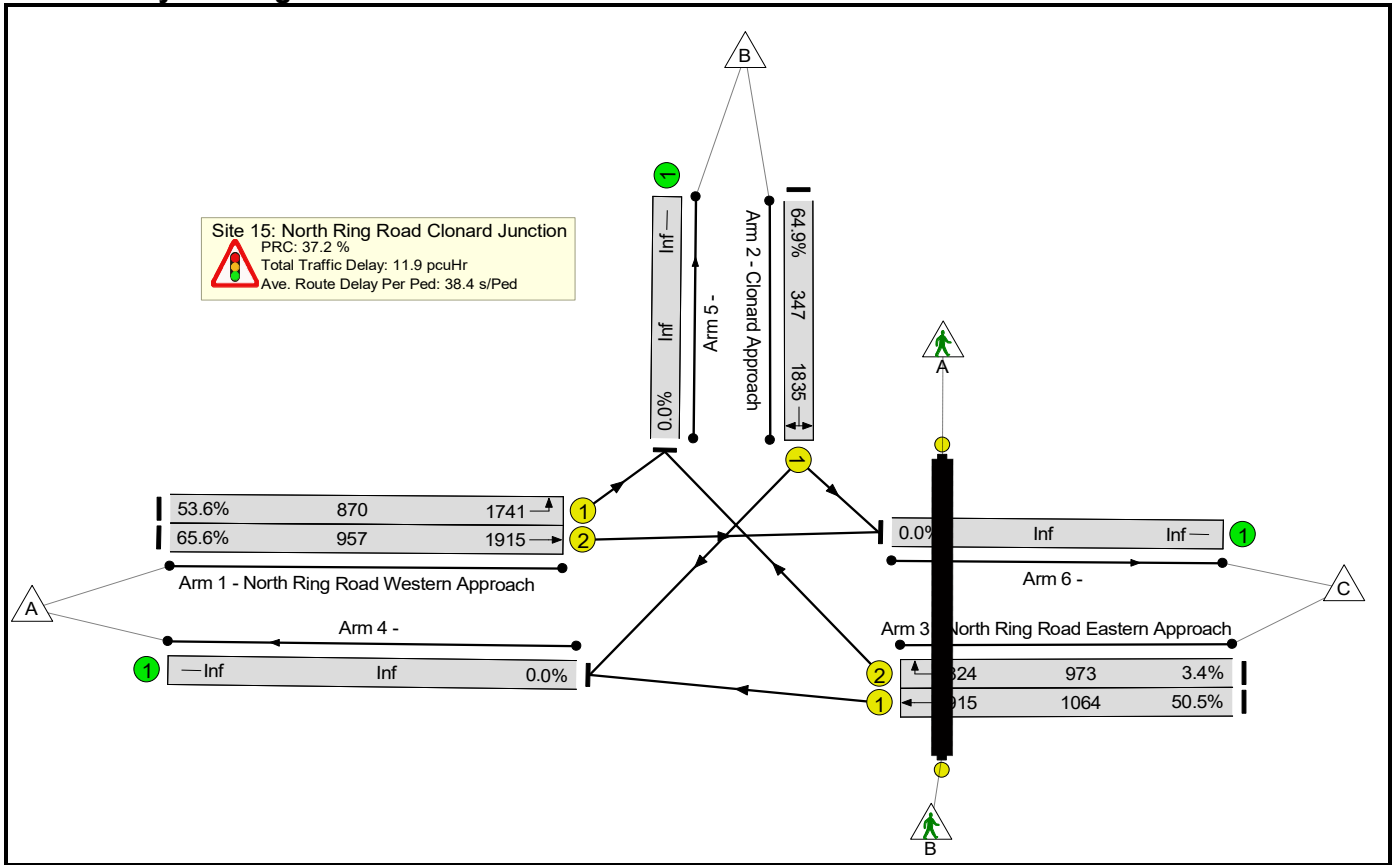
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	71.1%	0	0	0	13.2	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	71.1%	0	0	0	13.2	-	-
1/1	North Ring Road Western Approach Left	U	A		1	38	-	276	1741	754	36.6%	-	-	-	1.6	20.9	4.9
1/2	North Ring Road Western Approach Ahead	U	A		1	38	-	590	1915	830	71.1%	-	-	-	4.6	28.3	13.2
2/1	Clonard Approach Right Left	U	B		1	22	-	326	1845	471	69.1%	-	-	-	3.8	42.5	8.4
3/1	North Ring Road Eastern Approach Ahead	U	C		1	43	-	536	1915	936	57.3%	-	-	-	3.1	20.8	10.0
3/2	North Ring Road Eastern Approach Right	U	E		1	41	-	8	1824	851	0.9%	-	-	-	0.0	15.2	0.1
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
C1					PRC for Signalled Lanes (%):		26.6	Total Delay for Signalled Lanes (pcuHr):				13.23	Cycle Time (s): 90				
					PRC Over All Lanes (%):		26.6	Total Delay Over All Lanes(pcuHr):				13.23					

Basic Results Summary

Scenario 2: '2019 PM' (FG2: '2019 PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

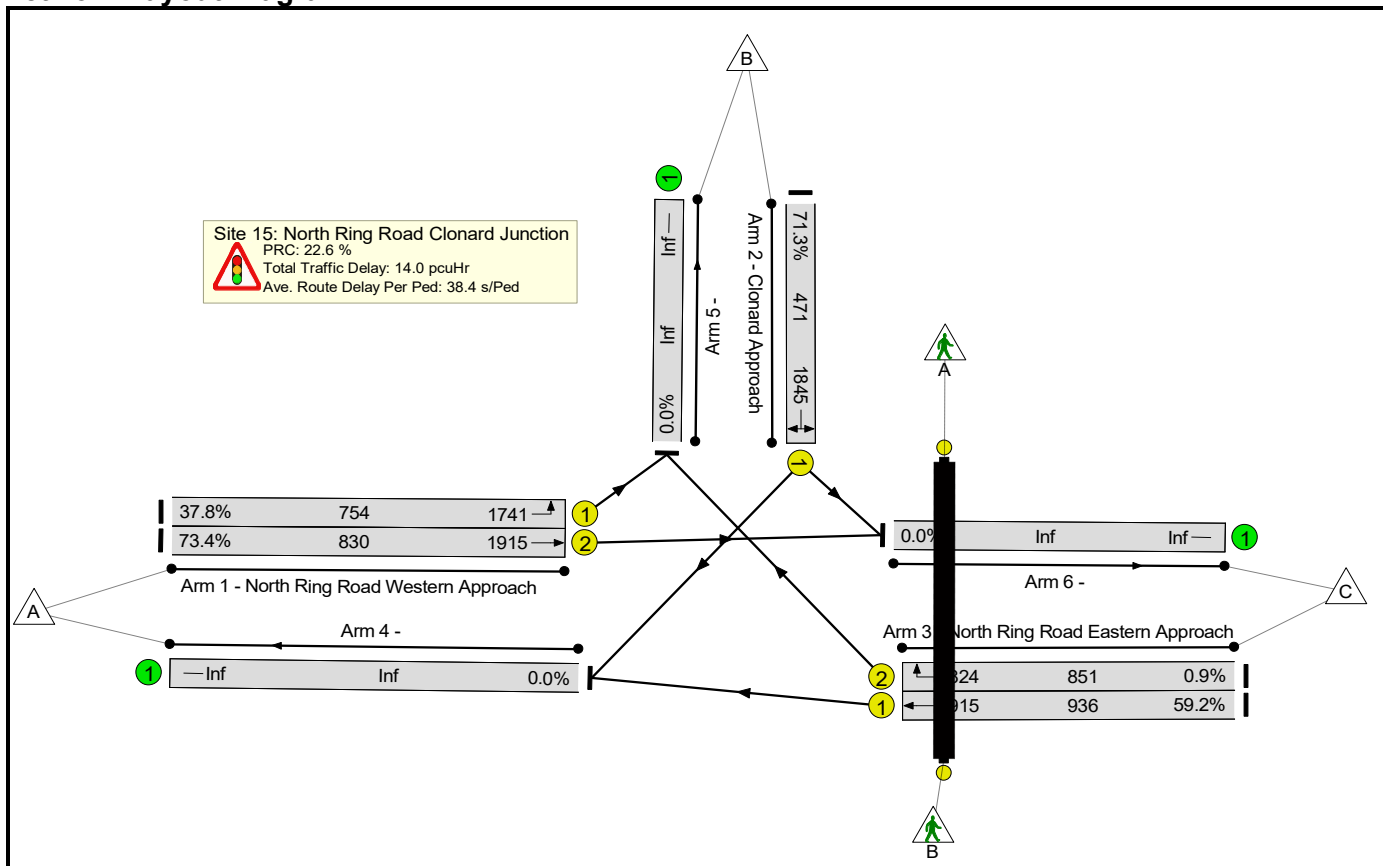
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	65.6%	0	0	0	11.9	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	65.6%	0	0	0	11.9	-	-
1/1	North Ring Road Western Approach Left	U	A		1	44	-	467	1741	870	53.6%	-	-	-	2.6	19.8	8.5
1/2	North Ring Road Western Approach Ahead	U	A		1	44	-	628	1915	957	65.6%	-	-	-	3.9	22.2	12.5
2/1	Clonard Approach Right Left	U	B		1	16	-	225	1835	347	64.9%	-	-	-	3.0	48.3	6.1
3/1	North Ring Road Eastern Approach Ahead	U	C		1	49	-	537	1915	1064	50.5%	-	-	-	2.4	15.8	8.7
3/2	North Ring Road Eastern Approach Right	U	E		1	47	-	33	1824	973	3.4%	-	-	-	0.1	11.9	0.4
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
		C1	PRC for Signalled Lanes (%):		37.2		Total Delay for Signalled Lanes (pcuHr):		11.92		Cycle Time (s):		90				
			PRC Over All Lanes (%):		37.2		Total Delay Over All Lanes(pcuHr):		11.92								

Basic Results Summary

Scenario 3: '2022 AM no Dev' (FG3: '2022 AM no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

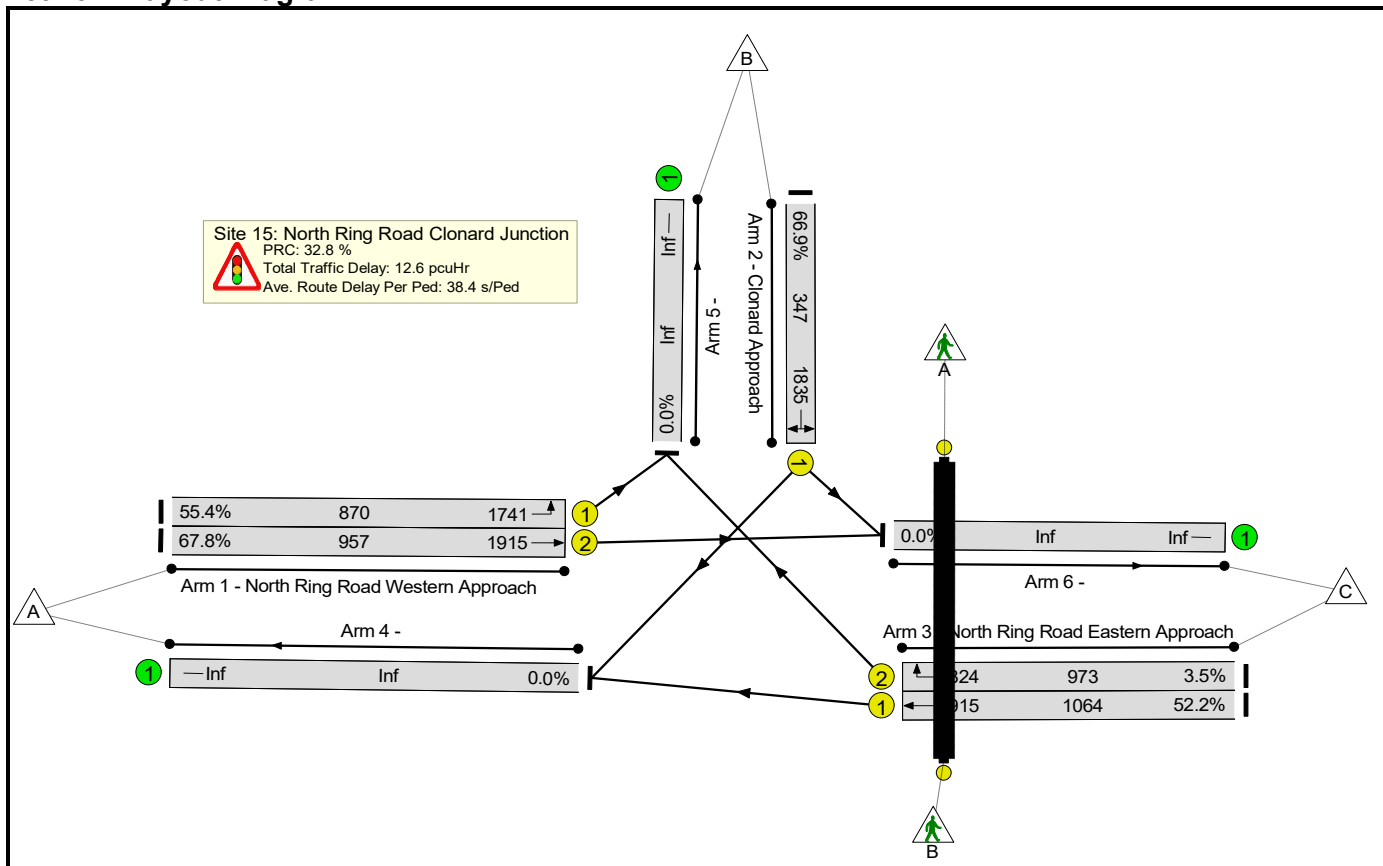
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	73.4%	0	0	0	14.0	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	73.4%	0	0	0	14.0	-	-
1/1	North Ring Road Western Approach Left	U	A		1	38	-	285	1741	754	37.8%	-	-	-	1.7	21.1	5.1
1/2	North Ring Road Western Approach Ahead	U	A		1	38	-	609	1915	830	73.4%	-	-	-	4.9	29.2	13.9
2/1	Clonard Approach Right Left	U	B		1	22	-	336	1845	471	71.3%	-	-	-	4.1	43.5	8.8
3/1	North Ring Road Eastern Approach Ahead	U	C		1	43	-	554	1915	936	59.2%	-	-	-	3.3	21.2	10.6
3/2	North Ring Road Eastern Approach Right	U	E		1	41	-	8	1824	851	0.9%	-	-	-	0.0	15.2	0.1
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
				C1	PRC for Signalled Lanes (%): 22.6		PRC Over All Lanes (%): 22.6		Total Delay for Signalled Lanes (pcuHr): 13.98			Total Delay Over All Lanes(pcuHr): 13.98		Cycle Time (s): 90			

Basic Results Summary

Scenario 4: '2022 PM no Dev' (FG4: '2022 PM no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

**Network Results**

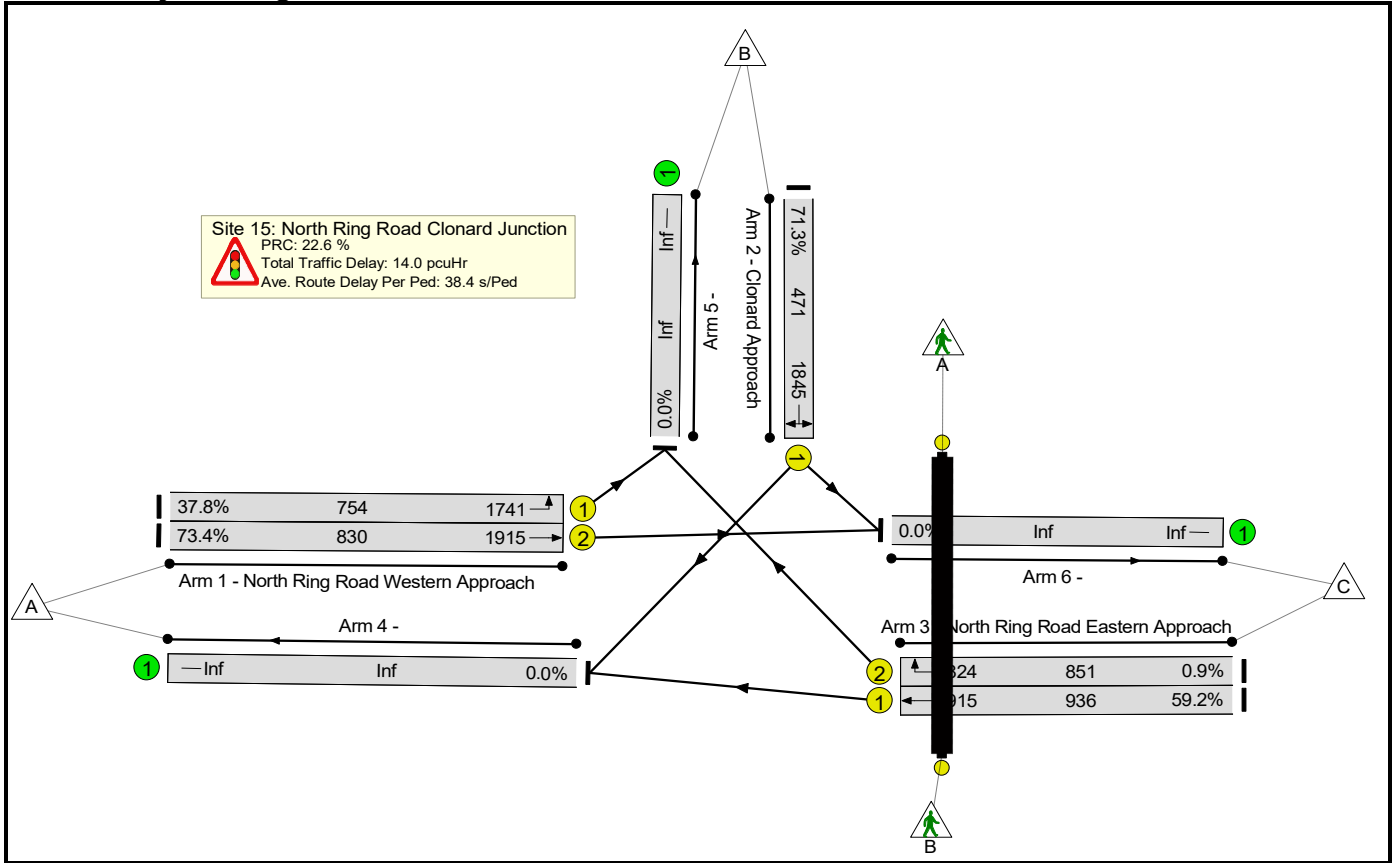
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	-		-	-	-	-	-	-	67.8%	0	0	0	12.6	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	67.8%	0	0	0	12.6	-	-
1/1	North Ring Road Western Approach Left	U	A		1	44	-	482	1741	870	55.4%	-	-	-	2.7	20.2	8.9
1/2	North Ring Road Western Approach Ahead	U	A		1	44	-	649	1915	957	67.8%	-	-	-	4.1	22.8	13.3
2/1	Clonard Approach Right Left	U	B		1	16	-	232	1835	347	66.9%	-	-	-	3.2	49.3	6.3
3/1	North Ring Road Eastern Approach Ahead	U	C		1	49	-	555	1915	1064	52.2%	-	-	-	2.5	16.0	9.2
3/2	North Ring Road Eastern Approach Right	U	E		1	47	-	34	1824	973	3.5%	-	-	-	0.1	12.0	0.4
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
				C1	PRC for Signalled Lanes (%): 32.8		32.8	Total Delay for Signalled Lanes (pcuHr): 12.58				Cycle Time (s): 90					
					PRC Over All Lanes (%): 32.8			Total Delay Over All Lanes(pcuHr): 12.58									



Basic Results Summary

Scenario 5: '2022 AM with Dev' (FG3: '2022 AM no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

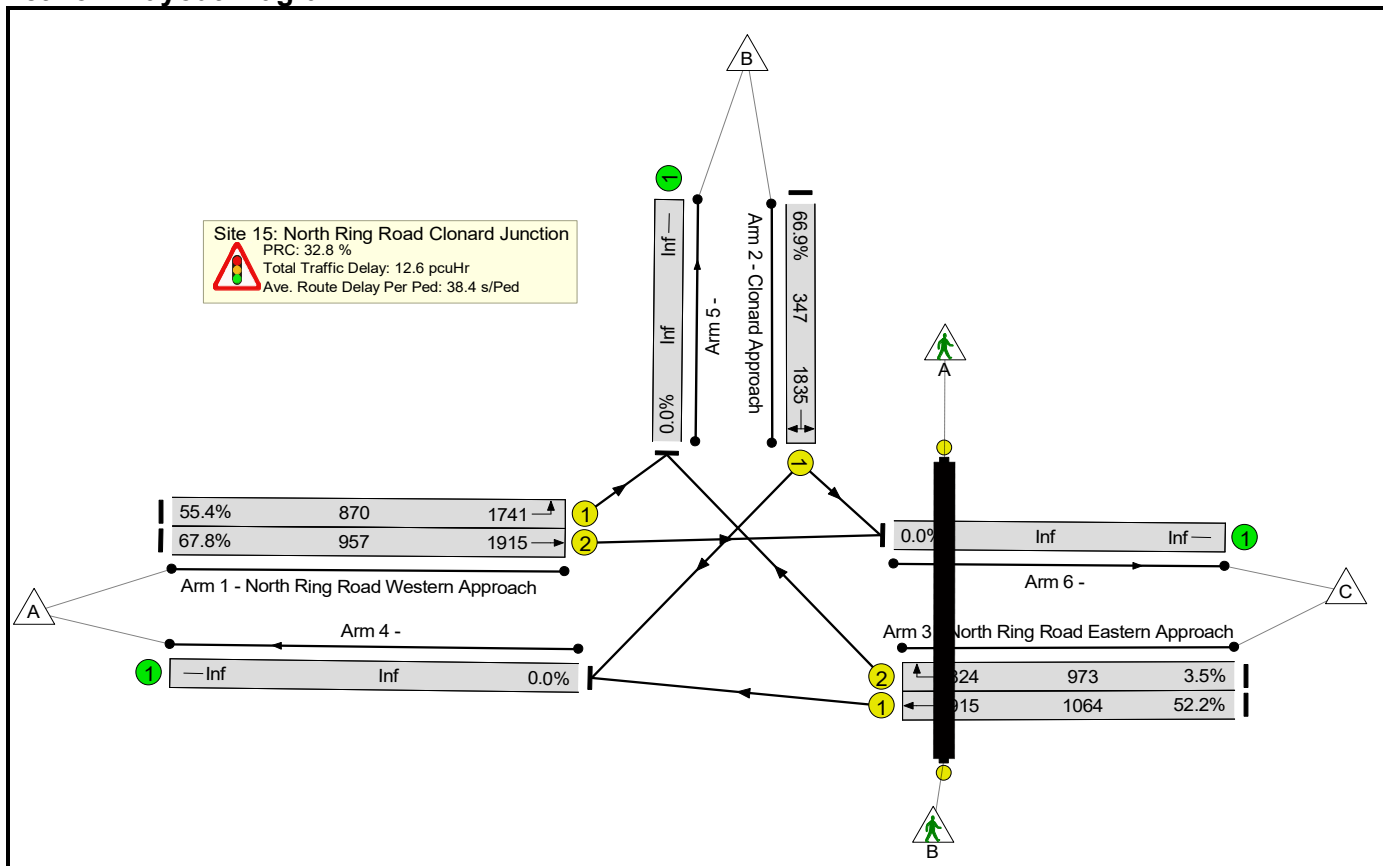
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	73.4%	0	0	0	14.0	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	73.4%	0	0	0	14.0	-	-
1/1	North Ring Road Western Approach Left	U	A		1	38	-	285	1741	754	37.8%	-	-	-	1.7	21.1	5.1
1/2	North Ring Road Western Approach Ahead	U	A		1	38	-	609	1915	830	73.4%	-	-	-	4.9	29.2	13.9
2/1	Clonard Approach Right Left	U	B		1	22	-	336	1845	471	71.3%	-	-	-	4.1	43.5	8.8
3/1	North Ring Road Eastern Approach Ahead	U	C		1	43	-	554	1915	936	59.2%	-	-	-	3.3	21.2	10.6
3/2	North Ring Road Eastern Approach Right	U	E		1	41	-	8	1824	851	0.9%	-	-	-	0.0	15.2	0.1
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
C1					PRC for Signalled Lanes (%):		22.6	Total Delay for Signalled Lanes (pcuHr):				13.98	Cycle Time (s): 90				
					PRC Over All Lanes (%):		22.6	Total Delay Over All Lanes(pcuHr):				13.98					

Basic Results Summary

Scenario 6: '2022 PM with Dev' (FG4: '2022 PM no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

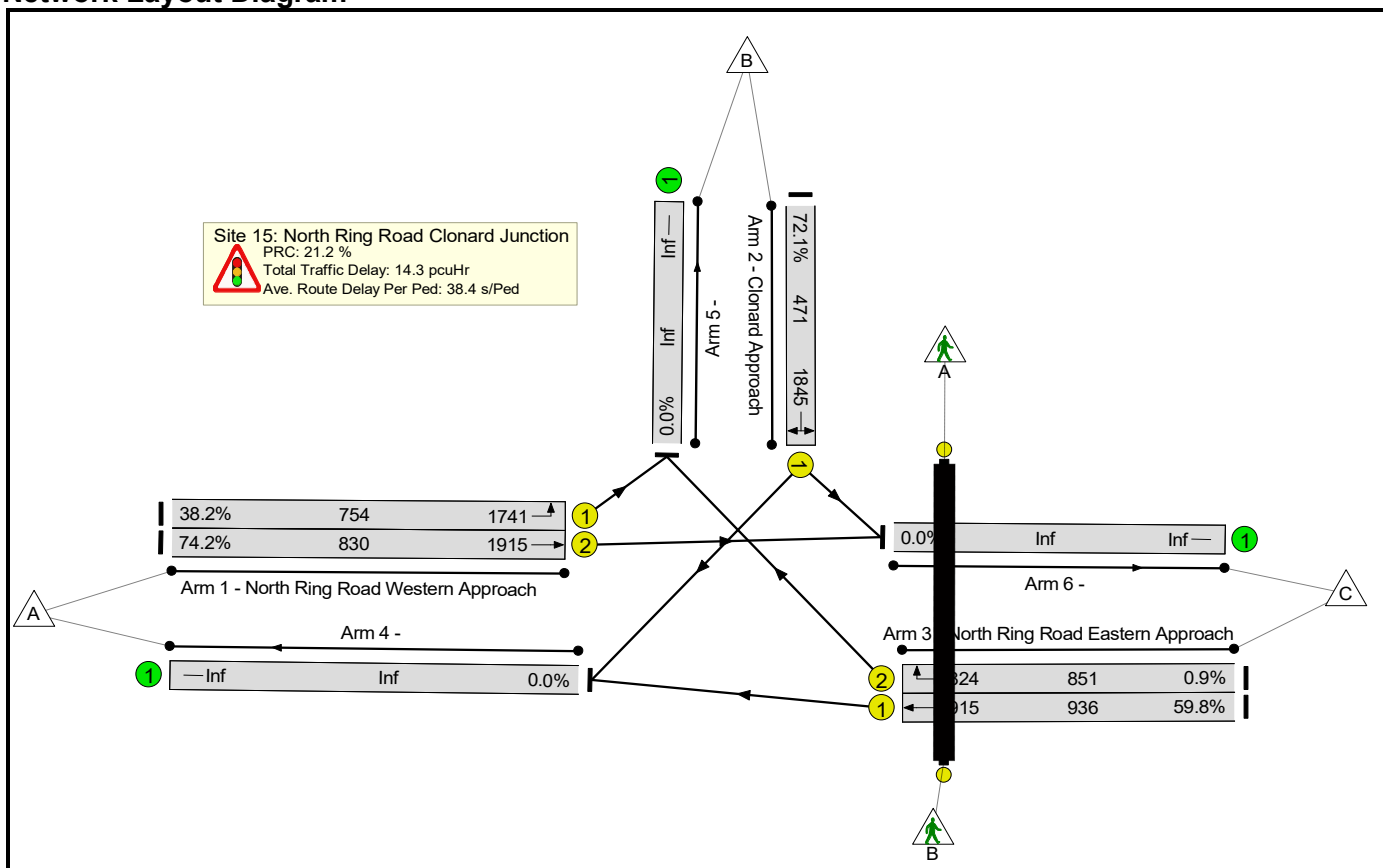
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	67.8%	0	0	0	12.6	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	67.8%	0	0	0	12.6	-	-
1/1	North Ring Road Western Approach Left	U	A		1	44	-	482	1741	870	55.4%	-	-	-	2.7	20.2	8.9
1/2	North Ring Road Western Approach Ahead	U	A		1	44	-	649	1915	957	67.8%	-	-	-	4.1	22.8	13.3
2/1	Clonard Approach Right Left	U	B		1	16	-	232	1835	347	66.9%	-	-	-	3.2	49.3	6.3
3/1	North Ring Road Eastern Approach Ahead	U	C		1	49	-	555	1915	1064	52.2%	-	-	-	2.5	16.0	9.2
3/2	North Ring Road Eastern Approach Right	U	E		1	47	-	34	1824	973	3.5%	-	-	-	0.1	12.0	0.4
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
				C1	PRC for Signalled Lanes (%): 32.8		32.8	Total Delay for Signalled Lanes (pcuHr):			12.58	Cycle Time (s):		90			
					PRC Over All Lanes (%):		32.8	Total Delay Over All Lanes(pcuHr):			12.58						

Basic Results Summary

Scenario 7: '2023 AM no Dev' (FG7: '2023 AM no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

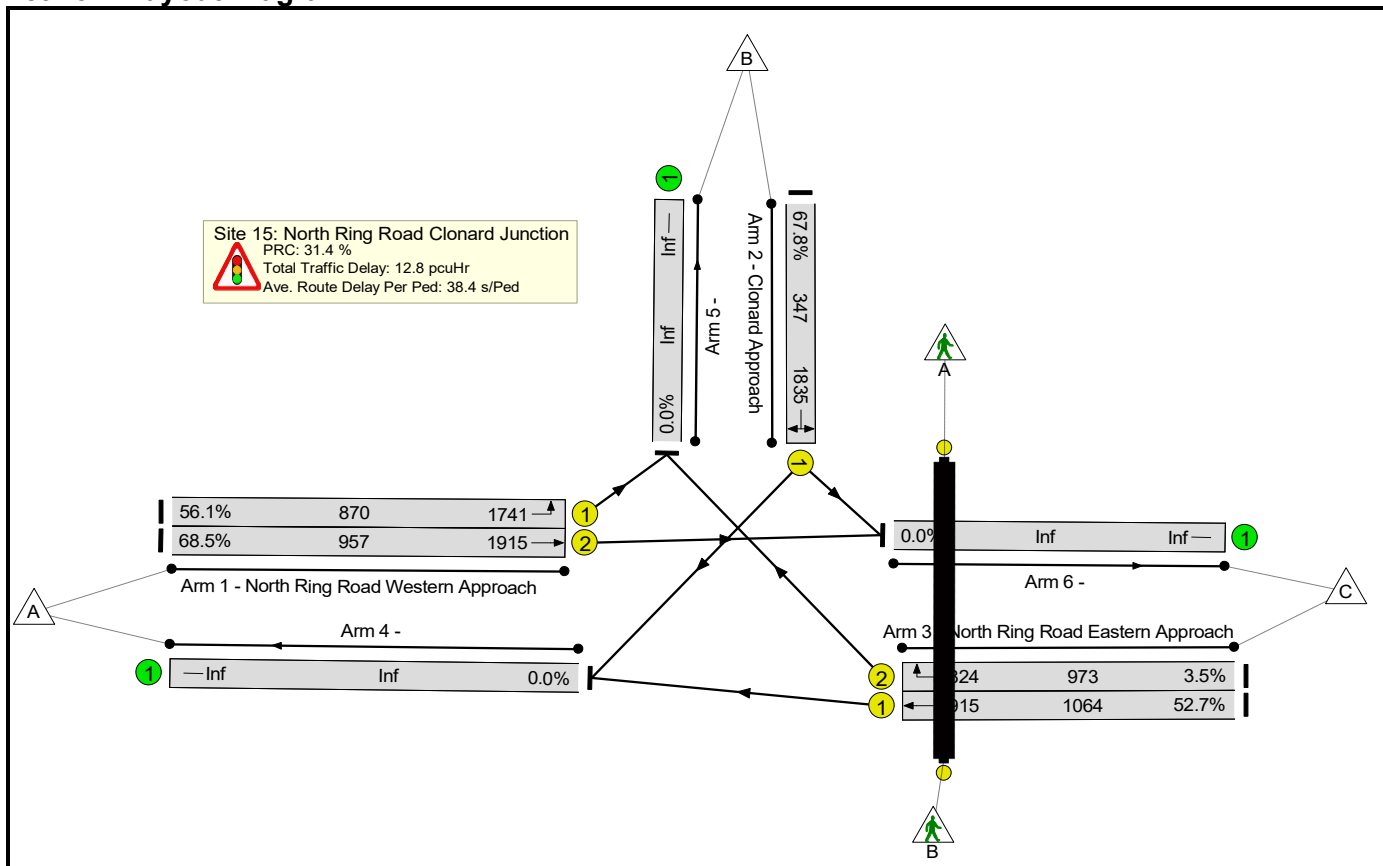
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	74.2%	0	0	0	14.3	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	74.2%	0	0	0	14.3	-	-
1/1	North Ring Road Western Approach Left	U	A		1	38	-	288	1741	754	38.2%	-	-	-	1.7	21.2	5.2
1/2	North Ring Road Western Approach Ahead	U	A		1	38	-	616	1915	830	74.2%	-	-	-	5.1	29.6	14.3
2/1	Clonard Approach Right Left	U	B		1	22	-	340	1845	471	72.1%	-	-	-	4.2	44.0	9.0
3/1	North Ring Road Eastern Approach Ahead	U	C		1	43	-	560	1915	936	59.8%	-	-	-	3.3	21.4	10.9
3/2	North Ring Road Eastern Approach Right	U	E		1	41	-	8	1824	851	0.9%	-	-	-	0.0	15.2	0.1
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
				C1	PRC for Signalled Lanes (%): 21.2		21.2	Total Delay for Signalled Lanes (pcuHr):			14.28	Cycle Time (s):		90			
					PRC Over All Lanes (%):		21.2	Total Delay Over All Lanes(pcuHr):			14.28						

Basic Results Summary

Scenario 8: '2023 PM no Dev' (FG8: '2023 PM no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

**Network Results**

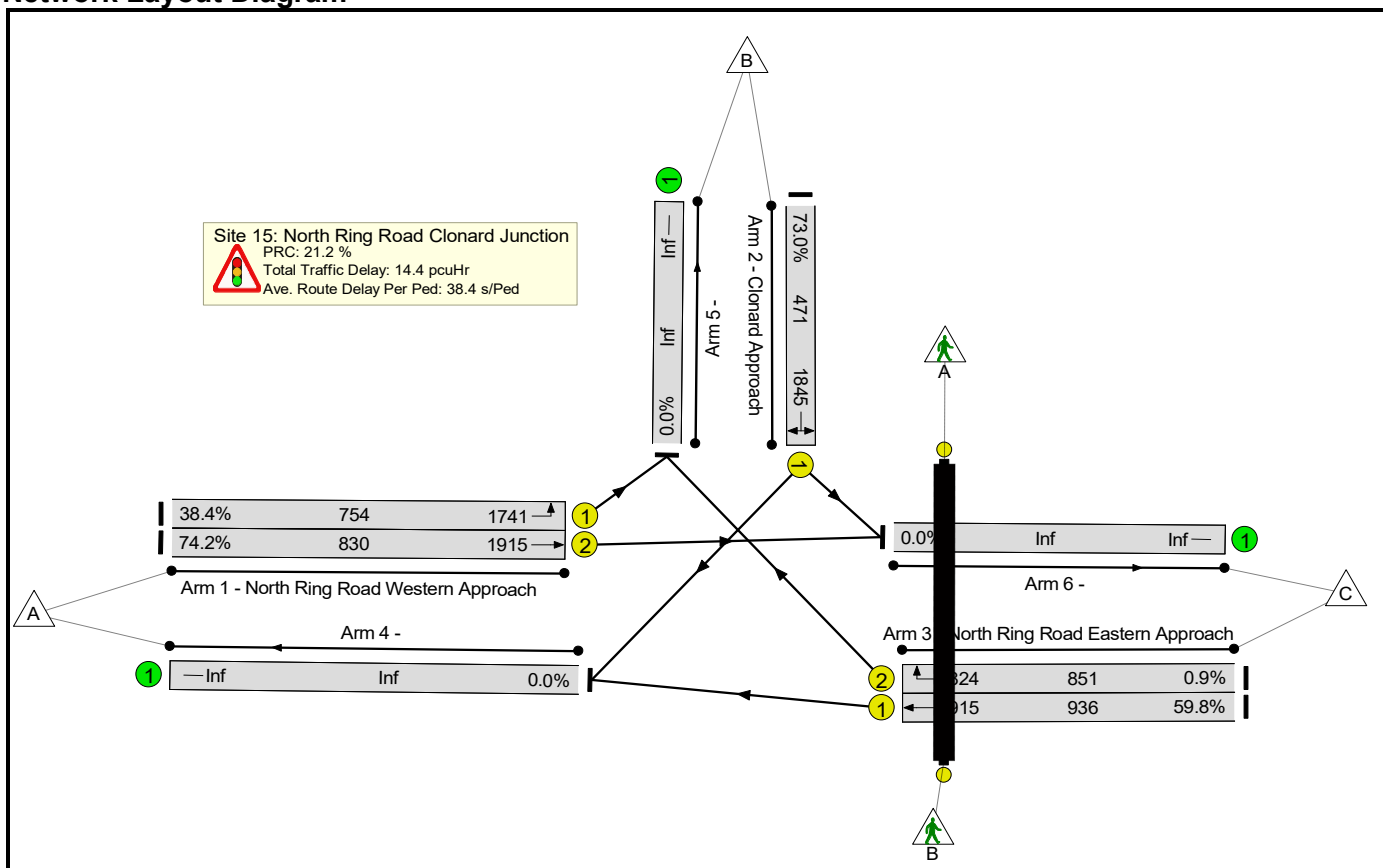
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	-		-	-	-	-	-	-	68.5%	0	0	0	12.8	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	68.5%	0	0	0	12.8	-	-
1/1	North Ring Road Western Approach Left	U	A		1	44	-	488	1741	870	56.1%	-	-	-	2.8	20.3	9.0
1/2	North Ring Road Western Approach Ahead	U	A		1	44	-	656	1915	957	68.5%	-	-	-	4.2	23.0	13.5
2/1	Clonard Approach Right Left	U	B		1	16	-	235	1835	347	67.8%	-	-	-	3.3	49.8	6.5
3/1	North Ring Road Eastern Approach Ahead	U	C		1	49	-	561	1915	1064	52.7%	-	-	-	2.5	16.1	9.3
3/2	North Ring Road Eastern Approach Right	U	E		1	47	-	34	1824	973	3.5%	-	-	-	0.1	12.0	0.4
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
				C1	PRC for Signalled Lanes (%): 31.4		31.4	Total Delay for Signalled Lanes (pcuHr): 12.83			12.83	Cycle Time (s): 90					
					PRC Over All Lanes (%): 31.4			Total Delay Over All Lanes(pcuHr): 12.83									



Basic Results Summary

Scenario 9: '2023 AM with Dev' (FG9: '2023 AM with dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

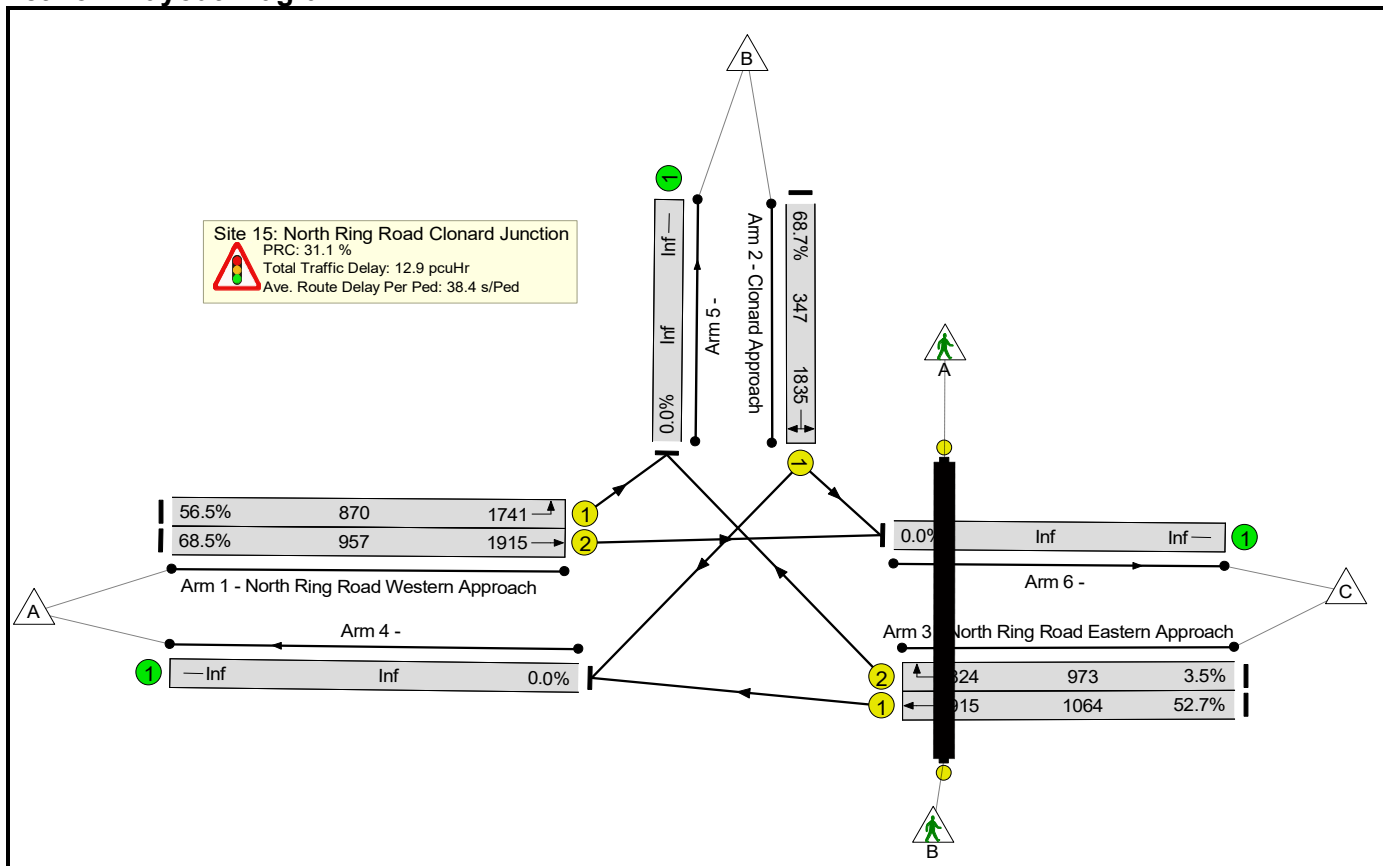
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	74.2%	0	0	0	14.4	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	74.2%	0	0	0	14.4	-	-
1/1	North Ring Road Western Approach Left	U	A		1	38	-	290	1741	754	38.4%	-	-	-	1.7	21.2	5.2
1/2	North Ring Road Western Approach Ahead	U	A		1	38	-	616	1915	830	74.2%	-	-	-	5.1	29.6	14.3
2/1	Clonard Approach Right Left	U	B		1	22	-	344	1845	471	73.0%	-	-	-	4.3	44.5	9.2
3/1	North Ring Road Eastern Approach Ahead	U	C		1	43	-	560	1915	936	59.8%	-	-	-	3.3	21.4	10.9
3/2	North Ring Road Eastern Approach Right	U	E		1	41	-	8	1824	851	0.9%	-	-	-	0.0	15.2	0.1
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
				C1	PRC for Signalled Lanes (%): 21.2		21.2	Total Delay for Signalled Lanes (pcuHr): 14.39				14.39	Cycle Time (s): 90				
					PRC Over All Lanes (%): 21.2			Total Delay Over All Lanes(pcuHr): 14.39									

Basic Results Summary

Scenario 10: '2023 PM with Dev' (FG10: '2023 PM With dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

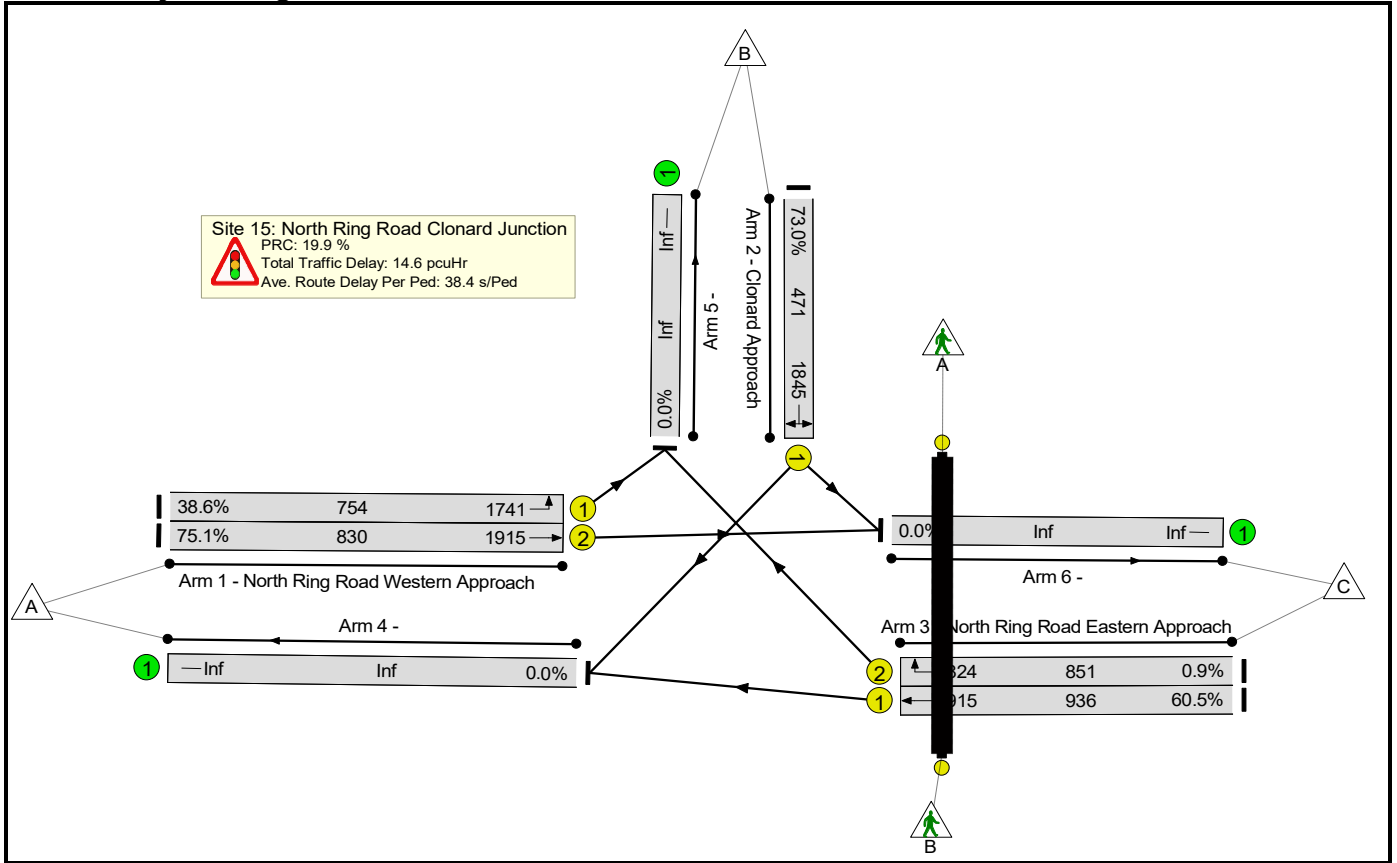
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	68.7%	0	0	0	12.9	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	68.7%	0	0	0	12.9	-	-
1/1	North Ring Road Western Approach Left	U	A		1	44	-	492	1741	870	56.5%	-	-	-	2.8	20.4	9.1
1/2	North Ring Road Western Approach Ahead	U	A		1	44	-	656	1915	957	68.5%	-	-	-	4.2	23.0	13.5
2/1	Clonard Approach Right Left	U	B		1	16	-	238	1835	347	68.7%	-	-	-	3.3	50.3	6.6
3/1	North Ring Road Eastern Approach Ahead	U	C		1	49	-	561	1915	1064	52.7%	-	-	-	2.5	16.1	9.3
3/2	North Ring Road Eastern Approach Right	U	E		1	47	-	34	1824	973	3.5%	-	-	-	0.1	12.0	0.4
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
				C1	PRC for Signalled Lanes (%): 31.1		PRC Over All Lanes (%): 31.1		Total Delay for Signalled Lanes (pcuHr): 12.94			Total Delay Over All Lanes(pcuHr): 12.94			Cycle Time (s): 90		

Basic Results Summary

Scenario 11: '2024 AM no Dev' (FG11: '2024 AM no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

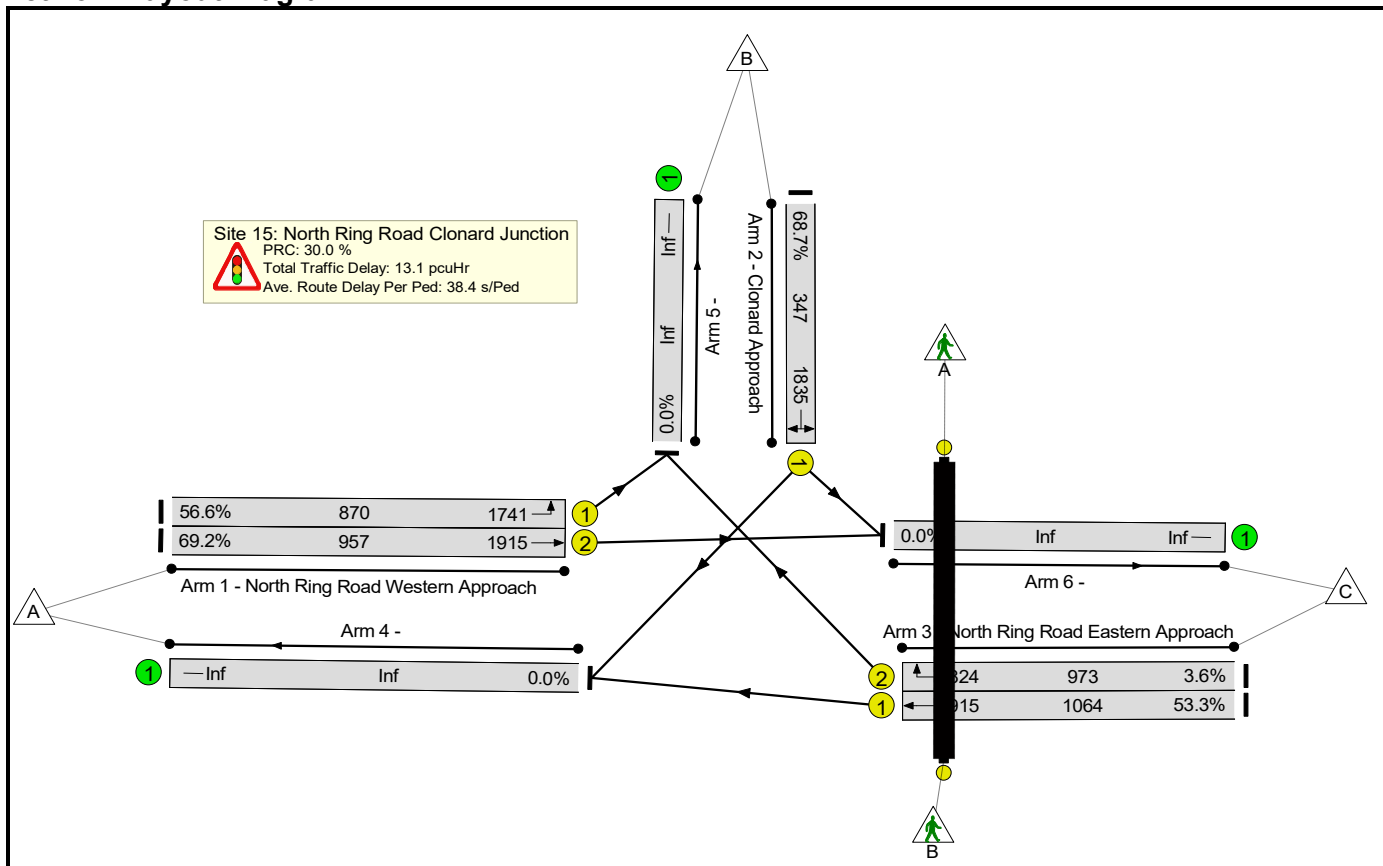
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	75.1%	0	0	0	14.6	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	75.1%	0	0	0	14.6	-	-
1/1	North Ring Road Western Approach Left	U	A		1	38	-	291	1741	754	38.6%	-	-	-	1.7	21.2	5.2
1/2	North Ring Road Western Approach Ahead	U	A		1	38	-	623	1915	830	75.1%	-	-	-	5.2	30.0	14.5
2/1	Clonard Approach Right Left	U	B		1	22	-	344	1845	471	73.0%	-	-	-	4.3	44.5	9.2
3/1	North Ring Road Eastern Approach Ahead	U	C		1	43	-	566	1915	936	60.5%	-	-	-	3.4	21.5	11.0
3/2	North Ring Road Eastern Approach Right	U	E		1	41	-	8	1824	851	0.9%	-	-	-	0.0	15.2	0.1
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
				C1	PRC for Signalled Lanes (%): 19.9		19.9	Total Delay for Signalled Lanes (pcuHr): 14.58				Cycle Time (s): 90					
					PRC Over All Lanes (%): 19.9			Total Delay Over All Lanes(pcuHr): 14.58									

Basic Results Summary

Scenario 12: '2024 PM no Dev' (FG12: '2024 PM no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

**Network Results**

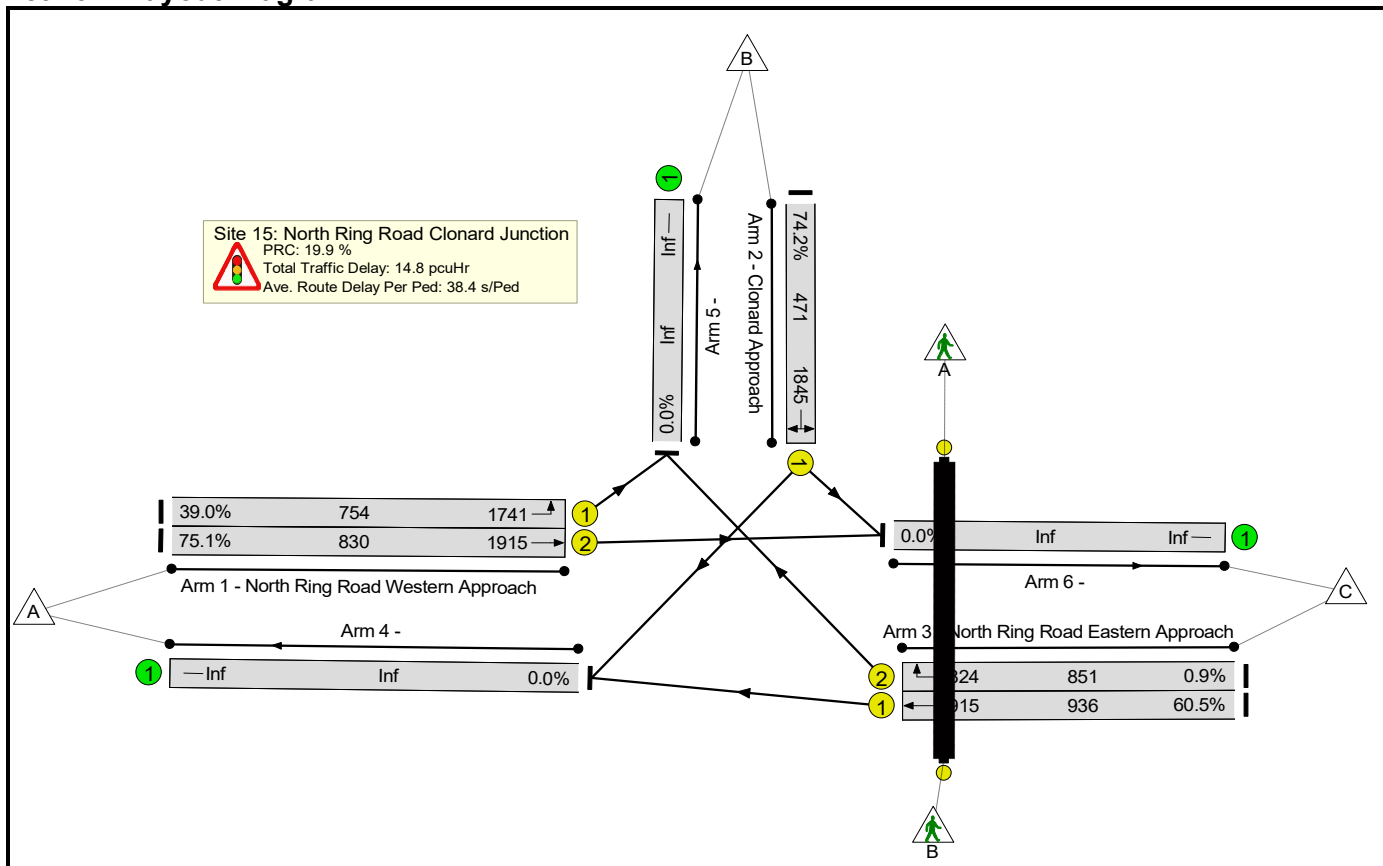
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	-		-	-	-	-	-	-	69.2%	0	0	0	13.1	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	69.2%	0	0	0	13.1	-	-
1/1	North Ring Road Western Approach Left	U	A		1	44	-	493	1741	870	56.6%	-	-	-	2.8	20.4	9.1
1/2	North Ring Road Western Approach Ahead	U	A		1	44	-	663	1915	957	69.2%	-	-	-	4.3	23.3	13.6
2/1	Clonard Approach Right Left	U	B		1	16	-	238	1835	347	68.7%	-	-	-	3.3	50.3	6.6
3/1	North Ring Road Eastern Approach Ahead	U	C		1	49	-	567	1915	1064	53.3%	-	-	-	2.6	16.2	9.4
3/2	North Ring Road Eastern Approach Right	U	E		1	47	-	35	1824	973	3.6%	-	-	-	0.1	12.0	0.4
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
				C1	PRC for Signalled Lanes (%): 30.0		30.0	Total Delay for Signalled Lanes (pcuHr): 13.08				13.08	Cycle Time (s): 90				
					PRC Over All Lanes (%): 30.0			Total Delay Over All Lanes(pcuHr): 13.08				13.08					



Basic Results Summary

Scenario 13: '2024 AM with Dev' (FG13: '2024 AM with dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

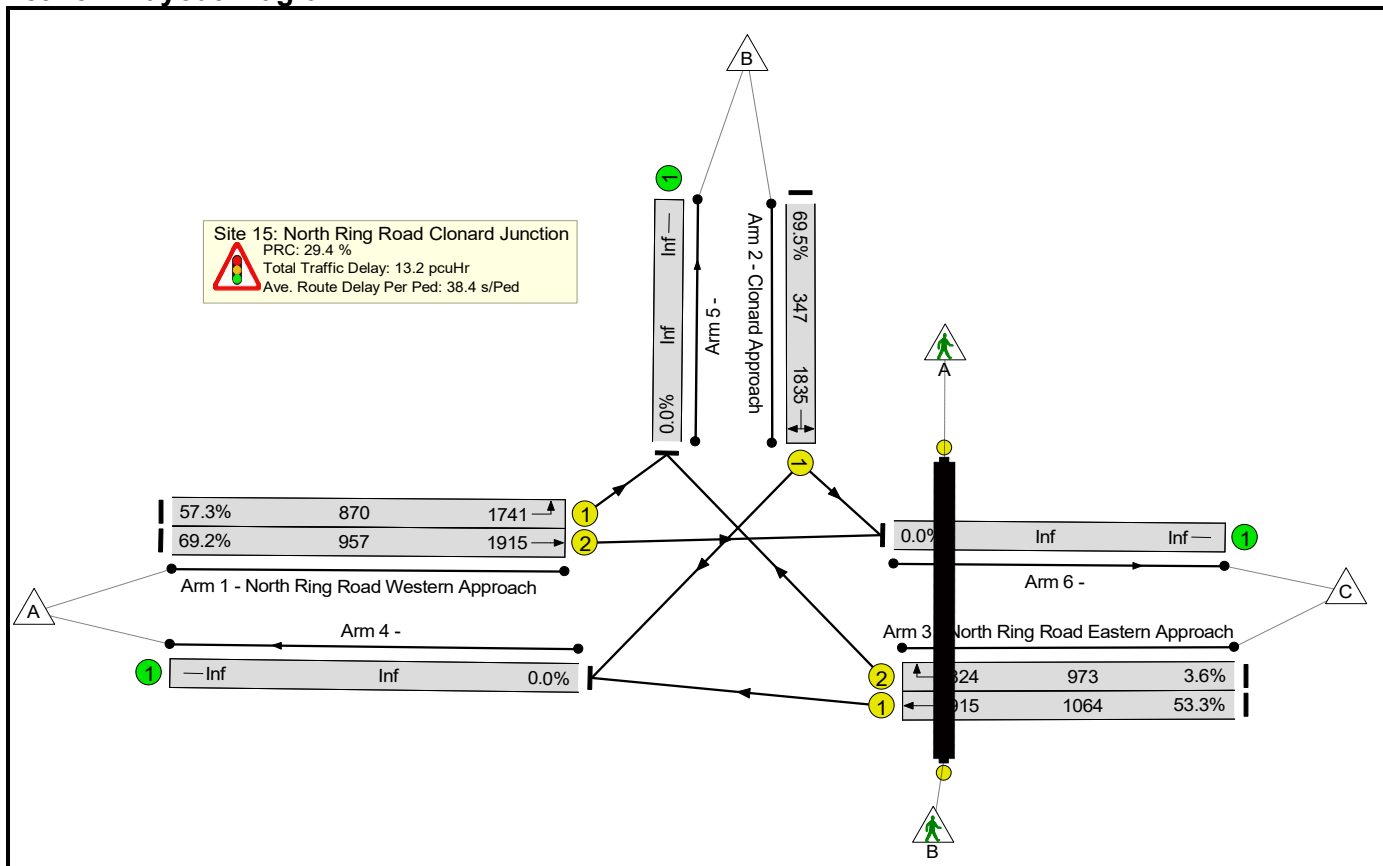
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	75.1%	0	0	0	14.8	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	75.1%	0	0	0	14.8	-	-
1/1	North Ring Road Western Approach Left	U	A		1	38	-	294	1741	754	39.0%	-	-	-	1.7	21.3	5.3
1/2	North Ring Road Western Approach Ahead	U	A		1	38	-	623	1915	830	75.1%	-	-	-	5.2	30.0	14.5
2/1	Clonard Approach Right Left	U	B		1	22	-	350	1845	471	74.2%	-	-	-	4.4	45.3	9.4
3/1	North Ring Road Eastern Approach Ahead	U	C		1	43	-	566	1915	936	60.5%	-	-	-	3.4	21.5	11.0
3/2	North Ring Road Eastern Approach Right	U	E		1	41	-	8	1824	851	0.9%	-	-	-	0.0	15.2	0.1
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
				C1	PRC for Signalled Lanes (%): 19.9		19.9	Total Delay for Signalled Lanes (pcuHr): 14.75				Cycle Time (s): 90					
					PRC Over All Lanes (%): 19.9			Total Delay Over All Lanes(pcuHr): 14.75									

Basic Results Summary

Scenario 14: '2024 PM with Dev' (FG14: '2024 PM With dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

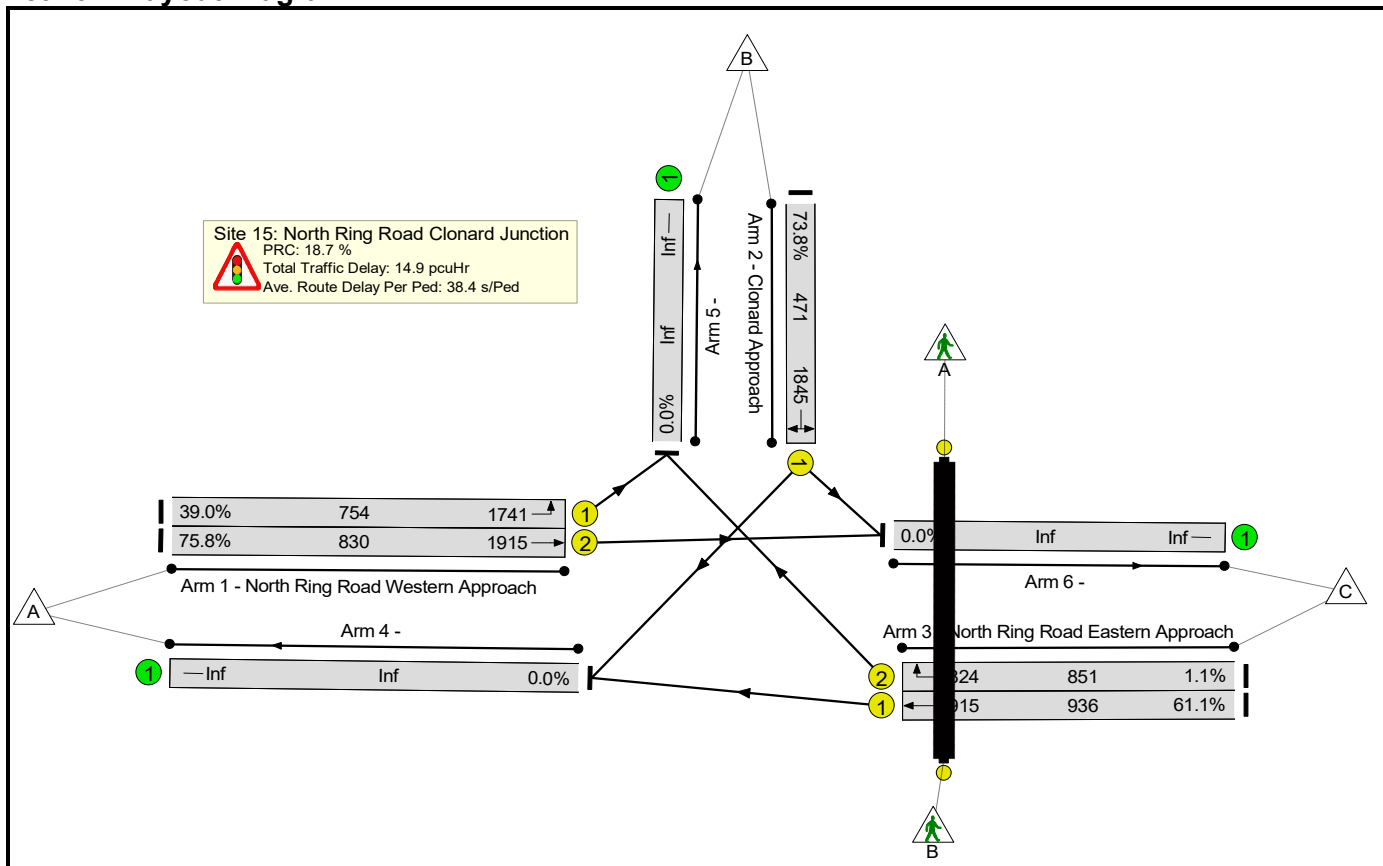
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>69.5%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13.2</b>	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	<b>69.5%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13.2</b>	-	-
1/1	North Ring Road Western Approach Left	U	A		1	44	-	499	1741	870	57.3%	-	-	-	2.9	20.6	9.4
1/2	North Ring Road Western Approach Ahead	U	A		1	44	-	663	1915	957	69.2%	-	-	-	4.3	23.3	13.6
2/1	Clonard Approach Right Left	U	B		1	16	-	241	1835	347	69.5%	-	-	-	3.4	50.8	6.7
3/1	North Ring Road Eastern Approach Ahead	U	C		1	49	-	567	1915	1064	53.3%	-	-	-	2.6	16.2	9.4
3/2	North Ring Road Eastern Approach Right	U	E		1	47	-	35	1824	973	3.6%	-	-	-	0.1	12.0	0.4
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
				C1	PRC for Signalled Lanes (%): 29.4		29.4	Total Delay for Signalled Lanes (pcuHr): 13.22				Cycle Time (s): 90					
					PRC Over All Lanes (%): 29.4			Total Delay Over All Lanes(pcuHr): 13.22									

Basic Results Summary

Scenario 15: '2025 AM no Dev' (FG15: '2025 AM no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

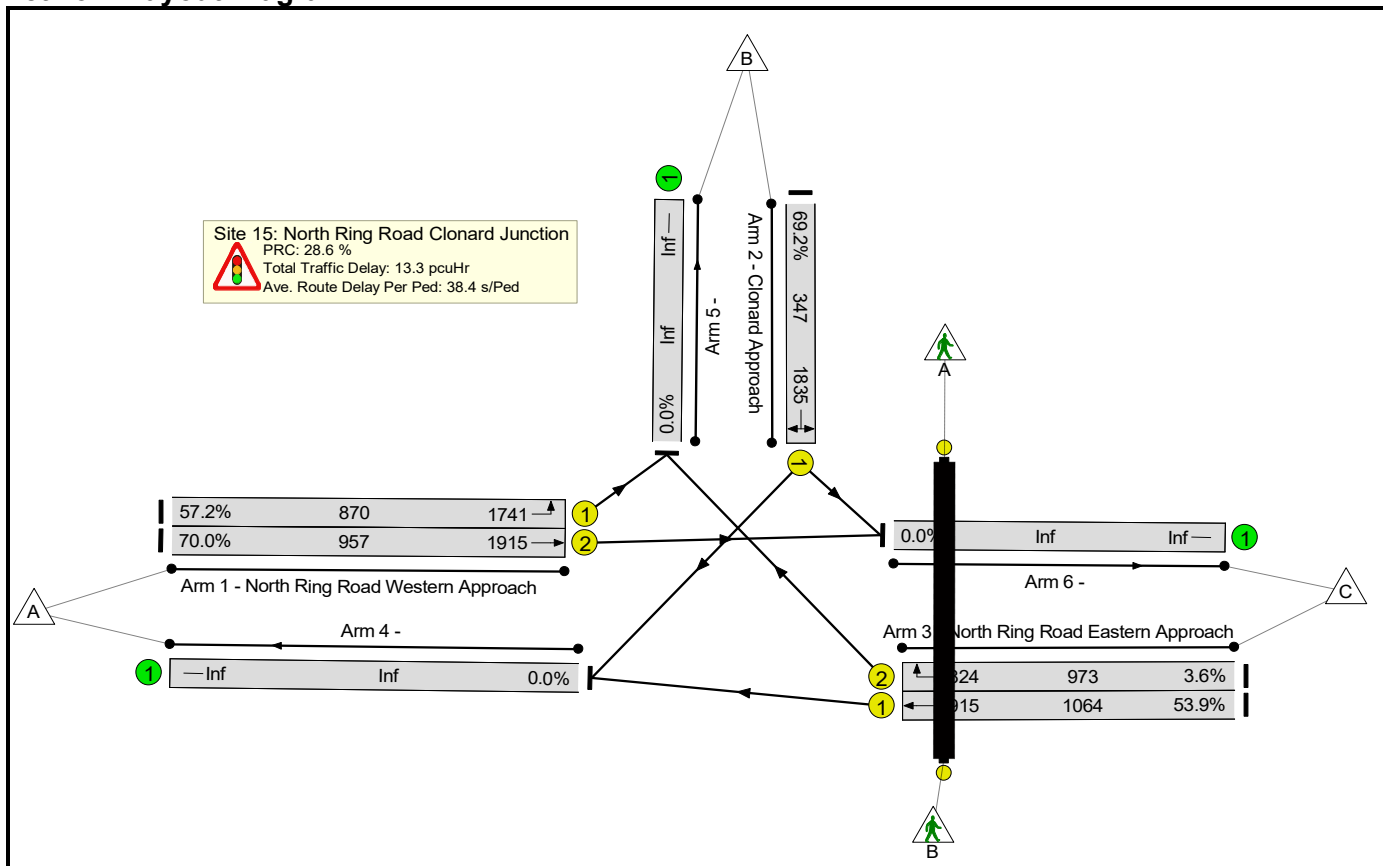
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>75.8%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14.9</b>	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	<b>75.8%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14.9</b>	-	-
1/1	North Ring Road Western Approach Left	U	A		1	38	-	294	1741	754	39.0%	-	-	-	1.7	21.3	5.3
1/2	North Ring Road Western Approach Ahead	U	A		1	38	-	629	1915	830	75.8%	-	-	-	5.3	30.3	14.6
2/1	Clonard Approach Right Left	U	B		1	22	-	348	1845	471	73.8%	-	-	-	4.3	45.0	9.3
3/1	North Ring Road Eastern Approach Ahead	U	C		1	43	-	572	1915	936	61.1%	-	-	-	3.4	21.7	11.1
3/2	North Ring Road Eastern Approach Right	U	E		1	41	-	9	1824	851	1.1%	-	-	-	0.0	15.2	0.1
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
				C1	PRC for Signalled Lanes (%): 18.7		18.7	Total Delay for Signalled Lanes (pcuHr): 14.87				14.87	Cycle Time (s): 90				
					PRC Over All Lanes (%): 18.7			Total Delay Over All Lanes(pcuHr): 14.87									

Basic Results Summary

Scenario 16: '2025 PM no Dev' (FG16: '2025 PM no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

**Network Results**

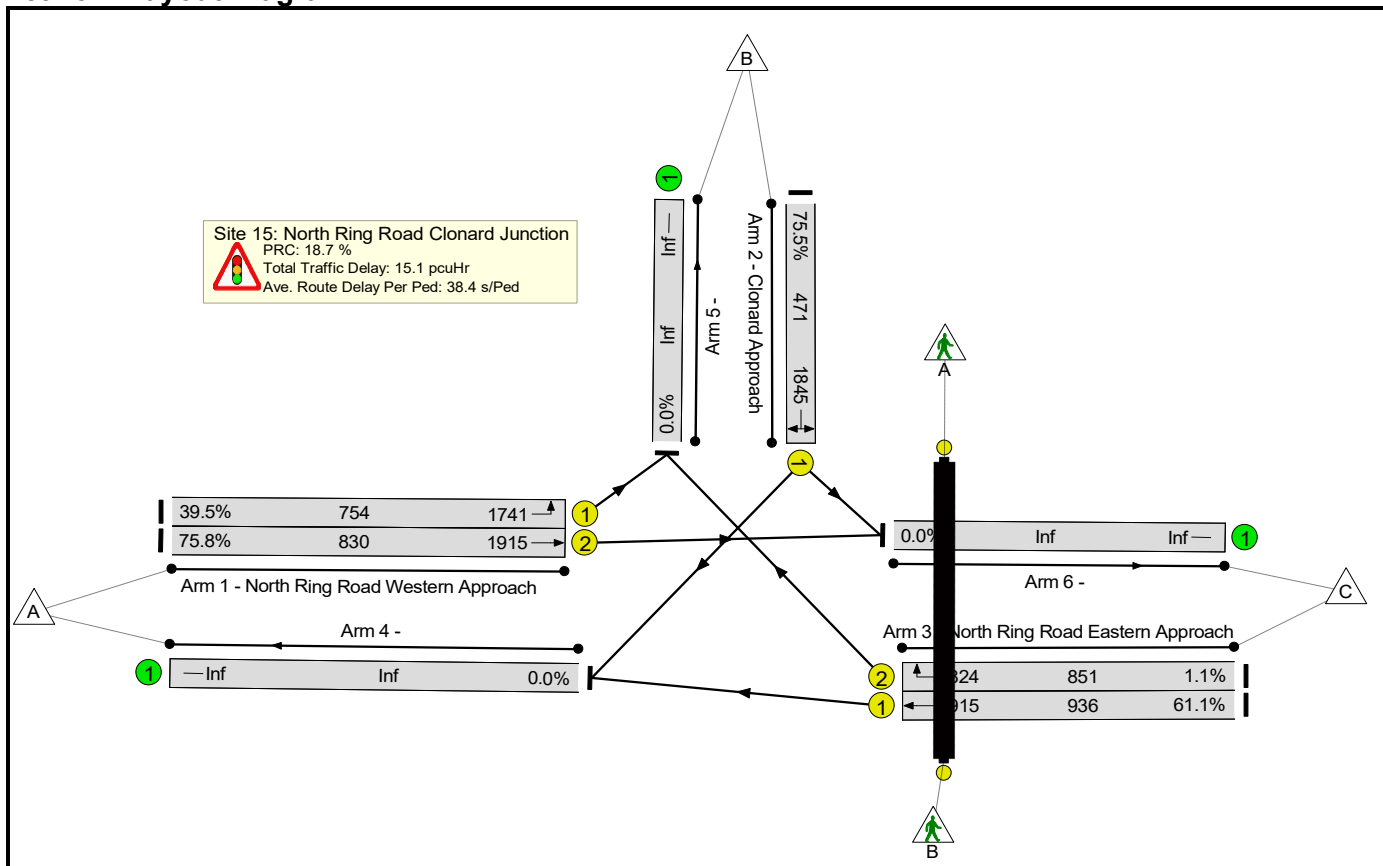
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>70.0%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13.3</b>	-	-	
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	<b>70.0%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13.3</b>	-	-	
1/1	North Ring Road Western Approach Left	U	A		1	44	-	498	1741	870	57.2%	-	-	-	2.8	20.6	9.4	
1/2	North Ring Road Western Approach Ahead	U	A		1	44	-	670	1915	957	70.0%	-	-	-	4.4	23.5	14.0	
2/1	Clonard Approach Right Left	U	B		1	16	-	240	1835	347	69.2%	-	-	-	3.4	50.6	6.6	
3/1	North Ring Road Eastern Approach Ahead	U	C		1	49	-	573	1915	1064	53.9%	-	-	-	2.6	16.3	9.7	
3/2	North Ring Road Eastern Approach Right	U	E		1	47	-	35	1824	973	3.6%	-	-	-	0.1	12.0	0.4	
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5	
C1					PRC for Signalled Lanes (%): 28.6			Total Delay for Signalled Lanes (pcuHr): 13.31			Cycle Time (s): 90							
					PRC Over All Lanes (%): 28.6			Total Delay Over All Lanes(pcuHr): 13.31										



Basic Results Summary

Scenario 17: '2025 AM with Dev' (FG17: '2025 AM with dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

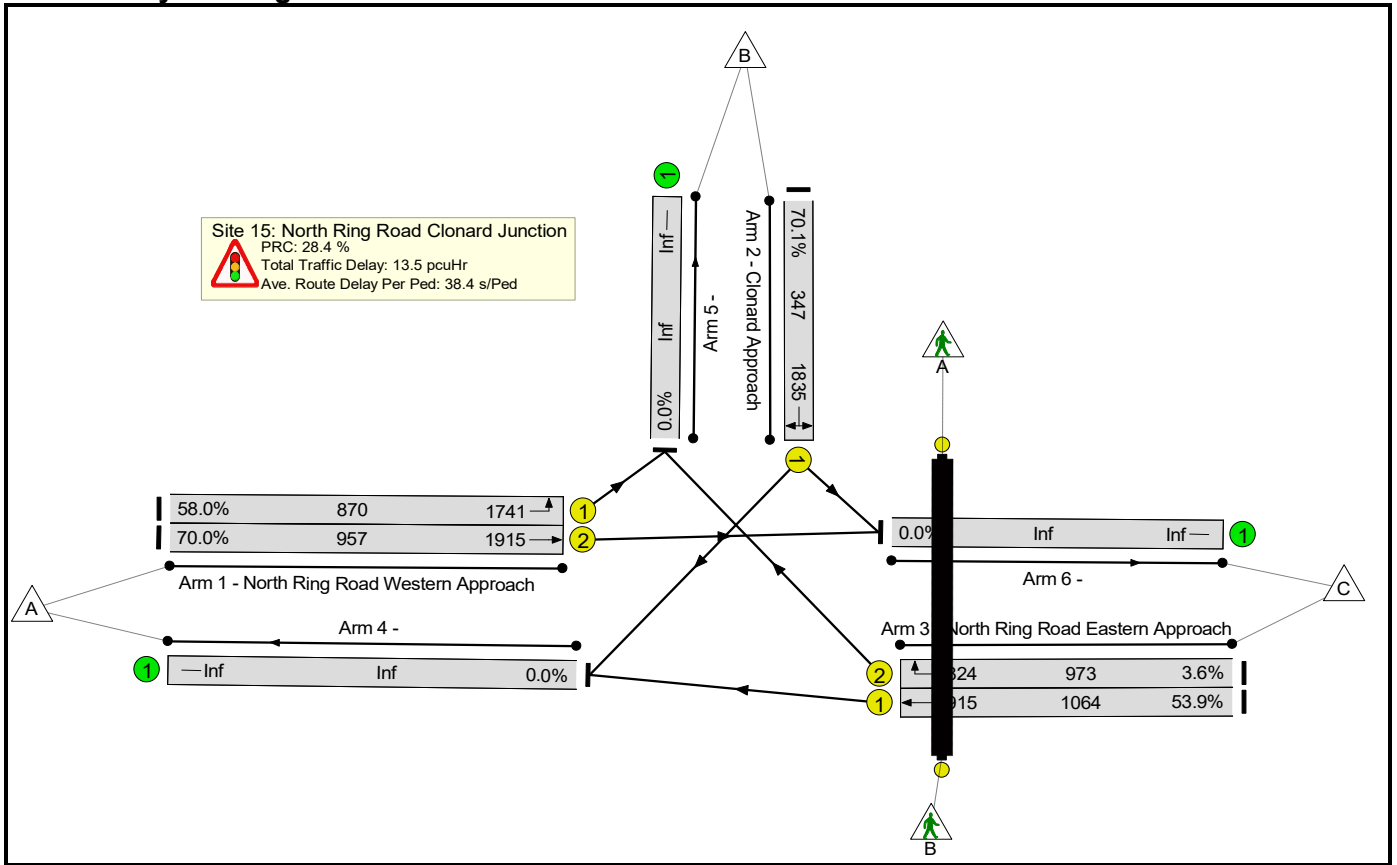
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>75.8%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15.1</b>	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	<b>75.8%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15.1</b>	-	-
1/1	North Ring Road Western Approach Left	U	A		1	38	-	298	1741	754	39.5%	-	-	-	1.8	21.4	5.4
1/2	North Ring Road Western Approach Ahead	U	A		1	38	-	629	1915	830	75.8%	-	-	-	5.3	30.3	14.6
2/1	Clonard Approach Right Left	U	B		1	22	-	356	1845	471	75.5%	-	-	-	4.6	46.1	9.7
3/1	North Ring Road Eastern Approach Ahead	U	C		1	43	-	572	1915	936	61.1%	-	-	-	3.4	21.7	11.1
3/2	North Ring Road Eastern Approach Right	U	E		1	41	-	9	1824	851	1.1%	-	-	-	0.0	15.2	0.1
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
				C1	PRC for Signalled Lanes (%): 18.7		18.7	Total Delay for Signalled Lanes (pcuHr):			15.11	Cycle Time (s):		90			
					PRC Over All Lanes (%):		18.7	Total Delay Over All Lanes(pcuHr):			15.11						

Basic Results Summary

Scenario 18: '2025 PM with Dev' (FG18: '2025 PM With dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

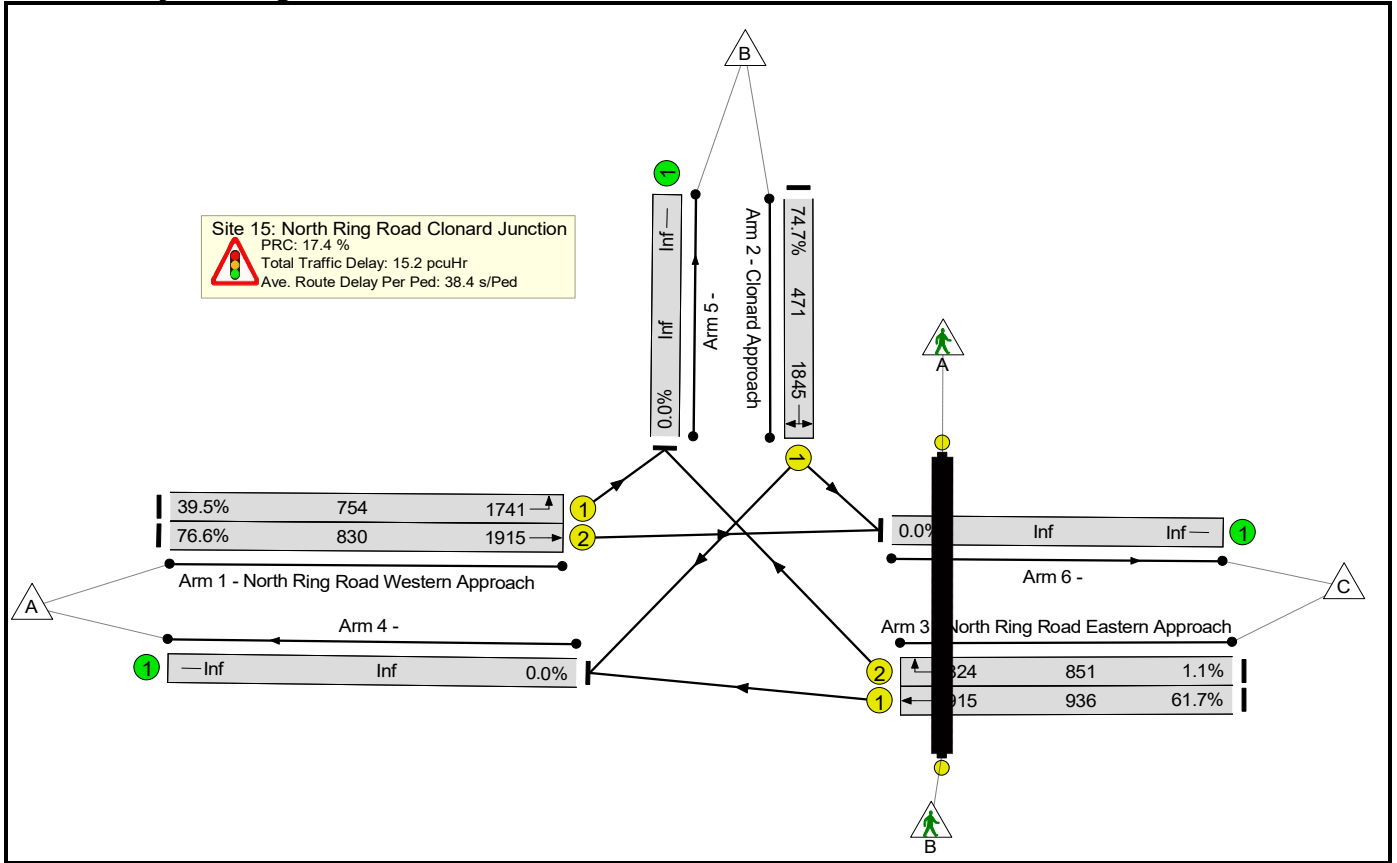
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	70.1%	0	0	0	13.5	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	70.1%	0	0	0	13.5	-	-
1/1	North Ring Road Western Approach Left	U	A		1	44	-	505	1741	870	58.0%	-	-	-	2.9	20.8	9.5
1/2	North Ring Road Western Approach Ahead	U	A		1	44	-	670	1915	957	70.0%	-	-	-	4.4	23.5	14.0
2/1	Clonard Approach Right Left	U	B		1	16	-	243	1835	347	70.1%	-	-	-	3.5	51.1	6.8
3/1	North Ring Road Eastern Approach Ahead	U	C		1	49	-	573	1915	1064	53.9%	-	-	-	2.6	16.3	9.7
3/2	North Ring Road Eastern Approach Right	U	E		1	47	-	35	1824	973	3.6%	-	-	-	0.1	12.0	0.4
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
				C1	PRC for Signalled Lanes (%): 28.4		28.4	Total Delay for Signalled Lanes (pcuHr): 13.46				13.46	Cycle Time (s): 90				
					PRC Over All Lanes (%): 28.4			Total Delay Over All Lanes(pcuHr): 13.46									

Basic Results Summary

Scenario 19: '2026 AM no Dev' (FG19: '2026 AM no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

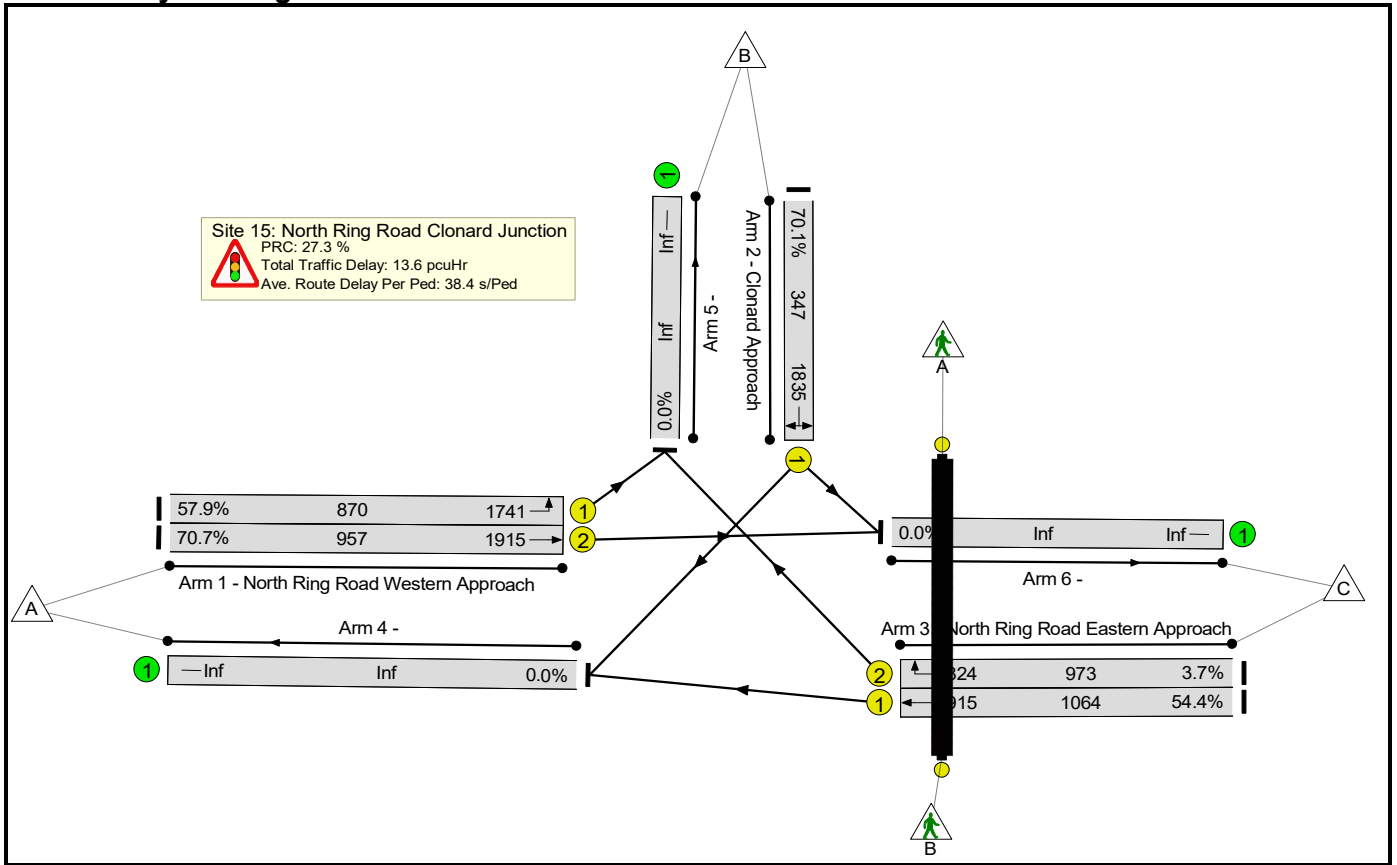
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	76.6%	0	0	0	15.2	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	76.6%	0	0	0	15.2	-	-
1/1	North Ring Road Western Approach Left	U	A		1	38	-	298	1741	754	39.5%	-	-	-	1.8	21.4	5.4
1/2	North Ring Road Western Approach Ahead	U	A		1	38	-	636	1915	830	76.6%	-	-	-	5.4	30.8	15.0
2/1	Clonard Approach Right Left	U	B		1	22	-	352	1845	471	74.7%	-	-	-	4.5	45.5	9.5
3/1	North Ring Road Eastern Approach Ahead	U	C		1	43	-	578	1915	936	61.7%	-	-	-	3.5	21.8	11.2
3/2	North Ring Road Eastern Approach Right	U	E		1	41	-	9	1824	851	1.1%	-	-	-	0.0	15.2	0.1
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
				C1	PRC for Signalled Lanes (%): 17.4		17.4	Total Delay for Signalled Lanes (pcuHr): 15.20				Cycle Time (s): 90					
					PRC Over All Lanes (%): 17.4			Total Delay Over All Lanes(pcuHr): 15.20									

Basic Results Summary

Scenario 20: '2026 PM no Dev' (FG20: '2026 PM no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

**Network Results**

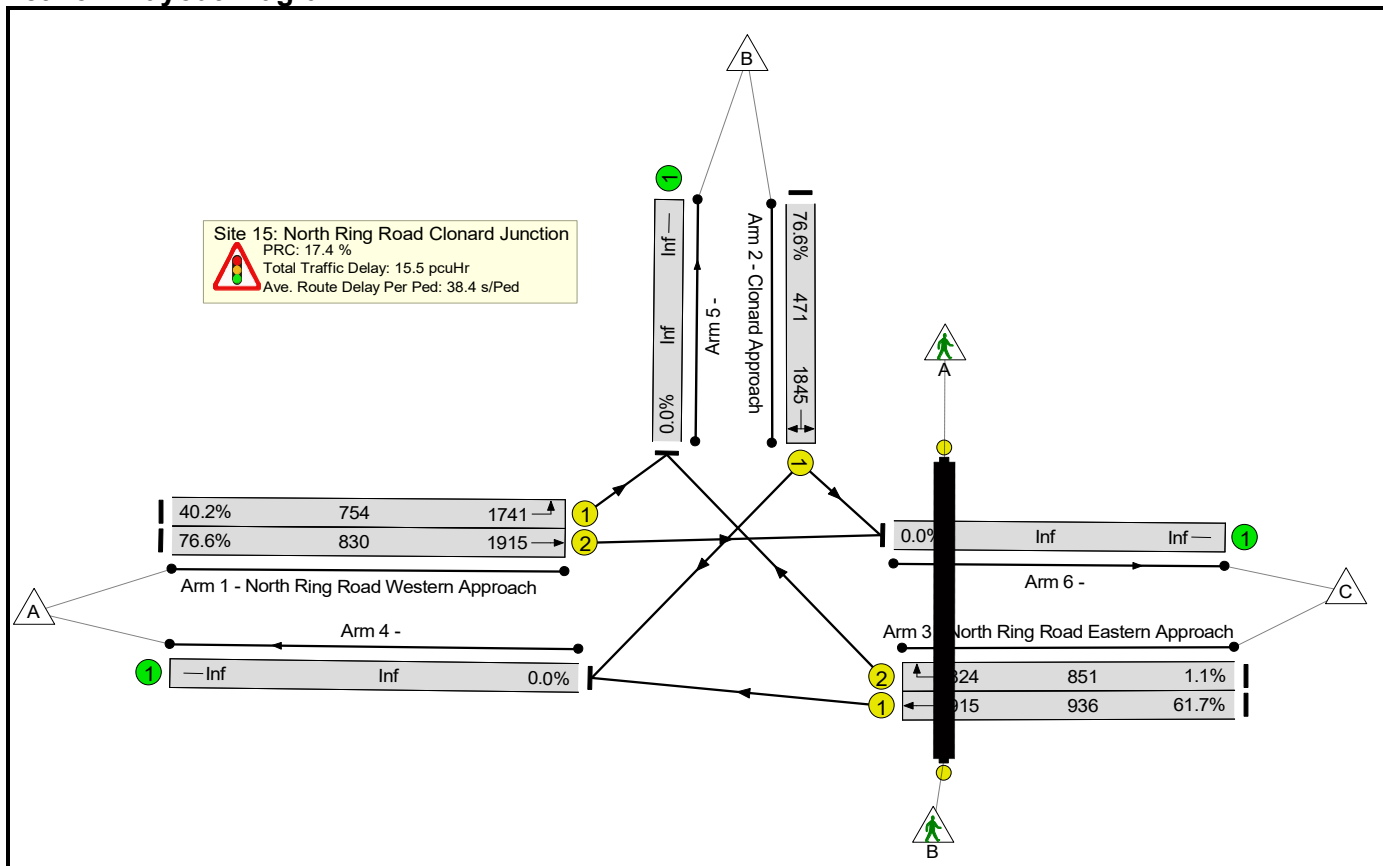
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	-		-	-	-	-	-	-	70.7%	0	0	0	13.6	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	70.7%	0	0	0	13.6	-	-
1/1	North Ring Road Western Approach Left	U	A		1	44	-	504	1741	870	57.9%	-	-	-	2.9	20.7	9.5
1/2	North Ring Road Western Approach Ahead	U	A		1	44	-	677	1915	957	70.7%	-	-	-	4.5	23.8	14.2
2/1	Clonard Approach Right Left	U	B		1	16	-	243	1835	347	70.1%	-	-	-	3.5	51.1	6.8
3/1	North Ring Road Eastern Approach Ahead	U	C		1	49	-	579	1915	1064	54.4%	-	-	-	2.6	16.4	9.8
3/2	North Ring Road Eastern Approach Right	U	E		1	47	-	36	1824	973	3.7%	-	-	-	0.1	12.0	0.4
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
				C1	PRC for Signalled Lanes (%): 27.3		27.3	Total Delay for Signalled Lanes (pcuHr): 13.59				Cycle Time (s): 90					
					PRC Over All Lanes (%): 27.3			Total Delay Over All Lanes(pcuHr): 13.59									



Basic Results Summary

Scenario 21: '2026 AM with Dev' (FG21: '2026 AM with dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

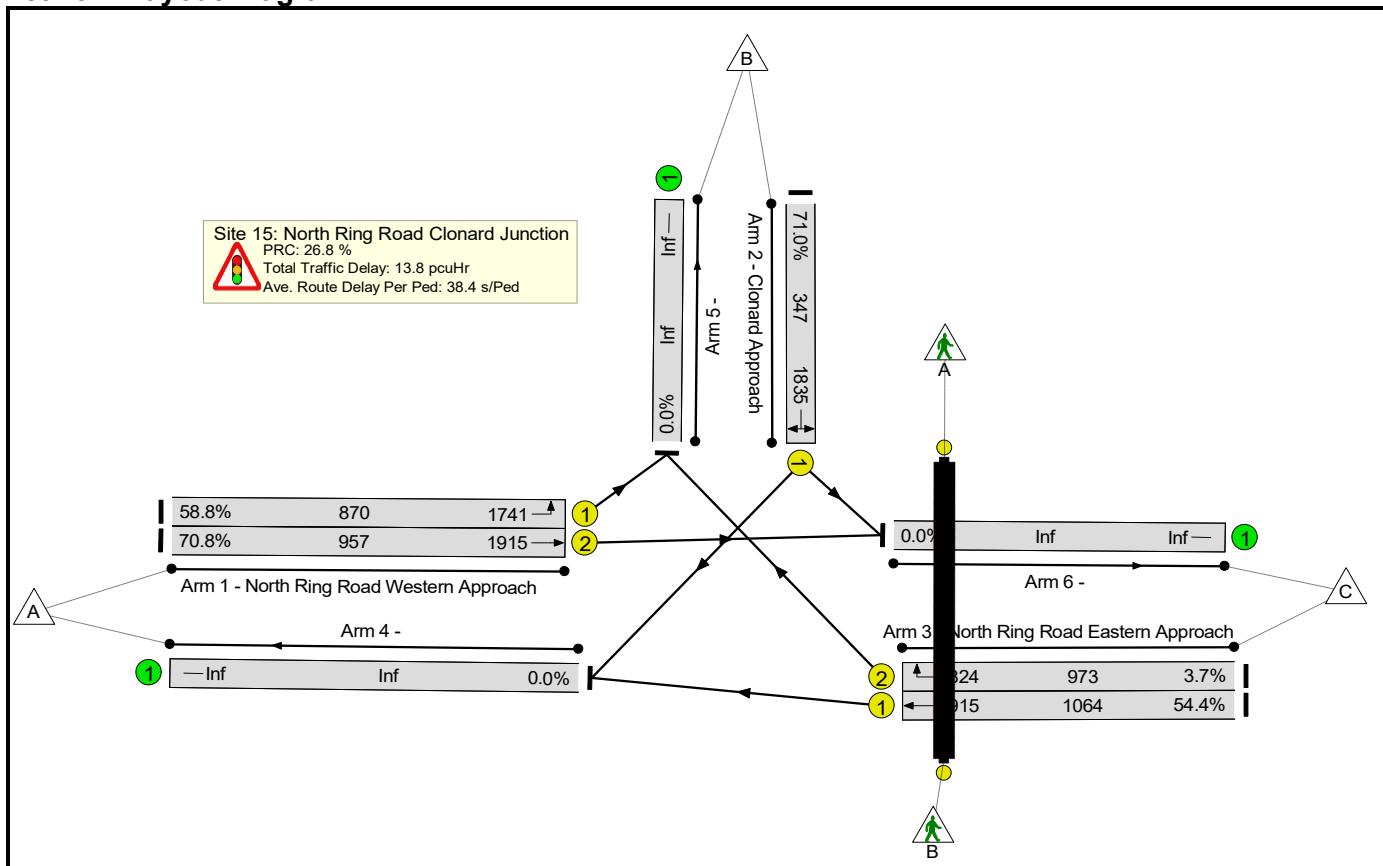
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>76.6%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15.5</b>	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	<b>76.6%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15.5</b>	-	-
1/1	North Ring Road Western Approach Left	U	A		1	38	-	303	1741	754	40.2%	-	-	-	1.8	21.5	5.5
1/2	North Ring Road Western Approach Ahead	U	A		1	38	-	636	1915	830	76.6%	-	-	-	5.4	30.8	15.0
2/1	Clonard Approach Right Left	U	B		1	22	-	361	1845	471	76.6%	-	-	-	4.7	46.8	9.9
3/1	North Ring Road Eastern Approach Ahead	U	C		1	43	-	578	1915	936	61.7%	-	-	-	3.5	21.8	11.2
3/2	North Ring Road Eastern Approach Right	U	E		1	41	-	9	1824	851	1.1%	-	-	-	0.0	15.2	0.1
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
				C1	PRC for Signalled Lanes (%): 17.4		17.4	Total Delay for Signalled Lanes (pcuHr): 15.49				15.49	Cycle Time (s): 90				
					PRC Over All Lanes (%): 17.4			Total Delay Over All Lanes(pcuHr): 15.49									

Basic Results Summary

Scenario 22: '2026 PM with Dev' (FG22: '2026 PM With dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

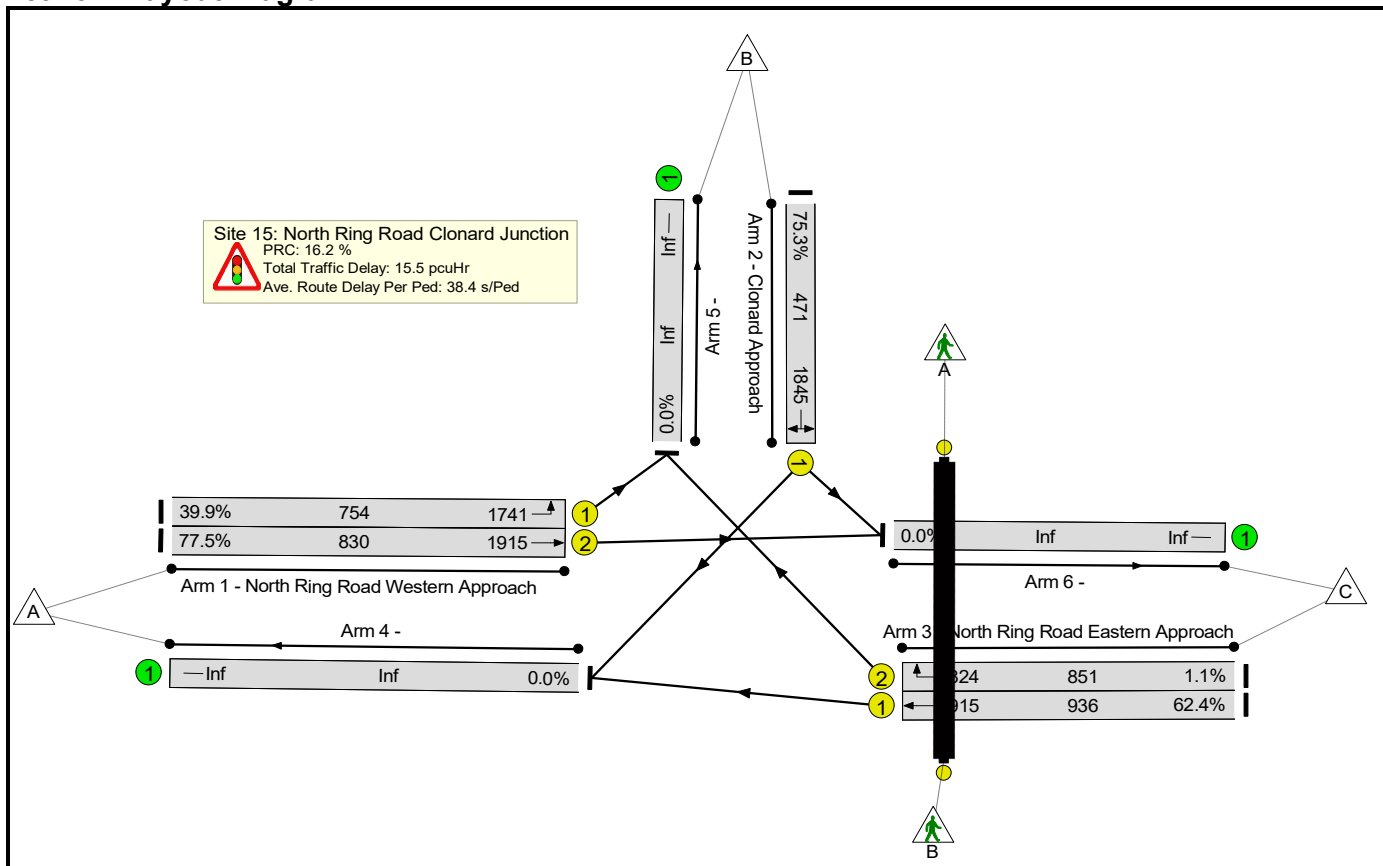
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>71.0%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13.8</b>	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	<b>71.0%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13.8</b>	-	-
1/1	North Ring Road Western Approach Left	U	A		1	44	-	512	1741	870	58.8%	-	-	-	3.0	20.9	9.7
1/2	North Ring Road Western Approach Ahead	U	A		1	44	-	678	1915	957	70.8%	-	-	-	4.5	23.8	14.2
2/1	Clonard Approach Right Left	U	B		1	16	-	246	1835	347	71.0%	-	-	-	3.5	51.7	6.9
3/1	North Ring Road Eastern Approach Ahead	U	C		1	49	-	579	1915	1064	54.4%	-	-	-	2.6	16.4	9.8
3/2	North Ring Road Eastern Approach Right	U	E		1	47	-	36	1824	973	3.7%	-	-	-	0.1	12.0	0.4
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
C1					PRC for Signalled Lanes (%):		26.8	Total Delay for Signalled Lanes (pcuHr):				13.76	Cycle Time (s): 90				
					PRC Over All Lanes (%):		26.8	Total Delay Over All Lanes(pcuHr):				13.76					

Basic Results Summary

Scenario 23: '2027 AM no Dev' (FG23: '2027 AM no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

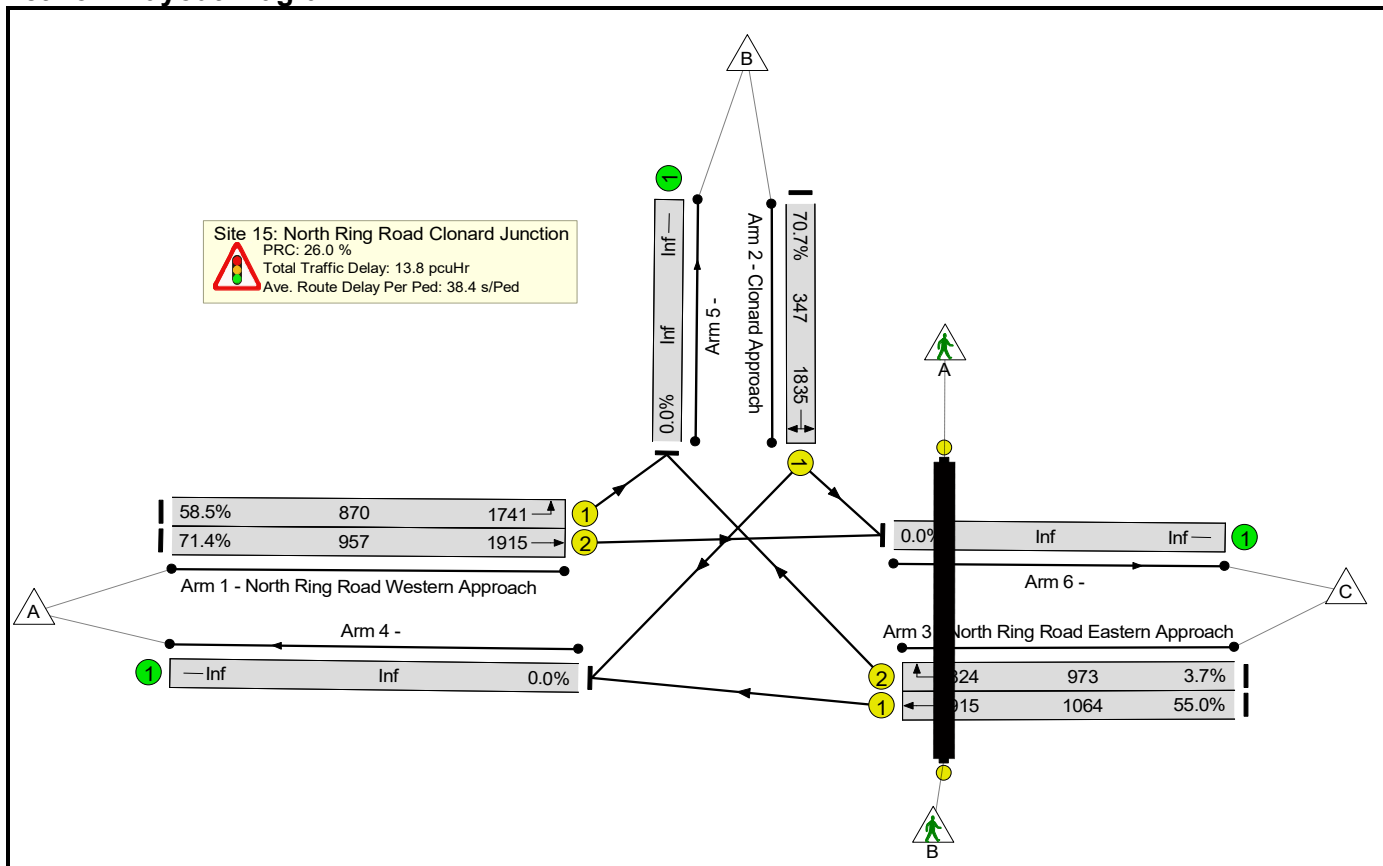
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	77.5%	0	0	0	15.5	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	77.5%	0	0	0	15.5	-	-
1/1	North Ring Road Western Approach Left	U	A		1	38	-	301	1741	754	39.9%	-	-	-	1.8	21.4	5.4
1/2	North Ring Road Western Approach Ahead	U	A		1	38	-	643	1915	830	77.5%	-	-	-	5.6	31.2	15.3
2/1	Clonard Approach Right Left	U	B		1	22	-	355	1845	471	75.3%	-	-	-	4.5	45.9	9.6
3/1	North Ring Road Eastern Approach Ahead	U	C		1	43	-	584	1915	936	62.4%	-	-	-	3.6	22.0	11.5
3/2	North Ring Road Eastern Approach Right	U	E		1	41	-	9	1824	851	1.1%	-	-	-	0.0	15.2	0.1
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
				C1	PRC for Signalled Lanes (%): 16.2		16.2	Total Delay for Signalled Lanes (pcuHr): 15.51				15.51	Cycle Time (s): 90				
					PRC Over All Lanes (%): 16.2			Total Delay Over All Lanes(pcuHr): 15.51									

Basic Results Summary

Scenario 24: '2027 PM no Dev' (FG24: '2027 PM no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

**Network Results**

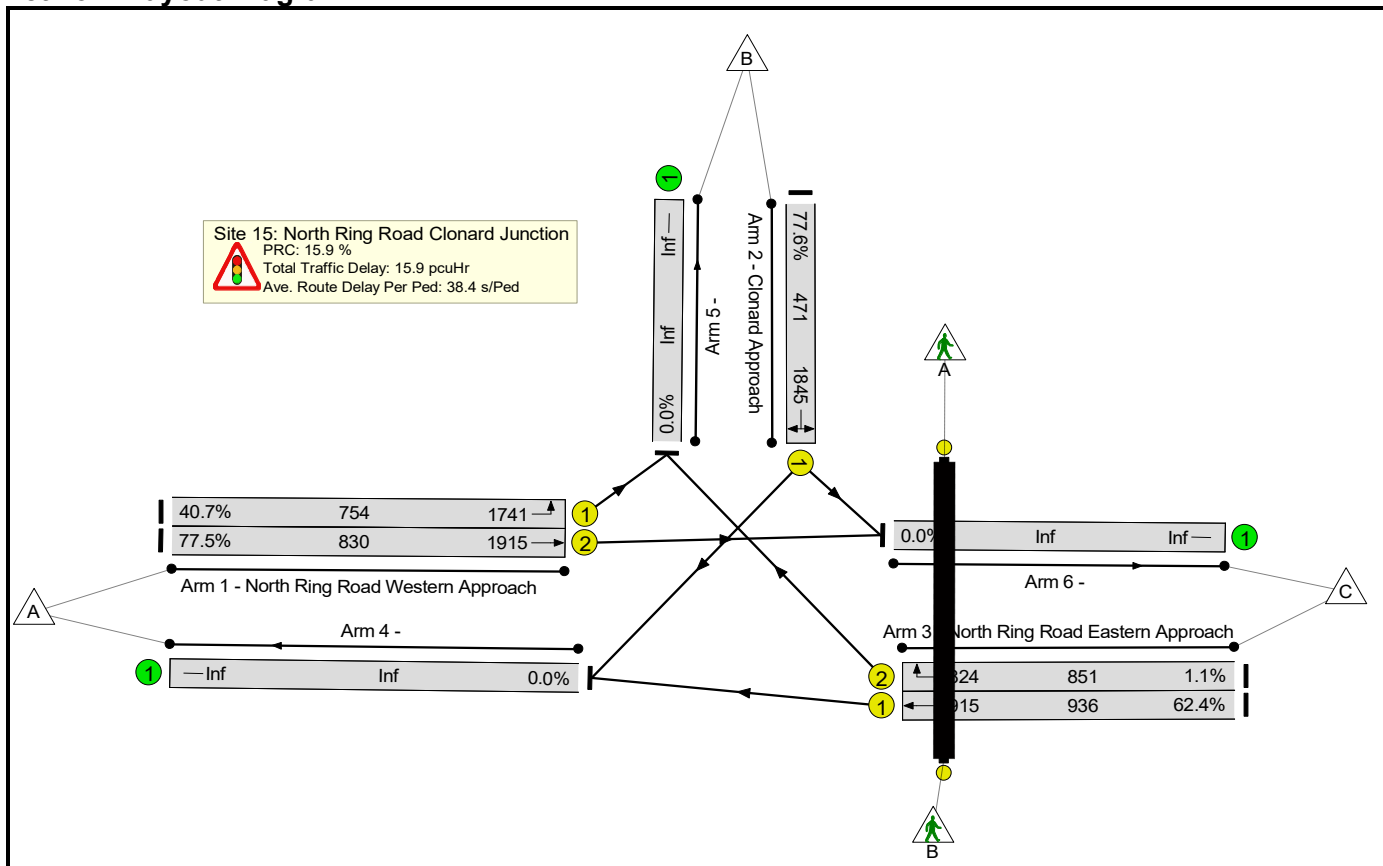
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	-		-	-	-	-	-	-	71.4%	0	0	0	13.8	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	71.4%	0	0	0	13.8	-	-
1/1	North Ring Road Western Approach Left	U	A		1	44	-	509	1741	870	58.5%	-	-	-	2.9	20.9	9.6
1/2	North Ring Road Western Approach Ahead	U	A		1	44	-	684	1915	957	71.4%	-	-	-	4.6	24.0	14.5
2/1	Clonard Approach Right Left	U	B		1	16	-	245	1835	347	70.7%	-	-	-	3.5	51.5	6.9
3/1	North Ring Road Eastern Approach Ahead	U	C		1	49	-	585	1915	1064	55.0%	-	-	-	2.7	16.6	9.9
3/2	North Ring Road Eastern Approach Right	U	E		1	47	-	36	1824	973	3.7%	-	-	-	0.1	12.0	0.4
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
				C1	PRC for Signalled Lanes (%): 26.0		26.0	Total Delay for Signalled Lanes (pcuHr): 13.83			13.83	Cycle Time (s): 90					
					PRC Over All Lanes (%): 26.0			Total Delay Over All Lanes(pcuHr): 13.83									



Basic Results Summary

Scenario 25: '2027 AM with Dev' (FG25: '2027 AM with dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

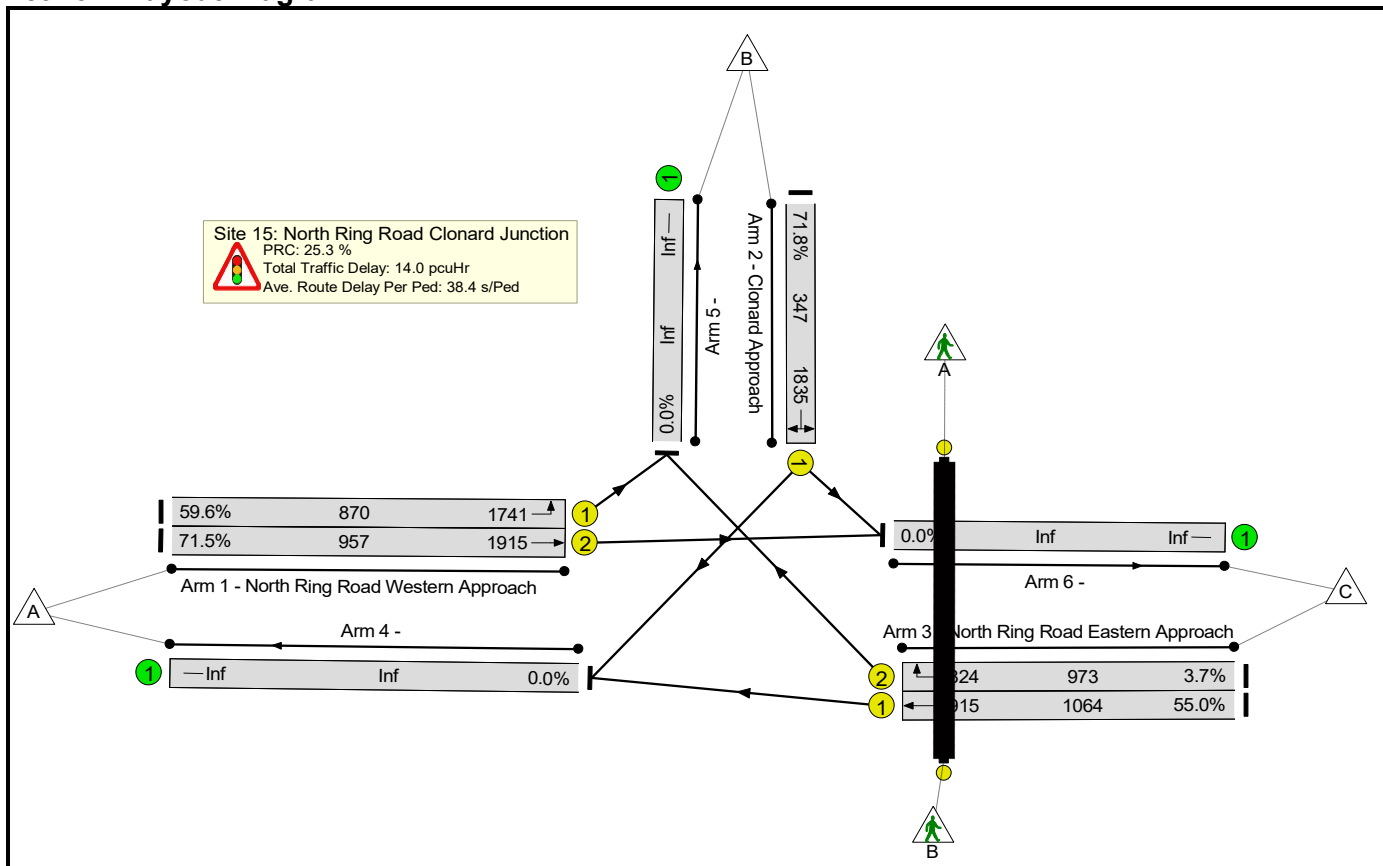
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	77.6%	0	0	0	15.9	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	77.6%	0	0	0	15.9	-	-
1/1	North Ring Road Western Approach Left	U	A		1	38	-	307	1741	754	40.7%	-	-	-	1.8	21.6	5.5
1/2	North Ring Road Western Approach Ahead	U	A		1	38	-	643	1915	830	77.5%	-	-	-	5.6	31.2	15.3
2/1	Clonard Approach Right Left	U	B		1	22	-	366	1845	471	77.6%	-	-	-	4.8	47.7	10.1
3/1	North Ring Road Eastern Approach Ahead	U	C		1	43	-	584	1915	936	62.4%	-	-	-	3.6	22.0	11.5
3/2	North Ring Road Eastern Approach Right	U	E		1	41	-	9	1824	851	1.1%	-	-	-	0.0	15.2	0.1
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
C1					PRC for Signalled Lanes (%):		15.9	Total Delay for Signalled Lanes (pcuHr):				15.87	Cycle Time (s): 90				
					PRC Over All Lanes (%):		15.9	Total Delay Over All Lanes(pcuHr):				15.87					

Basic Results Summary

Scenario 26: '2027 PM with Dev' (FG26: '2027 PM With dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

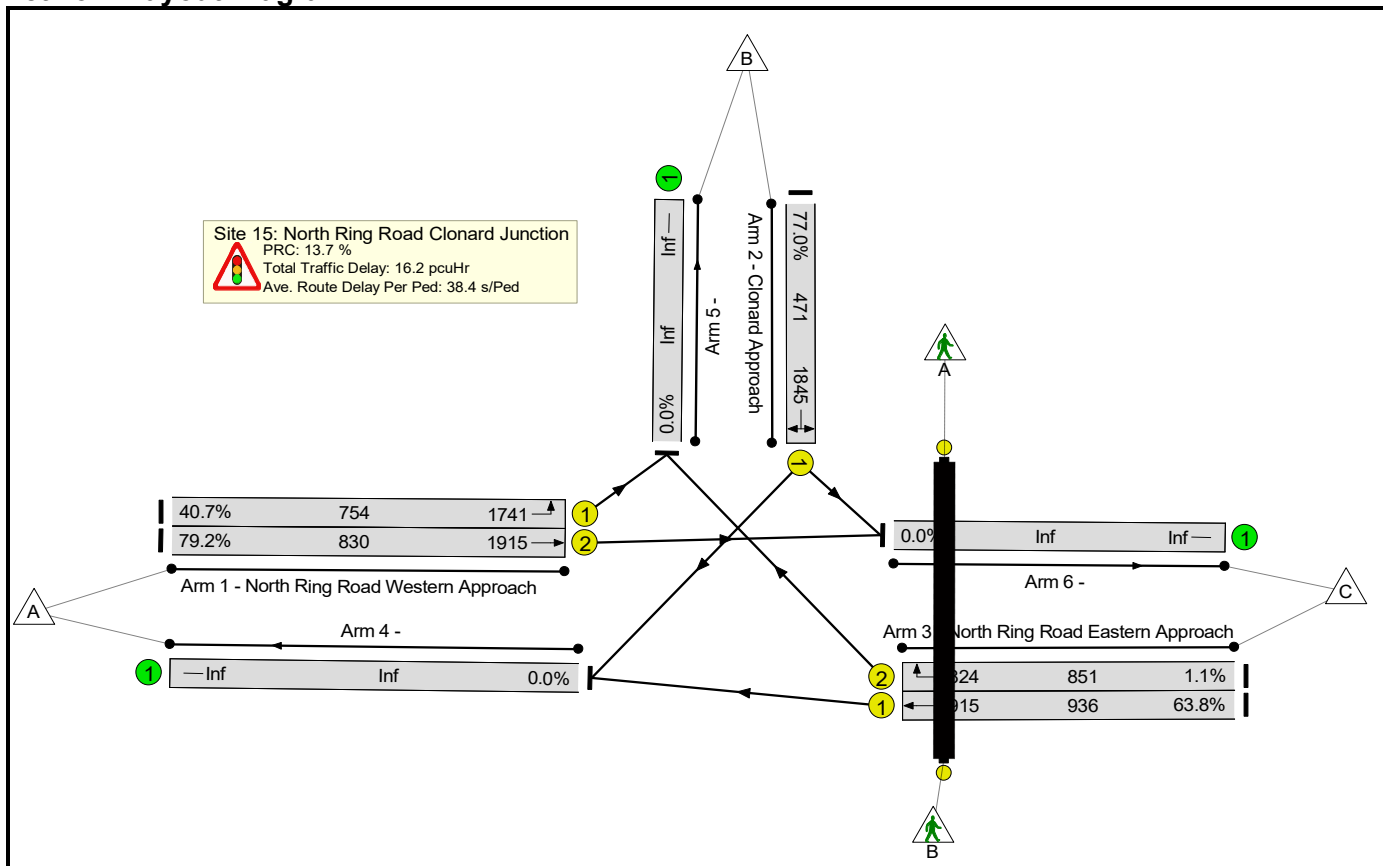
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>71.8%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14.0</b>	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	<b>71.8%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14.0</b>	-	-
1/1	North Ring Road Western Approach Left	U	A		1	44	-	519	1741	870	59.6%	-	-	-	3.0	21.1	10.0
1/2	North Ring Road Western Approach Ahead	U	A		1	44	-	685	1915	957	71.5%	-	-	-	4.6	24.1	14.6
2/1	Clonard Approach Right Left	U	B		1	16	-	249	1835	347	71.8%	-	-	-	3.6	52.2	7.1
3/1	North Ring Road Eastern Approach Ahead	U	C		1	49	-	585	1915	1064	55.0%	-	-	-	2.7	16.6	9.9
3/2	North Ring Road Eastern Approach Right	U	E		1	47	-	36	1824	973	3.7%	-	-	-	0.1	12.0	0.4
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
				C1	PRC for Signalled Lanes (%): 25.3		25.3	Total Delay for Signalled Lanes (pcuHr): 14.05			14.05		Cycle Time (s): 90				
					PRC Over All Lanes (%): 25.3			Total Delay Over All Lanes(pcuHr): 14.05			14.05						

Basic Results Summary

Scenario 27: '2029 AM no Dev' (FG27: '2029 AM no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

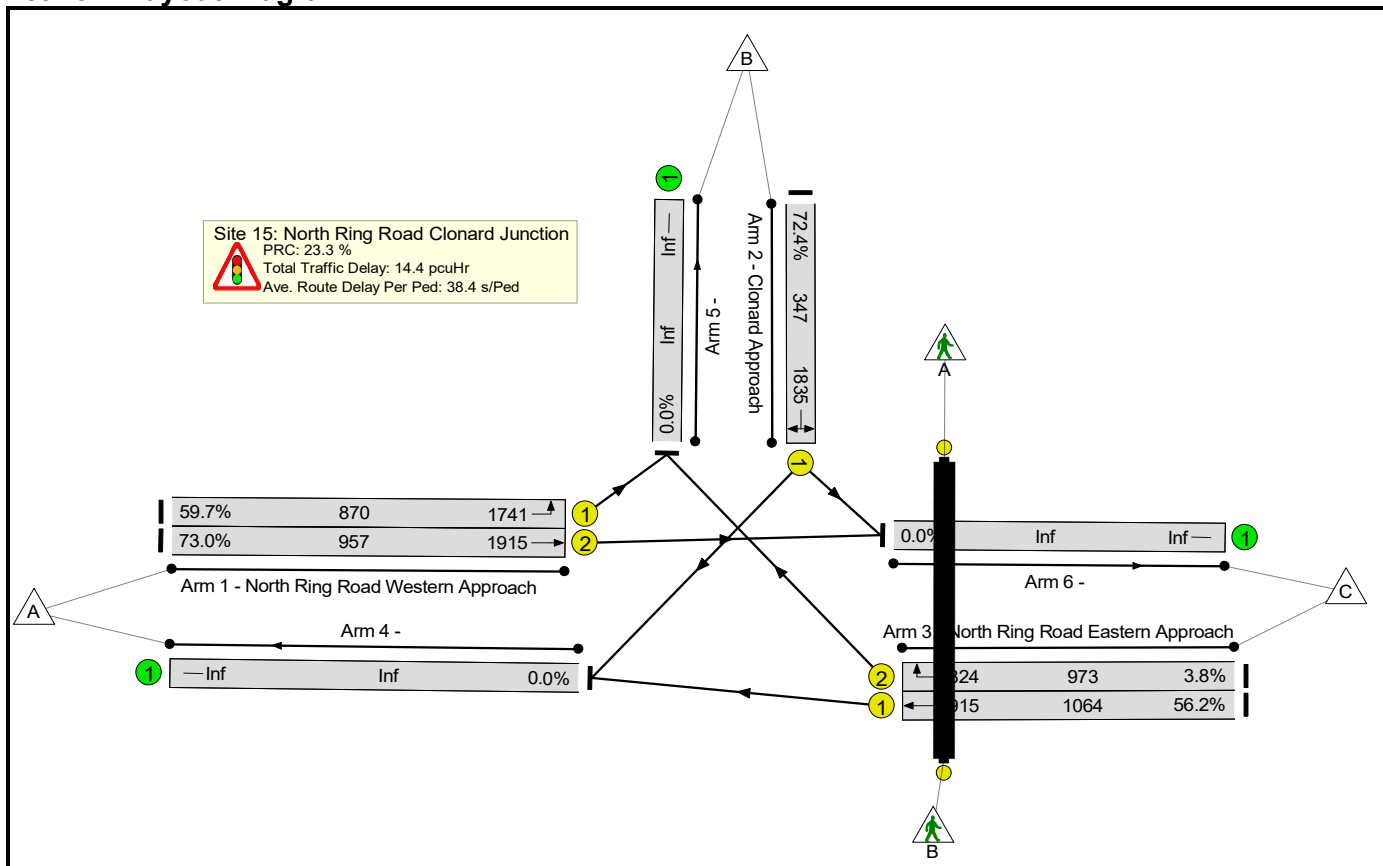
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	79.2%	0	0	0	16.2	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	79.2%	0	0	0	16.2	-	-
1/1	North Ring Road Western Approach Left	U	A		1	38	-	307	1741	754	40.7%	-	-	-	1.8	21.6	5.5
1/2	North Ring Road Western Approach Ahead	U	A		1	38	-	657	1915	830	79.2%	-	-	-	5.9	32.2	15.9
2/1	Clonard Approach Right Left	U	B		1	22	-	363	1845	471	77.0%	-	-	-	4.8	47.2	10.0
3/1	North Ring Road Eastern Approach Ahead	U	C		1	43	-	597	1915	936	63.8%	-	-	-	3.7	22.4	11.8
3/2	North Ring Road Eastern Approach Right	U	E		1	41	-	9	1824	851	1.1%	-	-	-	0.0	15.2	0.1
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
				C1	PRC for Signalled Lanes (%): 13.7		13.7	Total Delay for Signalled Lanes (pcuHr): 16.22				Cycle Time (s): 90					
					PRC Over All Lanes (%): 13.7			Total Delay Over All Lanes(pcuHr): 16.22									

Basic Results Summary

Scenario 28: '2029 PM no Dev' (FG28: '2029 PM no dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

**Network Results**

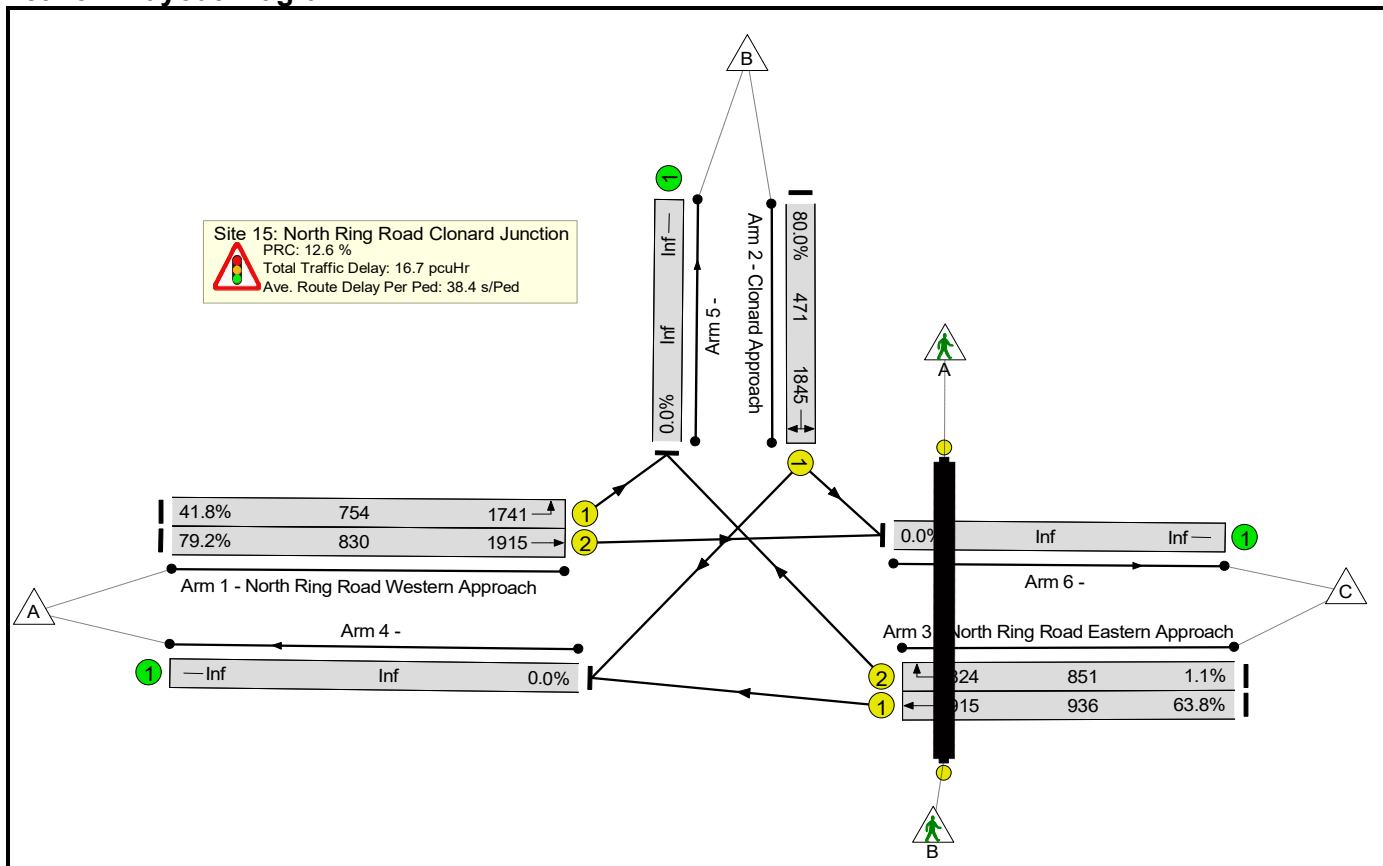
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	-		-	-	-	-	-	-	73.0%	0	0	0	14.4	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	73.0%	0	0	0	14.4	-	-
1/1	North Ring Road Western Approach Left	U	A		1	44	-	520	1741	870	59.7%	-	-	-	3.1	21.2	10.0
1/2	North Ring Road Western Approach Ahead	U	A		1	44	-	699	1915	957	73.0%	-	-	-	4.8	24.6	14.9
2/1	Clonard Approach Right Left	U	B		1	16	-	251	1835	347	72.4%	-	-	-	3.7	52.6	7.1
3/1	North Ring Road Eastern Approach Ahead	U	C		1	49	-	598	1915	1064	56.2%	-	-	-	2.8	16.8	10.3
3/2	North Ring Road Eastern Approach Right	U	E		1	47	-	37	1824	973	3.8%	-	-	-	0.1	12.0	0.5
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
				C1	PRC for Signalled Lanes (%): 23.3		23.3	Total Delay for Signalled Lanes (pcuHr): 14.41			14.41		Cycle Time (s): 90				
					PRC Over All Lanes (%): 23.3			Total Delay Over All Lanes(pcuHr): 14.41			14.41						



Basic Results Summary

Scenario 29: '2029 AM with Dev' (FG29: '2029 AM with dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

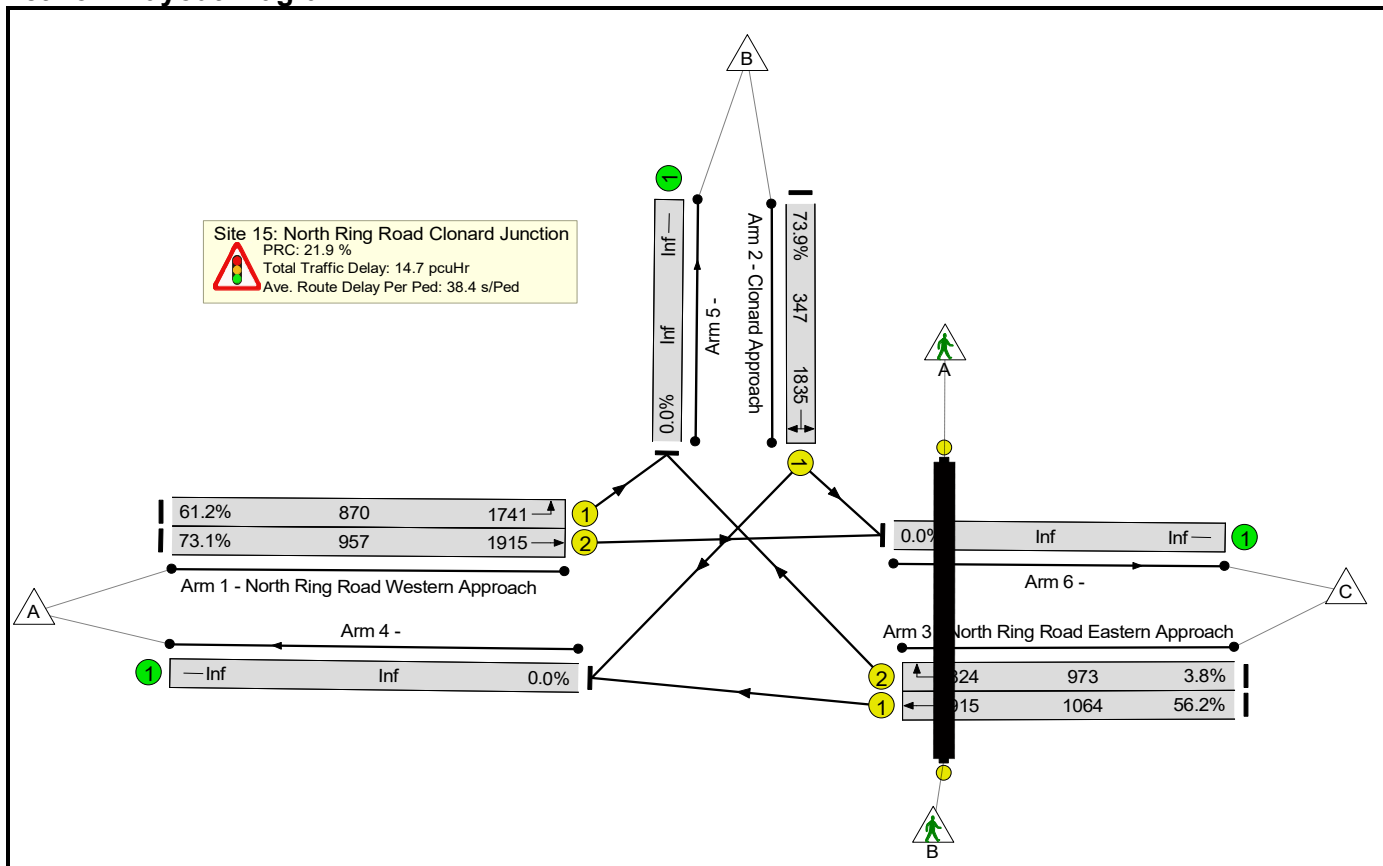
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	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)
<b>Network</b>	-	-	-		-	-	-	-	-	-	<b>80.0%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16.7</b>	-	-
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	<b>80.0%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16.7</b>	-	-
1/1	North Ring Road Western Approach Left	U	A		1	38	-	315	1741	754	41.8%	-	-	-	1.9	21.7	5.8
1/2	North Ring Road Western Approach Ahead	U	A		1	38	-	657	1915	830	79.2%	-	-	-	5.9	32.2	15.9
2/1	Clonard Approach Right Left	U	B		1	22	-	377	1845	471	80.0%	-	-	-	5.2	49.7	10.7
3/1	North Ring Road Eastern Approach Ahead	U	C		1	43	-	597	1915	936	63.8%	-	-	-	3.7	22.4	11.8
3/2	North Ring Road Eastern Approach Right	U	E		1	41	-	9	1824	851	1.1%	-	-	-	0.0	15.2	0.1
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5
				C1	PRC for Signalled Lanes (%): 12.6		12.6	Total Delay for Signalled Lanes (pcuHr): 16.72				Cycle Time (s): 90					
					PRC Over All Lanes (%): 12.6			Total Delay Over All Lanes(pcuHr): 16.72									

Basic Results Summary

Scenario 30: '2029 PM with Dev' (FG30: '2029 PM With dev', 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)	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)	
<b>Network</b>	-	-	-		-	-	-	-	-	-	73.9%	0	0	0	14.7	-	-	
<b>Site 15: North Ring Road Clonard Junction</b>	-	-	-		-	-	-	-	-	-	73.9%	0	0	0	14.7	-	-	
1/1	North Ring Road Western Approach Left	U	A		1	44	-	533	1741	870	61.2%	-	-	-	3.2	21.5	10.3	
1/2	North Ring Road Western Approach Ahead	U	A		1	44	-	700	1915	957	73.1%	-	-	-	4.8	24.7	15.0	
2/1	Clonard Approach Right Left	U	B		1	16	-	256	1835	347	73.9%	-	-	-	3.8	53.7	7.3	
3/1	North Ring Road Eastern Approach Ahead	U	C		1	49	-	598	1915	1064	56.2%	-	-	-	2.8	16.8	10.3	
3/2	North Ring Road Eastern Approach Right	U	E		1	47	-	37	1824	973	3.8%	-	-	-	0.1	12.0	0.5	
Ped Link: P1	Unnamed Ped Link	-	D		1	8	-	20	-	6400	0.3%	-	-	-	0.2	38.4	0.5	
C1					PRC for Signalled Lanes (%): 21.9			Total Delay for Signalled Lanes (pcuHr): 14.71			Cycle Time (s): 90							
					PRC Over All Lanes (%): 21.9			Total Delay Over All Lanes(pcuHr): 14.71										