CHAPTER 13

TRAFFIC AND TRANSPORT

13.0 TRAFFIC AND TRANSPORT

13.1 INTRODUCTION

This chapter of the Environmental Impact Assessment Report (EIAR) presents the traffic and transport assessment of the proposed construction of the Railpark Maynooth development. This section assesses and evaluates the impact of the proposed development on the surrounding traffic flow, traffic safety and transport infrastructure during the construction and operational phases. This chapter is advised to be read in conjunction with the Transport Impact Assessment Report for Proposed Residential Development at Railpark, Maynooth and its appendices, which outline related impacts arising from the proposed development, and proposed measures to mitigate the predicted impacts.

This chapter of the EIAR has been prepared by Rico Raymundo BEng (Hons), ME, MIEI, of Roughan and O'Donovan Consulting Engineers Limited. Rico is a design engineer in the transportation group with over 7 years' experience in the design and planning of traffic & transportation projects. Projects have included works associated with the commercial residential and transport infrastructure sectors. Rico has been involved in numerous traffic and transport deliverables of development planning applications including the generation of Traffic & Transport Assessments, Mobility Management Plans and Traffic & Transport inputs into Environmental Impact Assessment Reports.

13.2 STUDY METHODOLOGY

13.2.1 Guidelines

The assessment of the potential impact of the proposed development on traffic and transport was undertaken with reference to the methodology and criteria set out in the following documents:

- 'Traffic and Transport Assessment Guidelines' published by Transport Infrastructure Ireland (TII)
- 'Guidelines for Transport Impact Assessment' published by the Chartered Institution of Highways and Transportation [CIHT]

Also, the following additional documents are considered best practices in the industry and have been considered in the preparation of this report:

- Design Standards for New Apartments, Guidelines for Planning Authorities 2025;
- The Design Manual for Urban Roads and Streets, published by DTTaS and DoE;
- The Design Manual for Roads and Bridges, published by TII; and
- The National Cycle Manual, published by the NTA.

13.2.2 Consultation

The following investigative surveys were consulted:

- Traffinomics Ltd had been consulted for conducting traffic surveys. They had undertaken a traffic survey on Tuesday, December 3rd, 2024, at the Griffin Rath Manor/R405 junction and Dunboyne Road/R148 junction. The traffic counts were carried out over 16 hours between 6 am and 10 pm.

The following information sources were consulted:

- Geological Survey of Ireland (GSI) interactive mapping.
- Environmental Protection Agency (EPA) interactive mapping.
- Ordnance Survey Ireland (OSI) mapping.
- Topographical survey website (en-ie.topographic-map.com)
- Opensource technologies such as Google Earth and Bing Maps

13.2.3 Desk Study

This chapter entails a desk study of the area of the proposed development to establish the baseline conditions. The desk study involved collecting

- all relevant road networks, road classifications, speed limits, and constraints;
- existing pedestrian, cyclist, public transport, and vehicular traffic patterns;
- accident statistics, public transport information, and any previous traffic studies including national, regional, and local transport policies.

13.2.4 Study Area

13.2.4.1 Site Location

The proposed development is a 15.27-hectare area located at Railpark, Maynooth, Co. Kildare on a greenfield site adjacent to Maynooth town's southeastern side and approximately 1km southeast of Maynooth town centre. The lands are currently greenfield bounded by existing hedgerows/vegetation on all sides with existing residential developments also located immediately to the west.

The Maynooth Educate Together National School is located approximately 400m south of the land. The proposed development is approximately 400m north of regional road R405 (Celbridge Road), approximately 400m south of the main Dublin to Sligo Railway line and the Royal Canal and approximately 600m south of regional Road R148 (Leixlip Road). It is proposed that the Maynooth Eastern Ring Road (to be provided by Kildare County Council) will traverse the proposed development lands in a north-south direction. The ring road will serve the proposed development. Junction 7 on the M4 motorway is located approximately 950m south-west of the proposed development.

An aerial image of the site is shown below with the subject lands outlined in red.

Figure 13.1: Aerial Photo of Site Location (Source: Google Maps, 2025)

13.2.4.2 Access

Vehicular access to the proposed development will be via a new signalised junction on the Maynooth Eastern Ring Road (MERR). A secondary site access is also proposed via a new T-junction on the MERR on the south side of the site. This additional entry point will improve overall site circulation. Enhanced accessibility and provide alternative route for vehicles. The northeast section of the development will be accessed via a new local access road connecting the MERR. The MERR will connect the proposed development to the R148 Leixlip Road to the north and the R405 Celbridge Road to the south.

The Maynooth Ring Road Part VIII Planning Application was submitted for approval on the 14th of May 2019 with granted permission on the 29th of July 2019. Compulsory Purchase Order was published in December 2022 with Oral Hearing in May 2023. Currently, the Maynooth Eastern Ring Road is progressed towards the Tender stage with a contract package to be published in November 2024.

The proposed MERR will have a carriageway width of 7m (2x2.5m lanes), 0.5m hardstrip on both sides and 5m verge on both sides of the road.

The sightline has been checked at the access location from the development and the MERR and adequate visibility is available in both directions from a 2.4m setback. The standard required is 65m to oncoming traffic (DMURS Table 4.2). There is no major obstruction within the sightline from the development access and the alignment of the major road is generally straight, providing an unobstructed field of vision for entry from the development to the MERR.

A direct pedestrian and cycle access to the development will be provided as part of the MERR. The MERR will have fully segregated cycle tracks and 2m wide pedestrian footpath on both sides of the road. Future pedestrian and cycle connection links will also be provided on the western side of the development to connect to the existing neighbourhoods subject to agreement with the adjoining landowner/Planning Authority.

13.2.5 Methodology

An assessment of potential impacts from the proposed development on local traffic and transport networks was undertaken through a combination of desk-based analysis, site survey data, qualitative and quantitative impact assessment, and consideration of potential impact mitigation requirements. The potential impacts of the proposed development have been defined by reference to the baseline traffic survey data, transport demand forecasting and traffic growth; traffic microsimulation modelling for the base year, opening year and forecast years; and detailed development design proposals.

Appropriate mitigation measures have been defined for significant effects, to reduce residual risks to an acceptable level. The criteria for determining the significance of impact are based upon:

- Traffic Assessment through determining the Ratio of Flow to Capacity (RFC) for priority junctions/intersections (PICADY) and determining the Degree of Saturation (DoS) for signalised junctions;
- Assessment of Parking and Servicing for the development; and
- Determination of potential impact significance.

In terms of trip generation and trip distribution by the new main development, the junctions that will be most affected by the Railpark development are the Griffin Rath Manor/R405 junction and the Dunboyne Road/R148 junction. The new Maynooth Eastern Ring Road (MERR) is the main access and egress to the proposed development via the two junctions mentioned above. The two junctions have been assessed using TRL Junction10 and LinSig.v3 under the following scenarios:

Table 13.1: Assessment Scenarios

Scenarios	Assessments
Existing Baseline Situation	Baseline Year 2024
Impact of the proposed development	Estimated Opening Year 2030 (With Development) Opening Year +5 2035 (With Development) Opening Year +15 2045 (With Development)
'Do Nothing' Impact	Estimated Opening Year 2030 (Without Development) Opening Year +5 2035 (Without Development) Opening Year +15 2045 (Without Development)

The opening year consists of the 2024 Traffic Survey Data with growth factors applied. Similarly, for 2035 and 2045 as above, growth factors have also been applied. As noted above, 100% of the traffic to and from the proposed development will be from the new Maynooth Eastern Ring Road. The MERR will connect to the Griffin Rath Manor to the south and Dunboyne Road to the north. The two existing junctions currently a priority T- junction will be upgraded as signalised 4-arms junction with the MERR along with segregated cycle lanes and footpaths to promote safe active travel.

The assessment outputs are presented in the Ratio of Flow to Capacity (RFC) for priority junctions/intersections (PICADY). TRL Junctions 10 presents output in the form of the Ratio of Flow to Capacity (RFC) and anticipated average delay per vehicle. RFC is a measure of the proportion of the capacity of a junction approach arm being availed of by traffic. It is considered good practice that the RFC on any arm of a priority junction should not exceed 0.850 (that is to say that the junction should not operate above 85% of its theoretical capacity) as turbulent factors above that threshold may inhibit the optimal performance of the junction.

The assessment outputs are presented in Degree of Saturation (DoS) for signalised junctions. LinSig.v3 offers detailed insights into key performance indicators, including the degree of saturation and delays experienced by vehicles at these intersections. DoS is the ratio of the actual traffic flow to the capacity of the roadway or junction. This ratio indicates how close the traffic flow is to the maximum capacity that the road or junction can handle without becoming congested. The second output is the delay given in seconds and is the average time a vehicle must wait on the approach before it can enter the junction.

To stay consistent with the traffic survey data, the Griffin Rath Manor/R405 junction is also referred to as Site 01 and the Dunboyne Road/R148 junction as Site 02.

Figure 13.2: The most affected junction for the Proposed Development

13.3 The Existing Receiving Environment (Baseline Situation)

Details of the existing and important proposed traffic and transport network, which will be impacted by the new development or vice-versa, are described in the following sections:

13.3.1 Surrounding Road Network

The proposed development is located at Railpark, Maynooth, Co. Kildare, approximately 1km southeast of Maynooth town centre. The lands are currently greenfield bounded by existing hedgerows/vegetation on all sides with existing residential developments also located immediately to the west. The surrounding road network is described below.

Table 13.2: Surrounding Road Network

Existing Road Network	
Road Name	**Description**
R148 Leixlip Road	The R148 Leixlip Road is currently a single-lane carriageway with a posted speed limit of 60km/hr in the vicinity of the existing R148/R157 junction. This speed limit is increased to 80km/hr beyond the eastern extent of the proposed development boundary. The R148 links to Leixlip to the east and Maynooth to the west.
R405 Celbridge Road	The R405 is currently a single-lane carriageway with a posted speed limit of 50km/hr in the vicinity of the R405/Griffin Rath Manor junction and this limit is increased to 80km/hr approximately 110m east of the junction. The R405 links to Celbridge to the east and Maynooth to the west.
R406 Straffan Road	The R406 is a single lane carriageway with a posted speed limit of 50km/hr in the Maynooth area. This road links to Straffan to the South and Maynooth to the north. The R406 also connect to the M4 Motorway.
M4 Motorway	Located further south of the proposed development is the M4 motorway which the primary route connects Dublin to the west of Ireland. From the proposed development the M4 can be accessed via the R405 and the R406.
Proposed MERR Project	
Road Name	**Description**
Maynooth Eastern Ring Road	The proposed Maynooth Eastern Ring Road (MERR) will be located to the east of the site. This will be the primary access point to the proposed development. The Maynooth Eastern Ring Road is proposed to be a single carriageway comprising two 3.5m wide lanes for the majority of the length with lanes narrowing to 3.0m at the approach to the junctions. It will have a posted speed limit of 50km/hr and the curved alignment of the road will assist in reducing speed, thus increasing safety. The MERR will tie into the R4148/R157 junction to the north with the provision of a new 4-way signalised junction. To the south, the MERR will tie into the R405/Griffin Rath Road junction with the provision of a new 4-way signalized junction. The MERR will also provide pedestrians and cyclists dedicated cycle tracks and pedestrian footpaths on both sides of the road for the entire length of the road.

Figure 13.3: Surrounding Road Network in The Operational Phase.

13.3.2 Public Transport Accessibility

13.3.2.1 Train Service

The Maynooth Train Station is within 20 minutes of walking distance from the proposed development. It is served by the Commuter Service and Intercity Service. The Commuter Service runs between Dublin Connolly Station and Maynooth with a frequency of 15-30 minutes. The Intercity Service runs between Dublin Connoly Station and Sligo with a frequency of 2-3 hours.

13.3.2.2 Bus Service

The proposed site is also accessible by bus. Bus service along Straffan Road is approximately 15 minutes' walk from the proposed site. Phase 2 of the BusConnects Network Redesign launched on November 2021 saw the introduction of C-Spine routes including the below that serve the Maynooth area:

The following routes serve Straffan Road:

- C3 – Maynooth to Ringsend: Frequency 30 minutes.
- C4 - Maynooth to Ringsend: Frequency 30 minutes.
- C5 - Maynooth to Ringsend: Frequency 5 buses per day.
- C6- Maynooth to Ringsend; Frequency 5 buses per day.

13.3.3 Existing Traffic

13.3.3.1 Existing Traffic Survey Data

A traffic survey was undertaken by Traffinomics Ltd on Tuesday December 3rd, 2024, at the Griffin Rath Manor/R405 junction and Dunboyne Road/R148 junction. The full traffic survey data is included in Transport Impact Assessment Report for Proposed Residential Development at Railpark, Maynooth. The traffic counts were carried out over a 16-hour period between 6am and 10pm.

The traffic survey indicates the following periods represent the peak hours, AM Peak Hour: 08:00 – 09:00 and PM Peak Hour: 17:00 – 18:00. The traffic survey data was reviewed and has been summarised in Figure 13.4 and Figure 13.5 below. the summary shows the existing traffic volume for each movement during the peak hour, expressed in passenger car units (PCU's)

Figure 13.4: AM & PM Peak existing turning movements at Dunboyne Road / R148 junction

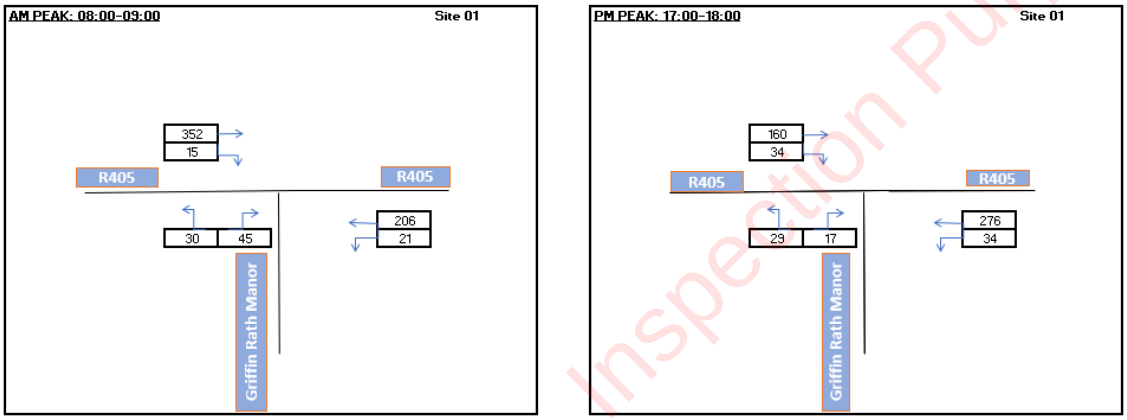
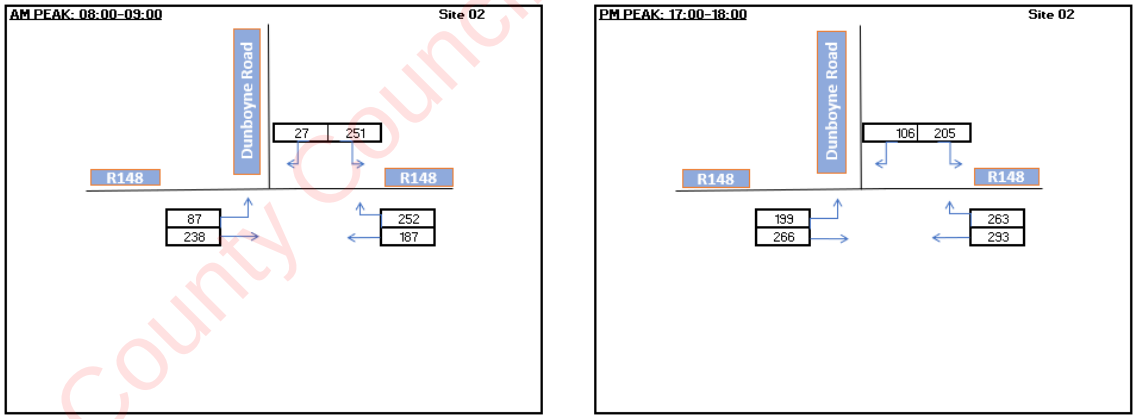


Figure 13.5 AM & PM Peak existing turning movements at Griffin Rath Manor / R405 junction



13.3.3.2 Annual Average Daily Traffic (AADT)

The AADT of the R405 Celbridge Road and R148 Maynooth Road has been calculated having regard to Unit 16.1 of the TII Project Appraisal Guidelines for National Road, October 2016. There is no equivalent document for non-national roads, so it is common practice to use this guidance, which is region-specific. For Railpark (Kildare), the guidance is:

1) 0800-0900 Peak hour is 7.8% of the daily flow.

2) Tuesday flows are 97% of the daily average.
3) December flows are 106% of the monthly average.

On the basis of the foregoing, the calculated AADT for R405 Celbridge Road is 7,330 and 14,275 for R148 Maynooth Road.

The Part VIII application for the MERR has been reviewed to compare the surveyed flows with the anticipated flows post completion of MERR. These flows are repeated in the table below:

Table 13.3: Future AADTs (MERR PART VIII report)

Road	2036 Do-Minimum AADT	2036 Do-Something AADT
MERR	-	21000
R148 Leixlip Road (East)	19500	17500
R148 Leixlip Road (West)	13900	13500
R157 Dunboyne Road	17500	20250
R405 Celbridge Road (East)	14000	11700
R405 Celbridge Road (West)	7250	8500
Griffin Rath Road	11500	15000

The MERR analysis indicates comparable flows on the R148 West and R405 West to the surveyed results. The Do-Something analysis indicates the anticipated changes in traffic patterns as a result of the MERR being introduced. While this would have taken some account of the additional traffic associated with the development of zoned lands along the MERR, for conservatism, the assessment herein will load the development traffic onto the anticipated MERR flows.

13.3.3.3 Existing Modal Split

The 2016 and 2022 CSO census Small Area Population Statistics (SAPS) was analysed for the nearby existing residential area west of the proposed site to understand the travel patterns in the area. The data considers the means of travel to work, school, or college for the population in the area aged 5 years and over. The data was used to calculate the existing percentage of people who walk, cycle, use public transport or take a private vehicle to commute.

A comparison of the 2016 and 2022 data above indicates that the modal share for car drivers reduced from 40% in 2016 to 30% in 2022 showing reduced reliance on private cars over time. The 2022 data also indicate a lower modal share for car drivers in the existing Railpark neighbourhood compared with the Kildare, Regional, and National averages (see Table 13.4 below).

Table 13.4: Existing Travel Patterns for Railpark Neighbourhood / Kildare / Leinster and National

Means of Travel	Railpark Neighbourhood		Kildare	Leinster	National
	2016 (%)	2022 (%)			
On foot	29%	**18%**	12.49%	14.41%	10.70%
Bicycle	3%	**5%**	2.1%	3.84%	1.76%
Bus, minibus or coach	7%	**7%**	7.75%	10.15%	8.61%
Train, DART or LUAS	10%	**10%**	3.84%	3.88%	1.22%
Motorcycle or scooter	0%	1%	0.24%	0.34%	0.17%

Car driver	40%	**30%**	37.25%	31.68%	36.82%
Car passenger	7%	**11%**	19.31%	16.44%	21.33%
Van	1%	**1%**	3.99%	3.38%	5.10%
Other (incl. lorry)	0%	0%	0.31%	0.31%	0.49%
Work mainly at or from home	2%	11%	7.55%	7.71%	6.94%
Not stated	1%	6%	5.16%	7.85%	6.85%
Total	100%	100%	100%	100%	100%

13.3.3.4 Base Year [2024] Scenario

The two junctions were analysed using the 2024 traffic survey data with existing road network. The results indicate that the base year operates within the capacity of both junctions. A summary of the results is shown below, and the full results of the analysis are included in Transport Impact Assessment Report for Proposed Residential Development at Railpark, Maynooth.

Table 13.5: Summary of Junction Analysis in Base Year (Site 01)

Baseline 2024 -Site 01			
Arm/Stream	Peak Hour	Delay (s)	RFC
Arm A - R405 E	AM Peak (08:00-09:00)	N/A	N/A
	PM Peak (17:00-18:00)	N/A	N/A
Arm B - Griffin Rath Manor	AM Peak (08:00-09:00)	9.07	0.16
	PM Peak (17:00-18:00)	7.73	0.09
Arm C - R405 W	AM Peak (08:00-09:00)	4.70	0.03
	PM Peak (17:00-18:00)	6.04	0.07

Table 13.6: Summary of Junction Analysis in Base Year (Site 02)

Baseline 2024 -Site 02			
Arm/Stream	Peak Hour	Delay (s)	RFC
Arm A - R148 W	AM Peak (08:00-09:00)	N/A	N/A
	PM Peak (17:00-18:00)	N/A	N/A
Arm B - Dunboyne Road	AM Peak (08:00-09:00)	12.66	0.50
	PM Peak (17:00-18:00)	24.93	0.69
Arm C - R148 E	AM Peak (08:00-09:00)	11.58	0.53
	PM Peak (17:00-18:00)	13.62	0.63

13.4 CHARACTERISTICS OF THE PROPOSED DEVELOPMENT

A ten-year planning permission is being sought for a proposed development comprising of 581 no. units, consisting of 396 no. houses (59 no. 2 bed units, 275 no. 3 bed units and 62 no. 4 bed units) and 185 no. apartments/duplex apartments (53 no. 1 bed units, 92 no. 2 bed units and 40 no. 3 bed units) at lands located at Railpark, Maynooth. A neighbourhood centre including a childcare facility, café, health centre, pharmacy/shop and convenience shop will also be provided as part of the development.

A total of 888 no. car parking spaces are proposed, which includes 711 no. in-curtilage spaces for houses, 115 no. spaces for the duplex apartments / apartments, 36 no. visitor car parking spaces, 26 no. for the commercial uses at the neighbourhood centre including visitor and staff parking. A total of 623 no. cycle spaces are proposed for residents, 42 no. spaces for the neighbourhood centre uses and 93 no. visitor cycle parking spaces.

13.5 POTENTIAL IMPACT OF THE PROPOSED DEVELOPMENT

It is anticipated that the main development characteristics impacting the traffic and transport comprise the following:

- During construction, the main development characteristics impacting traffic and transport include the volume and frequency of construction vehicle movements, temporary changes to local road networks or access points, and the transportation of materials and workers to and from the site. The phasing of construction activities and the location of site compounds and storage areas also influence traffic patterns and potential disruptions to existing road users.
- In the opening year and at full occupancy, key characteristics affecting traffic and transport comprise the number and type of dwelling units, parking provision, site access points, and the internal road network design.

13.5.1 Construction Phase

During the Construction Phase, it will be necessary to import fill materials to the site for the construction of roads, foundations and services, in addition to large quantities of bricks, concrete, steel, pipes etc. These materials will be delivered by lorry and generate a large amount of construction vehicle trips on the nearby road network during the construction phase.

It will be beneficial to construct and complete the proposed Maynooth Eastern Ring Road, prior to the commencement of the main development as it will help to eliminate the major impact on the existing road traffic due to the construction vehicle movements, cost of temporary local access roads along with reduce the cost of the transportation of materials and workers to and from the site. TTM (Temporary Traffic Management) will be proposed during the construction phase, and the heavy vehicles flow during the peak hours will be avoided by the contractors.

13.5.2 Operational Phase

The aim of the traffic and transport assessment is to provide enhanced walking, cycling and public transport infrastructure during the full operational phase of main development, which will enable and deliver efficient, safe, and integrated sustainable transport movement surrounding the main development.

13.5.2.1 Transport Demand Generation and Traffic Growth

The traffic generated by the proposed development has been calculated using the TRICS Software. TRICS is a database of various development types throughout Ireland and the UK, which allows the trip generation of new developments to be accurately calculated on similar sites in similar locations. The vehicular trip generation data for the proposed development is summarised below with further detail provided in Transport Impact Assessment Report for Proposed Residential Development at Railpark, Maynooth.

The number of trips generated by the development has been calculated for the AM peak hour, between 08:00-09:00, and the PM peak hour, between 17:00-18:00. A summary of the estimated number of trips generated by the proposed development is given below.

Table 13.7: Trips Generated in AM Peak Hour (Adjusted)

Use	Trip Rate			No. Trips		
	Unit	Inbound	Outbound	Inbound	Outbound	Two-way
				(veh/hr)		
Residential (Apartments & Houses)	/Dwelling	0.153	0.302	89	175	264
Creche	/100Sqm	3.052	2.191	9	7	16
Café	/100Sqm	5.94	5.161	2	2	4
Health Centre	/100Sqm	1.061	0.152	1	1	2
Pharmacy & Convenience Store	/100Sqm	9.044	8.463	10	10	20

Table 13.8: Trips Generated in PM Peak Hour (Adjusted)

Use	Trip Rate			No. Trips		
	Unit	Inbound	Outbound	Inbound	Outbound	Two-way
				(veh/hr)		
Residential (Apartments & Houses)	/Dwelling	0.246	0.145	143	84	227
Creche	/100Sqm	2.713	3.392	8	10	19
Café	/100Sqm	4.348	4.794	1	2	3
Health Centre	/100Sqm	0.712	1.246	1	1	2
Pharmacy & Convenience Store	/100Sqm	11.176	12.08	13	14	27

Traffic growth on the external road network is inevitable over time as a result of further economic development in the Kildare and Maynooth area. The performance of the road network has been assessed for the estimated Opening Year (2030), Opening +5 Years (2035), and Opening +15 Years (2045). The purpose of analysing the road network for future traffic growth is to ensure the surrounding road network has sufficient capacity not alone for the proposed development, but also for the other development, including other residential developments in the vicinity of the proposed development site, that will occur over time. These additional developments are captured by applying the growth factors calculated in the TII Project Appraisal Guidelines Unit 5.3 – Travel Demand Projections (October 2021). The traffic analysis undertaken in support of the MERR already had growth factors applied, so the growth factors have only been applied for the period beyond the original MERR assessment.

The medium growth rates (used for this analysis) for Kildare anticipate a 1.97% annual traffic growth until 2030 for light vehicles. Beyond 2030 until 2040, a 0.62% annual growth is anticipated for light vehicles.

These figures are net, and include, in addition to the new development traffic, modal shifts for existing travel movements to sustainable transport modes as services and infrastructure are improved on an ongoing basis (e.g. BusConnects, Cycle Network Plan, Railway Service, etc). The application of these growth factors thereby ensures that the analysis takes into account of other new developments in the area in line with best price TII guidelines. The traffic growth calculated for each traffic movement is shown in Transport Impact Assessment Report for Proposed Residential Development at Railpark, Maynooth.

13.5.2.2 Traffic Flow

The performance of the road network has been assessed for the estimated for Opening Year (2030), opening +5 years (2035), and opening +15 years (2045).

13.5.2.2.1 Opening Year [2030] Scenario- With Development / 'Do Something' scenario

Analysis has been carried out in the opening year scenario, assuming the development has been completed and fully occupied by then. The analysis was carried out with development / 'Do Something' Scenario (in taking account of other developments in the area by application of the TII growth factors). Site 01 for the opening year scenario was analysed with the MERR arm in the south of the junction. Similarly, Site 02 for the opening year scenario was analysed with the MERR arm in the north of the junction. The analysis shows that the opening year operates within the capacity of the two junctions for the 'Do Something' scenario. A summary of the results is shown below, and the full results of the analysis are included in Appendix 13.1.

Table 13.9: Summary of Junction Analysis in Opening Year 2030 (Site 01)

Opening Year 2030 - Site 01		With Development	
Arm/Stream	Peak Hour	Delay (s/pcu)	Degree of Saturation (%)
Arm 1/1 = MERR (Left)	AM Peak (08:00-09:00)	1.2	20.90%
	PM Peak (17:00-18:00)	0.7	13.10%
Arm 1/2 +1/3 = MERR (Right,Ahead)	AM Peak (08:00-09:00)	8.1	79.5 : 79.8%
	PM Peak (17:00-18:00)	10.9	89.00%
Arm 5/1 = R405 W (Left, Ahead)	AM Peak (08:00-09:00)	6.5	80.40%
	PM Peak (17:00-18:00)	3.4	56.00%
Arm 5/2 = R405 W (Right)	AM Peak (08:00-09:00)	0.3	9.40%
	PM Peak (17:00-18:00)	0.6	20.70%
Arm 8/1 = R405 E (Left, Ahead)	AM Peak (08:00-09:00)	6.1	67.1 : 80.2%
	PM Peak (17:00-18:00)	9.4	87.70%
Arm 8/2 = R405 E (Right)	AM Peak (08:00-09:00)	6.1	67.1 : 80.2%
	PM Peak (17:00-18:00)	9.4	87.70%
Arm 10/1 = Griffin Rath Manor (left, Ahead)	AM Peak (08:00-09:00)	3.6	51.10%
	PM Peak (17:00-18:00)	2.3	35.30%
Arm 10/2 = Griffin Rath Manor (Right)	AM Peak (08:00-09:00)	3.7	72.70%
	PM Peak (17:00-18:00)	5.3	84.40%

Table 13.10: Summary of Junction Analysis in Opening Year 2030 (Site 02)

Opening Year 2030 - Site 02		With Development	
Arm/Stream	Peak Hour	Delay (s)	Degree of Saturation (%)
Arm 1/1 = Dunboyne Road (Ahead)	AM Peak (08:00-09:00)	4.4	65.80%
	PM Peak (17:00-18:00)	8.6	87.50%
Arm 1/2 = Dunboyne Road (Right)	AM Peak (08:00-09:00)	2.8	66.80%
	PM Peak (17:00-18:00)	1.9	49.60%
Arm 4/1 + 4/2 = R148 E (Left, Ahead)	AM Peak (08:00-09:00)	2.1 3.5	39.1% 61.5%
	PM Peak (17:00-18:00)	5.8 5.0	78.0% 74.2%
Arm 4/3 = R148 E (Right)	AM Peak (08:00-09:00)	4.2	69.50%
	PM Peak (17:00-18:00)	4.1	66.60%
Arm 12/1 +12/2 = R148 W (Left, Ahead)	AM Peak (08:00-09:00)	1.3 6.3	28.5% 80.4%
	PM Peak (17:00-18:00)	2.5 9.1	42.1% 88.0%
Arm 12/3 = R148 W (Right)	AM Peak (08:00-09:00)	6.3	80.40%
	PM Peak (17:00-18:00)	9.1	88.00%
Arm 18/1 = MERR (left, Ahead)	AM Peak (08:00-09:00)	7.2	78.50%
	PM Peak (17:00-18:00)	3.9	56.10%
Arm 18/2 = MERR (Right)	AM Peak (08:00-09:00)	4.4	64.10%
	PM Peak (17:00-18:00)	4.1	79.10%

13.5.2.2.2 Opening Year + 5-year Forecast [2035] Scenario - With Development / 'Do Something' scenario

Analysis has been carried out in the opening year + 5-year forecast scenario. The analysis was carried out with development / 'Do Something' Scenario (in taking account of other developments in the area by application of the TII growth factors). Site 01 for the opening year +5-year scenario was analysed with the MERR arm in the south of the junction. Similarly, Site 02 for the opening year +5-year scenario was analysed with the MERR arm in the north of the junction.

The analysis shows that the opening year + 5 years operates within the capacity for the two junctions for the 'Do Something' scenario. A summary of the results is shown below, and the full results of the analysis are included in Appendix 13.1.

Table 13.11: Summary of Junction Analysis in Opening Year +5 - 2035 (Site 01)

Opening Year +5 2035 - Site 01		With Development	
Arm/Stream	Peak Hour	Delay (s)	Degree of Saturation (%)
Arm 1/1 = MERR (Left)	AM Peak (08:00-09:00)	1.2	21.00%
	PM Peak (17:00-18:00)	0.7	13.30%
Arm 1/2 +1/3 = MERR (Right,Ahead)	AM Peak (08:00-09:00)	8	78.50%
	PM Peak (17:00-18:00)	11.4	89.90%
Arm 5/1 = R405 W (Left, Ahead)	AM Peak (08:00-09:00)	7	82.90%
	PM Peak (17:00-18:00)	3.4	55.20%
Arm 5/2 = R405 W (Right)	AM Peak (08:00-09:00)	0.3	9.40%
	PM Peak (17:00-18:00)	0.6	19.40%
Arm 8/1 = R405 E (Left, Ahead)	AM Peak (08:00-09:00)	6.4	69.2 : 82.7%
	PM Peak (17:00-18:00)	9	81.50%
Arm 8/2 = R405 E (Right)	AM Peak (08:00-09:00)	6.4	69.2 : 82.7%
	PM Peak (17:00-18:00)	9	81.50%
Arm 10/1 = Griffin Rath Manor (left, Ahead)	AM Peak (08:00-09:00)	3.7	51.60%
	PM Peak (17:00-18:00)	2.4	36.30%
Arm 10/2 = Griffin Rath Manor (Right)	AM Peak (08:00-09:00)	3.6	70.10%
	PM Peak (17:00-18:00)	5.8	86.90%

Table 13.12: Summary of Junction Analysis in Opening Year +5 - 2035 (Site 02)

Opening Year +5 2035 - Site 02		With Development	
Arm/Stream	Peak Hour	Delay (s)	Degree of Saturation (%)
Arm 1/1 = Dunboyne Road (Ahead)	AM Peak (08:00-09:00)	4.6	67.80%
	PM Peak (17:00-18:00)	8.7	87.50%
Arm 1/2 = Dunboyne Road (Right)	AM Peak (08:00-09:00)	3	69.50%
	PM Peak (17:00-18:00)	2	51.10%
Arm 4/1 + 4/2 = R148 E (Left, Ahead)	AM Peak (08:00-09:00)	2.2 3.7	40.1% 63.5%
	PM Peak (17:00-18:00)	7.3 6.2	86.5% 83.5%
Arm 4/3 = R148 E (Right)	AM Peak (08:00-09:00)	4.5	71.80%
	PM Peak (17:00-18:00)	4.8	74.90%
Arm 12/1 +12/2 = R148 W (Left, Ahead)	AM Peak (08:00-09:00)	6.7	82.9 : 82.9%
	PM Peak (17:00-18:00)	2.4 8.5	40.5% 85.6%
Arm 12/3 = R148 W (Right)	AM Peak (08:00-09:00)	6.7	82.90%
	PM Peak (17:00-18:00)	8.5	85.60%
Arm 18/1 = MERR (left, Ahead)	AM Peak (08:00-09:00)	7.7	80.70%
	PM Peak (17:00-18:00)	4.1	57.80%
Arm 18/2 = MERR (Right)	AM Peak (08:00-09:00)	4.6	65.90%
	PM Peak (17:00-18:00)	5.5	88.30%

13.5.2.2.3 Opening Year + 15-year Forecast [2045] Scenario - With Development / 'Do Something' scenario

Analysis has been carried out in the opening year + 15-year forecast scenario. The analysis was carried out with development / 'Do-Something' (in taking account of other development in the area by application of the TII growth factors). Site 01 for the opening year +15-year scenario was analysed with the MERR arm in the south of the junction. Similarly, Site 02 for the opening year +15-year scenario was analysed with the MERR arm in the north of the junction. The analysis shows that the opening year + 15 years operates within the capacity for the two junctions for the 'Do Something' scenario. A summary of the results is shown below and full results of the analysis in included in **Appendix 13.1.**

Table 13.13: Summary of Junction Analysis in Opening Year +15 - 2045 (Site 01)

Opening Year +15 2045 - Site 01		With Development	
Arm/Stream	Peak Hour	Delay (s)	Degree of Saturation (%)
Arm 1/1 = MERR (Left)	AM Peak (08:00-09:00)	1.3	21.90%
	PM Peak (17:00-18:00)	0.7	13.10%
Arm 1/2 +1/3 = MERR (Right,Ahead)	AM Peak (08:00-09:00)	8.9	82.60%
	PM Peak (17:00-18:00)	11.4	89.80%
Arm 5/1 = R405 W (Left, Ahead)	AM Peak (08:00-09:00)	7	81.60%
	PM Peak (17:00-18:00)	3.6	57.90%
Arm 5/2 = R405 W (Right)	AM Peak (08:00-09:00)	0.3	10.00%
	PM Peak (17:00-18:00)	0.6	20.50%
Arm 8/1 = R405 E (Left, Ahead)	AM Peak (08:00-09:00)	7.2	78.2 : 86.5%
	PM Peak (17:00-18:00)	10.7	92.6 : 85.4%
Arm 8/2 = R405 E (Right)	AM Peak (08:00-09:00)	7.2	78.2 : 86.5%
	PM Peak (17:00-18:00)	10.7	92.6 : 85.4%
Arm 10/1 = Griffin Rath Manor (left, Ahead)	AM Peak (08:00-09:00)	4	54.60%
	PM Peak (17:00-18:00)	2.4	37.50%
Arm 10/2 = Griffin Rath Manor (Right)	AM Peak (08:00-09:00)	4	74.40%
	PM Peak (17:00-18:00)	5.8	86.20%

Table 13.14: Summary of Junction Analysis in Opening Year +15 - 2045 (Site 02)

Opening Year +15 2045 - Site 02		With Development	
Arm/Stream	Peak Hour	Delay (s)	Degree of Saturation (%)
Arm 1/1 = Dunboyne Road (Ahead)	AM Peak (08:00-09:00)	5	71.60%
	PM Peak (17:00-18:00)	11	92.70%
Arm 1/2 = Dunboyne Road (Right)	AM Peak (08:00-09:00)	3.3	73.10%
	PM Peak (17:00-18:00)	2.2	54.00%
Arm 4/1 + 4/2 = R148 E (Left, Ahead)	AM Peak (08:00-09:00)	2.3 4.0	42.1% 67.2%
	PM Peak (17:00-18:00)	7.7 6.5	87.5% 84.5%
Arm 4/3 = R148 E (Right)	AM Peak (08:00-09:00)	5	76.10%
	PM Peak (17:00-18:00)	5.1	76.00%
Arm 12/1 +12/2 = R148 W (Left, Ahead)	AM Peak (08:00-09:00)	1.4 7.9	31.2% 87.7%
	PM Peak (17:00-18:00)	2.7 11.5	44.4% 93.1%
Arm 12/3 = R148 W (Right)	AM Peak (08:00-09:00)	7.9	87.70%
	PM Peak (17:00-18:00)	11.5	93.10%
Arm 18/1 = MERR (left, Ahead)	AM Peak (08:00-09:00)	8.8	85.00%
	PM Peak (17:00-18:00)	4.4	60.70%
Arm 18/2 = MERR (Right)	AM Peak (08:00-09:00)	4.9	69.10%
	PM Peak (17:00-18:00)	6.6	92.40%

Table 13.13 above indicates that the proposed junction in the south (Site 01) with the proposed access can still accommodate the projected traffic growth in 2045 and the projected levels of traffic associated with the proposed 581 residential units.

Table 13.14 above indicates the proposed junction in the north (Site 02) with the proposed access can still accommodate the projected traffic growth in 2045 and the projected levels of traffic associated with the proposed 581 residential units.

13.5.2.2.4 Opening Year + 15-year Forecast [2045] Scenario - With Development / 'Do Something' scenario Site Entrance/MERR Junction

Analysis has been carried out in the opening year forecast scenario at the primary entrance/MERR junction. The analysis carried out with development/" Do Something" scenario (in taking account of other development in the area by application of the TII growth factors). The analysis shows that the opening year + 15 years 2045 operates within capacity for the Do Something scenario. A summary of the results is shown below and full results of the analysis is included in **Appendix 13.1**.

Table 13.15: Summary of Junction Analysis in Opening Year +15 - 2045 (Site Entrance/MERR)

Opening Year + 15 2045 With Development			
Arm/Steam	**Peak Hour**	**Degree of Saturation (%)**	**Delays (s)**
MERR North (Straight/Right)	AM Peak (08:00 - 09:00)	63.8	18.3
	PM Peak (17:00 -18:00)	76.4	19.6
MERR South (Straight/Left)	AM Peak (08:00 - 09:00)	65.8	18.2
	PM Peak (17:00 -18:00)	78.1	19.1
Site Entrance (Left/Right)	AM Peak (08:00 - 09:00)	59.9	47.1
	PM Peak (17:00 -18:00)	73.9	66.4

Table 13.15 above indicates that's the proposed entrance off the MERR can still accommodate the projected traffic growth in 2045 and the projected levels of traffic associated with the proposed development.

Annual Average Daily Traffic (AADT)

The AADT of the R405 Celbridge Road (Site 01) and R148 Maynooth Road (Site 02) has been calculated having regard to Unit 16.1 of the TII Project Appraisal Guidelines for National Roads, October 2016 as 7,330 for Site 01 and 14,275 for Site 02. With the development in place the additional AADT associated with the proposed development is 3,042 for Site 01 and 3,589 for Site 02. With the development and MERR in place the additional AADT associated with the proposed development and MERR is 28,152 for Site 01 and 35,931 for Site 02. The total AADT for Site 01 taking account of the proposed development and the traffic analysis undertaken for the MERR is 35,481 and 50,206 for Site 02.

The development will not generate regular HGV traffic, therefore the % HGV on Maynooth Eastern Ring Road (MERR), R405 and R148 will not increase following completion of the development.

13.5.2.2.5 Accessibility for Cyclists and Pedestrians

The proposed development will be fully accessible for pedestrians, cyclists, and the mobility impaired and disabled. The Main access point will be from the new Maynooth Eastern Ring Road which will have adequate accessibility for pedestrians and cyclists with crossing facilities. There is also a potential future pedestrian/cycle link northwest of the proposed development to the existing Parklands neighbourhood. This will improve permeability and providing a shortcut to public transport services at Maynooth Station and buses at Straffan Road.

The Royal Canal Greenway is also within the 500m proximity of the development site, which will encourage the residents to use active travel modes during the operational phase.
Pedestrian and cycle facilities within the site will be provided in accordance with the Design Manual for Urban Roads and Streets [DMURS]. The developer hopes to maximise permeability by providing future pedestrian and cycle links to the existing neighbourhoods at Parklands and Rockfield at the west of the site.

As part of the development, future pedestrian and cycle connection tie-ins the existing neighbourhoods to the west of the site is proposed subject to agreement with the adjoining landowner/Planning Authority.

13.6 POTENTIAL CUMULATIVE IMPACTS

Projects currently permitted or under construction are subject to EIA and/or planning conditions which include appropriate mitigation measures to minimise impacts on the traffic and transport network, transport infrastructure. Any cumulative impacts will be limited to the construction stage and will therefore be temporary and short-term in duration. If mitigation measures for the development are carried out as permitted, cumulative impacts on the traffic and transportation are not envisaged. A future development adjacent to the Railpark site (Celbridge Road) has been granted planning permission, however potential cumulative impacts are not anticipated, provided similar mitigation measures are implemented. There are no predicted cumulative impacts arising from the construction or operational phase.

13.7 'DO NOTHING' IMPACT

There are three scenarios developed for without development / 'Do nothing' Scenarios, similar to the operation phase analysis. To understand the difference between impacts on the junction during With Development / 'Do-Something' and Without Development / 'Do-Nothing' Scenarios.

13.7.1 Opening Year [2030] Scenario – No development / 'Do Nothing'

Analysis has been carried out in the opening year scenario, assuming the development has not been taken place. The analysis was carried out without development / 'Do Nothing' Scenario (in taking account of other developments in the area by application of the TII growth factors). Site 01 for the opening year scenario was analysed with the MERR arm in the south of the junction. Similarly, Site 02 for the opening year scenario was analysed with the MERR arm in the north of the junction. The analysis shows that the opening year operates within the capacity of the two junctions for the 'Do Nothing' scenario. A summary of the results is shown below, and the full results of the analysis are included in Appendix 13.1.

Table 13.16: Summary of Junction Analysis in Opening Year 2030 – Do Nothing Scenario (Site 01)

Opening Year 2030 No Development - Site 01			
Arm/Stream	Peak Hour	Delay (s)	Degree of Saturation (%)
Arm 1/1 = MERR (Left)	AM Peak (08:00-09:00)	0.9	15.20%
	PM Peak (17:00-18:00)	0.6	10.00%
Arm 1/2 +1/3 = MERR (Right,Ahead)	AM Peak (08:00-09:00)	6.8	73.80%
	PM Peak (17:00-18:00)	9.7	86.10%
Arm 5/1 = R405 W (Left, Ahead)	AM Peak (08:00-09:00)	5.7	75.10%
	PM Peak (17:00-18:00)	2.7	46.90%
Arm 5/2 = R405 W (Right)	AM Peak (08:00-09:00)	0.3	9.40%
	PM Peak (17:00-18:00)	0.6	20.70%
Arm 8/1 = R405 E (Left, Ahead)	AM Peak (08:00-09:00)	5.4	64.50%
	PM Peak (17:00-18:00)	8.3	85.60%
Arm 8/2 = R405 E (Right)	AM Peak (08:00-09:00)	5.4	64.50%
	PM Peak (17:00-18:00)	8.3	85.60%
Arm 10/1 = Griffin Rath Manor (left, Ahead)	AM Peak (08:00-09:00)	3.5	50.40%
	PM Peak (17:00-18:00)	2.2	34.00%
Arm 10/2 = Griffin Rath Manor (Right)	AM Peak (08:00-09:00)	3.7	72.70%
	PM Peak (17:00-18:00)	5.3	84.40%

Table 13.17: Summary of Junction Analysis in Opening Year 2030 - Do Nothing Scenario (Site 02)

Opening Year 2030 No Development - Site 02			
Arm/Stream	Peak Hour	Delay (s)	Degree of Saturation (%)
Arm 1/1 = Dunboyne Road (Ahead)	AM Peak (08:00-09:00)	4.2	64.50%
	PM Peak (17:00-18:00)	8.1	85.90%
Arm 1/2 = Dunboyne Road (Right)	AM Peak (08:00-09:00)	2.8	66.80%
	PM Peak (17:00-18:00)	1.9	49.60%
Arm 4/1 + 4/2 = R148 E (Left, Ahead)	AM Peak (08:00-09:00)	1.7 3.5	32.8% 61.5%
	PM Peak (17:00-18:00)	5.8 5.0	78.0% 74.2%
Arm 4/3 = R148 E (Right)	AM Peak (08:00-09:00)	4.2	69.50%
	PM Peak (17:00-18:00)	4.1	66.60%
Arm 12/1 +12/2 = R148 W (Left, Ahead)	AM Peak (08:00-09:00)	1.3 5.9	28.5% 80.4%
	PM Peak (17:00-18:00)	2.5 8.0	42.1% 85.4%
Arm 12/3 = R148 W (Right)	AM Peak (08:00-09:00)	5.9	80.4%
	PM Peak (17:00-18:00)	8	85.40%
Arm 18/1 = MERR (left, Ahead)	AM Peak (08:00-09:00)	6	71.90%
	PM Peak (17:00-18:00)	3.5	51.20%
Arm 18/2 = MERR (Right)	AM Peak (08:00-09:00)	3.5	55.20%
	PM Peak (17:00-18:00)	3	67.50%

13.7.2 Opening Year + 5-year Forecast [2035] Scenario – No development / 'Do Nothing'

Analysis has been carried out in the opening year + 5-year forecast scenario. The analysis was carried out without development / 'Do Nothing' Scenario (in taking account of other developments in the area by application of the TII growth factors). Site 01 for the opening year +5-year scenario was analysed with the MERR arm in the south of the junction. Similarly, Site 02 for the opening year +5-year scenario was analysed with the MERR arm in the north of the junction.

The analysis shows that the opening year + 5 years operates within the capacity for the two junctions for the 'Do Nothing' scenario. A summary of the results is shown below, and the full results of the analysis are included in Appendix 13.1.

Table 13.18: Summary of Junction Analysis in Opening Year +5 - 2035 - Do Nothing Scenario (Site 01)

Opening Year +5 2035 No Development - Site 01			
Arm/Stream	Peak Hour	Delay (s)	Degree of Saturation (%)
Arm 1/1 = MERR (Left)	AM Peak (08:00-09:00)	0.9	15.70%
	PM Peak (17:00-18:00)	0.6	10.40%
Arm 1/2 +1/3 = MERR (Right,Ahead)	AM Peak (08:00-09:00)	7.2	76.20%
	PM Peak (17:00-18:00)	10.7	88.70%
Arm 5/1 = R405 W (Left, Ahead)	AM Peak (08:00-09:00)	6	77.60%
	PM Peak (17:00-18:00)	2.8	48.60%
Arm 5/2 = R405 W (Right)	AM Peak (08:00-09:00)	0.3	9.40%
	PM Peak (17:00-18:00)	0.6	21.30%
Arm 8/1 = R405 E (Left, Ahead)	AM Peak (08:00-09:00)	5.7	66.70%
	PM Peak (17:00-18:00)	9.1	88.20%
Arm 8/2 = R405 E (Right)	AM Peak (08:00-09:00)	5.7	66.70%
	PM Peak (17:00-18:00)	9.1	88.20%
Arm 10/1 = Griffin Rath Manor (left, Ahead)	AM Peak (08:00-09:00)	3.7	52.00%
	PM Peak (17:00-18:00)	2.3	35.20%
Arm 10/2 = Griffin Rath Manor (Right)	AM Peak (08:00-09:00)	3.9	74.80%
	PM Peak (17:00-18:00)	5.8	86.90%

Table 13.19: Summary of Junction Analysis in Opening Year +5 – 2035 - Do Nothing Scenario (Site 02)

Opening Year +5 2035 No Development - Site 02			
Arm/Stream	Peak Hour	Delay (s)	Degree of Saturation (%)
Arm 1/1 = Dunboyne Road (Ahead)	AM Peak (08:00-09:00)	4.4	66.50%
	PM Peak (17:00-18:00)	9	88.60%
Arm 1/2 = Dunboyne Road (Right)	AM Peak (08:00-09:00)	3	69.50%
	PM Peak (17:00-18:00)	2	51.10%
Arm 4/1 + 4/2 = R148 E (Left, Ahead)	AM Peak (08:00-09:00)	1.8 3.7	33.8% 63.5%
	PM Peak (17:00-18:00)	4.9 5.3	71.5% 76.5%
Arm 4/3 = R148 E (Right)	AM Peak (08:00-09:00)	4.5	71.80%
	PM Peak (17:00-18:00)	4.3	68.70%
Arm 12/1 +12/2 = R148 W (Left, Ahead)	AM Peak (08:00-09:00)	6.4	82.9 : 82.9%
	PM Peak (17:00-18:00)	2.6 8.8	43.4% 88.1 : 88.1%
Arm 12/3 = R148 W (Right)	AM Peak (08:00-09:00)	6.4	82.9 : 82.9%
	PM Peak (17:00-18:00)	8.8	88.1 : 88.1%
Arm 18/1 = MERR (left, Ahead)	AM Peak (08:00-09:00)	6.4	74.30%
	PM Peak (17:00-18:00)	3.6	52.70%
Arm 18/2 = MERR (Right)	AM Peak (08:00-09:00)	3.7	57.00%
	PM Peak (17:00-18:00)	3.2	69.40%

13.7.3 Opening Year + 15-year Forecast [2045] Scenario – No development / 'Do Nothing'

Analysis has been carried out in the opening year + 15-year forecast scenario. The analysis was carried out without development / 'Do Nothing' Scenario (in taking account of other development in the area by application of the TII growth factors). Site 01 for the opening year +15-year scenario was analysed with the MERR arm in the south of the junction. Similarly, Site 02 for the opening year +15-year scenario was analysed with the MERR arm in the north of the junction. The analysis shows that the opening year +15-years operates within the capacity for the two junctions for the 'Do Nothing' scenario. A summary of the results is shown below and full results of the analysis in included in **Appendix 13.1.**

Table 13.20: Summary of Junction Analysis in Opening Year +15 - 2045 - 'Do Nothing' Scenario (Site 01)

Opening Year +15 2045 No Development - Site 01			
Arm/Stream	Peak Hour	Delay (s)	Degree of Saturation (%)
Arm 1/1 = MERR (Left)	AM Peak (08:00-09:00)	0.9	16.30%
	PM Peak (17:00-18:00)	0.6	10.40%
Arm 1/2 +1/3 = MERR (Right,Ahead)	AM Peak (08:00-09:00)	7.4	77.20%
	PM Peak (17:00-18:00)	10.7	88.60%
Arm 5/1 = R405 W (Left, Ahead)	AM Peak (08:00-09:00)	6.1	76.60%
	PM Peak (17:00-18:00)	2.9	47.40%
Arm 5/2 = R405 W (Right)	AM Peak (08:00-09:00)	0.3	10.00%
	PM Peak (17:00-18:00)	0.6	20.50%
Arm 8/1 = R405 E (Left, Ahead)	AM Peak (08:00-09:00)	5.9	66.8 : 70.8%
	PM Peak (17:00-18:00)	9.1	87.50%
Arm 8/2 = R405 E (Right)	AM Peak (08:00-09:00)	5.9	66.8 : 70.8%
	PM Peak (17:00-18:00)	9.1	87.50%
Arm 10/1 = Griffin Rath Manor (left, Ahead)	AM Peak (08:00-09:00)	3.9	53.90%
	PM Peak (17:00-18:00)	2.4	36.40%
Arm 10/2 = Griffin Rath Manor (Right)	AM Peak (08:00-09:00)	4	74.40%
	PM Peak (17:00-18:00)	5.8	86.20%

Table 13.21: Summary of Junction Analysis in Opening Year +15 – 2045 - 'Do Nothing' Scenario (Site 02)

Opening Year +15 2045 No Development - Site 02			
Arm/Stream	Peak Hour	Delay (s)	Degree of Saturation (%)
Arm 1/1 = Dunboyne Road (Ahead)	AM Peak (08:00-09:00)	4.9	70.50%
	PM Peak (17:00-18:00)	9.2	88.60%
Arm 1/2 = Dunboyne Road (Right)	AM Peak (08:00-09:00)	3.3	73.10%
	PM Peak (17:00-18:00)	2	50.10%
Arm 4/1 + 4/2 = R148 E (Left, Ahead)	AM Peak (08:00-09:00)	1.9 4.0	35.8% 67.2%
	PM Peak (17:00-18:00)	6.2 7.4	81.7% 88.3%
Arm 4/3 = R148 E (Right)	AM Peak (08:00-09:00)	5	76.10%
	PM Peak (17:00-18:00)	5.5	79.50%
Arm 12/1 +12/2 = R148 W (Left, Ahead)	AM Peak (08:00-09:00)	1.4 7.5	31.2% 87.7%
	PM Peak (17:00-18:00)	2.6 8.9	43.0% 87.9%
Arm 12/3 = R148 W (Right)	AM Peak (08:00-09:00)	7.5	87.70%
	PM Peak (17:00-18:00)	8.9	87.90%
Arm 18/1 = MERR (left, Ahead)	AM Peak (08:00-09:00)	7.2	78.70%
	PM Peak (17:00-18:00)	4	57.50%
Arm 18/2 = MERR (Right)	AM Peak (08:00-09:00)	4	60.40%
	PM Peak (17:00-18:00)	4.9	86.60%

If the proposed housing development at Railpark Maynooth did not proceed, there would be the increase in traffic over time but less than with the housing development. In both the With Development / 'Do Something' and Without development / 'Do Nothing' scenarios, the junctions are working under the capacity. The MERR project is likely to commence construction in the near future and passes through this location, therefore the development along the MERR will help the council to reduce the housing crisis.

13.8 AVOIDANCE, REMEDIAL & MITIGATION MEASURES

In order to mitigate the potential effect of the proposed development on Traffic and Transport, the following measures will be implemented:

13.8.1 Construction Phase Mitigation

T&T CONST 1: Construction & Environmental Management Plan and Construction Traffic Management

- The Construction & Environmental Management Plan (a outline CEMP accompanies the application) and the associated Construction Traffic Management Plan (CTMP) in addition to the Construction Waste Management Plan for the development will incorporate a range of integrated control measures and associated management initiatives with the objective of mitigating the impact of the proposed developments on-site construction activities
- All construction related parking will be provided on site. Construction traffic will consist of the following categories:
  - Private vehicles owned and driven by site construction staff and by full time supervisory staff. The proposed on-site car parking area will be designed to have the capacity to accommodate this parking demand in addition to an element of visitor parking spaces
  - Excavation plant and dumper trucks involved in site development works and material delivery vehicles for the following: granular fill materials, concrete pipes, manholes, reinforcement steel, ready mix concrete and mortar, concrete blocks, miscellaneous building materials, etc
- On-site employees will generally arrive before 08:00, thus avoiding morning peak hour traffic. These employees will generally depart after 18:00 and avoid the PM peak hour
- To minimise disruption to the surrounding environment, the following mitigation measures will be implemented;
  - During the pre-construction phase, the site will be securely fenced off from adjacent properties, public footpaths and roads.
  - All road works will be adequately signposted and enclosed to ensure the safety of all road users and construction personnel.
  - A dedicated ‘construction’ site access / egress junction will be provided during all construction phases.
  - Provision of sufficient on-site parking for staff and visitors (as described above) and compounding through the construction of temporary hardstanding areas to ensure no potential overflow of construction generated traffic onto the local network.
  - A material storage zone will also be provided in the compound area. This storage zone will include material recycling areas and facilities.
  - A series of ‘way finding’ signage will be provided to route staff / deliveries into the site and to designated compound / construction areas.
  - A dedicated construction haul route has been identified and will be agreed with the local authority prior to the commencement of constructions activities on-site.
  - Truck wheel washes will be installed at construction and discharge from wheel wash area will be directed to on-site settlement ponds.
  - On completion of the works all construction materials, debris, temporary hardstands etc. from the site compound will be removed off site and the site compound area reinstated in full on completion of the works

13.8.2 Operational Phase Mitigation

T&T OPERA 1: Mobility Management
A Mobility Management Plan (MMP) is included with the application. The measures identified in the MMP form part of the specific mitigation of this EIAR and a dedicated resident specific Mobility Management Plan (MMP) is to be compiled with the aim of guiding the delivery and management of coordinated initiatives by the scheme promoter. Resident specific MMPs include specialised plans and associated implementation strategies for the subject development proposals. The MMP ultimately seeks to encourage sustainable travel practices for all journeys by residents and visitors traveling to and from the proposed development. It involves the incorporation of a wide range of possible "hard" and "soft" tools from which to choose from with the objective of influencing travel choices.

13.9 RESIDUAL EFFECTS OF THE PROPOSED DEVELOPMENT

Following the implementation of the identified construction and operational phase mitigation measures, the residual effects on traffic and transportation are not considered significant.

13.9.1 Construction Phase

With the application of the Construction & Environmental Management Plan (CEMP) and the associated Construction Traffic Management Plan (CTMP), residual effects during construction will be temporary and short-term. Construction traffic will be managed by dedicated haul routes, on-site parking and compound arrangements, and off-peak scheduling of HGV trips. As a result, the residual effects on the local road network during the construction phase are predicted to be short-term, slightly negative and imperceptible and have no material effect on network capacity.

13.9.2 Operational Phase

The proposed development will generate additional vehicular and sustainable mode trips. The Transport Impact Assessment demonstrates that, with the development in place, all assessed junctions will continue to operate within capacity in the 2030 opening year, as well as in the 2035 and 2045 forecast years, taking account of traffic growth and other permitted development.

The provision of the Maynooth Eastern Ring Road (MERR) is a key element in the distribution of future traffic movements. As stated in Section 13.5.2, the junctions serving the site will operate satisfactorily with the development traffic and wider background growth loaded onto the MERR flows. The residual effects on network performance are therefore assessed as long-term, and imperceptible, with no capacity constraints at key junctions.

In addition, the delivery of the Mobility Management Plan (MMP) and the proposed pedestrian and cycle linkages will encourage active travel and reduce reliance on the private car. This is consistent with the observed modal shift trends in the Railpark neighbourhood (CSO 2016–2022), which show reduced car driver share and increased active travel. Accordingly, the enhancement of walking, cycling, and public transport accessibility will contribute to a positive cumulative effect on modal share.

13.10 MONITORING

Construction phase monitoring relates to the good maintenance of mitigation measures outlined above section and in the Project Specific Construction Management Plan (PCEMP). The heavy vehicle movement during the construction phase is to be monitored to avoid hassle on site. Monitoring of these heavy vehicles on-site will form part of the proposed Temporary Traffic Management (TTM). This TTM should be implemented in accordance with the mitigation measures in section 13.8 and the PCEMP.

13.10.1 Monitoring Measures – Construction

Proposed monitoring during the construction phase concerning the traffic and transport are as follows:

- Contractors will be recommended to adhere to the CEMP.
- Monitoring cleanliness of adjacent road network, implementation of dust suppression and provision of vehicle wheel wash facilities.
- Monitoring of the Temporary Traffic Management (TTM).
- Monitoring of Road safety for the construction workers.

13.10.2 Monitoring Measures – Operation

No regular monitoring will be necessary during the operational phase.

13.11 REINSTATEMENT

There is no requirement to assess if these lands can be fully reinstated to green field in the future scenario.

13.12 INTERACTIONS

Transport Network closely interact with drainage system, land and soil, population and human safety. The mitigation measures that will be put in place at the Proposed development will ensure that all activities comply with all Outline Construction Management Plan (CEMP), traffic and transport analysis. Therefore, the predicted impact is short-term, slightly negative and imperceptible with respect to the construction phase and long-term, and imperceptible with respect to the operational phase.

13.13 DIFFICULTIES ENCOUNTERED IN COMPILING

No particular difficulties were encountered in completing this section. There is no major impact of the main development on the surrounding junctions. It is noted that traffic demand generation calculated are estimated using the TRICS Software. TRICS is a database of various development types throughout Ireland and the UK, which allows the trip generation of new developments to be accurately calculated on similar sites in similar locations. Actual no. of trips may change based on other development around the site.

13.14 REFERENCES

- TRICS Software

- Junction 10 Software
- LinSig V.3 Software
- Geological Survey Ireland (GSI) online mapping.
- Transport Impact Assessment Report, Proposed Residential Development at Railpark, Maynooth, February 2025
- TII Traffic and Transport Assessment Guidelines 2014
- DTTS (2019). Traffic Management Guidelines
- Design Standards for New Apartments, Guidelines for Planning Authorities 2025
- The Design Manual for Urban Roads and Streets, published by DTTaS and DoE
- The Design Manual for Roads and Bridges, published by TII
- The National Cycle Manual, published by the NTA.

APPENDIX 13.1

TRAFFIC ANALYSIS

Basic Input Data and Results

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Site1_opening2030_NoDev.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	AM	AM	AM	08:00 - 09:00	120	19.9	26.40
2	PM	PM	PM	17:00 - 18:00	120	4.6	29.52

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Pedestrian		7	7
B	Pedestrian		7	7
C	Pedestrian		7	7
D	Pedestrian		7	7
E	Traffic		7	7
F	Traffic		7	7
G	Traffic		7	7
H	Traffic		7	7
I	Traffic		7	7
J	Traffic		7	7
K	Traffic		7	7
L	Traffic		7	7
M	Traffic		7	7

Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M
A		-	-	-	-	-	-	-	-	-	-	-	-
B	-		-	-	-	-	-	-	-	-	-	-	-
C	-	-		-	-	-	-	-	-	-	-	-	-
D	-	-	-		-	-	-	-	-	-	-	-	-
E	5	-	-	6		-	-	6	-	-	6	-	-
F	5	6	-	-	-		-	6	6	-	-	-	6
G	6	5	-	-	-	6		-	-	-	-	-	-
H	6	5	-	6	-	-	-		-	5	-	-	-
I	-	5	6	-	-	-	-	-		0	-	6	-
J	-	6	5	-	-	6	6	-	-		-	6	-
K	-	-	5	6	-	-	-	6	-	-		6	-
L	-	-	6	5	6	-	-	6	-	-	-		-
M	6	6	-	5	5	-	6	-	-	-	7	-	

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage \ To Stage	1	2	3	4	5	6
1		6	6	7	5	6
2	2		6	6	5	6
3	2	2		2	2	2
4	6	6	6		2	6
5	6	6	6	6		6
6	6	6	6	7	6	

Phases in Stage

Stage No.	Phases in Stage
1	H I M
2	G H I
3	A B C D
4	F K
5	E J
6	L M

Lane Input Data

Junction: Site 1

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1	U	I	2	3	60.0	Geom	-	3.90	0.00	Y	Arm 1 Left	Inf
1/2	U	H	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 9 Ahead	Inf
1/3	U	G	2	3	6.1	Geom	-	3.00	0.00	Y	Arm 6 Right	Inf
2/1	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y		
4/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y		
5/1	U	F	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 2 Left	Inf
											Arm 7 Ahead	Inf
5/2	U	E	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 9 Right	Inf
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U	K	2	3	60.0	Geom	-	3.70	0.00	Y	Arm 6 Ahead	Inf
											Arm 9 Left	Inf
8/2	U	J	2	3	8.7	Geom	-	3.00	0.00	Y	Arm 2 Right	Inf
9/1	U		2	3	60.0	Geom	-	4.20	0.00	Y		
10/1	U	M	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 2 Ahead	Inf
											Arm 6 Left	Inf
10/2	U	L	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 7 Right	Inf
11/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y		
12/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y	Arm 11 Ahead	Inf
13/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y	Arm 3 Ahead	Inf

Give-Way Lane Input Data

Junction: Site 1
There are no Opposed Lanes in this Junction

Lane Saturation Flows

Junction: Site 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1	3.90	0.00	Y	Arm 7 Left	Inf	100.0 %	2005	2005
1/2	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/3	3.00	0.00	Y	Arm 6 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW)	2.00	0.00	Y				1815	1815
4/1 (CW)	2.00	0.00	Y				1815	1815
5/1	4.00	0.00	Y	Arm 2 Left	Inf	3.4 %	2015	2015
				Arm 7 Ahead	Inf	96.6 %		
5/2	3.00	0.00	Y	Arm 9 Right	Inf	100.0 %	1915	1915
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	3.70	0.00	Y	Arm 6 Ahead	Inf	76.0 %	1985	1985
				Arm 9 Left	Inf	24.0 %		
8/2	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
9/1	4.20	0.00	Y				2035	2035
10/1	4.00	0.00	Y	Arm 2 Ahead	Inf	93.1 %	2015	2015
				Arm 6 Left	Inf	6.9 %		
10/2	3.00	0.00	Y	Arm 7 Right	Inf	100.0 %	1915	1915
11/1 (CW)	2.00	0.00	Y				1815	1815
12/1 (CW)	2.00	0.00	Y	Arm 11 Ahead	Inf	0.0 %	1815	1815
13/1 (CW)	2.00	0.00	Y	Arm 3 Ahead	Inf	0.0 %	1815	1815

Bonus Green Times
No Bonus Greens are defined For Scenario 1

Scenario 2: 'PM' (FG1: 'PM', Plan 2: 'PM')

Lane Saturation Flows

Junction: Site 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1	3.90	0.00	Y	Arm 7 Left	Inf	100.0 %	2005	2005
1/2	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/3	3.00	0.00	Y	Arm 6 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW)	2.00	0.00	Y				1815	1815
4/1 (CW)	2.00	0.00	Y				1815	1815
5/1	4.00	0.00	Y	Arm 2 Left	Inf	21.3 %	2015	2015
				Arm 7 Ahead	Inf	78.7 %		
5/2	3.00	0.00	Y	Arm 9 Right	Inf	100.0 %	1915	1915
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	3.70	0.00	Y	Arm 6 Ahead	Inf	83.0 %	1985	1985
				Arm 9 Left	Inf	17.0 %		
8/2	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
9/1	4.20	0.00	Y				2035	2035
10/1	4.00	0.00	Y	Arm 2 Ahead	Inf	88.3 %	2015	2015
				Arm 6 Left	Inf	11.7 %		
10/2	3.00	0.00	Y	Arm 7 Right	Inf	100.0 %	1915	1915
11/1 (CW)	2.00	0.00	Y				1815	1815
12/1 (CW)	2.00	0.00	Y	Arm 11 Ahead	Inf	0.0 %	1815	1815
13/1 (CW)	2.00	0.00	Y	Arm 3 Ahead	Inf	0.0 %	1815	1815

Bonus Green Times
No Bonus Greens are defined For Scenario 2

Traffic Flow Groups

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

Traffic Flows, Desired

FG1: 'PM'

Desired Flow :

	Destination	
		Tot.
Origin	Tot.	-

FG2: 'AM'

Desired Flow :

	Destination	
		Tot.
Origin	Tot.	-

Scenario 1: 'AM' (FG2: 'AM', Plan 1: 'AM')

Stage Timings

Stage	1	2	3	4	5	6
Duration	25	10	7	27	9	14
Change Point	0	31	47	60	89	100

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	7	53	60
B	Pedestrians across	Pedestrian	8	52	60
C	Pedestrians across	Pedestrian	7	53	60
D	Pedestrians across	Pedestrian	7	53	60
E	Right	Traffic	9	91	100
F	Left Ahead	Traffic	27	62	89
G	Right	Traffic	10	37	47
H	Ahead	Traffic	41	6	47
I	Left	Traffic	45	2	47
J	Right	Traffic	9	91	100
K	Ahead Left	Traffic	27	62	89
L	Right	Traffic	14	106	0
M	Ahead Left	Traffic	49	102	31

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**75.1%**
Site 1	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**75.1%**
1/1	Left	U	N/A	N/A	I		1	45	-	-	117	2005	769	15.2%
1/2+1/3	Right Ahead	U	N/A	N/A	H G		1	41:10	-	-	529	1915:1915	587+130	73.8 : 73.8%
2/1		U	N/A	N/A	-		-	-	-	-	509	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
4/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
5/1	Left Ahead	U	N/A	N/A	F		1	27	-	-	353	2015	470	75.1%
5/2	Right	U	N/A	N/A	E		1	9	-	-	15	1915	160	9.4%
6/1		U	N/A	N/A	-		-	-	-	-	325	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	-	632	Inf	Inf	0.0%
8/1+8/2	Right Ahead Left	U	N/A	N/A	K J		1	27:9	-	-	366	1985:1915	407+160	64.7 : 64.5%
9/1		U	N/A	N/A	-		-	-	-	-	511	2035	2035	25.1%
10/1	Ahead Left	U	N/A	N/A	M		1	49	-	-	423	2015	840	50.4%
10/2	Right	U	N/A	N/A	L		1	14	-	-	174	1915	239	72.7%
11/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
12/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
13/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	7	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	8	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	7	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	D		1	7	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**20.5**	**5.9**	**0.0**	**26.4**	**-**	**-**	**-**	**-**
Site 1	**-**	**-**	**0**	**0**	**0**	**20.5**	**5.9**	**0.0**	**26.4**	**-**	**-**	**-**	**-**
1/1	117	117	-	-	-	0.8	0.1	-	0.9	27.0	2.5	0.1	2.6
1/2+1/3	529	529	-	-	-	5.4	1.4	-	6.8	46.0	13.8	1.4	15.2
2/1	509	509	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	353	353	-	-	-	4.2	1.5	-	5.7	57.7	10.9	1.5	12.4
5/2	15	15	-	-	-	0.2	0.1	-	0.3	63.3	0.5	0.1	0.5
6/1	325	325	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	632	632	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1+8/2	366	366	-	-	-	4.5	0.9	-	5.4	53.1	7.7	0.9	8.6
9/1	511	511	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
10/1	423	423	-	-	-	3.0	0.5	-	3.5	30.2	10.3	0.5	10.8
10/2	174	174	-	-	-	2.4	1.3	-	3.7	77.0	5.6	1.3	6.8
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 19.9 Total Delay for Signalled Lanes (pcuHr): 26.24 Cycle Time (s): 120
PRC Over All Lanes (%): 19.9 Total Delay Over All Lanes(pcuHr): 26.40

Scenario 2: 'PM' (FG1: 'PM', Plan 2: 'PM')

Stage Timings

Stage	1	2	3	4	5	6
Duration	17	21	7	24	9	14
Change Point	0	23	50	63	89	100

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	7	56	63
B	Pedestrians across	Pedestrian	8	55	63
C	Pedestrians across	Pedestrian	7	56	63
D	Pedestrians across	Pedestrian	7	56	63
E	Right	Traffic	9	91	100
F	Left Ahead	Traffic	24	65	89
G	Right	Traffic	21	29	50
H	Ahead	Traffic	44	6	50
I	Left	Traffic	48	2	50
J	Right	Traffic	9	91	100
K	Ahead Left	Traffic	24	65	89
L	Right	Traffic	14	106	0
M	Ahead Left	Traffic	41	102	23

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**86.1%**
Site 1	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**86.1%**
1/1	Left	U	N/A	N/A	I		1	48	-	-	82	2005	819	10.0%
1/2+1/3	Right Ahead	U	N/A	N/A	H G		1	44:21	-	-	677	1915:1915	587+200	86.1 : 86.1%
2/1		U	N/A	N/A	-		-	-	-	-	366	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
4/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
5/1	Left Ahead	U	N/A	N/A	F		1	24	-	-	197	2015	420	46.9%
5/2	Right	U	N/A	N/A	E		1	9	-	-	33	1915	160	20.7%
6/1		U	N/A	N/A	-		-	-	-	-	468	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	-	439	Inf	Inf	0.0%
8/1+8/2	Right Ahead Left	U	N/A	N/A	K J		1	24:9	-	-	426	1985:1915	377+120	85.6 : 85.6%
9/1		U	N/A	N/A	-		-	-	-	-	593	2035	2035	29.1%
10/1	Ahead Left	U	N/A	N/A	M		1	41	-	-	240	2015	705	34.0%
10/2	Right	U	N/A	N/A	L		1	14	-	-	202	1915	239	84.4%
11/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
12/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
13/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	7	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	8	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	7	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	D		1	7	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**20.4**	**9.2**	**0.0**	**29.5**	**-**	**-**	**-**	**-**
Site 1	**-**	**-**	**0**	**0**	**0**	**20.4**	**9.2**	**0.0**	**29.5**	**-**	**-**	**-**	**-**
1/1	82	82	-	-	-	0.5	0.1	-	0.6	24.3	1.7	0.1	1.7
1/2+1/3	677	677	-	-	-	6.7	2.9	-	9.7	51.4	18.4	2.9	21.3
2/1	366	366	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	197	197	-	-	-	2.3	0.4	-	2.7	49.7	5.7	0.4	6.2
5/2	33	33	-	-	-	0.5	0.1	-	0.6	65.5	1.0	0.1	1.1
6/1	468	468	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	439	439	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1+8/2	426	426	-	-	-	5.6	2.8	-	8.3	70.3	10.7	2.8	13.5
9/1	593	593	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
10/1	240	240	-	-	-	1.9	0.3	-	2.2	32.6	5.9	0.3	6.1
10/2	202	202	-	-	-	2.9	2.4	-	5.3	94.1	6.6	2.4	9.0
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 4.6 Total Delay for Signalled Lanes (pcuHr): 29.32 Cycle Time (s): 120
PRC Over All Lanes (%): 4.6 Total Delay Over All Lanes(pcuHr): 29.52

Basic Input Data and Results

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Site1_opening2030_W_Dev.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	AM	AM	AM	08:00 - 09:00	120	11.9	29.75
2	PM	PM	PM	17:00 - 18:00	120	1.1	32.81

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Pedestrian		7	7
B	Pedestrian		7	7
C	Pedestrian		7	7
D	Pedestrian		7	7
E	Traffic		7	7
F	Traffic		7	7
G	Traffic		7	7
H	Traffic		7	7
I	Traffic		7	7
J	Traffic		7	7
K	Traffic		7	7
L	Traffic		7	7
M	Traffic		7	7

Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M
A		-	-	-	-	-	-	-	-	-	-	-	-
B	-		-	-	-	-	-	-	-	-	-	-	-
C	-	-		-	-	-	-	-	-	-	-	-	-
D	-	-	-		-	-	-	-	-	-	-	-	-
E	5	-	-	6		-	-	6	-	-	6	-	-
F	5	6	-	-	-		-	6	6	-	-	-	6
G	6	5	-	-	-	6		-	-	-	-	-	-
H	6	5	-	6	-	-	-		-	5	-	-	-
I	-	5	6	-	-	-	-	-		0	-	6	-
J	-	6	5	-	-	6	6	-	-		-	6	-
K	-	-	5	6	-	-	-	6	-	-		6	-
L	-	-	6	5	6	-	-	6	-	-	-		-
M	6	6	-	5	5	-	6	-	-	-	7	-	

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage \ To Stage	1	2	3	4	5	6
1		6	6	7	5	6
2	2		6	6	5	6
3	2	2		2	2	2
4	6	6	6		2	6
5	6	6	6	6		6
6	6	6	6	7	6	

Phases in Stage

Stage No.	Phases in Stage
1	H I M
2	G H I
3	A B C D
4	F K
5	E J
6	L M

Lane Input Data

Junction: Site 1

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1	U	I	2	3	60.0	Geom	-	3.90	0.00	Y	Arm 1 Left	Inf
1/2	U	H	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 9 Ahead	Inf
1/3	U	G	2	3	6.1	Geom	-	3.00	0.00	Y	Arm 6 Right	Inf
2/1	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y		
4/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y		
5/1	U	F	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 2 Left	Inf
											Arm 7 Ahead	Inf
5/2	U	E	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 9 Right	Inf
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U	K	2	3	60.0	Geom	-	3.70	0.00	Y	Arm 6 Ahead	Inf
											Arm 9 Left	Inf
8/2	U	J	2	3	8.7	Geom	-	3.00	0.00	Y	Arm 2 Right	Inf
9/1	U		2	3	60.0	Geom	-	4.20	0.00	Y		
10/1	U	M	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 2 Ahead	Inf
											Arm 6 Left	Inf
10/2	U	L	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 7 Right	Inf
11/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y		
12/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y	Arm 11 Ahead	Inf
13/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y	Arm 3 Ahead	Inf

Give-Way Lane Input Data

Junction: Site 1
There are no Opposed Lanes in this Junction

Lane Saturation Flows

Junction: Site 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1	3.90	0.00	Y	Arm 7 Left	Inf	100.0 %	2005	2005
1/2	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/3	3.00	0.00	Y	Arm 6 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW)	2.00	0.00	Y				1815	1815
4/1 (CW)	2.00	0.00	Y				1815	1815
5/1	4.00	0.00	Y	Arm 2 Left	Inf	9.8 %	2015	2015
				Arm 7 Ahead	Inf	90.2 %		
5/2	3.00	0.00	Y	Arm 9 Right	Inf	100.0 %	1915	1915
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	3.70	0.00	Y	Arm 6 Ahead	Inf	76.0 %	1985	1985
				Arm 9 Left	Inf	24.0 %		
8/2	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
9/1	4.20	0.00	Y				2035	2035
10/1	4.00	0.00	Y	Arm 2 Ahead	Inf	93.2 %	2015	2015
				Arm 6 Left	Inf	6.8 %		
10/2	3.00	0.00	Y	Arm 7 Right	Inf	100.0 %	1915	1915
11/1 (CW)	2.00	0.00	Y				1815	1815
12/1 (CW)	2.00	0.00	Y	Arm 11 Ahead	Inf	0.0 %	1815	1815
13/1 (CW)	2.00	0.00	Y	Arm 3 Ahead	Inf	0.0 %	1815	1815

Bonus Green Times
No Bonus Greens are defined For Scenario 1

Scenario 2: 'PM' (FG1: 'PM', Plan 2: 'PM')

Lane Saturation Flows

Junction: Site 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1	3.90	0.00	Y	Arm 7 Left	Inf	100.0 %	2005	2005
1/2	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/3	3.00	0.00	Y	Arm 6 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW)	2.00	0.00	Y				1815	1815
4/1 (CW)	2.00	0.00	Y				1815	1815
5/1	4.00	0.00	Y	Arm 2 Left	Inf	34.0 %	2015	2015
				Arm 7 Ahead	Inf	66.0 %		
5/2	3.00	0.00	Y	Arm 9 Right	Inf	100.0 %	1915	1915
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	3.70	0.00	Y	Arm 6 Ahead	Inf	83.0 %	1985	1985
				Arm 9 Left	Inf	17.0 %		
8/2	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
9/1	4.20	0.00	Y				2035	2035
10/1	4.00	0.00	Y	Arm 2 Ahead	Inf	88.8 %	2015	2015
				Arm 6 Left	Inf	11.2 %		
10/2	3.00	0.00	Y	Arm 7 Right	Inf	100.0 %	1915	1915
11/1 (CW)	2.00	0.00	Y				1815	1815
12/1 (CW)	2.00	0.00	Y	Arm 11 Ahead	Inf	0.0 %	1815	1815
13/1 (CW)	2.00	0.00	Y	Arm 3 Ahead	Inf	0.0 %	1815	1815

Bonus Green Times
No Bonus Greens are defined For Scenario 2

Traffic Flow Groups

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

Traffic Flows, Desired

FG1: 'PM'

Desired Flow :

	Destination	
		Tot.
Origin	Tot.	-

FG2: 'AM'

Desired Flow :

	Destination	
		Tot.
Origin	Tot.	-

Scenario 1: 'AM' (FG2: 'AM', Plan 1: 'AM')

Stage Timings

Stage	1	2	3	4	5	6
Duration	25	10	7	27	9	14
Change Point	0	31	47	60	89	100

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	7	53	60
B	Pedestrians across	Pedestrian	8	52	60
C	Pedestrians across	Pedestrian	7	53	60
D	Pedestrians across	Pedestrian	7	53	60
E	Right	Traffic	9	91	100
F	Left Ahead	Traffic	27	62	89
G	Right	Traffic	10	37	47
H	Ahead	Traffic	41	6	47
I	Left	Traffic	45	2	47
J	Right	Traffic	9	91	100
K	Ahead Left	Traffic	27	62	89
L	Right	Traffic	14	106	0
M	Ahead Left	Traffic	49	102	31

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**80.4%**
Site 1	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**80.4%**
1/1	Left	U	N/A	N/A	I		1	45	-	-	161	2005	769	20.9%
1/2+1/3	Right Ahead	U	N/A	N/A	H G		1	41:10	-	-	583	1915:1915	557+176	79.5 : 79.8%
2/1		U	N/A	N/A	-		-	-	-	-	509	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
4/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
5/1	Left Ahead	U	N/A	N/A	F		1	27	-	-	378	2015	470	80.4%
5/2	Right	U	N/A	N/A	E		1	9	-	-	15	1915	160	9.4%
6/1		U	N/A	N/A	-		-	-	-	-	325	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	-	632	Inf	Inf	0.0%
8/1+8/2	Right Ahead Left	U	N/A	N/A	K J		1	27:9	-	-	391	1985:1915	392+160	67.1 : 80.2%
9/1		U	N/A	N/A	-		-	-	-	-	511	2035	2035	25.1%
10/1	Ahead Left	U	N/A	N/A	M		1	49	-	-	429	2015	840	51.1%
10/2	Right	U	N/A	N/A	L		1	14	-	-	174	1915	239	72.7%
11/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
12/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
13/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	7	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	8	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	7	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	D		1	7	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**22.5**	**7.2**	**0.0**	**29.8**	**-**	**-**	**-**	**-**
Site 1	**-**	**-**	**0**	**0**	**0**	**22.5**	**7.2**	**0.0**	**29.8**	**-**	**-**	**-**	**-**
1/1	161	161	-	-	-	1.1	0.1	-	1.2	27.8	3.6	0.1	3.7
1/2+1/3	583	583	-	-	-	6.2	1.9	-	8.1	50.2	15.2	1.9	17.1
2/1	509	509	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	378	378	-	-	-	4.6	2.0	-	6.5	62.1	11.9	2.0	13.8
5/2	15	15	-	-	-	0.2	0.1	-	0.3	63.3	0.5	0.1	0.5
6/1	325	325	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	632	632	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1+8/2	391	391	-	-	-	4.9	1.2	-	6.1	56.1	7.7	1.2	8.9
9/1	511	511	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
10/1	429	429	-	-	-	3.1	0.5	-	3.6	30.3	10.5	0.5	11.0
10/2	174	174	-	-	-	2.4	1.3	-	3.7	77.0	5.6	1.3	6.8
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 11.9 Total Delay for Signalled Lanes (pcuHr): 29.58 Cycle Time (s): 120
PRC Over All Lanes (%): 11.9 Total Delay Over All Lanes(pcuHr): 29.75

Scenario 2: 'PM' (FG1: 'PM', Plan 2: 'PM')

Stage Timings

Stage	1	2	3	4	5	6
Duration	17	21	7	24	9	14
Change Point	0	23	50	63	89	100

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	7	56	63
B	Pedestrians across	Pedestrian	8	55	63
C	Pedestrians across	Pedestrian	7	56	63
D	Pedestrians across	Pedestrian	7	56	63
E	Right	Traffic	9	91	100
F	Left Ahead	Traffic	24	65	89
G	Right	Traffic	21	29	50
H	Ahead	Traffic	44	6	50
I	Left	Traffic	48	2	50
J	Right	Traffic	9	91	100
K	Ahead Left	Traffic	24	65	89
L	Right	Traffic	14	106	0
M	Ahead Left	Traffic	41	102	23

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**89.0%**
Site 1	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**89.0%**
1/1	Left	U	N/A	N/A	I		1	48	-	-	107	2005	819	13.1%
1/2+1/3	Right Ahead	U	N/A	N/A	H G		1	44:21	-	-	707	1915:1915	574+220	89.0 : 89.0%
2/1		U	N/A	N/A	-		-	-	-	-	441	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
4/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
5/1	Left Ahead	U	N/A	N/A	F		1	24	-	-	235	2015	420	56.0%
5/2	Right	U	N/A	N/A	E		1	9	-	-	33	1915	160	20.7%
6/1		U	N/A	N/A	-		-	-	-	-	492	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	-	464	Inf	Inf	0.0%
8/1+8/2	Right Ahead Left	U	N/A	N/A	K J		1	24:9	-	-	463	1985:1915	368+160	87.7 : 87.7%
9/1		U	N/A	N/A	-		-	-	-	-	599	2035	2035	29.4%
10/1	Ahead Left	U	N/A	N/A	M		1	41	-	-	249	2015	705	35.3%
10/2	Right	U	N/A	N/A	L		1	14	-	-	202	1915	239	84.4%
11/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
12/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
13/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	7	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	8	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	7	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	D		1	7	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**22.1**	**10.7**	**0.0**	**32.8**	**-**	**-**	**-**	**-**
Site 1	**-**	**-**	**0**	**0**	**0**	**22.1**	**10.7**	**0.0**	**32.8**	**-**	**-**	**-**	**-**
1/1	107	107	-	-	-	0.7	0.1	-	0.7	24.7	2.2	0.1	2.3
1/2+1/3	707	707	-	-	-	7.2	3.7	-	10.9	55.5	19.5	3.7	23.2
2/1	441	441	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	235	235	-	-	-	2.8	0.6	-	3.4	52.3	7.0	0.6	7.6
5/2	33	33	-	-	-	0.5	0.1	-	0.6	65.5	1.0	0.1	1.1
6/1	492	492	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	464	464	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1+8/2	463	463	-	-	-	6.2	3.3	-	9.4	73.1	10.9	3.3	14.1
9/1	599	599	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
10/1	249	249	-	-	-	2.0	0.3	-	2.3	32.9	6.1	0.3	6.4
10/2	202	202	-	-	-	2.9	2.4	-	5.3	94.1	6.6	2.4	9.0
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 1.1 Total Delay for Signalled Lanes (pcuHr): 32.60 Cycle Time (s): 120
PRC Over All Lanes (%): 1.1 Total Delay Over All Lanes(pcuHr): 32.81

Basic Input Data and Results

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Site1_opening+5_2035_NoDev.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	AM	AM	AM	08:00 - 09:00	120	15.9	27.86
2	PM	PM	PM	17:00 - 18:00	120	1.4	32.10

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Pedestrian		7	7
B	Pedestrian		7	7
C	Pedestrian		7	7
D	Pedestrian		7	7
E	Traffic		7	7
F	Traffic		7	7
G	Traffic		7	7
H	Traffic		7	7
I	Traffic		7	7
J	Traffic		7	7
K	Traffic		7	7
L	Traffic		7	7
M	Traffic		7	7

Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M
A		-	-	-	-	-	-	-	-	-	-	-	-
B	-		-	-	-	-	-	-	-	-	-	-	-
C	-	-		-	-	-	-	-	-	-	-	-	-
D	-	-	-		-	-	-	-	-	-	-	-	-
E	5	-	-	6		-	-	6	-	-	6	-	-
F	5	6	-	-	-		-	6	6	-	-	-	6
G	6	5	-	-	-	6		-	-	-	-	-	-
H	6	5	-	6	-	-	-		-	5	-	-	-
I	-	5	6	-	-	-	-	-		0	-	6	-
J	-	6	5	-	-	6	6	-	-		-	6	-
K	-	-	5	6	-	-	-	6	-	-		6	-
L	-	-	6	5	6	-	-	6	-	-	-		-
M	6	6	-	5	5	-	6	-	-	-	7	-	

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage \ To Stage	1	2	3	4	5	6
1		6	6	7	5	6
2	2		6	6	5	6
3	2	2		2	2	2
4	6	6	6		2	6
5	6	6	6	6		6
6	6	6	6	7	6	

Phases in Stage

Stage No.	Phases in Stage
1	H I M
2	G H I
3	A B C D
4	F K
5	E J
6	L M

Lane Input Data

Junction: Site 1

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1	U	I	2	3	60.0	Geom	-	3.90	0.00	Y	Arm 1 Left	Inf
1/2	U	H	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 9 Ahead	Inf
1/3	U	G	2	3	6.1	Geom	-	3.00	0.00	Y	Arm 6 Right	Inf
2/1	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y		
4/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y		
5/1	U	F	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 2 Left	Inf
											Arm 7 Ahead	Inf
5/2	U	E	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 9 Right	Inf
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U	K	2	3	60.0	Geom	-	3.70	0.00	Y	Arm 6 Ahead	Inf
											Arm 9 Left	Inf
8/2	U	J	2	3	8.7	Geom	-	3.00	0.00	Y	Arm 2 Right	Inf
9/1	U		2	3	60.0	Geom	-	4.20	0.00	Y		
10/1	U	M	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 2 Ahead	Inf
											Arm 6 Left	Inf
10/2	U	L	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 7 Right	Inf
11/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y		
12/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y	Arm 11 Ahead	Inf
13/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y	Arm 3 Ahead	Inf

Give-Way Lane Input Data

Junction: Site 1
There are no Opposed Lanes in this Junction

Lane Saturation Flows

Junction: Site 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1	3.90	0.00	Y	Arm 7 Left	Inf	100.0 %	2005	2005
1/2	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/3	3.00	0.00	Y	Arm 6 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW)	2.00	0.00	Y				1815	1815
4/1 (CW)	2.00	0.00	Y				1815	1815
5/1	4.00	0.00	Y	Arm 2 Left	Inf	3.6 %	2015	2015
				Arm 7 Ahead	Inf	96.4 %		
5/2	3.00	0.00	Y	Arm 9 Right	Inf	100.0 %	1915	1915
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	3.70	0.00	Y	Arm 6 Ahead	Inf	76.0 %	1985	1985
				Arm 9 Left	Inf	24.0 %		
8/2	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
9/1	4.20	0.00	Y				2035	2035
10/1	4.00	0.00	Y	Arm 2 Ahead	Inf	93.1 %	2015	2015
				Arm 6 Left	Inf	6.9 %		
10/2	3.00	0.00	Y	Arm 7 Right	Inf	100.0 %	1915	1915
11/1 (CW)	2.00	0.00	Y				1815	1815
12/1 (CW)	2.00	0.00	Y	Arm 11 Ahead	Inf	0.0 %	1815	1815
13/1 (CW)	2.00	0.00	Y	Arm 3 Ahead	Inf	0.0 %	1815	1815

Bonus Green Times
No Bonus Greens are defined For Scenario 1

Scenario 2: 'PM' (FG1: 'PM', Plan 2: 'PM')

Lane Saturation Flows

Junction: Site 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1	3.90	0.00	Y	Arm 7 Left	Inf	100.0 %	2005	2005
1/2	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/3	3.00	0.00	Y	Arm 6 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW)	2.00	0.00	Y				1815	1815
4/1 (CW)	2.00	0.00	Y				1815	1815
5/1	4.00	0.00	Y	Arm 2 Left	Inf	21.6 %	2015	2015
				Arm 7 Ahead	Inf	78.4 %		
5/2	3.00	0.00	Y	Arm 9 Right	Inf	100.0 %	1915	1915
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	3.70	0.00	Y	Arm 6 Ahead	Inf	82.9 %	1985	1985
				Arm 9 Left	Inf	17.1 %		
8/2	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
9/1	4.20	0.00	Y				2035	2035
10/1	4.00	0.00	Y	Arm 2 Ahead	Inf	88.3 %	2015	2015
				Arm 6 Left	Inf	11.7 %		
10/2	3.00	0.00	Y	Arm 7 Right	Inf	100.0 %	1915	1915
11/1 (CW)	2.00	0.00	Y				1815	1815
12/1 (CW)	2.00	0.00	Y	Arm 11 Ahead	Inf	0.0 %	1815	1815
13/1 (CW)	2.00	0.00	Y	Arm 3 Ahead	Inf	0.0 %	1815	1815

Bonus Green Times
No Bonus Greens are defined For Scenario 2

Traffic Flow Groups

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

Traffic Flows, Desired

FG1: 'PM'

Desired Flow :

	Destination	
		Tot.
Origin	Tot.	-

FG2: 'AM'

Desired Flow :

	Destination	
		Tot.
Origin	Tot.	-

Scenario 1: 'AM' (FG2: 'AM', Plan 1: 'AM')

Stage Timings

Stage	1	2	3	4	5	6
Duration	25	10	7	27	9	14
Change Point	0	31	47	60	89	100

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	7	53	60
B	Pedestrians across	Pedestrian	8	52	60
C	Pedestrians across	Pedestrian	7	53	60
D	Pedestrians across	Pedestrian	7	53	60
E	Right	Traffic	9	91	100
F	Left Ahead	Traffic	27	62	89
G	Right	Traffic	10	37	47
H	Ahead	Traffic	41	6	47
I	Left	Traffic	45	2	47
J	Right	Traffic	9	91	100
K	Ahead Left	Traffic	27	62	89
L	Right	Traffic	14	106	0
M	Ahead Left	Traffic	49	102	31

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**77.6%**
Site 1	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**77.6%**
1/1	Left	U	N/A	N/A	I		1	45	-	-	121	2005	769	15.7%
1/2+1/3	Right Ahead	U	N/A	N/A	H G		1	41:10	-	-	546	1915:1915	587+130	76.2 : 76.2%
2/1		U	N/A	N/A	-		-	-	-	-	509	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
4/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
5/1	Left Ahead	U	N/A	N/A	F		1	27	-	-	365	2015	470	77.6%
5/2	Right	U	N/A	N/A	E		1	9	-	-	15	1915	160	9.4%
6/1		U	N/A	N/A	-		-	-	-	-	325	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	-	632	Inf	Inf	0.0%
8/1+8/2	Right Ahead Left	U	N/A	N/A	K J		1	27:9	-	-	378	1985:1915	406+160	66.7 : 67.0%
9/1		U	N/A	N/A	-		-	-	-	-	511	2035	2035	25.1%
10/1	Ahead Left	U	N/A	N/A	M		1	49	-	-	437	2015	840	52.0%
10/2	Right	U	N/A	N/A	L		1	14	-	-	179	1915	239	74.8%
11/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
12/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
13/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	7	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	8	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	7	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	D		1	7	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**21.3**	**6.5**	**0.0**	**27.9**	**-**	**-**	**-**	**-**
Site 1	**-**	**-**	**0**	**0**	**0**	**21.3**	**6.5**	**0.0**	**27.9**	**-**	**-**	**-**	**-**
1/1	121	121	-	-	-	0.8	0.1	-	0.9	27.1	2.6	0.1	2.7
1/2+1/3	546	546	-	-	-	5.6	1.6	-	7.2	47.3	14.6	1.6	16.1
2/1	509	509	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	365	365	-	-	-	4.4	1.7	-	6.0	59.7	11.4	1.7	13.0
5/2	15	15	-	-	-	0.2	0.1	-	0.3	63.3	0.5	0.1	0.5
6/1	325	325	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	632	632	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1+8/2	378	378	-	-	-	4.7	1.0	-	5.7	53.9	8.0	1.0	9.0
9/1	511	511	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
10/1	437	437	-	-	-	3.2	0.5	-	3.7	30.5	10.8	0.5	11.3
10/2	179	179	-	-	-	2.5	1.4	-	3.9	79.2	5.7	1.4	7.1
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 15.9 Total Delay for Signalled Lanes (pcuHr): 27.69 Cycle Time (s): 120
PRC Over All Lanes (%): 15.9 Total Delay Over All Lanes(pcuHr): 27.86

Scenario 2: 'PM' (FG1: 'PM', Plan 2: 'PM')

Stage Timings

Stage	1	2	3	4	5	6
Duration	17	21	7	24	9	14
Change Point	0	23	50	63	89	100

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	7	56	63
B	Pedestrians across	Pedestrian	8	55	63
C	Pedestrians across	Pedestrian	7	56	63
D	Pedestrians across	Pedestrian	7	56	63
E	Right	Traffic	9	91	100
F	Left Ahead	Traffic	24	65	89
G	Right	Traffic	21	29	50
H	Ahead	Traffic	44	6	50
I	Left	Traffic	48	2	50
J	Right	Traffic	9	91	100
K	Ahead Left	Traffic	24	65	89
L	Right	Traffic	14	106	0
M	Ahead Left	Traffic	41	102	23

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**88.7%**
Site 1	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**88.7%**
1/1	Left	U	N/A	N/A	I		1	48	-	-	85	2005	819	10.4%
1/2+1/3	Right Ahead	U	N/A	N/A	H G		1	44:21	-	-	698	1915:1915	587+199	88.7 : 88.7%
2/1		U	N/A	N/A	-		-	-	-	-	369	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
4/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
5/1	Left Ahead	U	N/A	N/A	F		1	24	-	-	204	2015	420	48.6%
5/2	Right	U	N/A	N/A	E		1	9	-	-	34	1915	160	21.3%
6/1		U	N/A	N/A	-		-	-	-	-	482	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	-	453	Inf	Inf	0.0%
8/1+8/2	Right Ahead Left	U	N/A	N/A	K J		1	24:9	-	-	439	1985:1915	377+120	88.2 : 88.2%
9/1		U	N/A	N/A	-		-	-	-	-	612	2035	2035	30.1%
10/1	Ahead Left	U	N/A	N/A	M		1	41	-	-	248	2015	705	35.2%
10/2	Right	U	N/A	N/A	L		1	14	-	-	208	1915	239	86.9%
11/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
12/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
13/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	7	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	8	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	7	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	D		1	7	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**21.1**	**11.0**	**0.0**	**32.1**	**-**	**-**	**-**	**-**
Site 1	**-**	**-**	**0**	**0**	**0**	**21.1**	**11.0**	**0.0**	**32.1**	**-**	**-**	**-**	**-**
1/1	85	85	-	-	-	0.5	0.1	-	0.6	24.4	1.7	0.1	1.8
1/2+1/3	698	698	-	-	-	7.0	3.6	-	10.7	55.1	19.4	3.6	23.1
2/1	369	369	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	204	204	-	-	-	2.4	0.5	-	2.8	50.2	6.0	0.5	6.4
5/2	34	34	-	-	-	0.5	0.1	-	0.6	65.6	1.0	0.1	1.2
6/1	482	482	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	453	453	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1+8/2	439	439	-	-	-	5.8	3.4	-	9.1	74.8	11.3	3.4	14.6
9/1	612	612	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
10/1	248	248	-	-	-	2.0	0.3	-	2.3	32.8	6.1	0.3	6.3
10/2	208	208	-	-	-	3.0	2.8	-	5.8	100.2	6.8	2.8	9.6
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 1.4 Total Delay for Signalled Lanes (pcuHr): 31.89 Cycle Time (s): 120
PRC Over All Lanes (%): 1.4 Total Delay Over All Lanes(pcuHr): 32.10

Basic Input Data and Results

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Site1_opening+5_2035_W_Dev.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	AM	AM	AM	08:00 - 09:00	120	8.5	30.36
2	PM	PM	PM	17:00 - 18:00	120	0.1	33.57

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Pedestrian		7	7
B	Pedestrian		7	7
C	Pedestrian		7	7
D	Pedestrian		7	7
E	Traffic		7	7
F	Traffic		7	7
G	Traffic		7	7
H	Traffic		7	7
I	Traffic		7	7
J	Traffic		7	7
K	Traffic		7	7
L	Traffic		7	7
M	Traffic		7	7

Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M
A		-	-	-	-	-	-	-	-	-	-	-	-
B	-		-	-	-	-	-	-	-	-	-	-	-
C	-	-		-	-	-	-	-	-	-	-	-	-
D	-	-	-		-	-	-	-	-	-	-	-	-
E	5	-	-	5		-	-	5	-	-	5	-	-
F	5	5	-	-	-		-	5	5	-	-	-	5
G	5	5	-	-	-	5		-	-	-	-	-	-
H	5	5	-	5	-	-	-		-	5	-	-	-
I	-	5	5	-	-	-	-	-		0	-	5	-
J	-	5	5	-	-	5	5	-	-		-	5	-
K	-	-	5	5	-	-	-	5	-	-		5	-
L	-	-	5	5	5	-	-	5	-	-	-		-
M	5	5	-	5	5	-	5	-	-	-	5	-	

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage \ To Stage	1	2	3	4	5	6
1		5	5	5	5	5
2	2		5	5	5	5
3	2	2		2	2	2
4	5	5	5		2	5
5	5	5	5	5		5
6	5	5	5	5	5	

Phases in Stage

Stage No.	Phases in Stage
1	H I M
2	G H I
3	A B C D
4	F K
5	E J
6	L M

Lane Input Data

Junction: Site 1

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1	U	I	2	3	60.0	Geom	-	3.90	0.00	Y	Arm 1 Left	Inf
1/2	U	H	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 9 Ahead	Inf
1/3	U	G	2	3	6.1	Geom	-	3.00	0.00	Y	Arm 6 Right	Inf
2/1	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y		
4/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y		
5/1	U	F	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 2 Left	Inf
											Arm 7 Ahead	Inf
5/2	U	E	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 9 Right	Inf
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U	K	2	3	60.0	Geom	-	3.70	0.00	Y	Arm 6 Ahead	Inf
											Arm 9 Left	Inf
8/2	U	J	2	3	8.7	Geom	-	3.00	0.00	Y	Arm 2 Right	Inf
9/1	U		2	3	60.0	Geom	-	4.20	0.00	Y		
10/1	U	M	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 2 Ahead	Inf
											Arm 6 Left	Inf
10/2	U	L	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 7 Right	Inf
11/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y		
12/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y	Arm 11 Ahead	Inf
13/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y	Arm 3 Ahead	Inf

Give-Way Lane Input Data

Junction: Site 1
There are no Opposed Lanes in this Junction

Lane Saturation Flows

Junction: Site 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1	3.90	0.00	Y	Arm 7 Left	Inf	100.0 %	2005	2005
1/2	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/3	3.00	0.00	Y	Arm 6 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW)	2.00	0.00	Y				1815	1815
4/1 (CW)	2.00	0.00	Y				1815	1815
5/1	4.00	0.00	Y	Arm 2 Left	Inf	9.7 %	2015	2015
				Arm 7 Ahead	Inf	90.3 %		
5/2	3.00	0.00	Y	Arm 9 Right	Inf	100.0 %	1915	1915
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	3.70	0.00	Y	Arm 6 Ahead	Inf	76.0 %	1985	1985
				Arm 9 Left	Inf	24.0 %		
8/2	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
9/1	4.20	0.00	Y				2035	2035
10/1	4.00	0.00	Y	Arm 2 Ahead	Inf	93.2 %	2015	2015
				Arm 6 Left	Inf	6.8 %		
10/2	3.00	0.00	Y	Arm 7 Right	Inf	100.0 %	1915	1915
11/1 (CW)	2.00	0.00	Y				1815	1815
12/1 (CW)	2.00	0.00	Y	Arm 11 Ahead	Inf	0.0 %	1815	1815
13/1 (CW)	2.00	0.00	Y	Arm 3 Ahead	Inf	0.0 %	1815	1815

Bonus Green Times
No Bonus Greens are defined For Scenario 1

Scenario 2: 'PM' (FG1: 'PM', Plan 2: 'PM')

Lane Saturation Flows

Junction: Site 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1	3.90	0.00	Y	Arm 7 Left	Inf	100.0 %	2005	2005
1/2	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/3	3.00	0.00	Y	Arm 6 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW)	2.00	0.00	Y				1815	1815
4/1 (CW)	2.00	0.00	Y				1815	1815
5/1	4.00	0.00	Y	Arm 2 Left	Inf	33.6 %	2015	2015
				Arm 7 Ahead	Inf	66.4 %		
5/2	3.00	0.00	Y	Arm 9 Right	Inf	100.0 %	1915	1915
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	3.70	0.00	Y	Arm 6 Ahead	Inf	82.9 %	1985	1985
				Arm 9 Left	Inf	17.1 %		
8/2	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
9/1	4.20	0.00	Y				2035	2035
10/1	4.00	0.00	Y	Arm 2 Ahead	Inf	88.7 %	2015	2015
				Arm 6 Left	Inf	11.3 %		
10/2	3.00	0.00	Y	Arm 7 Right	Inf	100.0 %	1915	1915
11/1 (CW)	2.00	0.00	Y				1815	1815
12/1 (CW)	2.00	0.00	Y	Arm 11 Ahead	Inf	0.0 %	1815	1815
13/1 (CW)	2.00	0.00	Y	Arm 3 Ahead	Inf	0.0 %	1815	1815

Bonus Green Times
No Bonus Greens are defined For Scenario 2

Traffic Flow Groups

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

Traffic Flows, Desired

FG1: 'PM'

Desired Flow :

	Destination	
		Tot.
Origin	Tot.	-

FG2: 'AM'

Desired Flow :

	Destination	
		Tot.
Origin	Tot.	-

Scenario 1: 'AM' (FG2: 'AM', Plan 1: 'AM')

Stage Timings

Stage	1	2	3	4	5	6
Duration	27	11	7	27	9	15
Change Point	0	32	48	60	89	100

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	7	53	60
B	Pedestrians across	Pedestrian	7	53	60
C	Pedestrians across	Pedestrian	7	53	60
D	Pedestrians across	Pedestrian	7	53	60
E	Right	Traffic	9	91	100
F	Left Ahead	Traffic	27	62	89
G	Right	Traffic	11	37	48
H	Ahead	Traffic	43	5	48
I	Left	Traffic	46	2	48
J	Right	Traffic	9	91	100
K	Ahead Left	Traffic	27	62	89
L	Right	Traffic	15	105	0
M	Ahead Left	Traffic	50	102	32

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**82.9%**
Site 1	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**82.9%**
1/1	Left	U	N/A	N/A	I		1	46	-	-	165	2005	785	21.0%
1/2+1/3	Right Ahead	U	N/A	N/A	H G		1	43:11	-	-	599	1915:1915	581+182	78.5 : 78.5%
2/1		U	N/A	N/A	-		-	-	-	-	582	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
4/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
5/1	Left Ahead	U	N/A	N/A	F		1	27	-	-	390	2015	470	82.9%
5/2	Right	U	N/A	N/A	E		1	9	-	-	15	1915	160	9.4%
6/1		U	N/A	N/A	-		-	-	-	-	379	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	-	696	Inf	Inf	0.0%
8/1+8/2	Right Ahead Left	U	N/A	N/A	K J		1	27:9	-	-	403	1985:1915	392+160	69.2 : 82.7%
9/1		U	N/A	N/A	-		-	-	-	-	536	2035	2035	26.3%
10/1	Ahead Left	U	N/A	N/A	M		1	50	-	-	442	2015	856	51.6%
10/2	Right	U	N/A	N/A	L		1	15	-	-	179	1915	255	70.1%
11/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
12/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
13/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	7	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	7	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	7	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	D		1	7	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**22.9**	**7.5**	**0.0**	**30.4**	**-**	**-**	**-**	**-**
Site 1	**-**	**-**	**0**	**0**	**0**	**22.9**	**7.5**	**0.0**	**30.4**	**-**	**-**	**-**	**-**
1/1	165	165	-	-	-	1.1	0.1	-	1.2	27.1	3.6	0.1	3.8
1/2+1/3	599	599	-	-	-	6.2	1.8	-	8.0	47.9	15.4	1.8	17.2
2/1	582	582	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	390	390	-	-	-	4.7	2.3	-	7.0	65.0	12.3	2.3	14.7
5/2	15	15	-	-	-	0.2	0.1	-	0.3	63.3	0.5	0.1	0.5
6/1	379	379	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	696	696	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1+8/2	403	403	-	-	-	5.1	1.3	-	6.4	57.1	8.0	1.3	9.3
9/1	536	536	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
10/1	442	442	-	-	-	3.1	0.5	-	3.7	29.7	10.8	0.5	11.3
10/2	179	179	-	-	-	2.5	1.1	-	3.6	72.6	5.7	1.1	6.8
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 8.5 Total Delay for Signalled Lanes (pcuHr): 30.18 Cycle Time (s): 120
PRC Over All Lanes (%): 8.5 Total Delay Over All Lanes(pcuHr): 30.36

Scenario 2: 'PM' (FG1: 'PM', Plan 2: 'PM')

Stage Timings

Stage	1	2	3	4	5	6
Duration	19	21	7	25	10	14
Change Point	0	24	50	62	89	101

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	7	55	62
B	Pedestrians across	Pedestrian	7	55	62
C	Pedestrians across	Pedestrian	7	55	62
D	Pedestrians across	Pedestrian	7	55	62
E	Right	Traffic	10	91	101
F	Left Ahead	Traffic	25	64	89
G	Right	Traffic	21	29	50
H	Ahead	Traffic	45	5	50
I	Left	Traffic	48	2	50
J	Right	Traffic	10	91	101
K	Ahead Left	Traffic	25	64	89
L	Right	Traffic	14	106	0
M	Ahead Left	Traffic	41	103	24

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**89.9%**
Site 1	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**89.9%**
1/1	Left	U	N/A	N/A	I		1	48	-	-	109	2005	819	13.3%
1/2+1/3	Right Ahead	U	N/A	N/A	H G		1	45:21	-	-	729	1915:1915	586+225	89.9 : 89.9%
2/1		U	N/A	N/A	-		-	-	-	-	451	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
4/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
5/1	Left Ahead	U	N/A	N/A	F		1	25	-	-	241	2015	437	55.2%
5/2	Right	U	N/A	N/A	E		1	10	-	-	34	1915	176	19.4%
6/1		U	N/A	N/A	-		-	-	-	-	507	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	-	477	Inf	Inf	0.0%
8/1+8/2	Right Ahead Left	U	N/A	N/A	K J		1	25:10	-	-	476	1985:1915	380+176	87.7 : 81.5%
9/1		U	N/A	N/A	-		-	-	-	-	618	2035	2035	30.4%
10/1	Ahead Left	U	N/A	N/A	M		1	41	-	-	256	2015	705	36.3%
10/2	Right	U	N/A	N/A	L		1	14	-	-	208	1915	239	86.9%
11/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
12/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
13/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	7	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	7	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	7	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	D		1	7	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**22.6**	**11.0**	**0.0**	**33.6**	**-**	**-**	**-**	**-**
Site 1	**-**	**-**	**0**	**0**	**0**	**22.6**	**11.0**	**0.0**	**33.6**	**-**	**-**	**-**	**-**
1/1	109	109	-	-	-	0.7	0.1	-	0.7	24.8	2.3	0.1	2.3
1/2+1/3	729	729	-	-	-	7.4	4.1	-	11.4	56.4	20.1	4.1	24.2
2/1	451	451	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	241	241	-	-	-	2.8	0.6	-	3.4	51.0	7.1	0.6	7.7
5/2	34	34	-	-	-	0.5	0.1	-	0.6	63.1	1.0	0.1	1.2
6/1	507	507	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	477	477	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1+8/2	476	476	-	-	-	6.2	2.8	-	9.0	68.3	11.3	2.8	14.1
9/1	618	618	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
10/1	256	256	-	-	-	2.1	0.3	-	2.4	33.0	6.3	0.3	6.6
10/2	208	208	-	-	-	3.0	2.8	-	5.8	100.2	6.8	2.8	9.6
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 0.1 Total Delay for Signalled Lanes (pcuHr): 33.35 Cycle Time (s): 120
PRC Over All Lanes (%): 0.1 Total Delay Over All Lanes(pcuHr): 33.57

Basic Input Data and Results

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Site1_opening+15_2045_No_Dev.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	AM	AM	AM	08:00 - 09:00	120	16.6	28.71
2	PM	PM	PM	17:00 - 18:00	120	1.6	32.31

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Pedestrian		7	5
B	Pedestrian		7	5
C	Pedestrian		7	5
D	Pedestrian		7	5
E	Traffic		7	7
F	Traffic		7	7
G	Traffic		7	7
H	Traffic		7	7
I	Traffic		7	7
J	Traffic		7	7
K	Traffic		7	7
L	Traffic		7	7
M	Traffic		7	7

Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M
A		-	-	-	-	-	-	-	-	-	-	-	-
B	-		-	-	-	-	-	-	-	-	-	-	-
C	-	-		-	-	-	-	-	-	-	-	-	-
D	-	-	-		-	-	-	-	-	-	-	-	-
E	5	-	-	5		0	-	5	-	-	5	-	-
F	5	5	-	-	-		-	5	5	-	-	-	5
G	5	5	-	-	-	5		-	-	-	-	-	-
H	5	5	-	5	-	-	-		-	5	-	-	-
I	-	5	5	-	-	-	-	-		0	0	5	-
J	-	5	5	-	-	5	5	-	-		0	5	-
K	-	-	5	5	-	-	-	5	-	-		5	-
L	-	-	5	5	5	-	-	5	-	-	-		-
M	5	5	-	5	5	-	5	-	-	-	5	-	

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
2	1	G	Losing	2	2
3	1	A	Losing	2	2
3	1	B	Losing	2	2
3	1	C	Losing	2	2
3	1	D	Losing	2	2
3	2	A	Losing	2	2
3	2	B	Losing	2	2
3	2	C	Losing	2	2
3	2	D	Losing	2	2
3	4	A	Losing	2	2
3	4	B	Losing	2	2
3	4	C	Losing	2	2
3	4	D	Losing	2	2
3	5	A	Losing	2	2
3	5	B	Losing	2	2
3	5	C	Losing	2	2
3	5	D	Losing	2	2
3	6	A	Losing	2	2
3	6	B	Losing	2	2
3	6	C	Losing	2	2
3	6	D	Losing	2	2

Basic Input Data and Results

4	5	F	Losing	2	2
4	5	K	Losing	2	2

Prohibited Stage Change

From Stage \ To Stage	1	2	3	4	5	6
1		5	5	5	5	5
2	2		5	5	5	5
3	2	2		2	2	2
4	5	5	5		2	5
5	5	5	5	5		5
6	5	5	5	5	5	

Phases in Stage

Stage No.	Phases in Stage
1	H I M
2	G H I
3	A B C D
4	F K
5	E J
6	L M

Lane Input Data

Junction: Site 1												
Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1	U	I	2	3	60.0	Geom	-	3.90	0.00	Y	Arm 1 Left	Inf
1/2	U	H	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 9 Ahead	Inf
1/3	U	G	2	3	6.1	Geom	-	3.00	0.00	Y	Arm 6 Right	Inf
2/1	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y		
4/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y		
5/1	U	F	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 2 Left	Inf
											Arm 7 Ahead	Inf
5/2	U	E	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 9 Right	Inf
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U	K	2	3	60.0	Geom	-	3.70	0.00	Y	Arm 6 Ahead	Inf
											Arm 9 Left	Inf
8/2	U	J	2	3	8.7	Geom	-	3.00	0.00	Y	Arm 2 Right	Inf
9/1	U		2	3	60.0	Geom	-	4.20	0.00	Y		
10/1	U	M	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 2 Ahead	Inf
											Arm 6 Left	Inf
10/2	U	L	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 7 Right	Inf
11/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y		
12/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y	Arm 11 Ahead	Inf
13/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y	Arm 3 Ahead	Inf

Give-Way Lane Input Data

Junction: Site 1
There are no Opposed Lanes in this Junction

Lane Saturation Flows

Junction: Site 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1	3.90	0.00	Y	Arm 7 Left	Inf	100.0 %	2005	2005
1/2	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/3	3.00	0.00	Y	Arm 6 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW)	2.00	0.00	Y				1815	1815
4/1 (CW)	2.00	0.00	Y				1815	1815
5/1	4.00	0.00	Y	Arm 2 Left	Inf	3.4 %	2015	2015
				Arm 7 Ahead	Inf	96.6 %		
5/2	3.00	0.00	Y	Arm 9 Right	Inf	100.0 %	1915	1915
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	3.70	0.00	Y	Arm 6 Ahead	Inf	76.0 %	1985	1985
				Arm 9 Left	Inf	24.0 %		
8/2	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
9/1	4.20	0.00	Y				2035	2035
10/1	4.00	0.00	Y	Arm 2 Ahead	Inf	93.1 %	2015	2015
				Arm 6 Left	Inf	6.9 %		
10/2	3.00	0.00	Y	Arm 7 Right	Inf	100.0 %	1915	1915
11/1 (CW)	2.00	0.00	Y				1815	1815
12/1 (CW)	2.00	0.00	Y	Arm 11 Ahead	Inf	0.0 %	1815	1815
13/1 (CW)	2.00	0.00	Y	Arm 3 Ahead	Inf	0.0 %	1815	1815

Bonus Green Times
No Bonus Greens are defined For Scenario 1

Scenario 2: 'PM' (FG1: 'PM', Plan 2: 'PM')

Lane Saturation Flows

Junction: Site 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1	3.90	0.00	Y	Arm 7 Left	Inf	100.0 %	2005	2005
1/2	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/3	3.00	0.00	Y	Arm 6 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW)	2.00	0.00	Y				1815	1815
4/1 (CW)	2.00	0.00	Y				1815	1815
5/1	4.00	0.00	Y	Arm 2 Left	Inf	21.4 %	2015	2015
				Arm 7 Ahead	Inf	78.6 %		
5/2	3.00	0.00	Y	Arm 9 Right	Inf	100.0 %	1915	1915
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	3.70	0.00	Y	Arm 6 Ahead	Inf	83.0 %	1985	1985
				Arm 9 Left	Inf	17.0 %		
8/2	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
9/1	4.20	0.00	Y				2035	2035
10/1	4.00	0.00	Y	Arm 2 Ahead	Inf	88.2 %	2015	2015
				Arm 6 Left	Inf	11.8 %		
10/2	3.00	0.00	Y	Arm 7 Right	Inf	100.0 %	1915	1915
11/1 (CW)	2.00	0.00	Y				1815	1815
12/1 (CW)	2.00	0.00	Y	Arm 11 Ahead	Inf	0.0 %	1815	1815
13/1 (CW)	2.00	0.00	Y	Arm 3 Ahead	Inf	0.0 %	1815	1815

Bonus Green Times
No Bonus Greens are defined For Scenario 2

Traffic Flow Groups

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

Traffic Flows, Desired

FG1: 'PM'

Desired Flow :

	Destination	
		Tot.
Origin	Tot.	-

FG2: 'AM'

Desired Flow :

	Destination	
		Tot.
Origin	Tot.	-

Scenario 1: 'AM' (FG2: 'AM', Plan 1: 'AM')

Stage Timings

Stage	1	2	3	4	5	6
Duration	27	11	7	27	9	15
Change Point	0	32	48	60	89	100

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	9	53	62
B	Pedestrians across	Pedestrian	9	53	62
C	Pedestrians across	Pedestrian	9	53	62
D	Pedestrians across	Pedestrian	9	53	62
E	Right	Traffic	9	91	100
F	Left Ahead	Traffic	29	62	91
G	Right	Traffic	11	37	48
H	Ahead	Traffic	43	5	48
I	Left	Traffic	46	2	48
J	Right	Traffic	9	91	100
K	Ahead Left	Traffic	29	62	91
L	Right	Traffic	15	105	0
M	Ahead Left	Traffic	50	102	32

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**77.2%**
Site 1	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**77.2%**
1/1	Left	U	N/A	N/A	I		1	46	-	-	128	2005	785	16.3%
1/2+1/3	Right Ahead	U	N/A	N/A	H G		1	43:11	-	-	578	1915:1915	613+136	77.2 : 77.2%
2/1		U	N/A	N/A	-		-	-	-	-	556	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
4/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
5/1	Left Ahead	U	N/A	N/A	F		1	29	-	-	386	2015	504	76.6%
5/2	Right	U	N/A	N/A	E		1	9	-	-	16	1915	160	10.0%
6/1		U	N/A	N/A	-		-	-	-	-	355	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	-	691	Inf	Inf	0.0%
8/1+8/2	Right Ahead Left	U	N/A	N/A	K J		1	29:9	-	-	400	1985:1915	430+160	66.8 : 70.8%
9/1		U	N/A	N/A	-		-	-	-	-	558	2035	2035	27.4%
10/1	Ahead Left	U	N/A	N/A	M		1	50	-	-	462	2015	856	53.9%
10/2	Right	U	N/A	N/A	L		1	15	-	-	190	1915	255	74.4%
11/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
12/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
13/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	9	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	9	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	9	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	D		1	9	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**22.1**	**6.6**	**0.0**	**28.7**	**-**	**-**	**-**	**-**
Site 1	**-**	**-**	**0**	**0**	**0**	**22.1**	**6.6**	**0.0**	**28.7**	**-**	**-**	**-**	**-**
1/1	128	128	-	-	-	0.8	0.1	-	0.9	26.5	2.7	0.1	2.8
1/2+1/3	578	578	-	-	-	5.8	1.7	-	7.4	46.3	15.3	1.7	17.0
2/1	556	556	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	386	386	-	-	-	4.5	1.6	-	6.1	56.6	11.9	1.6	13.5
5/2	16	16	-	-	-	0.2	0.1	-	0.3	63.4	0.5	0.1	0.5
6/1	355	355	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	691	691	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1+8/2	400	400	-	-	-	4.8	1.0	-	5.9	52.8	8.4	1.0	9.4
9/1	558	558	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
10/1	462	462	-	-	-	3.3	0.6	-	3.9	30.3	11.4	0.6	12.0
10/2	190	190	-	-	-	2.6	1.4	-	4.0	76.5	6.1	1.4	7.5
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 16.6 Total Delay for Signalled Lanes (pcuHr): 28.52 Cycle Time (s): 120
PRC Over All Lanes (%): 16.6 Total Delay Over All Lanes(pcuHr): 28.71

Scenario 2: 'PM' (FG1: 'PM', Plan 2: 'PM')

Stage Timings

Stage	1	2	3	4	5	6
Duration	19	23	5	24	10	15
Change Point	0	24	52	62	88	100

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	7	57	64
B	Pedestrians across	Pedestrian	7	57	64
C	Pedestrians across	Pedestrian	7	57	64
D	Pedestrians across	Pedestrian	7	57	64
E	Right	Traffic	10	90	100
F	Left Ahead	Traffic	26	64	90
G	Right	Traffic	23	29	52
H	Ahead	Traffic	47	5	52
I	Left	Traffic	50	2	52
J	Right	Traffic	10	90	100
K	Ahead Left	Traffic	26	64	90
L	Right	Traffic	15	105	0
M	Ahead Left	Traffic	42	102	24

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**88.6%**
Site 1	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**88.6%**
1/1	Left	U	N/A	N/A	I		1	50	-	-	89	2005	852	10.4%
1/2+1/3	Right Ahead	U	N/A	N/A	H G		1	47:23	-	-	739	1915:1915	623+211	88.6 : 88.6%
2/1		U	N/A	N/A	-		-	-	-	-	390	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
4/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
5/1	Left Ahead	U	N/A	N/A	F		1	26	-	-	215	2015	453	47.4%
5/2	Right	U	N/A	N/A	E		1	10	-	-	36	1915	176	20.5%
6/1		U	N/A	N/A	-		-	-	-	-	510	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	-	478	Inf	Inf	0.0%
8/1+8/2	Right Ahead Left	U	N/A	N/A	K J		1	26:10	-	-	464	1985:1915	402+128	87.5 : 87.5%
9/1		U	N/A	N/A	-		-	-	-	-	648	2035	2035	31.8%
10/1	Ahead Left	U	N/A	N/A	M		1	42	-	-	263	2015	722	36.4%
10/2	Right	U	N/A	N/A	L		1	15	-	-	220	1915	255	86.2%
11/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
12/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
13/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	7	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	7	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	7	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	D		1	7	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**21.7**	**10.7**	**0.0**	**32.3**	**-**	**-**	**-**	**-**
Site 1	**-**	**-**	**0**	**0**	**0**	**21.7**	**10.7**	**0.0**	**32.3**	**-**	**-**	**-**	**-**
1/1	89	89	-	-	-	0.5	0.1	-	0.6	23.1	1.8	0.1	1.8
1/2+1/3	739	739	-	-	-	7.1	3.6	-	10.7	52.2	20.5	3.6	24.1
2/1	390	390	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	215	215	-	-	-	2.4	0.4	-	2.9	47.9	6.2	0.4	6.7
5/2	36	36	-	-	-	0.5	0.1	-	0.6	63.3	1.1	0.1	1.2
6/1	510	510	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	478	478	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1+8/2	464	464	-	-	-	5.9	3.2	-	9.1	70.8	11.9	3.2	15.1
9/1	648	648	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
10/1	263	263	-	-	-	2.1	0.3	-	2.4	32.3	6.4	0.3	6.7
10/2	220	220	-	-	-	3.1	2.7	-	5.8	95.1	7.1	2.7	9.9
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 1.6 Total Delay for Signalled Lanes (pcuHr): 32.08 Cycle Time (s): 120
PRC Over All Lanes (%): 1.6 Total Delay Over All Lanes(pcuHr): 32.31

Basic Input Data and Results

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Site1_opening+15_2045_W_Dev.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	AM	AM	AM	08:00 - 09:00	120	4.1	32.88
2	PM	PM	PM	17:00 - 18:00	120	-2.9	35.58

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Pedestrian		7	5
B	Pedestrian		7	5
C	Pedestrian		7	5
D	Pedestrian		7	5
E	Traffic		7	7
F	Traffic		7	7
G	Traffic		7	7
H	Traffic		7	7
I	Traffic		7	7
J	Traffic		7	7
K	Traffic		7	7
L	Traffic		7	7
M	Traffic		7	7

Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M
A		-	-	-	-	-	-	-	-	-	-	-	-
B	-		-	-	-	-	-	-	-	-	-	-	-
C	-	-		-	-	-	-	-	-	-	-	-	-
D	-	-	-		-	-	-	-	-	-	-	-	-
E	5	-	-	5		0	-	5	-	-	5	-	-
F	5	5	-	-	-		-	5	5	-	-	-	5
G	5	5	-	-	-	5		-	-	-	-	-	-
H	5	5	-	5	-	-	-		-	5	-	-	-
I	-	5	5	-	-	-	-	-		0	0	5	-
J	-	5	5	-	-	5	5	-	-		0	5	-
K	-	-	5	5	-	-	-	5	-	-		5	-
L	-	-	5	5	5	-	-	5	-	-	-		-
M	5	5	-	5	5	-	5	-	-	-	5	-	

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
2	1	G	Losing	2	2
3	1	A	Losing	2	2
3	1	B	Losing	2	2
3	1	C	Losing	2	2
3	1	D	Losing	2	2
3	2	A	Losing	2	2
3	2	B	Losing	2	2
3	2	C	Losing	2	2
3	2	D	Losing	2	2
3	4	A	Losing	2	2
3	4	B	Losing	2	2
3	4	C	Losing	2	2
3	4	D	Losing	2	2
3	5	A	Losing	2	2
3	5	B	Losing	2	2
3	5	C	Losing	2	2
3	5	D	Losing	2	2
3	6	A	Losing	2	2
3	6	B	Losing	2	2
3	6	C	Losing	2	2
3	6	D	Losing	2	2

Basic Input Data and Results

4	5	F	Losing	2	2
4	5	K	Losing	2	2

Prohibited Stage Change

From Stage \ To Stage	1	2	3	4	5	6
1		5	5	5	5	5
2	2		5	5	5	5
3	2	2		2	2	2
4	5	5	5		2	5
5	5	5	5	5		5
6	5	5	5	5	5	

Phases in Stage

Stage No.	Phases in Stage
1	H I M
2	G H I
3	A B C D
4	F K
5	E J
6	L M

Lane Input Data

Junction: Site 1

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1	U	I	2	3	60.0	Geom	-	3.90	0.00	Y	Arm 1 Left	Inf
1/2	U	H	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 9 Ahead	Inf
1/3	U	G	2	3	6.1	Geom	-	3.00	0.00	Y	Arm 6 Right	Inf
2/1	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y		
4/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y		
5/1	U	F	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 2 Left	Inf
											Arm 7 Ahead	Inf
5/2	U	E	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 9 Right	Inf
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U	K	2	3	60.0	Geom	-	3.70	0.00	Y	Arm 6 Ahead	Inf
											Arm 9 Left	Inf
8/2	U	J	2	3	8.7	Geom	-	3.00	0.00	Y	Arm 2 Right	Inf
9/1	U		2	3	60.0	Geom	-	4.20	0.00	Y		
10/1	U	M	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 2 Ahead	Inf
											Arm 6 Left	Inf
10/2	U	L	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 7 Right	Inf
11/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y		
12/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y	Arm 11 Ahead	Inf
13/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y	Arm 3 Ahead	Inf

Give-Way Lane Input Data

Junction: Site 1
There are no Opposed Lanes in this Junction

Lane Saturation Flows

Junction: Site 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1	3.90	0.00	Y	Arm 7 Left	Inf	100.0 %	2005	2005
1/2	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/3	3.00	0.00	Y	Arm 6 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW)	2.00	0.00	Y				1815	1815
4/1 (CW)	2.00	0.00	Y				1815	1815
5/1	4.00	0.00	Y	Arm 2 Left	Inf	9.2 %	2015	2015
				Arm 7 Ahead	Inf	90.8 %		
5/2	3.00	0.00	Y	Arm 9 Right	Inf	100.0 %	1915	1915
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	3.70	0.00	Y	Arm 6 Ahead	Inf	76.0 %	1985	1985
				Arm 9 Left	Inf	24.0 %		
8/2	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
9/1	4.20	0.00	Y				2035	2035
10/1	4.00	0.00	Y	Arm 2 Ahead	Inf	93.2 %	2015	2015
				Arm 6 Left	Inf	6.8 %		
10/2	3.00	0.00	Y	Arm 7 Right	Inf	100.0 %	1915	1915
11/1 (CW)	2.00	0.00	Y				1815	1815
12/1 (CW)	2.00	0.00	Y	Arm 11 Ahead	Inf	0.0 %	1815	1815
13/1 (CW)	2.00	0.00	Y	Arm 3 Ahead	Inf	0.0 %	1815	1815

Bonus Green Times
No Bonus Greens are defined For Scenario 1

Scenario 2: 'PM' (FG1: 'PM', Plan 2: 'PM')

Lane Saturation Flows

Junction: Site 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1	3.90	0.00	Y	Arm 7 Left	Inf	100.0 %	2005	2005
1/2	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/3	3.00	0.00	Y	Arm 6 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW)	2.00	0.00	Y				1815	1815
4/1 (CW)	2.00	0.00	Y				1815	1815
5/1	4.00	0.00	Y	Arm 2 Left	Inf	33.2 %	2015	2015
				Arm 7 Ahead	Inf	66.8 %		
5/2	3.00	0.00	Y	Arm 9 Right	Inf	100.0 %	1915	1915
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	3.70	0.00	Y	Arm 6 Ahead	Inf	83.0 %	1985	1985
				Arm 9 Left	Inf	17.0 %		
8/2	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
9/1	4.20	0.00	Y				2035	2035
10/1	4.00	0.00	Y	Arm 2 Ahead	Inf	88.6 %	2015	2015
				Arm 6 Left	Inf	11.4 %		
10/2	3.00	0.00	Y	Arm 7 Right	Inf	100.0 %	1915	1915
11/1 (CW)	2.00	0.00	Y				1815	1815
12/1 (CW)	2.00	0.00	Y	Arm 11 Ahead	Inf	0.0 %	1815	1815
13/1 (CW)	2.00	0.00	Y	Arm 3 Ahead	Inf	0.0 %	1815	1815

Bonus Green Times
No Bonus Greens are defined For Scenario 2

Traffic Flow Groups

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

Traffic Flows, Desired

FG1: 'PM'

Desired Flow :

	Destination	
		Tot.
Origin	Tot.	-

FG2: 'AM'

Desired Flow :

	Destination	
		Tot.
Origin	Tot.	-

Scenario 1: 'AM' (FG2: 'AM', Plan 1: 'AM')

Stage Timings

Stage	1	2	3	4	5	6
Duration	27	11	7	27	9	15
Change Point	0	32	48	60	89	100

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	9	53	62
B	Pedestrians across	Pedestrian	9	53	62
C	Pedestrians across	Pedestrian	9	53	62
D	Pedestrians across	Pedestrian	9	53	62
E	Right	Traffic	9	91	100
F	Left Ahead	Traffic	29	62	91
G	Right	Traffic	11	37	48
H	Ahead	Traffic	43	5	48
I	Left	Traffic	46	2	48
J	Right	Traffic	9	91	100
K	Ahead Left	Traffic	29	62	91
L	Right	Traffic	15	105	0
M	Ahead Left	Traffic	50	102	32

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**86.5%**
Site 1	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**86.5%**
1/1	Left	U	N/A	N/A	I		1	46	-	-	172	2005	785	21.9%
1/2+1/3	Right Ahead	U	N/A	N/A	H G		1	43:11	-	-	631	1915:1915	585+179	82.6 : 82.6%
2/1		U	N/A	N/A	-		-	-	-	-	612	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
4/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
5/1	Left Ahead	U	N/A	N/A	F		1	29	-	-	411	2015	504	81.6%
5/2	Right	U	N/A	N/A	E		1	9	-	-	16	1915	160	10.0%
6/1		U	N/A	N/A	-		-	-	-	-	398	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	-	735	Inf	Inf	0.0%
8/1+8/2	Right Ahead Left	U	N/A	N/A	K J		1	29:9	-	-	425	1985:1915	367+160	78.2 : 86.5%
9/1		U	N/A	N/A	-		-	-	-	-	568	2035	2035	27.9%
10/1	Ahead Left	U	N/A	N/A	M		1	50	-	-	468	2015	856	54.6%
10/2	Right	U	N/A	N/A	L		1	15	-	-	190	1915	255	74.4%
11/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
12/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
13/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	9	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	9	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	9	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	D		1	9	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**24.1**	**8.8**	**0.0**	**32.9**	**-**	**-**	**-**	**-**
Site 1	**-**	**-**	**0**	**0**	**0**	**24.1**	**8.8**	**0.0**	**32.9**	**-**	**-**	**-**	**-**
1/1	172	172	-	-	-	1.2	0.1	-	1.3	27.2	3.8	0.1	3.9
1/2+1/3	631	631	-	-	-	6.6	2.3	-	8.9	50.8	16.9	2.3	19.2
2/1	612	612	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	411	411	-	-	-	4.8	2.1	-	7.0	61.0	12.9	2.1	15.0
5/2	16	16	-	-	-	0.2	0.1	-	0.3	63.4	0.5	0.1	0.5
6/1	398	398	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	735	735	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1+8/2	425	425	-	-	-	5.2	2.0	-	7.2	61.4	8.4	2.0	10.4
9/1	568	568	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
10/1	468	468	-	-	-	3.4	0.6	-	4.0	30.5	11.6	0.6	12.2
10/2	190	190	-	-	-	2.6	1.4	-	4.0	76.5	6.1	1.4	7.5
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 4.1 Total Delay for Signalled Lanes (pcuHr): 32.68 Cycle Time (s): 120
PRC Over All Lanes (%): 4.1 Total Delay Over All Lanes(pcuHr): 32.88

Scenario 2: 'PM' (FG1: 'PM', Plan 2: 'PM')

Stage Timings

Stage	1	2	3	4	5	6
Duration	19	24	5	23	10	15
Change Point	0	24	53	63	88	100

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	7	58	65
B	Pedestrians across	Pedestrian	7	58	65
C	Pedestrians across	Pedestrian	7	58	65
D	Pedestrians across	Pedestrian	7	58	65
E	Right	Traffic	10	90	100
F	Left Ahead	Traffic	25	65	90
G	Right	Traffic	24	29	53
H	Ahead	Traffic	48	5	53
I	Left	Traffic	51	2	53
J	Right	Traffic	10	90	100
K	Ahead Left	Traffic	25	65	90
L	Right	Traffic	15	105	0
M	Ahead Left	Traffic	42	102	24

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**92.6%**
Site 1	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**92.6%**
1/1	Left	U	N/A	N/A	I		1	51	-	-	114	2005	869	13.1%
1/2+1/3	Right Ahead	U	N/A	N/A	H G		1	48:24	-	-	770	1915:1915	622+236	89.8 : 89.8%
2/1		U	N/A	N/A	-		-	-	-	-	474	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
4/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
5/1	Left Ahead	U	N/A	N/A	F		1	25	-	-	253	2015	437	57.9%
5/2	Right	U	N/A	N/A	E		1	10	-	-	36	1915	176	20.5%
6/1		U	N/A	N/A	-		-	-	-	-	535	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	-	503	Inf	Inf	0.0%
8/1+8/2	Right Ahead Left	U	N/A	N/A	K J		1	25:10	-	-	502	1985:1915	380+176	92.6 : 85.4%
9/1		U	N/A	N/A	-		-	-	-	-	654	2035	2035	32.1%
10/1	Ahead Left	U	N/A	N/A	M		1	42	-	-	271	2015	722	37.5%
10/2	Right	U	N/A	N/A	L		1	15	-	-	220	1915	255	86.2%
11/1	CW	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
12/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
13/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	7	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	7	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	7	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	D		1	7	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**23.4**	**12.2**	**0.0**	**35.6**	**-**	**-**	**-**	**-**
Site 1	**-**	**-**	**0**	**0**	**0**	**23.4**	**12.2**	**0.0**	**35.6**	**-**	**-**	**-**	**-**
1/1	114	114	-	-	-	0.6	0.1	-	0.7	22.8	2.3	0.1	2.4
1/2+1/3	770	770	-	-	-	7.4	4.0	-	11.4	53.2	21.2	4.0	25.2
2/1	474	474	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	253	253	-	-	-	3.0	0.7	-	3.6	51.8	7.5	0.7	8.2
5/2	36	36	-	-	-	0.5	0.1	-	0.6	63.3	1.1	0.1	1.2
6/1	535	535	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	503	503	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1+8/2	502	502	-	-	-	6.6	4.1	-	10.7	76.7	12.5	4.1	16.5
9/1	654	654	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
10/1	271	271	-	-	-	2.1	0.3	-	2.4	32.5	6.6	0.3	6.9
10/2	220	220	-	-	-	3.1	2.7	-	5.8	95.1	7.1	2.7	9.9
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -2.9 Total Delay for Signalled Lanes (pcuHr): 35.35 Cycle Time (s): 120
PRC Over All Lanes (%): -2.9 Total Delay Over All Lanes(pcuHr): 35.58

Basic Input Data and Results

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Site 2_OpeningYear+5_2035_No_Dev.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	AM	AM	Network Control Plan 1	08:00 - 09:00	120	8.6	35.95
2	PM	PM	Network Control Plan 1	17:00 - 18:00	120	1.5	44.72

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Pedestrian		7	7
B	Pedestrian		7	7
C	Pedestrian		7	7
D	Pedestrian		7	7
E	Pedestrian		7	7
F	Traffic		7	7
G	Traffic		7	7
H	Traffic		7	7
I	Traffic		7	7
J	Traffic		7	7
K	Traffic		7	7
L	Traffic		7	7
M	Traffic		7	7
N	Traffic		7	7
O	Traffic		7	7
P	Traffic		7	7

Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
C	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-
D	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
E	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
F	4	-	-	4	-		-	-	5	-	-	-	-	-	5	-
G	4	-	4	-	-	-		-	5	-	-	5	-	-	-	-
H	-	-	-	-	4	-	-		-	-	-	-	-	-	-	-
I	4	4	-	-	-	-	-	-		-	-	5	-	-	5	-
J	-	4	-	4	-	-	-	-	-		-	-	-	-	-	-
K	-	4	4	-	-	-	-	-	-	-		-	-	5	-	-
L	-	4	4	-	-	-	-	-	-	5	5		-	5	-	-
M	4	-	4	4	-	5	-	-	-	5	-	-		5	-	-
N	-	-	4	4	-	4	-	-	-	5	-	-	-		-	-
O	-	4	-	4	-	-	-	-	-	-	-	-	4	-		-
P	4	-	-	4	-	5	5	-	5	-	-	-	4	-	-	

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage \ To Stage	1	2	3	4	5	6
1		2	2	2	2	2
2	4		4	5	5	5
3	4	5		5	5	5
4	4	5	4		5	5
5	4	5	5	4		5
6	4	4	4	5	5	

Phases in Stage

Stage No.	Phases in Stage
1	A B C D E
2	B F G H
3	B E G M
4	H L M
5	E N O P
6	H I J K

Lane Input Data

Junction: Unnamed Junction

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1	U	G	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 16 Ahead	Inf
1/2	U	F	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 13 Right	Inf
2/1	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/1	U	K	2	3	11.3	Geom	-	3.00	0.00	Y	Arm 16 Left	Inf
4/2	U	J	2	3	11.3	Geom	-	3.00	0.00	Y	Arm 13 Ahead	Inf
4/3	U	I	2	3	11.3	Geom	-	3.00	0.00	Y	Arm 2 Right	Inf
5/1	U		2	3	4.9	Inf	-	-	-	-	-	-
5/2	U		2	3	4.9	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Geom	-	4.00	0.00	Y	Arm 5 Ahead	Inf
7/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1	U		2	3	60.0	Inf	-	-	-	-	-	-
10/2	U		2	3	60.0	Inf	-	-	-	-	-	-
11/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
12/1	U	P	2	3	12.2	Geom	-	3.50	0.00	Y	Arm 2 Left	Inf
12/2	U	O	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 8 Ahead	Inf
12/3	U	N	2	3	8.7	Geom	-	3.00	0.00	Y	Arm 16 Right	Inf
13/1	U		2	3	60.0	Inf	-	-	-	-	-	-
14/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
15/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y	Arm 3 Left	Inf
16/1	U		2	3	60.0	Inf	-	-	-	-	-	-
17/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
18/1	U	M	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 2 Ahead	Inf
											Arm 13 Left	Inf
18/2	U	L	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 8 Right	Inf
19/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
20/1	U	H	2	3	10.8	Geom	-	3.00	0.00	Y	Arm 9 Ahead	Inf

Give-Way Lane Input Data

Junction: Unnamed Junction
There are no Opposed Lanes in this Junction

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

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1	3.00	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1915	1915
1/2	3.00	0.00	Y	Arm 13 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1	3.00	0.00	Y	Arm 16 Left	Inf	100.0 %	1915	1915
4/2	3.00	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1915	1915
4/3	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	4.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2015	2015
7/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
11/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 2 Left	Inf	100.0 %	1965	1965
12/2	3.00	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1915	1915
12/3	3.00	0.00	Y	Arm 16 Right	Inf	100.0 %	1915	1915
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
15/1 (CW)	2.00	0.00	Y	Arm 3 Left	Inf	0.0 %	1815	1815
16/1	Infinite Saturation Flow						Inf	Inf
17/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
18/1	3.50	0.00	Y	Arm 2 Ahead	Inf	43.9 %	1965	1965
				Arm 13 Left	Inf	56.1 %		
18/2	3.00	0.00	Y	Arm 8 Right	Inf	100.0 %	1915	1915
19/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
20/1	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915

Bonus Green Times

No Bonus Greens are defined For Scenario 1

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

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1	3.00	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1915	1915
1/2	3.00	0.00	Y	Arm 13 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1	3.00	0.00	Y	Arm 16 Left	Inf	100.0 %	1915	1915
4/2	3.00	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1915	1915
4/3	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	4.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2015	2015
7/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
11/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 2 Left	Inf	100.0 %	1965	1965
12/2	3.00	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1915	1915
12/3	3.00	0.00	Y	Arm 16 Right	Inf	100.0 %	1915	1915
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
15/1 (CW)	2.00	0.00	Y	Arm 3 Left	Inf	0.0 %	1815	1815
16/1	Infinite Saturation Flow						Inf	Inf
17/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
18/1	3.50	0.00	Y	Arm 2 Ahead	Inf	44.2 %	1965	1965
				Arm 13 Left	Inf	55.8 %		
18/2	3.00	0.00	Y	Arm 8 Right	Inf	100.0 %	1915	1915
19/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
20/1	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915

Bonus Green Times
No Bonus Greens are defined For Scenario 2

Traffic Flow Groups

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

Traffic Flows, Desired
FG1: 'AM'
Desired Flow :

	Destination	
Origin		Tot.
	Tot.	-

FG2: 'PM'
Desired Flow :

	Destination	
Origin		Tot.
	Tot.	-

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

Stage	1	2	3	4	5	6
Duration	7	11	12	30	14	21
Change Point	0	11	24	40	75	94

Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	7	4	11			
B	Pedestrians across	Pedestrian	36	4	40			
C	Pedestrians across	Pedestrian	7	4	11			
D	Pedestrians across	Pedestrian	7	4	11			
E	Pedestrians across	Pedestrian	7	4	11	12	28	40
F	Right	Traffic	11	13	24			
G	Ahead	Traffic	27	13	40			
H	Ahead	Traffic	11	13	24	33	42	75
I	Right	Traffic	21	99	0			
J	Ahead	Traffic	21	99	0			
K	Left	Traffic	24	96	0			
L	Right	Traffic	30	45	75			
M	Ahead Left	Traffic	49	26	75			
N	Right	Traffic	14	80	94			
O	Ahead	Traffic	17	77	94			
P	Left	Traffic	17	77	94			

Phase Name	Description	Phase	Green Period 3		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian			
B	Pedestrians across	Pedestrian			
C	Pedestrians across	Pedestrian			
D	Pedestrians across	Pedestrian			
E	Pedestrians across	Pedestrian	15	79	94
F	Right	Traffic			
G	Ahead	Traffic			
H	Ahead	Traffic	24	96	0
I	Right	Traffic			
J	Ahead	Traffic			
K	Left	Traffic			
L	Right	Traffic			
M	Ahead Left	Traffic			
N	Right	Traffic			
O	Ahead	Traffic			
P	Left	Traffic			

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**82.9%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**82.9%**
1/1	Ahead	U	N/A	N/A	G		1	27	-	-	297	1915	447	66.5%
1/2	Right	U	N/A	N/A	F		1	11	-	-	133	1915	191	69.5%
2/1		U	N/A	N/A	-		-	-	-	-	587	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
4/1	Left	U	N/A	N/A	K		1	24	-	-	135	1915	399	33.8%
4/2	Ahead	U	N/A	N/A	J		1	21	-	-	223	1915	351	63.5%
4/3	Right	U	N/A	N/A	I		1	21	-	-	252	1915	351	71.8%
5/1	Ahead	U	N/A	N/A	-		-	-	-	-	135	Inf	Inf	0.0%
5/2	Ahead	U	N/A	N/A	-		-	-	-	-	475	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	-	610	2015	2015	30.3%
7/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	-		-	-	-	-	520	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	-	846	Inf	Inf	0.0%
10/1	Ahead Left	U	N/A	N/A	-		-	-	-	-	623	Inf	Inf	0.0%
10/2	Ahead	U	N/A	N/A	-		-	-	-	-	133	Inf	Inf	0.0%
11/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
12/1	Left	U	N/A	N/A	P		1	17	-	-	87	1965	295	29.5%
12/2+12/3	Ahead Right	U	N/A	N/A	O N		1	17:14	-	-	303	1915:1915	287+78	82.9 : 82.9%
13/1		U	N/A	N/A	-		-	-	-	-	674	Inf	Inf	0.0%
14/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	-
15/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
16/1		U	N/A	N/A	-		-	-	-	-	482	Inf	Inf	0.0%

17/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
18/1	Ahead Left	U	N/A	N/A	M		1	49	-	-	608	1965	819	74.3%
18/2	Right	U	N/A	N/A	L		1	30	-	-	282	1915	495	57.0%
19/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
20/1	Ahead	U	N/A	N/A	H		3	68	-	-	326	1915	1133	28.8%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	7	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	36	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	7	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	E		3	34	-	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	D		1	7	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	**-**	**-**	**0**	**0**	**0**	**26.6**	**9.4**	**0.0**	**35.9**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**26.6**	**9.4**	**0.0**	**35.9**	**-**	**-**	**-**	**-**	
1/1	297	297	-	-	-	3.4	1.0	-	4.4	53.6	8.9	1.0	9.9	
1/2	133	133	-	-	-	1.9	1.1	-	3.0	81.9	4.3	1.1	5.4	
2/1	587	587	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/1	135	135	-	-	-	1.5	0.3	-	1.8	47.3	3.8	0.3	4.1	
4/2	223	223	-	-	-	2.8	0.9	-	3.7	59.2	6.8	0.9	7.7	
4/3	252	252	-	-	-	3.2	1.2	-	4.5	63.8	7.8	1.2	9.1	
5/1	135	135	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	475	475	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	610	610	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	520	520	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/1	846	846	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	623	623	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	133	133	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	87	87	-	-	-	1.1	0.2	-	1.3	54.0	2.6	0.2	2.8	
12/2+12/3	303	303	-	-	-	4.1	2.3	-	6.4	75.9	7.7	2.3	9.9	
13/1	674	674	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
14/1	-	-	-	-	-	-	-	-	-	-	-	-	-	
15/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	482	482	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
17/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

18/1	608	608	-	-	-	5.0	1.4	-	6.4	38.0	17.1	1.4	18.5	
18/2	282	282	-	-	-	3.0	0.7	-	3.7	47.1	8.1	0.7	8.8	
19/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/1	326	326	-	-	-	0.4	0.2	-	0.6	6.4	2.2	0.2	2.4	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	

C1 PRC for Signalled Lanes (%): 8.6 Total Delay for Signalled Lanes (pcuHr): 35.73 Cycle Time (s): 120
PRC Over All Lanes (%): 8.6 Total Delay Over All Lanes(pcuHr): 35.95

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

Stage Timings

Stage	1	2	3	4	5	6
Duration	7	12	17	12	24	23
Change Point	0	11	25	46	63	92

Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	7	4	11			
B	Pedestrians across	Pedestrian	42	4	46			
C	Pedestrians across	Pedestrian	7	4	11			
D	Pedestrians across	Pedestrian	7	4	11			
E	Pedestrians across	Pedestrian	7	4	11	17	29	46
F	Right	Traffic	12	13	25			
G	Ahead	Traffic	33	13	46			
H	Ahead	Traffic	12	13	25	15	48	63
I	Right	Traffic	23	97	0			
J	Ahead	Traffic	23	97	0			
K	Left	Traffic	26	94	0			
L	Right	Traffic	12	51	63			
M	Ahead Left	Traffic	36	27	63			
N	Right	Traffic	24	68	92			
O	Ahead	Traffic	27	65	92			
P	Left	Traffic	27	65	92			

Basic Input Data and Results

Phase Name	Description	Phase	Green Period 3		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian			
B	Pedestrians across	Pedestrian			
C	Pedestrians across	Pedestrian			
D	Pedestrians across	Pedestrian			
E	Pedestrians across	Pedestrian	25	67	92
F	Right	Traffic			
G	Ahead	Traffic			
H	Ahead	Traffic	26	94	0
I	Right	Traffic			
J	Ahead	Traffic			
K	Left	Traffic			
L	Right	Traffic			
M	Ahead Left	Traffic			
N	Right	Traffic			
O	Ahead	Traffic			
P	Left	Traffic			

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**88.6%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**88.6%**
1/1	Ahead	U	N/A	N/A	G		1	33	-	-	481	1915	543	88.6%
1/2	Right	U	N/A	N/A	F		1	12	-	-	106	1915	207	51.1%
2/1		U	N/A	N/A	-		-	-	-	-	591	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
4/1	Left	U	N/A	N/A	K		1	26	-	-	308	1915	431	71.5%
4/2	Ahead	U	N/A	N/A	J		1	23	-	-	293	1915	383	76.5%
4/3	Right	U	N/A	N/A	I		1	23	-	-	263	1915	383	68.7%
5/1	Ahead	U	N/A	N/A	-		-	-	-	-	308	Inf	Inf	0.0%
5/2	Ahead	U	N/A	N/A	-		-	-	-	-	556	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	-	875	2015	2015	43.4%
7/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	-		-	-	-	-	515	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	-	766	Inf	Inf	0.0%
10/1	Ahead Left	U	N/A	N/A	-		-	-	-	-	732	Inf	Inf	0.0%
10/2	Ahead	U	N/A	N/A	-		-	-	-	-	106	Inf	Inf	0.0%
11/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
12/1	Left	U	N/A	N/A	P		1	27	-	-	199	1965	458	43.4%
12/2+12/3	Ahead Right	U	N/A	N/A	O N		1	27:24	-	-	456	1915:1915	421+97	88.1 : 88.1%
13/1		U	N/A	N/A	-		-	-	-	-	577	Inf	Inf	0.0%
14/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
15/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
16/1		U	N/A	N/A	-		-	-	-	-	874	Inf	Inf	0.0%

17/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
18/1	Ahead Left	U	N/A	N/A	M		1	36	-	-	319	1965	606	52.7%
18/2	Right	U	N/A	N/A	L		1	12	-	-	144	1915	207	69.4%
19/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
20/1	Ahead	U	N/A	N/A	H		3	53	-	-	251	1915	894	28.1%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	7	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	42	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	7	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	E		3	49	-	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	D		1	7	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	**-**	**-**	**0**	**0**	**0**	**30.9**	**13.8**	**0.0**	**44.7**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**30.9**	**13.8**	**0.0**	**44.7**	**-**	**-**	**-**	**-**	
1/1	481	481	-	-	-	5.5	3.5	-	9.0	67.4	15.2	3.5	18.7	
1/2	106	106	-	-	-	1.5	0.5	-	2.0	68.1	3.3	0.5	3.8	
2/1	591	591	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/1	308	308	-	-	-	3.7	1.2	-	4.9	57.3	9.4	1.2	10.6	
4/2	293	293	-	-	-	3.7	1.6	-	5.3	64.7	9.2	1.6	10.8	
4/3	263	263	-	-	-	3.3	1.1	-	4.3	59.3	8.1	1.1	9.2	
5/1	308	308	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	556	556	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	875	875	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4	
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	515	515	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/1	766	766	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	732	732	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	106	106	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	199	199	-	-	-	2.2	0.4	-	2.6	46.2	5.6	0.4	6.0	
12/2+12/3	456	456	-	-	-	5.5	3.3	-	8.8	69.6	12.4	3.3	15.8	
13/1	577	577	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
14/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	874	874	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
17/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

18/1	319	319	-	-	-	3.0	0.6	-	3.6	40.5	8.8	0.6	9.3	
18/2	144	144	-	-	-	2.1	1.1	-	3.2	79.0	4.6	1.1	5.7	
19/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/1	251	251	-	-	-	0.5	0.2	-	0.7	10.1	2.4	0.2	2.6	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	

C1 PRC for Signalled Lanes (%): 1.5 Total Delay for Signalled Lanes (pcuHr): 44.33 Cycle Time (s): 120
PRC Over All Lanes (%): 1.5 Total Delay Over All Lanes(pcuHr): 44.72

Basic Input Data and Results

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Site 2_OpeningYear+5_2035_W_Dev.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	AM	AM	Network Control Plan 1	08:00 - 09:00	120	8.6	38.99
2	PM	PM	Network Control Plan 1	17:00 - 18:00	120	2.0	50.63

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Pedestrian		7	7
B	Pedestrian		7	7
C	Pedestrian		7	7
D	Pedestrian		7	7
E	Pedestrian		7	7
F	Traffic		7	7
G	Traffic		7	7
H	Traffic		7	7
I	Traffic		7	7
J	Traffic		7	7
K	Traffic		7	7
L	Traffic		7	7
M	Traffic		7	7
N	Traffic		7	7
O	Traffic		7	7
P	Traffic		7	7

Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
C	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-
D	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
E	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
F	4	-	-	4	-		-	-	5	-	-	-	-	-	5	-
G	4	-	4	-	-	-		-	5	-	-	5	-	-	-	-
H	-	-	-	-	4	-	-		-	-	-	-	-	-	-	-
I	4	4	-	-	-	-	-	-		-	-	5	-	-	5	-
J	-	4	-	4	-	-	-	-	-		-	-	-	-	-	-
K	-	4	4	-	-	-	-	-	-	-		-	-	5	-	-
L	-	4	4	-	-	-	-	-	-	5	5		-	5	-	-
M	4	-	4	4	-	5	-	-	-	5	-	-		5	-	-
N	-	-	4	4	-	4	-	-	-	5	-	-	-		-	-
O	-	4	-	4	-	-	-	-	-	-	-	-	4	-		-
P	4	-	-	4	-	5	5	-	5	-	-	-	4	-	-	

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage \ To Stage	1	2	3	4	5	6
1		2	2	2	2	2
2	4		4	5	5	5
3	4	5		5	5	5
4	4	5	4		5	5
5	4	5	5	4		5
6	4	4	4	5	5	

Phases in Stage

Stage No.	Phases in Stage
1	A B C D E
2	B F G H
3	B E G M
4	H L M
5	E N O P
6	H I J K

Lane Input Data

Junction: Unnamed Junction

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1	U	G	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 16 Ahead	Inf
1/2	U	F	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 13 Right	Inf
2/1	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/1	U	K	2	3	11.3	Geom	-	3.00	0.00	Y	Arm 16 Left	Inf
4/2	U	J	2	3	11.3	Geom	-	3.00	0.00	Y	Arm 13 Ahead	Inf
4/3	U	I	2	3	11.3	Geom	-	3.00	0.00	Y	Arm 2 Right	Inf
5/1	U		2	3	4.9	Inf	-	-	-	-	-	-
5/2	U		2	3	4.9	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Geom	-	4.00	0.00	Y	Arm 5 Ahead	Inf
7/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1	U		2	3	60.0	Inf	-	-	-	-	-	-
10/2	U		2	3	60.0	Inf	-	-	-	-	-	-
11/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
12/1	U	P	2	3	12.2	Geom	-	3.50	0.00	Y	Arm 2 Left	Inf
12/2	U	O	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 8 Ahead	Inf
12/3	U	N	2	3	8.7	Geom	-	3.00	0.00	Y	Arm 16 Right	Inf
13/1	U		2	3	60.0	Inf	-	-	-	-	-	-
14/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
15/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y	Arm 3 Left	Inf
16/1	U		2	3	60.0	Inf	-	-	-	-	-	-
17/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
18/1	U	M	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 2 Ahead	Inf
											Arm 13 Left	Inf
18/2	U	L	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 8 Right	Inf
19/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
20/1	U	H	2	3	10.8	Geom	-	3.00	0.00	Y	Arm 9 Ahead	Inf

Give-Way Lane Input Data

Junction: Unnamed Junction
There are no Opposed Lanes in this Junction

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

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1	3.00	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1915	1915
1/2	3.00	0.00	Y	Arm 13 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1	3.00	0.00	Y	Arm 16 Left	Inf	100.0 %	1915	1915
4/2	3.00	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1915	1915
4/3	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	4.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2015	2015
7/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
11/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 2 Left	Inf	100.0 %	1965	1965
12/2	3.00	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1915	1915
12/3	3.00	0.00	Y	Arm 16 Right	Inf	100.0 %	1915	1915
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
15/1 (CW)	2.00	0.00	Y	Arm 3 Left	Inf	0.0 %	1815	1815
16/1	Infinite Saturation Flow						Inf	Inf
17/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
18/1	3.50	0.00	Y	Arm 2 Ahead	Inf	41.9 %	1965	1965
				Arm 13 Left	Inf	58.1 %		
18/2	3.00	0.00	Y	Arm 8 Right	Inf	100.0 %	1915	1915
19/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
20/1	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915

Bonus Green Times

No Bonus Greens are defined For Scenario 1

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

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1	3.00	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1915	1915
1/2	3.00	0.00	Y	Arm 13 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1	3.00	0.00	Y	Arm 16 Left	Inf	100.0 %	1915	1915
4/2	3.00	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1915	1915
4/3	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	4.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2015	2015
7/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
11/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 2 Left	Inf	100.0 %	1965	1965
12/2	3.00	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1915	1915
12/3	3.00	0.00	Y	Arm 16 Right	Inf	100.0 %	1915	1915
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
15/1 (CW)	2.00	0.00	Y	Arm 3 Left	Inf	0.0 %	1815	1815
16/1	Infinite Saturation Flow						Inf	Inf
17/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
18/1	3.50	0.00	Y	Arm 2 Ahead	Inf	42.0 %	1965	1965
				Arm 13 Left	Inf	58.0 %		
18/2	3.00	0.00	Y	Arm 8 Right	Inf	100.0 %	1915	1915
19/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
20/1	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915

Bonus Green Times

No Bonus Greens are defined For Scenario 2

Traffic Flow Groups

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

Traffic Flows, Desired

FG1: 'AM'

Desired Flow :

	Destination	
Origin		Tot.
	Tot.	-

FG2: 'PM'

Desired Flow :

	Destination	
Origin		Tot.
	Tot.	-

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

Stage Timings

Stage	1	2	3	4	5	6
Duration	7	11	12	30	14	21
Change Point	0	11	24	40	75	94

Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	7	4	11			
B	Pedestrians across	Pedestrian	36	4	40			
C	Pedestrians across	Pedestrian	7	4	11			
D	Pedestrians across	Pedestrian	7	4	11			
E	Pedestrians across	Pedestrian	7	4	11	12	28	40
F	Right	Traffic	11	13	24			
G	Ahead	Traffic	27	13	40			
H	Ahead	Traffic	11	13	24	33	42	75
I	Right	Traffic	21	99	0			
J	Ahead	Traffic	21	99	0			
K	Left	Traffic	24	96	0			
L	Right	Traffic	30	45	75			
M	Ahead Left	Traffic	49	26	75			
N	Right	Traffic	14	80	94			
O	Ahead	Traffic	17	77	94			
P	Left	Traffic	17	77	94			

Phase Name	Description	Phase	Green Period 3		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian			
B	Pedestrians across	Pedestrian			
C	Pedestrians across	Pedestrian			
D	Pedestrians across	Pedestrian			
E	Pedestrians across	Pedestrian	15	79	94
F	Right	Traffic			
G	Ahead	Traffic			
H	Ahead	Traffic	24	96	0
I	Right	Traffic			
J	Ahead	Traffic			
K	Left	Traffic			
L	Right	Traffic			
M	Ahead Left	Traffic			
N	Right	Traffic			
O	Ahead	Traffic			
P	Left	Traffic			

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**82.9%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**82.9%**
1/1	Ahead	U	N/A	N/A	G		1	27	-	-	303	1915	447	67.8%
1/2	Right	U	N/A	N/A	F		1	11	-	-	133	1915	191	69.5%
2/1		U	N/A	N/A	-		-	-	-	-	587	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
4/1	Left	U	N/A	N/A	K		1	24	-	-	160	1915	399	40.1%
4/2	Ahead	U	N/A	N/A	J		1	21	-	-	223	1915	351	63.5%
4/3	Right	U	N/A	N/A	I		1	21	-	-	252	1915	351	71.8%
5/1	Ahead	U	N/A	N/A	-		-	-	-	-	160	Inf	Inf	0.0%
5/2	Ahead	U	N/A	N/A	-		-	-	-	-	475	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	-	635	2015	2015	31.5%
7/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	-		-	-	-	-	564	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	-	890	Inf	Inf	0.0%
10/1	Ahead Left	U	N/A	N/A	-		-	-	-	-	623	Inf	Inf	0.0%
10/2	Ahead	U	N/A	N/A	-		-	-	-	-	133	Inf	Inf	0.0%
11/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
12/1	Left	U	N/A	N/A	P		1	17	-	-	87	1965	295	29.5%
12/2+12/3	Ahead Right	U	N/A	N/A	O N		1	17:14	-	-	328	1915:1915	287+109	82.9 : 82.9%
13/1		U	N/A	N/A	-		-	-	-	-	740	Inf	Inf	0.0%
14/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	-
15/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
16/1		U	N/A	N/A	-		-	-	-	-	553	Inf	Inf	0.0%

Basic Input Data and Results

17/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
18/1	Ahead Left	U	N/A	N/A	M		1	49	-	-	661	1965	819	80.7%
18/2	Right	U	N/A	N/A	L		1	30	-	-	326	1915	495	65.9%
19/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
20/1	Ahead	U	N/A	N/A	H		3	68	-	-	326	1915	1133	28.8%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	7	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	36	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	7	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	E		3	34	-	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	D		1	7	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	**-**	**-**	**0**	**0**	**0**	**28.5**	**10.5**	**0.0**	**39.0**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**28.5**	**10.5**	**0.0**	**39.0**	**-**	**-**	**-**	**-**	
1/1	303	303	-	-	-	3.5	1.0	-	4.6	54.2	9.2	1.0	10.2	
1/2	133	133	-	-	-	1.9	1.1	-	3.0	81.9	4.3	1.1	5.4	
2/1	587	587	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/1	160	160	-	-	-	1.8	0.3	-	2.2	48.6	4.6	0.3	4.9	
4/2	223	223	-	-	-	2.8	0.9	-	3.7	59.2	6.8	0.9	7.7	
4/3	252	252	-	-	-	3.2	1.2	-	4.5	63.8	7.8	1.2	9.1	
5/1	160	160	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	475	475	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	635	635	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	564	564	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/1	890	890	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	623	623	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	133	133	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	87	87	-	-	-	1.1	0.2	-	1.3	54.0	2.6	0.2	2.8	
12/2+12/3	328	328	-	-	-	4.5	2.3	-	6.7	74.0	7.7	2.3	9.9	
13/1	740	740	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
14/1	-	-	-	-	-	-	-	-	-	-	-	-	-	
15/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	553	553	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
17/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

18/1	661	661	-	-	-	5.6	2.0	-	7.7	41.9	19.3	2.0	21.3	
18/2	326	326	-	-	-	3.6	1.0	-	4.6	50.3	9.7	1.0	10.6	
19/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/1	326	326	-	-	-	0.4	0.2	-	0.6	6.4	2.2	0.2	2.4	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	

C1 PRC for Signalled Lanes (%): 8.6 Total Delay for Signalled Lanes (pcuHr): 38.76 Cycle Time (s): 120
PRC Over All Lanes (%): 8.6 Total Delay Over All Lanes(pcuHr): 38.99

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

Stage Timings

Stage	1	2	3	4	5	6
Duration	7	12	18	11	26	21
Change Point	0	11	25	47	63	94

Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	7	4	11			
B	Pedestrians across	Pedestrian	43	4	47			
C	Pedestrians across	Pedestrian	7	4	11			
D	Pedestrians across	Pedestrian	7	4	11			
E	Pedestrians across	Pedestrian	7	4	11	18	29	47
F	Right	Traffic	12	13	25			
G	Ahead	Traffic	34	13	47			
H	Ahead	Traffic	12	13	25	14	49	63
I	Right	Traffic	21	99	0			
J	Ahead	Traffic	21	99	0			
K	Left	Traffic	24	96	0			
L	Right	Traffic	11	52	63			
M	Ahead Left	Traffic	36	27	63			
N	Right	Traffic	26	68	94			
O	Ahead	Traffic	29	65	94			
P	Left	Traffic	29	65	94			

Basic Input Data and Results

Phase Name	Description	Phase	Green Period 3		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian			
B	Pedestrians across	Pedestrian			
C	Pedestrians across	Pedestrian			
D	Pedestrians across	Pedestrian			
E	Pedestrians across	Pedestrian	27	67	94
F	Right	Traffic			
G	Ahead	Traffic			
H	Ahead	Traffic	24	96	0
I	Right	Traffic			
J	Ahead	Traffic			
K	Left	Traffic			
L	Right	Traffic			
M	Ahead Left	Traffic			
N	Right	Traffic			
O	Ahead	Traffic			
P	Left	Traffic			

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**88.3%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**88.3%**
1/1	Ahead	U	N/A	N/A	G		1	34	-	-	489	1915	559	87.5%
1/2	Right	U	N/A	N/A	F		1	12	-	-	106	1915	207	51.1%
2/1		U	N/A	N/A	-		-	-	-	-	609	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
4/1	Left	U	N/A	N/A	K		1	24	-	-	345	1915	399	86.5%
4/2	Ahead	U	N/A	N/A	J		1	21	-	-	293	1915	351	83.5%
4/3	Right	U	N/A	N/A	I		1	21	-	-	263	1915	351	74.9%
5/1	Ahead	U	N/A	N/A	-		-	-	-	-	345	Inf	Inf	0.0%
5/2	Ahead	U	N/A	N/A	-		-	-	-	-	556	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	-	901	2015	2015	44.7%
7/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	-		-	-	-	-	540	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	-	791	Inf	Inf	0.0%
10/1	Ahead Left	U	N/A	N/A	-		-	-	-	-	732	Inf	Inf	0.0%
10/2	Ahead	U	N/A	N/A	-		-	-	-	-	106	Inf	Inf	0.0%
11/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
12/1	Left	U	N/A	N/A	P		1	29	-	-	199	1965	491	40.5%
12/2+12/3	Ahead Right	U	N/A	N/A	O N		1	29:26	-	-	493	1915:1915	433+143	85.6 : 85.6%
13/1		U	N/A	N/A	-		-	-	-	-	602	Inf	Inf	0.0%
14/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
15/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
16/1		U	N/A	N/A	-		-	-	-	-	956	Inf	Inf	0.0%

17/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
18/1	Ahead Left	U	N/A	N/A	M		1	36	-	-	350	1965	606	57.8%
18/2	Right	U	N/A	N/A	L		1	11	-	-	169	1915	191	88.3%
19/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
20/1	Ahead	U	N/A	N/A	H		3	50	-	-	251	1915	846	29.7%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	7	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	43	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	7	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	E		3	52	-	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	D		1	7	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	**-**	**-**	**0**	**0**	**0**	**32.8**	**17.8**	**0.0**	**50.6**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**32.8**	**17.8**	**0.0**	**50.6**	**-**	**-**	**-**	**-**	
1/1	489	489	-	-	-	5.5	3.2	-	8.7	64.1	15.5	3.2	18.7	
1/2	106	106	-	-	-	1.5	0.5	-	2.0	68.1	3.3	0.5	3.8	
2/1	609	609	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/1	345	345	-	-	-	4.4	2.9	-	7.3	76.0	11.0	2.9	13.9	
4/2	293	293	-	-	-	3.8	2.3	-	6.2	75.9	9.4	2.3	11.7	
4/3	263	263	-	-	-	3.4	1.4	-	4.8	66.2	8.3	1.4	9.7	
5/1	345	345	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	556	556	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	901	901	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4	
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	540	540	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/1	791	791	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	732	732	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	106	106	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	199	199	-	-	-	2.1	0.3	-	2.4	43.7	5.5	0.3	5.9	
12/2+12/3	493	493	-	-	-	5.7	2.8	-	8.5	61.8	12.5	2.8	15.3	
13/1	602	602	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
14/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	956	956	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
17/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

18/1	350	350	-	-	-	3.4	0.7	-	4.1	41.9	9.7	0.7	10.4	
18/2	169	169	-	-	-	2.5	3.0	-	5.5	116.6	5.5	3.0	8.5	
19/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/1	251	251	-	-	-	0.6	0.2	-	0.8	11.2	2.5	0.2	2.7	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	

C1 PRC for Signalled Lanes (%): 2.0 Total Delay for Signalled Lanes (pcuHr): 50.22 Cycle Time (s): 120
PRC Over All Lanes (%): 2.0 Total Delay Over All Lanes(pcuHr): 50.63

Basic Input Data and Results

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Site 2_OpeningYear+15_2045_No_Dev.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	AM	AM	Network Control Plan 1	08:00 - 09:00	120	2.6	40.10
2	PM	PM	Network Control Plan 1	17:00 - 18:00	120	1.6	51.99

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Pedestrian		7	5
B	Pedestrian		7	7
C	Pedestrian		7	5
D	Pedestrian		7	5
E	Pedestrian		7	7
F	Traffic		7	7
G	Traffic		7	7
H	Traffic		7	7
I	Traffic		7	7
J	Traffic		7	7
K	Traffic		7	7
L	Traffic		7	7
M	Traffic		7	7
N	Traffic		7	7
O	Traffic		7	7
P	Traffic		7	7

Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
C	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-
D	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
E	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
F	4	-	-	4	-		-	-	5	-	-	-	-	-	5	-
G	4	-	4	-	-	-		-	5	-	-	5	-	-	-	-
H	-	-	-	-	4	-	-		-	-	-	-	-	-	-	-
I	4	4	-	-	-	-	-	-		-	-	5	-	-	5	-
J	-	4	-	4	-	-	-	-	-		-	-	-	-	-	-
K	-	4	4	-	-	-	-	-	-	-		-	-	5	-	-
L	-	4	4	-	-	-	-	-	-	5	5		-	5	-	-
M	4	-	4	4	-	5	-	-	-	5	-	-		5	-	-
N	-	-	4	4	-	4	-	-	-	5	-	-	-		-	-
O	-	4	-	4	-	-	-	-	-	-	-	-	4	-		-
P	4	-	-	4	-	5	5	-	5	-	-	-	4	-	-	

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	A	Losing	2	2
1	2	C	Losing	2	2
1	2	D	Losing	2	2
1	2	E	Losing	2	2
1	3	A	Losing	2	2
1	3	C	Losing	2	2
1	3	D	Losing	2	2
1	4	A	Losing	2	2
1	4	B	Losing	2	2
1	4	C	Losing	2	2
1	4	D	Losing	2	2
1	4	E	Losing	2	2
1	5	A	Losing	2	2
1	5	B	Losing	2	2
1	5	C	Losing	2	2
1	5	D	Losing	2	2
1	6	A	Losing	2	2
1	6	B	Losing	2	2

Basic Input Data and Results

1	6	C	Losing	2	2
1	6	D	Losing	2	2
1	6	E	Losing	2	2

Prohibited Stage Change

		To Stage					
		1	2	3	4	5	6
From Stage	1		2	2	2	2	2
	2	4		4	5	5	5
	3	4	5		5	5	5
	4	4	5	4		5	5
	5	4	5	5	4		5
	6	4	4	4	5	5	

Phases in Stage

Stage No.	Phases in Stage
1	A B C D E
2	B F G H
3	B E G M
4	H L M
5	E N O P
6	H I J K

Lane Input Data

Junction: Unnamed Junction

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1	U	G	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 16 Ahead	Inf
1/2	U	F	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 13 Right	Inf
2/1	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/1	U	K	2	3	11.3	Geom	-	3.00	0.00	Y	Arm 16 Left	Inf
4/2	U	J	2	3	11.3	Geom	-	3.00	0.00	Y	Arm 13 Ahead	Inf
4/3	U	I	2	3	11.3	Geom	-	3.00	0.00	Y	Arm 2 Right	Inf
5/1	U		2	3	4.9	Inf	-	-	-	-	-	-
5/2	U		2	3	4.9	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Geom	-	4.00	0.00	Y	Arm 5 Ahead	Inf
7/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1	U		2	3	60.0	Inf	-	-	-	-	-	-
10/2	U		2	3	60.0	Inf	-	-	-	-	-	-
11/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
12/1	U	P	2	3	12.2	Geom	-	3.50	0.00	Y	Arm 2 Left	Inf
12/2	U	O	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 8 Ahead	Inf
12/3	U	N	2	3	8.7	Geom	-	3.00	0.00	Y	Arm 16 Right	Inf
13/1	U		2	3	60.0	Inf	-	-	-	-	-	-
14/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
15/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y	Arm 3 Left	Inf
16/1	U		2	3	60.0	Inf	-	-	-	-	-	-
17/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
18/1	U	M	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 2 Ahead	Inf
											Arm 13 Left	Inf
18/2	U	L	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 8 Right	Inf
19/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
20/1	U	H	2	3	10.8	Geom	-	3.00	0.00	Y	Arm 9 Ahead	Inf

Give-Way Lane Input Data

Junction: Unnamed Junction
There are no Opposed Lanes in this Junction

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

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1	3.00	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1915	1915
1/2	3.00	0.00	Y	Arm 13 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1	3.00	0.00	Y	Arm 16 Left	Inf	100.0 %	1915	1915
4/2	3.00	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1915	1915
4/3	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	4.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2015	2015
7/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
11/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 2 Left	Inf	100.0 %	1965	1965
12/2	3.00	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1915	1915
12/3	3.00	0.00	Y	Arm 16 Right	Inf	100.0 %	1915	1915
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
15/1 (CW)	2.00	0.00	Y	Arm 3 Left	Inf	0.0 %	1815	1815
16/1	Infinite Saturation Flow						Inf	Inf
17/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
18/1	3.50	0.00	Y	Arm 2 Ahead	Inf	43.9 %	1965	1965
				Arm 13 Left	Inf	56.1 %		
18/2	3.00	0.00	Y	Arm 8 Right	Inf	100.0 %	1915	1915
19/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
20/1	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915

Bonus Green Times

No Bonus Greens are defined For Scenario 1

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

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1	3.00	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1915	1915
1/2	3.00	0.00	Y	Arm 13 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1	3.00	0.00	Y	Arm 16 Left	Inf	100.0 %	1915	1915
4/2	3.00	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1915	1915
4/3	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	4.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2015	2015
7/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
11/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 2 Left	Inf	100.0 %	1965	1965
12/2	3.00	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1915	1915
12/3	3.00	0.00	Y	Arm 16 Right	Inf	100.0 %	1915	1915
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
15/1 (CW)	2.00	0.00	Y	Arm 3 Left	Inf	0.0 %	1815	1815
16/1	Infinite Saturation Flow						Inf	Inf
17/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
18/1	3.50	0.00	Y	Arm 2 Ahead	Inf	44.2 %	1965	1965
				Arm 13 Left	Inf	55.8 %		
18/2	3.00	0.00	Y	Arm 8 Right	Inf	100.0 %	1915	1915
19/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
20/1	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915

Bonus Green Times

No Bonus Greens are defined For Scenario 2

Traffic Flow Groups

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

Traffic Flows, Desired

FG1: 'AM'

Desired Flow :

	Destination	
		Tot.
Origin	Tot.	-

FG2: 'PM'

Desired Flow :

	Destination	
		Tot.
Origin	Tot.	-

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

Stage Timings

Stage	1	2	3	4	5	6
Duration	7	11	12	30	14	21
Change Point	0	11	24	40	75	94

Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	9	4	13			
B	Pedestrians across	Pedestrian	36	4	40			
C	Pedestrians across	Pedestrian	9	4	13			
D	Pedestrians across	Pedestrian	9	4	13			
E	Pedestrians across	Pedestrian	9	4	13	12	28	40
F	Right	Traffic	11	13	24			
G	Ahead	Traffic	27	13	40			
H	Ahead	Traffic	11	13	24	33	42	75
I	Right	Traffic	21	99	0			
J	Ahead	Traffic	21	99	0			
K	Left	Traffic	24	96	0			
L	Right	Traffic	30	45	75			
M	Ahead Left	Traffic	49	26	75			
N	Right	Traffic	14	80	94			
O	Ahead	Traffic	17	77	94			
P	Left	Traffic	17	77	94			

Phase Name	Description	Phase	Green Period 3		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian			
B	Pedestrians across	Pedestrian			
C	Pedestrians across	Pedestrian			
D	Pedestrians across	Pedestrian			
E	Pedestrians across	Pedestrian	15	79	94
F	Right	Traffic			
G	Ahead	Traffic			
H	Ahead	Traffic	24	96	0
I	Right	Traffic			
J	Ahead	Traffic			
K	Left	Traffic			
L	Right	Traffic			
M	Ahead Left	Traffic			
N	Right	Traffic			
O	Ahead	Traffic			
P	Left	Traffic			

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**87.7%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**87.7%**
1/1	Ahead	U	N/A	N/A	G		1	27	-	-	315	1915	447	70.5%
1/2	Right	U	N/A	N/A	F		1	11	-	-	140	1915	191	73.1%
2/1		U	N/A	N/A	-		-	-	-	-	587	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
4/1	Left	U	N/A	N/A	K		1	24	-	-	143	1915	399	35.8%
4/2	Ahead	U	N/A	N/A	J		1	21	-	-	236	1915	351	67.2%
4/3	Right	U	N/A	N/A	I		1	21	-	-	267	1915	351	76.1%
5/1	Ahead	U	N/A	N/A	-		-	-	-	-	143	Inf	Inf	0.0%
5/2	Ahead	U	N/A	N/A	-		-	-	-	-	475	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	-	618	2015	2015	30.7%
7/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	-		-	-	-	-	564	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	-	890	Inf	Inf	0.0%
10/1	Ahead Left	U	N/A	N/A	-		-	-	-	-	661	Inf	Inf	0.0%
10/2	Ahead	U	N/A	N/A	-		-	-	-	-	140	Inf	Inf	0.0%
11/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
12/1	Left	U	N/A	N/A	P		1	17	-	-	92	1965	295	31.2%
12/2+12/3	Ahead Right	U	N/A	N/A	O N		1	17:14	-	-	321	1915:1915	287+79	87.7 : 87.7%
13/1		U	N/A	N/A	-		-	-	-	-	740	Inf	Inf	0.0%
14/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	-
15/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
16/1		U	N/A	N/A	-		-	-	-	-	553	Inf	Inf	0.0%

17/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
18/1	Ahead Left	U	N/A	N/A	M		1	49	-	-	644	1965	819	78.7%
18/2	Right	U	N/A	N/A	L		1	30	-	-	299	1915	495	60.4%
19/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
20/1	Ahead	U	N/A	N/A	H		3	68	-	-	346	1915	1133	30.5%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	9	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	36	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	9	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	E		3	36	-	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	D		1	9	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	**-**	**-**	**0**	**0**	**0**	**28.4**	**11.7**	**0.0**	**40.1**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**28.4**	**11.7**	**0.0**	**40.1**	**-**	**-**	**-**	**-**	
1/1	315	315	-	-	-	3.7	1.2	-	4.9	55.6	9.6	1.2	10.8	
1/2	140	140	-	-	-	2.0	1.3	-	3.3	85.7	4.5	1.3	5.8	
2/1	587	587	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/1	143	143	-	-	-	1.6	0.3	-	1.9	47.7	4.1	0.3	4.3	
4/2	236	236	-	-	-	3.0	1.0	-	4.0	61.0	7.3	1.0	8.3	
4/3	267	267	-	-	-	3.4	1.5	-	5.0	67.2	8.4	1.5	9.9	
5/1	143	143	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	475	475	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	618	618	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	564	564	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/1	890	890	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	661	661	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	140	140	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	92	92	-	-	-	1.2	0.2	-	1.4	54.3	2.7	0.2	3.0	
12/2+12/3	321	321	-	-	-	4.4	3.1	-	7.5	84.6	8.2	3.1	11.3	
13/1	740	740	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
14/1	-	-	-	-	-	-	-	-	-	-	-	-	-	
15/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	553	553	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
17/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

18/1	644	644	-	-	-	5.4	1.8	-	7.2	40.5	18.6	1.8	20.4	
18/2	299	299	-	-	-	3.2	0.8	-	4.0	48.2	8.7	0.8	9.5	
19/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/1	346	346	-	-	-	0.4	0.2	-	0.6	6.5	2.3	0.2	2.5	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	

C1 PRC for Signalled Lanes (%): 2.6 Total Delay for Signalled Lanes (pcuHr): 39.88 Cycle Time (s): 120
PRC Over All Lanes (%): 2.6 Total Delay Over All Lanes(pcuHr): 40.10

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

Stage Timings

Stage	1	2	3	4	5	6
Duration	7	13	18	10	26	21
Change Point	0	11	26	48	63	94

Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	9	4	13			
B	Pedestrians across	Pedestrian	44	4	48			
C	Pedestrians across	Pedestrian	9	4	13			
D	Pedestrians across	Pedestrian	9	4	13			
E	Pedestrians across	Pedestrian	9	4	13	18	30	48
F	Right	Traffic	13	13	26			
G	Ahead	Traffic	35	13	48			
H	Ahead	Traffic	13	13	26	13	50	63
I	Right	Traffic	21	99	0			
J	Ahead	Traffic	21	99	0			
K	Left	Traffic	24	96	0			
L	Right	Traffic	10	53	63			
M	Ahead Left	Traffic	35	28	63			
N	Right	Traffic	26	68	94			
O	Ahead	Traffic	29	65	94			
P	Left	Traffic	29	65	94			

Basic Input Data and Results

Phase Name	Description	Phase	Green Period 3		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian			
B	Pedestrians across	Pedestrian			
C	Pedestrians across	Pedestrian			
D	Pedestrians across	Pedestrian			
E	Pedestrians across	Pedestrian	27	67	94
F	Right	Traffic			
G	Ahead	Traffic			
H	Ahead	Traffic	24	96	0
I	Right	Traffic			
J	Ahead	Traffic			
K	Left	Traffic			
L	Right	Traffic			
M	Ahead Left	Traffic			
N	Right	Traffic			
O	Ahead	Traffic			
P	Left	Traffic			

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**88.6%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**88.6%**
1/1	Ahead	U	N/A	N/A	G		1	35	-	-	509	1915	574	88.6%
1/2	Right	U	N/A	N/A	F		1	13	-	-	112	1915	223	50.1%
2/1		U	N/A	N/A	-		-	-	-	-	645	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
4/1	Left	U	N/A	N/A	K		1	24	-	-	326	1915	399	81.7%
4/2	Ahead	U	N/A	N/A	J		1	21	-	-	310	1915	351	88.3%
4/3	Right	U	N/A	N/A	I		1	21	-	-	279	1915	351	79.5%
5/1	Ahead	U	N/A	N/A	-		-	-	-	-	326	Inf	Inf	0.0%
5/2	Ahead	U	N/A	N/A	-		-	-	-	-	589	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	-	915	2015	2015	45.4%
7/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	-		-	-	-	-	570	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	-	806	Inf	Inf	0.0%
10/1	Ahead Left	U	N/A	N/A	-		-	-	-	-	732	Inf	Inf	0.0%
10/2	Ahead	U	N/A	N/A	-		-	-	-	-	112	Inf	Inf	0.0%
11/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
12/1	Left	U	N/A	N/A	P		1	29	-	-	211	1965	491	43.0%
12/2+12/3	Ahead Right	U	N/A	N/A	O N		1	29:26	-	-	483	1915:1915	447+102	87.9 : 87.9%
13/1		U	N/A	N/A	-		-	-	-	-	635	Inf	Inf	0.0%
14/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
15/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
16/1		U	N/A	N/A	-		-	-	-	-	1008	Inf	Inf	0.0%

17/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
18/1	Ahead Left	U	N/A	N/A	M		1	35	-	-	339	1965	590	57.5%
18/2	Right	U	N/A	N/A	L		1	10	-	-	152	1915	176	86.6%
19/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
20/1	Ahead	U	N/A	N/A	H		3	50	-	-	266	1915	846	31.4%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	9	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	44	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	9	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	E		3	54	-	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	D		1	9	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	**-**	**-**	**0**	**0**	**0**	**33.1**	**18.8**	**0.0**	**52.0**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**33.1**	**18.8**	**0.0**	**52.0**	**-**	**-**	**-**	**-**	
1/1	509	509	-	-	-	5.7	3.5	-	9.2	64.9	16.1	3.5	19.6	
1/2	112	112	-	-	-	1.5	0.5	-	2.0	65.8	3.5	0.5	4.0	
2/1	645	645	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/1	326	326	-	-	-	4.1	2.1	-	6.2	68.6	10.3	2.1	12.4	
4/2	310	310	-	-	-	4.1	3.3	-	7.4	85.6	10.0	3.3	13.2	
4/3	279	279	-	-	-	3.6	1.8	-	5.5	70.6	8.8	1.8	10.7	
5/1	326	326	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	589	589	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	915	915	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4	
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	570	570	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/1	806	806	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	732	732	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	112	112	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	211	211	-	-	-	2.2	0.4	-	2.6	44.2	5.9	0.4	6.2	
12/2+12/3	483	483	-	-	-	5.7	3.3	-	8.9	66.7	13.3	3.3	16.6	
13/1	635	635	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
14/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	1008	1008	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
17/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

18/1	339	339	-	-	-	3.3	0.7	-	4.0	42.7	9.5	0.7	10.2	
18/2	152	152	-	-	-	2.3	2.6	-	4.9	116.2	5.0	2.6	7.6	
19/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/1	266	266	-	-	-	0.6	0.2	-	0.8	11.3	2.7	0.2	3.0	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	

C1 PRC for Signalled Lanes (%): 1.6 Total Delay for Signalled Lanes (pcuHr): 51.58 Cycle Time (s): 120
PRC Over All Lanes (%): 1.6 Total Delay Over All Lanes(pcuHr): 51.99

Basic Input Data and Results

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Site 2_OpeningYear+15_2045_W_Dev.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	AM	AM	Network Control Plan 1	08:00 - 09:00	120	2.6	43.52
2	PM	PM	Network Control Plan 1	17:00 - 18:00	120	-3.4	58.92

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Pedestrian		7	5
B	Pedestrian		7	7
C	Pedestrian		7	5
D	Pedestrian		7	5
E	Pedestrian		7	7
F	Traffic		7	7
G	Traffic		7	7
H	Traffic		7	7
I	Traffic		7	7
J	Traffic		7	7
K	Traffic		7	7
L	Traffic		7	7
M	Traffic		7	7
N	Traffic		7	7
O	Traffic		7	7
P	Traffic		7	7

Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
C	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-
D	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
E	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
F	4	-	-	4	-		-	-	5	-	-	-	-	-	5	-
G	4	-	4	-	-	-		-	5	-	-	5	-	-	-	-
H	-	-	-	-	4	-	-		-	-	-	-	-	-	-	-
I	4	4	-	-	-	-	-	-		-	-	5	-	-	5	-
J	-	4	-	4	-	-	-	-	-		-	-	-	-	-	-
K	-	4	4	-	-	-	-	-	-	-		-	-	5	-	-
L	-	4	4	-	-	-	-	-	-	5	5		-	5	-	-
M	4	-	4	4	-	5	-	-	-	5	-	-		5	-	-
N	-	-	4	4	-	4	-	-	-	5	-	-	-		-	-
O	-	4	-	4	-	-	-	-	-	-	-	-	4	-		-
P	4	-	-	4	-	5	5	-	5	-	-	-	4	-	-	

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	A	Losing	2	2
1	2	C	Losing	2	2
1	2	D	Losing	2	2
1	2	E	Losing	2	2
1	3	A	Losing	2	2
1	3	C	Losing	2	2
1	3	D	Losing	2	2
1	4	A	Losing	2	2
1	4	B	Losing	2	2
1	4	C	Losing	2	2
1	4	D	Losing	2	2
1	4	E	Losing	2	2
1	5	A	Losing	2	2
1	5	B	Losing	2	2
1	5	C	Losing	2	2
1	5	D	Losing	2	2
1	6	A	Losing	2	2
1	6	B	Losing	2	2

Basic Input Data and Results

1	6	C	Losing	2	2
1	6	D	Losing	2	2
1	6	E	Losing	2	2

Prohibited Stage Change

		To Stage					
		1	2	3	4	5	6
From Stage	1		2	2	2	2	2
	2	4		4	5	5	5
	3	4	5		5	5	5
	4	4	5	4		5	5
	5	4	5	5	4		5
	6	4	4	4	5	5	

Phases in Stage

Stage No.	Phases in Stage
1	A B C D E
2	B F G H
3	B E G M
4	H L M
5	E N O P
6	H I J K

Lane Input Data

Junction: Unnamed Junction

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1	U	G	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 16 Ahead	Inf
1/2	U	F	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 13 Right	Inf
2/1	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/1	U	K	2	3	11.3	Geom	-	3.00	0.00	Y	Arm 16 Left	Inf
4/2	U	J	2	3	11.3	Geom	-	3.00	0.00	Y	Arm 13 Ahead	Inf
4/3	U	I	2	3	11.3	Geom	-	3.00	0.00	Y	Arm 2 Right	Inf
5/1	U		2	3	4.9	Inf	-	-	-	-	-	-
5/2	U		2	3	4.9	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Geom	-	4.00	0.00	Y	Arm 5 Ahead	Inf
7/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1	U		2	3	60.0	Inf	-	-	-	-	-	-
10/2	U		2	3	60.0	Inf	-	-	-	-	-	-
11/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
12/1	U	P	2	3	12.2	Geom	-	3.50	0.00	Y	Arm 2 Left	Inf
12/2	U	O	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 8 Ahead	Inf
12/3	U	N	2	3	8.7	Geom	-	3.00	0.00	Y	Arm 16 Right	Inf
13/1	U		2	3	60.0	Inf	-	-	-	-	-	-
14/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
15/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y	Arm 3 Left	Inf
16/1	U		2	3	60.0	Inf	-	-	-	-	-	-
17/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
18/1	U	M	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 2 Ahead	Inf
											Arm 13 Left	Inf
18/2	U	L	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 8 Right	Inf
19/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
20/1	U	H	2	3	10.8	Geom	-	3.00	0.00	Y	Arm 9 Ahead	Inf

Give-Way Lane Input Data

Junction: Unnamed Junction
There are no Opposed Lanes in this Junction

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

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1	3.00	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1915	1915
1/2	3.00	0.00	Y	Arm 13 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1	3.00	0.00	Y	Arm 16 Left	Inf	100.0 %	1915	1915
4/2	3.00	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1915	1915
4/3	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	4.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2015	2015
7/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
11/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 2 Left	Inf	100.0 %	1965	1965
12/2	3.00	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1915	1915
12/3	3.00	0.00	Y	Arm 16 Right	Inf	100.0 %	1915	1915
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
15/1 (CW)	2.00	0.00	Y	Arm 3 Left	Inf	0.0 %	1815	1815
16/1	Infinite Saturation Flow						Inf	Inf
17/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
18/1	3.50	0.00	Y	Arm 2 Ahead	Inf	42.0 %	1965	1965
				Arm 13 Left	Inf	58.0 %		
18/2	3.00	0.00	Y	Arm 8 Right	Inf	100.0 %	1915	1915
19/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
20/1	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915

Bonus Green Times

No Bonus Greens are defined For Scenario 1

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

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1	3.00	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1915	1915
1/2	3.00	0.00	Y	Arm 13 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1	3.00	0.00	Y	Arm 16 Left	Inf	100.0 %	1915	1915
4/2	3.00	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1915	1915
4/3	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	4.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2015	2015
7/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
11/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 2 Left	Inf	100.0 %	1965	1965
12/2	3.00	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1915	1915
12/3	3.00	0.00	Y	Arm 16 Right	Inf	100.0 %	1915	1915
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
15/1 (CW)	2.00	0.00	Y	Arm 3 Left	Inf	0.0 %	1815	1815
16/1	Infinite Saturation Flow						Inf	Inf
17/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
18/1	3.50	0.00	Y	Arm 2 Ahead	Inf	42.1 %	1965	1965
				Arm 13 Left	Inf	57.9 %		
18/2	3.00	0.00	Y	Arm 8 Right	Inf	100.0 %	1915	1915
19/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
20/1	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915

Bonus Green Times
No Bonus Greens are defined For Scenario 2

Traffic Flow Groups

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

Traffic Flows, Desired
FG1: 'AM'
Desired Flow :

	Destination	
Origin		Tot.
	Tot.	-

FG2: 'PM'
Desired Flow :

	Destination	
Origin		Tot.
	Tot.	-

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

Stage	1	2	3	4	5	6
Duration	7	11	12	30	14	21
Change Point	0	11	24	40	75	94

Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	9	4	13			
B	Pedestrians across	Pedestrian	36	4	40			
C	Pedestrians across	Pedestrian	9	4	13			
D	Pedestrians across	Pedestrian	9	4	13			
E	Pedestrians across	Pedestrian	9	4	13	12	28	40
F	Right	Traffic	11	13	24			
G	Ahead	Traffic	27	13	40			
H	Ahead	Traffic	11	13	24	33	42	75
I	Right	Traffic	21	99	0			
J	Ahead	Traffic	21	99	0			
K	Left	Traffic	24	96	0			
L	Right	Traffic	30	45	75			
M	Ahead Left	Traffic	49	26	75			
N	Right	Traffic	14	80	94			
O	Ahead	Traffic	17	77	94			
P	Left	Traffic	17	77	94			

Phase Name	Description	Phase	Green Period 3		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian			
B	Pedestrians across	Pedestrian			
C	Pedestrians across	Pedestrian			
D	Pedestrians across	Pedestrian			
E	Pedestrians across	Pedestrian	15	79	94
F	Right	Traffic			
G	Ahead	Traffic			
H	Ahead	Traffic	24	96	0
I	Right	Traffic			
J	Ahead	Traffic			
K	Left	Traffic			
L	Right	Traffic			
M	Ahead Left	Traffic			
N	Right	Traffic			
O	Ahead	Traffic			
P	Left	Traffic			

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**87.7%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**87.7%**
1/1	Ahead	U	N/A	N/A	G		1	27	-	-	320	1915	447	71.6%
1/2	Right	U	N/A	N/A	F		1	11	-	-	140	1915	191	73.1%
2/1		U	N/A	N/A	-		-	-	-	-	587	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
4/1	Left	U	N/A	N/A	K		1	24	-	-	168	1915	399	42.1%
4/2	Ahead	U	N/A	N/A	J		1	21	-	-	236	1915	351	67.2%
4/3	Right	U	N/A	N/A	I		1	21	-	-	267	1915	351	76.1%
5/1	Ahead	U	N/A	N/A	-		-	-	-	-	160	Inf	Inf	0.0%
5/2	Ahead	U	N/A	N/A	-		-	-	-	-	475	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	-	635	2015	2015	31.5%
7/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	-		-	-	-	-	564	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	-	890	Inf	Inf	0.0%
10/1	Ahead Left	U	N/A	N/A	-		-	-	-	-	623	Inf	Inf	0.0%
10/2	Ahead	U	N/A	N/A	-		-	-	-	-	133	Inf	Inf	0.0%
11/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
12/1	Left	U	N/A	N/A	P		1	17	-	-	92	1965	295	31.2%
12/2+12/3	Ahead Right	U	N/A	N/A	O N		1	17:14	-	-	346	1915:1915	287+107	87.7 : 87.7%
13/1		U	N/A	N/A	-		-	-	-	-	740	Inf	Inf	0.0%
14/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	-
15/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
16/1		U	N/A	N/A	-		-	-	-	-	553	Inf	Inf	0.0%

17/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
18/1	Ahead Left	U	N/A	N/A	M		1	49	-	-	696	1965	819	85.0%
18/2	Right	U	N/A	N/A	L		1	30	-	-	342	1915	495	69.1%
19/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
20/1	Ahead	U	N/A	N/A	H		3	68	-	-	346	1915	1133	30.5%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	9	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	36	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	9	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	E		3	36	-	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	D		1	9	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	**-**	**-**	**0**	**0**	**0**	**30.4**	**13.1**	**0.0**	**43.5**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**30.4**	**13.1**	**0.0**	**43.5**	**-**	**-**	**-**	**-**	
1/1	320	320	-	-	-	3.8	1.2	-	5.0	56.3	9.8	1.2	11.0	
1/2	140	140	-	-	-	2.0	1.3	-	3.3	85.7	4.5	1.3	5.8	
2/1	587	587	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/1	168	168	-	-	-	1.9	0.4	-	2.3	49.0	4.9	0.4	5.2	
4/2	236	236	-	-	-	3.0	1.0	-	4.0	61.0	7.3	1.0	8.3	
4/3	267	267	-	-	-	3.4	1.5	-	5.0	67.2	8.4	1.5	9.9	
5/1	160	160	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	475	475	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	635	635	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	564	564	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/1	890	890	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	623	623	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	133	133	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	92	92	-	-	-	1.2	0.2	-	1.4	54.3	2.7	0.2	3.0	
12/2+12/3	346	346	-	-	-	4.8	3.2	-	7.9	82.4	8.2	3.2	11.4	
13/1	740	740	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
14/1	-	-	-	-	-	-	-	-	-	-	-	-	-	
15/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	553	553	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
17/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

18/1	696	696	-	-	-	6.1	2.7	-	8.8	45.7	20.9	2.7	23.6	
18/2	342	342	-	-	-	3.8	1.1	-	4.9	51.8	10.3	1.1	11.4	
19/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/1	346	346	-	-	-	0.4	0.2	-	0.6	6.5	2.3	0.2	2.5	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	

C1 PRC for Signalled Lanes (%): 2.6 Total Delay for Signalled Lanes (pcuHr): 43.29 Cycle Time (s): 120
PRC Over All Lanes (%): 2.6 Total Delay Over All Lanes(pcuHr): 43.52

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

Stage Timings

Stage	1	2	3	4	5	6
Duration	7	12	18	11	25	22
Change Point	0	11	25	47	63	93

Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	9	4	13			
B	Pedestrians across	Pedestrian	43	4	47			
C	Pedestrians across	Pedestrian	9	4	13			
D	Pedestrians across	Pedestrian	9	4	13			
E	Pedestrians across	Pedestrian	9	4	13	18	29	47
F	Right	Traffic	12	13	25			
G	Ahead	Traffic	34	13	47			
H	Ahead	Traffic	12	13	25	14	49	63
I	Right	Traffic	22	98	0			
J	Ahead	Traffic	22	98	0			
K	Left	Traffic	25	95	0			
L	Right	Traffic	11	52	63			
M	Ahead Left	Traffic	36	27	63			
N	Right	Traffic	25	68	93			
O	Ahead	Traffic	28	65	93			
P	Left	Traffic	28	65	93			

Basic Input Data and Results

Phase Name	Description	Phase	Green Period 3		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian			
B	Pedestrians across	Pedestrian			
C	Pedestrians across	Pedestrian			
D	Pedestrians across	Pedestrian			
E	Pedestrians across	Pedestrian	26	67	93
F	Right	Traffic			
G	Ahead	Traffic			
H	Ahead	Traffic	25	95	0
I	Right	Traffic			
J	Ahead	Traffic			
K	Left	Traffic			
L	Right	Traffic			
M	Ahead Left	Traffic			
N	Right	Traffic			
O	Ahead	Traffic			
P	Left	Traffic			

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**93.1%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**93.1%**
1/1	Ahead	U	N/A	N/A	G		1	34	-	-	518	1915	559	92.7%
1/2	Right	U	N/A	N/A	F		1	12	-	-	112	1915	207	54.0%
2/1		U	N/A	N/A	-		-	-	-	-	645	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
4/1	Left	U	N/A	N/A	K		1	25	-	-	363	1915	415	87.5%
4/2	Ahead	U	N/A	N/A	J		1	22	-	-	310	1915	367	84.5%
4/3	Right	U	N/A	N/A	I		1	22	-	-	279	1915	367	76.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	-	363	Inf	Inf	0.0%
5/2	Ahead	U	N/A	N/A	-		-	-	-	-	589	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	-	952	2015	2015	47.2%
7/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	-		-	-	-	-	570	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	-	806	Inf	Inf	0.0%
10/1	Ahead Left	U	N/A	N/A	-		-	-	-	-	732	Inf	Inf	0.0%
10/2	Ahead	U	N/A	N/A	-		-	-	-	-	106	Inf	Inf	0.0%
11/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
12/1	Left	U	N/A	N/A	P		1	28	-	-	211	1965	475	44.4%
12/2+12/3	Ahead Right	U	N/A	N/A	O N		1	28:25	-	-	520	1915:1915	422+136	93.1 : 93.1%
13/1		U	N/A	N/A	-		-	-	-	-	635	Inf	Inf	0.0%
14/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
15/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
16/1		U	N/A	N/A	-		-	-	-	-	1008	Inf	Inf	0.0%

17/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
18/1	Ahead Left	U	N/A	N/A	M		1	36	-	-	368	1965	606	60.7%
18/2	Right	U	N/A	N/A	L		1	11	-	-	177	1915	191	92.4%
19/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
20/1	Ahead	U	N/A	N/A	H		3	51	-	-	266	1915	862	30.9%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	9	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	43	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	9	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	E		3	53	-	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	D		1	9	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	**-**	**-**	**0**	**0**	**0**	**35.0**	**23.9**	**0.0**	**58.9**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**35.0**	**23.9**	**0.0**	**58.9**	**-**	**-**	**-**	**-**	
1/1	518	518	-	-	-	5.9	5.1	-	11.0	76.7	16.7	5.1	21.8	
1/2	112	112	-	-	-	1.6	0.6	-	2.2	69.3	3.5	0.6	4.1	
2/1	645	645	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/1	363	363	-	-	-	4.6	3.1	-	7.7	76.4	11.6	3.1	14.7	
4/2	310	310	-	-	-	4.0	2.5	-	6.5	75.8	9.9	2.5	12.4	
4/3	279	279	-	-	-	3.6	1.5	-	5.1	65.7	8.8	1.5	10.3	
5/1	363	363	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	589	589	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	952	952	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4	
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	570	570	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/1	806	806	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	732	732	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	106	106	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	211	211	-	-	-	2.3	0.4	-	2.7	45.5	5.9	0.4	6.3	
12/2+12/3	520	520	-	-	-	6.2	5.3	-	11.5	79.8	13.9	5.3	19.2	
13/1	635	635	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
14/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	1008	1008	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
17/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

18/1	368	368	-	-	-	3.6	0.8	-	4.4	42.8	10.4	0.8	11.2	
18/2	177	177	-	-	-	2.6	4.0	-	6.6	133.9	5.8	4.0	9.8	
19/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/1	266	266	-	-	-	0.6	0.2	-	0.8	10.9	2.7	0.2	2.9	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	

C1 PRC for Signalled Lanes (%): -3.4 Total Delay for Signalled Lanes (pcuHr): 58.47 Cycle Time (s): 120
PRC Over All Lanes (%): -3.4 Total Delay Over All Lanes(pcuHr): 58.92

Basic Input Data and Results

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Site 2_OpeningYear_2030_No_Dev.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	AM	AM	Network Control Plan 1	08:00 - 09:00	120	11.9	34.03
2	PM	PM	Network Control Plan 1	17:00 - 18:00	120	4.8	42.90

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Pedestrian		7	7
B	Pedestrian		7	7
C	Pedestrian		7	7
D	Pedestrian		7	7
E	Pedestrian		7	7
F	Traffic		7	7
G	Traffic		7	7
H	Traffic		7	7
I	Traffic		7	7
J	Traffic		7	7
K	Traffic		7	7
L	Traffic		7	7
M	Traffic		7	7
N	Traffic		7	7
O	Traffic		7	7
P	Traffic		7	7

Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
C	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-
D	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
E	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
F	4	-	-	4	-		-	-	5	-	-	-	-	-	5	-
G	4	-	4	-	-	-		-	5	-	-	5	-	-	-	-
H	-	-	-	-	4	-	-		-	-	-	-	-	-	-	-
I	4	4	-	-	-	-	-	-		-	-	5	-	-	5	-
J	-	4	-	4	-	-	-	-	-		-	-	-	-	-	-
K	-	4	4	-	-	-	-	-	-	-		-	-	5	-	-
L	-	4	4	-	-	-	-	-	-	5	5		-	5	-	-
M	4	-	4	4	-	5	-	-	-	5	-	-		5	-	-
N	-	-	4	4	-	4	-	-	-	5	-	-	-		-	-
O	-	4	-	4	-	-	-	-	-	-	-	-	4	-		-
P	4	-	-	4	-	5	5	-	5	-	-	-	4	-	-	

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage \ To Stage	1	2	3	4	5	6
1		2	2	2	2	2
2	4		4	5	5	5
3	4	5		5	5	5
4	4	5	4		5	5
5	4	5	5	4		5
6	4	4	4	5	5	

Phases in Stage

Stage No.	Phases in Stage
1	A B C D E
2	B F G H
3	B E G M
4	H L M
5	E N O P
6	H I J K

Lane Input Data

Junction: Unnamed Junction

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1	U	G	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 16 Ahead	Inf
1/2	U	F	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 13 Right	Inf
2/1	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/1	U	K	2	3	11.3	Geom	-	3.00	0.00	Y	Arm 16 Left	Inf
4/2	U	J	2	3	11.3	Geom	-	3.00	0.00	Y	Arm 13 Ahead	Inf
4/3	U	I	2	3	11.3	Geom	-	3.00	0.00	Y	Arm 2 Right	Inf
5/1	U		2	3	4.9	Inf	-	-	-	-	-	-
5/2	U		2	3	4.9	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Geom	-	4.00	0.00	Y	Arm 5 Ahead	Inf
7/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1	U		2	3	60.0	Inf	-	-	-	-	-	-
10/2	U		2	3	60.0	Inf	-	-	-	-	-	-
11/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
12/1	U	P	2	3	12.2	Geom	-	3.50	0.00	Y	Arm 2 Left	Inf
12/2	U	O	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 8 Ahead	Inf
12/3	U	N	2	3	8.7	Geom	-	3.00	0.00	Y	Arm 16 Right	Inf
13/1	U		2	3	60.0	Inf	-	-	-	-	-	-
14/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
15/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y	Arm 3 Left	Inf
16/1	U		2	3	60.0	Inf	-	-	-	-	-	-
17/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
18/1	U	M	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 2 Ahead	Inf
											Arm 13 Left	Inf
18/2	U	L	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 8 Right	Inf
19/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
20/1	U	H	2	3	10.8	Geom	-	3.00	0.00	Y	Arm 9 Ahead	Inf

Give-Way Lane Input Data

Junction: Unnamed Junction
There are no Opposed Lanes in this Junction

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

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1	3.00	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1915	1915
1/2	3.00	0.00	Y	Arm 13 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1	3.00	0.00	Y	Arm 16 Left	Inf	100.0 %	1915	1915
4/2	3.00	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1915	1915
4/3	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	4.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2015	2015
7/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
11/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 2 Left	Inf	100.0 %	1965	1965
12/2	3.00	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1915	1915
12/3	3.00	0.00	Y	Arm 16 Right	Inf	100.0 %	1915	1915
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
15/1 (CW)	2.00	0.00	Y	Arm 3 Left	Inf	0.0 %	1815	1815
16/1	Infinite Saturation Flow						Inf	Inf
17/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
18/1	3.50	0.00	Y	Arm 2 Ahead	Inf	44.0 %	1965	1965
				Arm 13 Left	Inf	56.0 %		
18/2	3.00	0.00	Y	Arm 8 Right	Inf	100.0 %	1915	1915
19/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
20/1	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915

Bonus Green Times

No Bonus Greens are defined For Scenario 1

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

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1	3.00	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1915	1915
1/2	3.00	0.00	Y	Arm 13 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1	3.00	0.00	Y	Arm 16 Left	Inf	100.0 %	1915	1915
4/2	3.00	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1915	1915
4/3	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	4.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2015	2015
7/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
11/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 2 Left	Inf	100.0 %	1965	1965
12/2	3.00	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1915	1915
12/3	3.00	0.00	Y	Arm 16 Right	Inf	100.0 %	1915	1915
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
15/1 (CW)	2.00	0.00	Y	Arm 3 Left	Inf	0.0 %	1815	1815
16/1	Infinite Saturation Flow						Inf	Inf
17/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
18/1	3.50	0.00	Y	Arm 2 Ahead	Inf	44.2 %	1965	1965
				Arm 13 Left	Inf	55.8 %		
18/2	3.00	0.00	Y	Arm 8 Right	Inf	100.0 %	1915	1915
19/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
20/1	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915

Bonus Green Times
No Bonus Greens are defined For Scenario 2

Traffic Flow Groups

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

Traffic Flows, Desired
FG1: 'AM'
Desired Flow :

	Destination	
Origin		Tot.
	Tot.	-

FG2: 'PM'
Desired Flow :

	Destination	
Origin		Tot.
	Tot.	-

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

Stage	1	2	3	4	5	6
Duration	7	11	12	30	14	21
Change Point	0	11	24	40	75	94

Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	7	4	11			
B	Pedestrians across	Pedestrian	36	4	40			
C	Pedestrians across	Pedestrian	7	4	11			
D	Pedestrians across	Pedestrian	7	4	11			
E	Pedestrians across	Pedestrian	7	4	11	12	28	40
F	Right	Traffic	11	13	24			
G	Ahead	Traffic	27	13	40			
H	Ahead	Traffic	11	13	24	33	42	75
I	Right	Traffic	21	99	0			
J	Ahead	Traffic	21	99	0			
K	Left	Traffic	24	96	0			
L	Right	Traffic	30	45	75			
M	Ahead Left	Traffic	49	26	75			
N	Right	Traffic	14	80	94			
O	Ahead	Traffic	17	77	94			
P	Left	Traffic	17	77	94			

Phase Name	Description	Phase	Green Period 3		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian			
B	Pedestrians across	Pedestrian			
C	Pedestrians across	Pedestrian			
D	Pedestrians across	Pedestrian			
E	Pedestrians across	Pedestrian	15	79	94
F	Right	Traffic			
G	Ahead	Traffic			
H	Ahead	Traffic	24	96	0
I	Right	Traffic			
J	Ahead	Traffic			
K	Left	Traffic			
L	Right	Traffic			
M	Ahead Left	Traffic			
N	Right	Traffic			
O	Ahead	Traffic			
P	Left	Traffic			

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**80.4%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**80.4%**
1/1	Ahead	U	N/A	N/A	G		1	27	-	-	288	1915	447	64.5%
1/2	Right	U	N/A	N/A	F		1	11	-	-	128	1915	191	66.8%
2/1		U	N/A	N/A	-		-	-	-	-	587	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
4/1	Left	U	N/A	N/A	K		1	24	-	-	131	1915	399	32.8%
4/2	Ahead	U	N/A	N/A	J		1	21	-	-	216	1915	351	61.5%
4/3	Right	U	N/A	N/A	I		1	21	-	-	244	1915	351	69.5%
5/1	Ahead	U	N/A	N/A	-		-	-	-	-	131	Inf	Inf	0.0%
5/2	Ahead	U	N/A	N/A	-		-	-	-	-	460	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	-	616	2015	2015	30.6%
7/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	-		-	-	-	-	504	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	-	865	Inf	Inf	0.0%
10/1	Ahead Left	U	N/A	N/A	-		-	-	-	-	605	Inf	Inf	0.0%
10/2	Ahead	U	N/A	N/A	-		-	-	-	-	128	Inf	Inf	0.0%
11/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
12/1	Left	U	N/A	N/A	P		1	17	-	-	84	1965	295	28.5%
12/2+12/3	Ahead Right	U	N/A	N/A	O N		1	17:14	-	-	294	1915:1915	287+78	80.4 : 80.4%
13/1		U	N/A	N/A	-		-	-	-	-	674	Inf	Inf	0.0%
14/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	-
15/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
16/1		U	N/A	N/A	-		-	-	-	-	482	Inf	Inf	0.0%

17/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
18/1	Ahead Left	U	N/A	N/A	M		1	49	-	-	589	1965	819	71.9%
18/2	Right	U	N/A	N/A	L		1	30	-	-	273	1915	495	55.2%
19/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
20/1	Ahead	U	N/A	N/A	H		3	68	-	-	317	1915	1133	28.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	7	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	36	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	7	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	E		3	34	-	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	D		1	7	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	**-**	**-**	**0**	**0**	**0**	**25.6**	**8.5**	**0.0**	**34.0**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**25.6**	**8.5**	**0.0**	**34.0**	**-**	**-**	**-**	**-**	
1/1	288	288	-	-	-	3.3	0.9	-	4.2	52.7	8.6	0.9	9.5	
1/2	128	128	-	-	-	1.9	1.0	-	2.8	79.6	4.1	1.0	5.1	
2/1	587	587	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/1	131	131	-	-	-	1.5	0.2	-	1.7	47.1	3.7	0.2	3.9	
4/2	216	216	-	-	-	2.7	0.8	-	3.5	58.3	6.6	0.8	7.4	
4/3	244	244	-	-	-	3.1	1.1	-	4.2	62.3	7.6	1.1	8.7	
5/1	131	131	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	460	460	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	616	616	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	504	504	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/1	865	865	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	605	605	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	128	128	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	84	84	-	-	-	1.1	0.2	-	1.3	53.8	2.5	0.2	2.7	
12/2+12/3	294	294	-	-	-	4.0	1.9	-	5.9	72.8	7.4	1.9	9.3	
13/1	674	674	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
14/1	-	-	-	-	-	-	-	-	-	-	-	-	-	
15/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	482	482	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
17/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

18/1	589	589	-	-	-	4.8	1.3	-	6.0	36.9	16.2	1.3	17.5	
18/2	273	273	-	-	-	2.9	0.6	-	3.5	46.6	7.8	0.6	8.4	
19/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/1	317	317	-	-	-	0.4	0.2	-	0.6	6.4	2.0	0.2	2.2	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	

C1 PRC for Signalled Lanes (%): 11.9 Total Delay for Signalled Lanes (pcuHr): 33.81 Cycle Time (s): 120
PRC Over All Lanes (%): 11.9 Total Delay Over All Lanes(pcuHr): 34.03

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

Stage Timings

Stage	1	2	3	4	5	6
Duration	7	12	17	12	24	23
Change Point	0	11	25	46	63	92

Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	7	4	11			
B	Pedestrians across	Pedestrian	42	4	46			
C	Pedestrians across	Pedestrian	7	4	11			
D	Pedestrians across	Pedestrian	7	4	11			
E	Pedestrians across	Pedestrian	7	4	11	17	29	46
F	Right	Traffic	12	13	25			
G	Ahead	Traffic	33	13	46			
H	Ahead	Traffic	12	13	25	15	48	63
I	Right	Traffic	23	97	0			
J	Ahead	Traffic	23	97	0			
K	Left	Traffic	26	94	0			
L	Right	Traffic	12	51	63			
M	Ahead Left	Traffic	36	27	63			
N	Right	Traffic	24	68	92			
O	Ahead	Traffic	27	65	92			
P	Left	Traffic	27	65	92			

Basic Input Data and Results

Phase Name	Description	Phase	Green Period 3		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian			
B	Pedestrians across	Pedestrian			
C	Pedestrians across	Pedestrian			
D	Pedestrians across	Pedestrian			
E	Pedestrians across	Pedestrian	25	67	92
F	Right	Traffic			
G	Ahead	Traffic			
H	Ahead	Traffic	26	94	0
I	Right	Traffic			
J	Ahead	Traffic			
K	Left	Traffic			
L	Right	Traffic			
M	Ahead Left	Traffic			
N	Right	Traffic			
O	Ahead	Traffic			
P	Left	Traffic			

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**85.9%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**85.9%**
1/1	Ahead	U	N/A	N/A	G		1	33	-	-	466	1915	543	85.9%
1/2	Right	U	N/A	N/A	F		1	12	-	-	103	1915	207	49.6%
2/1		U	N/A	N/A	-		-	-	-	-	591	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
4/1	Left	U	N/A	N/A	K		1	26	-	-	336	1915	431	78.0%
4/2	Ahead	U	N/A	N/A	J		1	23	-	-	284	1915	383	74.2%
4/3	Right	U	N/A	N/A	I		1	23	-	-	255	1915	383	66.6%
5/1	Ahead	U	N/A	N/A	-		-	-	-	-	336	Inf	Inf	0.0%
5/2	Ahead	U	N/A	N/A	-		-	-	-	-	539	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	-	875	2015	2015	43.4%
7/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	-		-	-	-	-	524	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	-	767	Inf	Inf	0.0%
10/1	Ahead Left	U	N/A	N/A	-		-	-	-	-	718	Inf	Inf	0.0%
10/2	Ahead	U	N/A	N/A	-		-	-	-	-	103	Inf	Inf	0.0%
11/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
12/1	Left	U	N/A	N/A	P		1	27	-	-	193	1965	458	42.1%
12/2+12/3	Ahead Right	U	N/A	N/A	O N		1	27:24	-	-	442	1915:1915	421+96	85.4 : 85.4%
13/1		U	N/A	N/A	-		-	-	-	-	584	Inf	Inf	0.0%
14/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
15/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
16/1		U	N/A	N/A	-		-	-	-	-	931	Inf	Inf	0.0%

17/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
18/1	Ahead Left	U	N/A	N/A	M		1	36	-	-	310	1965	606	51.2%
18/2	Right	U	N/A	N/A	L		1	12	-	-	140	1915	207	67.5%
19/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
20/1	Ahead	U	N/A	N/A	H		3	53	-	-	243	1915	894	27.2%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	7	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	42	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	7	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	E		3	49	-	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	D		1	7	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	**-**	**-**	**0**	**0**	**0**	**30.3**	**12.6**	**0.0**	**42.9**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**30.3**	**12.6**	**0.0**	**42.9**	**-**	**-**	**-**	**-**	
1/1	466	466	-	-	-	5.3	2.8	-	8.1	62.6	14.6	2.8	17.5	
1/2	103	103	-	-	-	1.4	0.5	-	1.9	67.5	3.2	0.5	3.7	
2/1	591	591	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/1	336	336	-	-	-	4.1	1.7	-	5.8	62.0	10.5	1.7	12.2	
4/2	284	284	-	-	-	3.6	1.4	-	5.0	62.8	8.8	1.4	10.2	
4/3	255	255	-	-	-	3.1	1.0	-	4.1	58.2	7.8	1.0	8.8	
5/1	336	336	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	539	539	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	875	875	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4	
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	524	524	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/1	767	767	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	718	718	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	103	103	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	193	193	-	-	-	2.1	0.4	-	2.5	45.9	5.5	0.4	5.8	
12/2+12/3	442	442	-	-	-	5.3	2.7	-	8.0	65.2	11.9	2.7	14.6	
13/1	584	584	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
14/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	931	931	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
17/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

18/1	310	310	-	-	-	2.9	0.5	-	3.5	40.1	8.4	0.5	9.0	
18/2	140	140	-	-	-	2.0	1.0	-	3.0	77.4	4.5	1.0	5.5	
19/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/1	243	243	-	-	-	0.5	0.2	-	0.7	10.1	2.3	0.2	2.5	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	

C1 PRC for Signalled Lanes (%): 4.8 Total Delay for Signalled Lanes (pcuHr): 42.51 Cycle Time (s): 120
PRC Over All Lanes (%): 4.8 Total Delay Over All Lanes(pcuHr): 42.90

Basic Input Data and Results

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Site 2_OpeningYear_2030_W_Dev.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	AM	AM	Network Control Plan 1	08:00 - 09:00	120	11.9	36.91
2	PM	PM	Network Control Plan 1	17:00 - 18:00	120	2.2	46.04

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Pedestrian		7	7
B	Pedestrian		7	7
C	Pedestrian		7	7
D	Pedestrian		7	7
E	Pedestrian		7	7
F	Traffic		7	7
G	Traffic		7	7
H	Traffic		7	7
I	Traffic		7	7
J	Traffic		7	7
K	Traffic		7	7
L	Traffic		7	7
M	Traffic		7	7
N	Traffic		7	7
O	Traffic		7	7
P	Traffic		7	7

Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
C	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-
D	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
E	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
F	4	-	-	4	-		-	-	5	-	-	-	-	-	5	-
G	4	-	4	-	-	-		-	5	-	-	5	-	-	-	-
H	-	-	-	-	4	-	-		-	-	-	-	-	-	-	-
I	4	4	-	-	-	-	-	-		-	-	5	-	-	5	-
J	-	4	-	4	-	-	-	-	-		-	-	-	-	-	-
K	-	4	4	-	-	-	-	-	-	-		-	-	5	-	-
L	-	4	4	-	-	-	-	-	-	5	5		-	5	-	-
M	4	-	4	4	-	5	-	-	-	5	-	-		5	-	-
N	-	-	4	4	-	4	-	-	-	5	-	-	-		-	-
O	-	4	-	4	-	-	-	-	-	-	-	-	4	-		-
P	4	-	-	4	-	5	5	-	5	-	-	-	4	-	-	

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage \ To Stage	1	2	3	4	5	6
1		2	2	2	2	2
2	4		4	5	5	5
3	4	5		5	5	5
4	4	5	4		5	5
5	4	5	5	4		5
6	4	4	4	5	5	

Phases in Stage

Stage No.	Phases in Stage
1	A B C D E
2	B F G H
3	B E G M
4	H L M
5	E N O P
6	H I J K

Lane Input Data

Junction: Unnamed Junction												
Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1	U	G	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 16 Ahead	Inf
1/2	U	F	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 13 Right	Inf
2/1	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/1	U	K	2	3	11.3	Geom	-	3.00	0.00	Y	Arm 16 Left	Inf
4/2	U	J	2	3	11.3	Geom	-	3.00	0.00	Y	Arm 13 Ahead	Inf
4/3	U	I	2	3	11.3	Geom	-	3.00	0.00	Y	Arm 2 Right	Inf
5/1	U		2	3	4.9	Inf	-	-	-	-	-	-
5/2	U		2	3	4.9	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Geom	-	4.00	0.00	Y	Arm 5 Ahead	Inf
7/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1	U		2	3	60.0	Inf	-	-	-	-	-	-
10/2	U		2	3	60.0	Inf	-	-	-	-	-	-
11/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
12/1	U	P	2	3	12.2	Geom	-	3.50	0.00	Y	Arm 2 Left	Inf
12/2	U	O	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 8 Ahead	Inf
12/3	U	N	2	3	8.7	Geom	-	3.00	0.00	Y	Arm 16 Right	Inf
13/1	U		2	3	60.0	Inf	-	-	-	-	-	-
14/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
15/1 (CW)	U		2	3	60.0	Geom	-	2.00	0.00	Y	Arm 3 Left	Inf
16/1	U		2	3	60.0	Inf	-	-	-	-	-	-
17/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
18/1	U	M	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 2 Ahead	Inf
											Arm 13 Left	Inf
18/2	U	L	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 8 Right	Inf
19/1 (CW)	U		2	3	60.0	Inf	-	-	-	-	-	-
20/1	U	H	2	3	10.8	Geom	-	3.00	0.00	Y	Arm 9 Ahead	Inf

Give-Way Lane Input Data

Junction: Unnamed Junction
There are no Opposed Lanes in this Junction

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

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1	3.00	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1915	1915
1/2	3.00	0.00	Y	Arm 13 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1	3.00	0.00	Y	Arm 16 Left	Inf	100.0 %	1915	1915
4/2	3.00	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1915	1915
4/3	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	4.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2015	2015
7/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
11/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 2 Left	Inf	100.0 %	1965	1965
12/2	3.00	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1915	1915
12/3	3.00	0.00	Y	Arm 16 Right	Inf	100.0 %	1915	1915
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
15/1 (CW)	2.00	0.00	Y	Arm 3 Left	Inf	0.0 %	1815	1815
16/1	Infinite Saturation Flow						Inf	Inf
17/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
18/1	3.50	0.00	Y	Arm 2 Ahead	Inf	41.8 %	1965	1965
				Arm 13 Left	Inf	58.2 %		
18/2	3.00	0.00	Y	Arm 8 Right	Inf	100.0 %	1915	1915
19/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
20/1	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915

Bonus Green Times

No Bonus Greens are defined For Scenario 1

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

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1	3.00	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1915	1915
1/2	3.00	0.00	Y	Arm 13 Right	Inf	100.0 %	1915	1915
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1	3.00	0.00	Y	Arm 16 Left	Inf	100.0 %	1915	1915
4/2	3.00	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1915	1915
4/3	3.00	0.00	Y	Arm 2 Right	Inf	100.0 %	1915	1915
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	4.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2015	2015
7/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
11/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 2 Left	Inf	100.0 %	1965	1965
12/2	3.00	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1915	1915
12/3	3.00	0.00	Y	Arm 16 Right	Inf	100.0 %	1915	1915
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
15/1 (CW)	2.00	0.00	Y	Arm 3 Left	Inf	0.0 %	1815	1815
16/1	Infinite Saturation Flow						Inf	Inf
17/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
18/1	3.50	0.00	Y	Arm 2 Ahead	Inf	42.1 %	1965	1965
				Arm 13 Left	Inf	57.9 %		
18/2	3.00	0.00	Y	Arm 8 Right	Inf	100.0 %	1915	1915
19/1 (CW Lane 1)	Infinite Saturation Flow						Inf	Inf
20/1	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915

Bonus Green Times
No Bonus Greens are defined For Scenario 2

Traffic Flow Groups

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

Traffic Flows, Desired
FG1: 'AM'
Desired Flow :

	Destination	
Origin		Tot.
	Tot.	-

FG2: 'PM'
Desired Flow :

	Destination	
Origin		Tot.
	Tot.	-

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

Stage	1	2	3	4	5	6
Duration	7	11	12	30	14	21
Change Point	0	11	24	40	75	94

Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	7	4	11			
B	Pedestrians across	Pedestrian	36	4	40			
C	Pedestrians across	Pedestrian	7	4	11			
D	Pedestrians across	Pedestrian	7	4	11			
E	Pedestrians across	Pedestrian	7	4	11	12	28	40
F	Right	Traffic	11	13	24			
G	Ahead	Traffic	27	13	40			
H	Ahead	Traffic	11	13	24	33	42	75
I	Right	Traffic	21	99	0			
J	Ahead	Traffic	21	99	0			
K	Left	Traffic	24	96	0			
L	Right	Traffic	30	45	75			
M	Ahead Left	Traffic	49	26	75			
N	Right	Traffic	14	80	94			
O	Ahead	Traffic	17	77	94			
P	Left	Traffic	17	77	94			

Phase Name	Description	Phase	Green Period 3		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian			
B	Pedestrians across	Pedestrian			
C	Pedestrians across	Pedestrian			
D	Pedestrians across	Pedestrian			
E	Pedestrians across	Pedestrian	15	79	94
F	Right	Traffic			
G	Ahead	Traffic			
H	Ahead	Traffic	24	96	0
I	Right	Traffic			
J	Ahead	Traffic			
K	Left	Traffic			
L	Right	Traffic			
M	Ahead Left	Traffic			
N	Right	Traffic			
O	Ahead	Traffic			
P	Left	Traffic			

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**80.4%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**80.4%**
1/1	Ahead	U	N/A	N/A	G		1	27	-	-	294	1915	447	65.8%
1/2	Right	U	N/A	N/A	F		1	11	-	-	128	1915	191	66.8%
2/1		U	N/A	N/A	-		-	-	-	-	597	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
4/1	Left	U	N/A	N/A	K		1	24	-	-	156	1915	399	39.1%
4/2	Ahead	U	N/A	N/A	J		1	21	-	-	216	1915	351	61.5%
4/3	Right	U	N/A	N/A	I		1	21	-	-	244	1915	351	69.5%
5/1	Ahead	U	N/A	N/A	-		-	-	-	-	156	Inf	Inf	0.0%
5/2	Ahead	U	N/A	N/A	-		-	-	-	-	460	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	-	616	2015	2015	30.6%
7/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	-		-	-	-	-	548	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	-	865	Inf	Inf	0.0%
10/1	Ahead Left	U	N/A	N/A	-		-	-	-	-	611	Inf	Inf	0.0%
10/2	Ahead	U	N/A	N/A	-		-	-	-	-	128	Inf	Inf	0.0%
11/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
12/1	Left	U	N/A	N/A	P		1	17	-	-	84	1965	295	28.5%
12/2+12/3	Ahead Right	U	N/A	N/A	O N		1	17:14	-	-	319	1915:1915	287+109	80.4 : 80.4%
13/1		U	N/A	N/A	-		-	-	-	-	718	Inf	Inf	0.0%
14/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	-
15/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
16/1		U	N/A	N/A	-		-	-	-	-	538	Inf	Inf	0.0%

17/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
18/1	Ahead Left	U	N/A	N/A	M		1	49	-	-	643	1965	819	78.5%
18/2	Right	U	N/A	N/A	L		1	30	-	-	317	1915	495	64.1%
19/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
20/1	Ahead	U	N/A	N/A	H		3	68	-	-	317	1915	1133	28.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	7	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	36	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	7	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	E		3	34	-	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	D		1	7	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	**-**	**-**	**0**	**0**	**0**	**27.5**	**9.4**	**0.0**	**36.9**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**27.5**	**9.4**	**0.0**	**36.9**	**-**	**-**	**-**	**-**	
1/1	294	294	-	-	-	3.4	1.0	-	4.4	53.3	8.8	1.0	9.8	
1/2	128	128	-	-	-	1.9	1.0	-	2.8	79.6	4.1	1.0	5.1	
2/1	597	597	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/1	156	156	-	-	-	1.8	0.3	-	2.1	48.3	4.5	0.3	4.8	
4/2	216	216	-	-	-	2.7	0.8	-	3.5	58.3	6.6	0.8	7.4	
4/3	244	244	-	-	-	3.1	1.1	-	4.2	62.3	7.6	1.1	8.7	
5/1	156	156	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	460	460	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	616	616	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	548	548	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/1	865	865	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	611	611	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	128	128	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	84	84	-	-	-	1.1	0.2	-	1.3	53.8	2.5	0.2	2.7	
12/2+12/3	319	319	-	-	-	4.3	2.0	-	6.3	71.0	7.4	2.0	9.3	
13/1	718	718	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
14/1	-	-	-	-	-	-	-	-	-	-	-	-	-	
15/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	538	538	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
17/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

18/1	643	643	-	-	-	5.4	1.8	-	7.2	40.4	18.6	1.8	20.4	
18/2	317	317	-	-	-	3.5	0.9	-	4.4	49.6	9.3	0.9	10.2	
19/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/1	317	317	-	-	-	0.4	0.2	-	0.6	6.4	2.0	0.2	2.2	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	

C1 PRC for Signalled Lanes (%): 11.9 Total Delay for Signalled Lanes (pcuHr): 36.69 Cycle Time (s): 120
PRC Over All Lanes (%): 11.9 Total Delay Over All Lanes(pcuHr): 36.91

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

Stage Timings

Stage	1	2	3	4	5	6
Duration	7	12	17	12	24	23
Change Point	0	11	25	46	63	92

Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian	7	4	11			
B	Pedestrians across	Pedestrian	42	4	46			
C	Pedestrians across	Pedestrian	7	4	11			
D	Pedestrians across	Pedestrian	7	4	11			
E	Pedestrians across	Pedestrian	7	4	11	17	29	46
F	Right	Traffic	12	13	25			
G	Ahead	Traffic	33	13	46			
H	Ahead	Traffic	12	13	25	15	48	63
I	Right	Traffic	23	97	0			
J	Ahead	Traffic	23	97	0			
K	Left	Traffic	26	94	0			
L	Right	Traffic	12	51	63			
M	Ahead Left	Traffic	36	27	63			
N	Right	Traffic	24	68	92			
O	Ahead	Traffic	27	65	92			
P	Left	Traffic	27	65	92			

Basic Input Data and Results

Phase Name	Description	Phase	Green Period 3		
			Total Green	Start Time	End Time
A	Pedestrians across	Pedestrian			
B	Pedestrians across	Pedestrian			
C	Pedestrians across	Pedestrian			
D	Pedestrians across	Pedestrian			
E	Pedestrians across	Pedestrian	25	67	92
F	Right	Traffic			
G	Ahead	Traffic			
H	Ahead	Traffic	26	94	0
I	Right	Traffic			
J	Ahead	Traffic			
K	Left	Traffic			
L	Right	Traffic			
M	Ahead Left	Traffic			
N	Right	Traffic			
O	Ahead	Traffic			
P	Left	Traffic			

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**88.0%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**88.0%**
1/1	Ahead	U	N/A	N/A	G		1	33	-	-	475	1915	543	87.5%
1/2	Right	U	N/A	N/A	F		1	12	-	-	103	1915	207	49.6%
2/1		U	N/A	N/A	-		-	-	-	-	591	Inf	Inf	0.0%
3/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
4/1	Left	U	N/A	N/A	K		1	26	-	-	336	1915	431	78.0%
4/2	Ahead	U	N/A	N/A	J		1	23	-	-	284	1915	383	74.2%
4/3	Right	U	N/A	N/A	I		1	23	-	-	255	1915	383	66.6%
5/1	Ahead	U	N/A	N/A	-		-	-	-	-	336	Inf	Inf	0.0%
5/2	Ahead	U	N/A	N/A	-		-	-	-	-	539	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	-	875	2015	2015	43.4%
7/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	-		-	-	-	-	524	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	-	767	Inf	Inf	0.0%
10/1	Ahead Left	U	N/A	N/A	-		-	-	-	-	718	Inf	Inf	0.0%
10/2	Ahead	U	N/A	N/A	-		-	-	-	-	103	Inf	Inf	0.0%
11/1	CW Ahead	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
12/1	Left	U	N/A	N/A	P		1	27	-	-	193	1965	458	42.1%
12/2+12/3	Ahead Right	U	N/A	N/A	O N		1	27:24	-	-	480	1915:1915	409+136	88.0 : 88.0%
13/1		U	N/A	N/A	-		-	-	-	-	584	Inf	Inf	0.0%
14/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
15/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	1815	1815	0.0%
16/1		U	N/A	N/A	-		-	-	-	-	931	Inf	Inf	0.0%

17/1	CW	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
18/1	Ahead Left	U	N/A	N/A	M		1	36	-	-	340	1965	606	56.1%
18/2	Right	U	N/A	N/A	L		1	12	-	-	164	1915	207	79.1%
19/1	CW Left	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
20/1	Ahead	U	N/A	N/A	H		3	53	-	-	243	1915	894	27.2%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	A		1	7	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	B		1	42	-	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	C		1	7	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	E		3	49	-	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	D		1	7	-	-	0	-	0	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	**-**	**-**	**0**	**0**	**0**	**31.6**	**14.4**	**0.0**	**46.0**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**31.6**	**14.4**	**0.0**	**46.0**	**-**	**-**	**-**	**-**	
1/1	475	475	-	-	-	5.4	3.2	-	8.6	65.3	15.0	3.2	18.3	
1/2	103	103	-	-	-	1.4	0.5	-	1.9	67.5	3.2	0.5	3.7	
2/1	591	591	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/1	336	336	-	-	-	4.1	1.7	-	5.8	62.0	10.5	1.7	12.2	
4/2	284	284	-	-	-	3.6	1.4	-	5.0	62.8	8.8	1.4	10.2	
4/3	255	255	-	-	-	3.1	1.0	-	4.1	58.2	7.8	1.0	8.8	
5/1	336	336	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	539	539	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	875	875	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4	
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	524	524	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/1	767	767	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	718	718	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	103	103	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	193	193	-	-	-	2.1	0.4	-	2.5	45.9	5.5	0.4	5.8	
12/2+12/3	480	480	-	-	-	5.7	3.3	-	9.1	68.1	12.3	3.3	15.6	
13/1	584	584	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
14/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	931	931	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
17/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

18/1	340	340	-	-	-	3.3	0.6	-	3.9	41.5	9.4	0.6	10.1	
18/2	164	164	-	-	-	2.4	1.7	-	4.1	90.5	5.3	1.7	7.1	
19/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/1	243	243	-	-	-	0.5	0.2	-	0.7	10.1	2.3	0.2	2.5	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	

C1 PRC for Signalled Lanes (%): 2.2 Total Delay for Signalled Lanes (pcuHr): 45.66 Cycle Time (s): 120
PRC Over All Lanes (%): 2.2 Total Delay Over All Lanes(pcuHr): 46.04

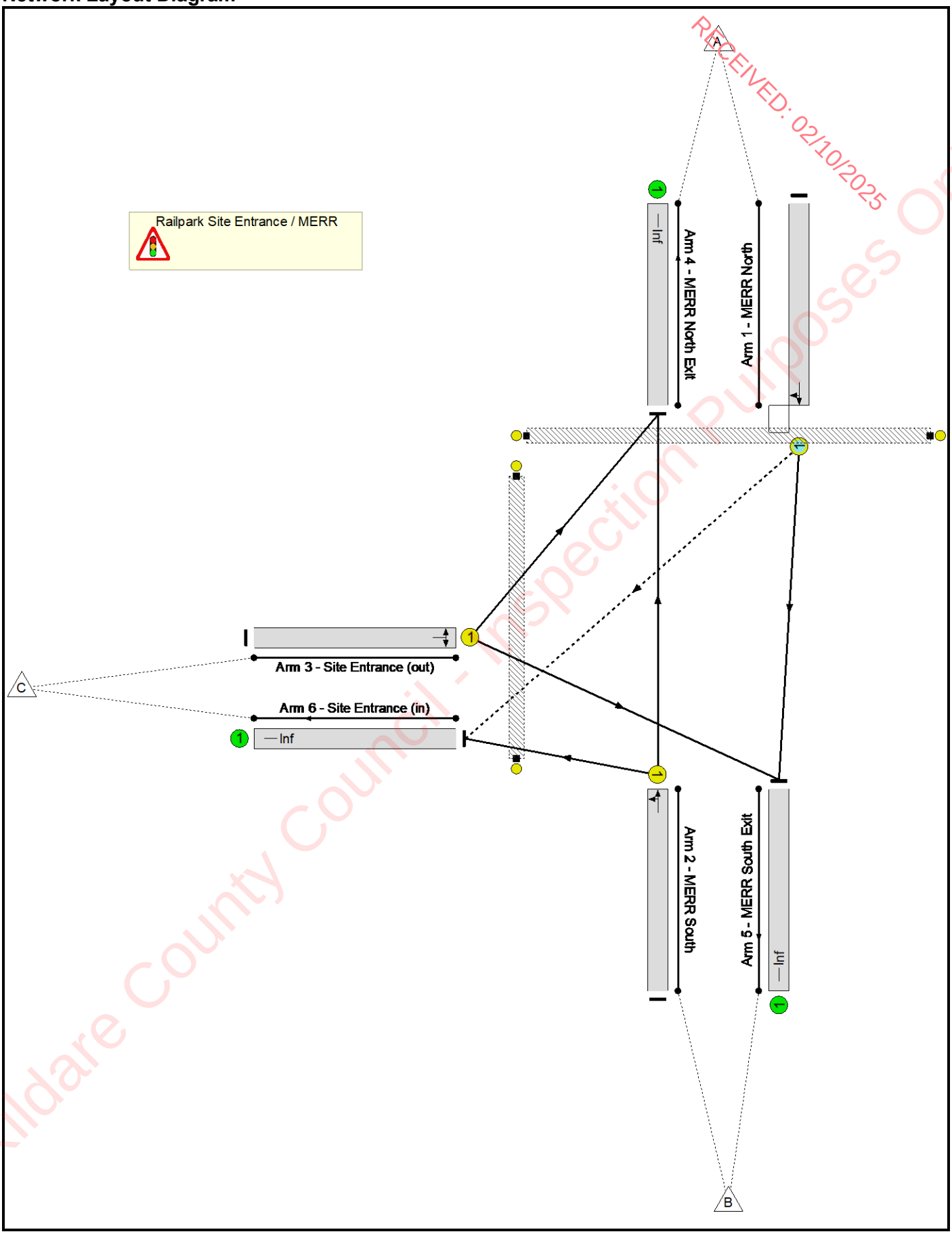
Full Input Data And Results

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Railpark MERR Junction.lsg3x
Author:	
Company:	
Address:	

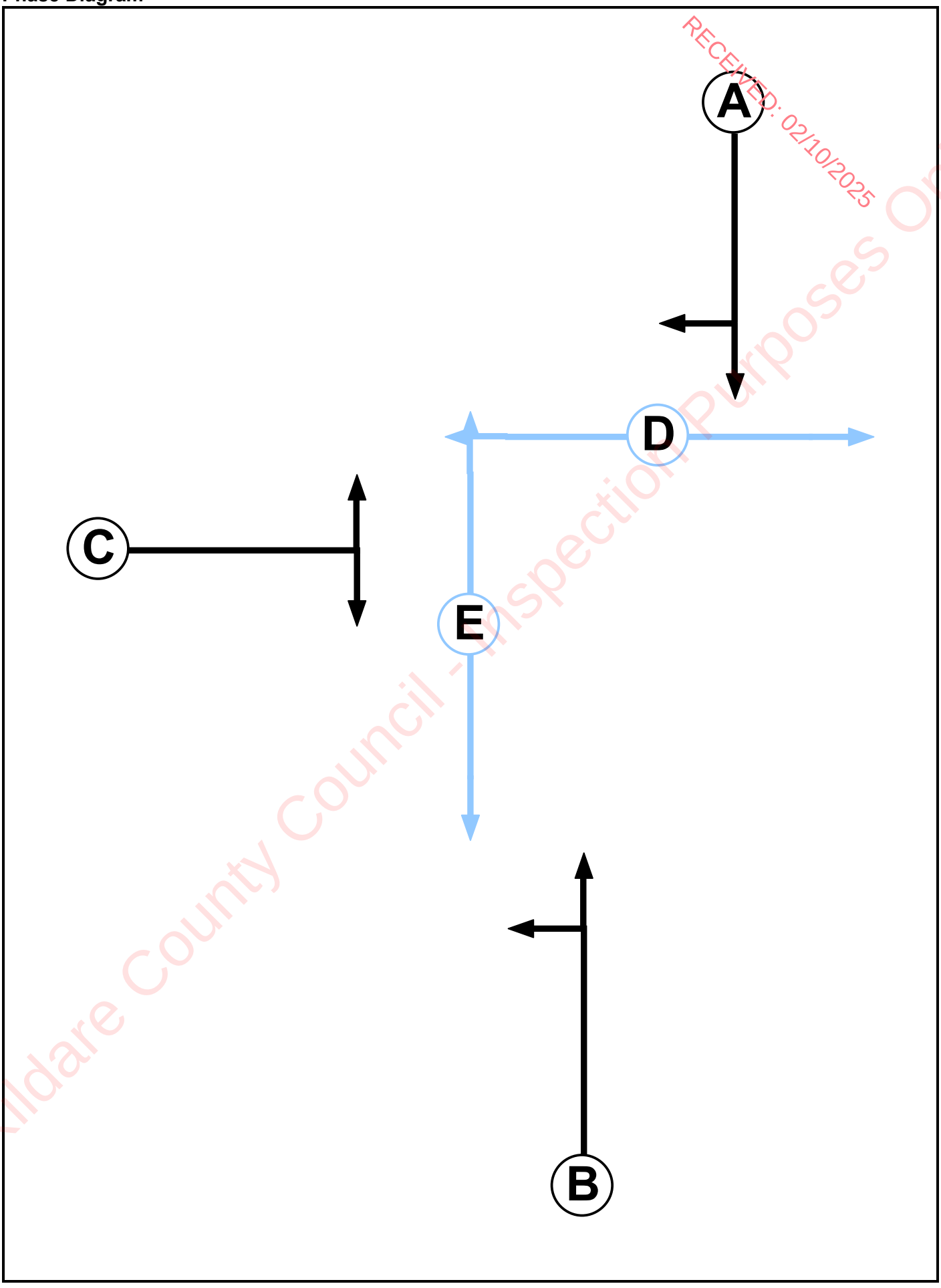
Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Pedestrian		7	7
E	Pedestrian		7	7

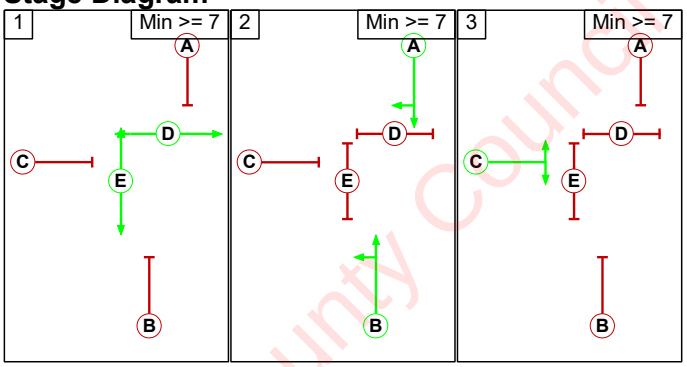
Phase Intergreens Matrix

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

Phases in Stage

Stage No.	Phases in Stage
1	D E
2	A B
3	C

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

		To Stage		
		1	2	3
From Stage	1		5	5
	2	5		5
	3	5	5	

Full Input Data And Results

Full Input Data And Results

Give-Way Lane Input Data

Junction: Railpark Site Entrance / MERR											
Lane	**Movement**	**Max Flow when Giving Way (PCU/Hr)**	**Min Flow when Giving Way (PCU/Hr)**	**Opposing Lane**	**Opp. Lane Coeff.**	**Opp. Mvmnts.**	**Right Turn Storage (PCU)**	**Non-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
1/1 (MERR North)	6/1 (Right)	1439	0	2/1	1.09	All	2.00	2.00	0.50	2	2.00

Full Input Data And Results

Lane Input Data

Junction: Railpark Site Entrance / MERR											
Lane	**Lane Type**	**Phases**	**Start Disp. (s)**	**End Disp. (s)**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
1/1 (MERR North)	O	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Right	Inf
2/1 (MERR South)	U	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Ahead	Inf
											Arm 6 Left	Inf
3/1 (Site Entrance (out))	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 4 Left	Inf
											Arm 5 Right	Inf
4/1 (MERR North Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (MERR South Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Site Entrance (in))	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

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

Scenario 1: '2045 DoSom AM' (FG1: 'AM With Development', Plan 1: 'AM Network Control')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	664	46	710
	B	664	0	69	733
	C	82	122	0	204
	Tot.	746	786	115	1647

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2045 DoSom AM
Junction: Railpark Site Entrance / MERR	
1/1	710
2/1	733
3/1	204
4/1	746
5/1	786
6/1	115

Lane Saturation Flows

Junction: Railpark Site Entrance / MERR								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (MERR North)	3.50	0.00	Y	Arm 5 Ahead	Inf	93.5 %	1965	1965
				Arm 6 Right	Inf	6.5 %		
2/1 (MERR South)	3.50	0.00	Y	Arm 4 Ahead	Inf	90.6 %	1965	1965
				Arm 6 Left	Inf	9.4 %		
3/1 (Site Entrance (out))	3.00	0.00	Y	Arm 4 Left	Inf	40.2 %	1915	1915
				Arm 5 Right	Inf	59.8 %		
4/1 (MERR North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (MERR South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Site Entrance (in) Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2045 DoSom PM' (FG2: 'PM With Development', Plan 2: 'PM Network Control')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	851	69	920
	B	851	0	104	955
	C	69	104	0	173
	Tot.	920	955	173	2048

Full Input Data And Results

Traffic Lane Flows

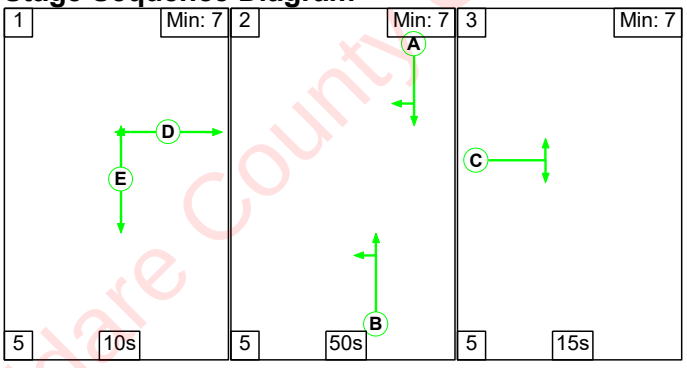
Lane	Scenario 2: 2045 DoSom PM
Junction: Railpark Site Entrance / MERR	
1/1	920
2/1	955
3/1	173
4/1	920
5/1	955
6/1	173

Lane Saturation Flows

Junction: Railpark Site Entrance / MERR								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (MERR North)	3.50	0.00	Y	Arm 5 Ahead	Inf	92.5 %	1965	1965
				Arm 6 Right	Inf	7.5 %		
2/1 (MERR South)	3.50	0.00	Y	Arm 4 Ahead	Inf	89.1 %	1965	1965
				Arm 6 Left	Inf	10.9 %		
3/1 (Site Entrance (out))	3.00	0.00	Y	Arm 4 Left	Inf	39.9 %	1915	1915
				Arm 5 Right	Inf	60.1 %		
4/1 (MERR North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (MERR South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Site Entrance (in) Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2045 DoSom AM' (FG1: 'AM With Development', Plan 1: 'AM Network Control')

Stage Sequence Diagram

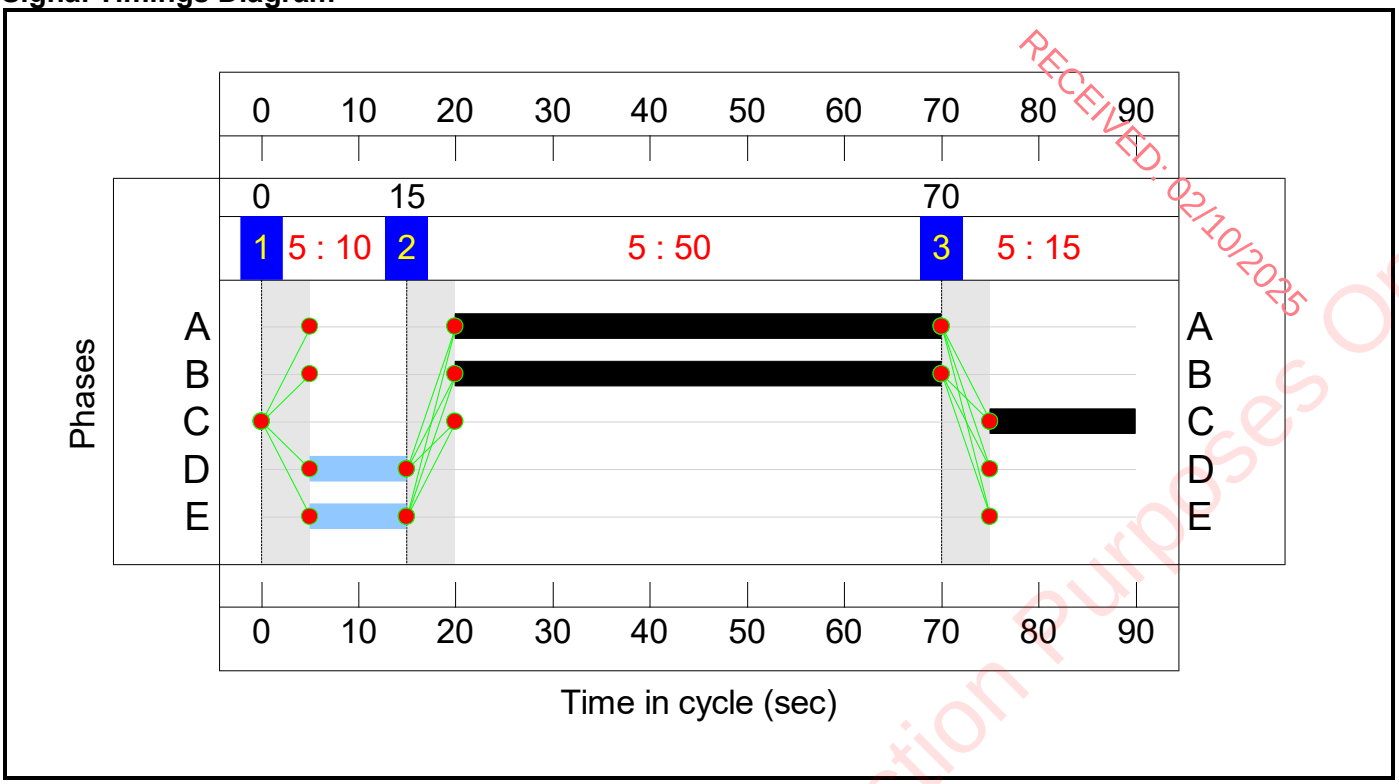


Stage Timings

Stage	1	2	3
Duration	10	50	15
Change Point	0	15	70

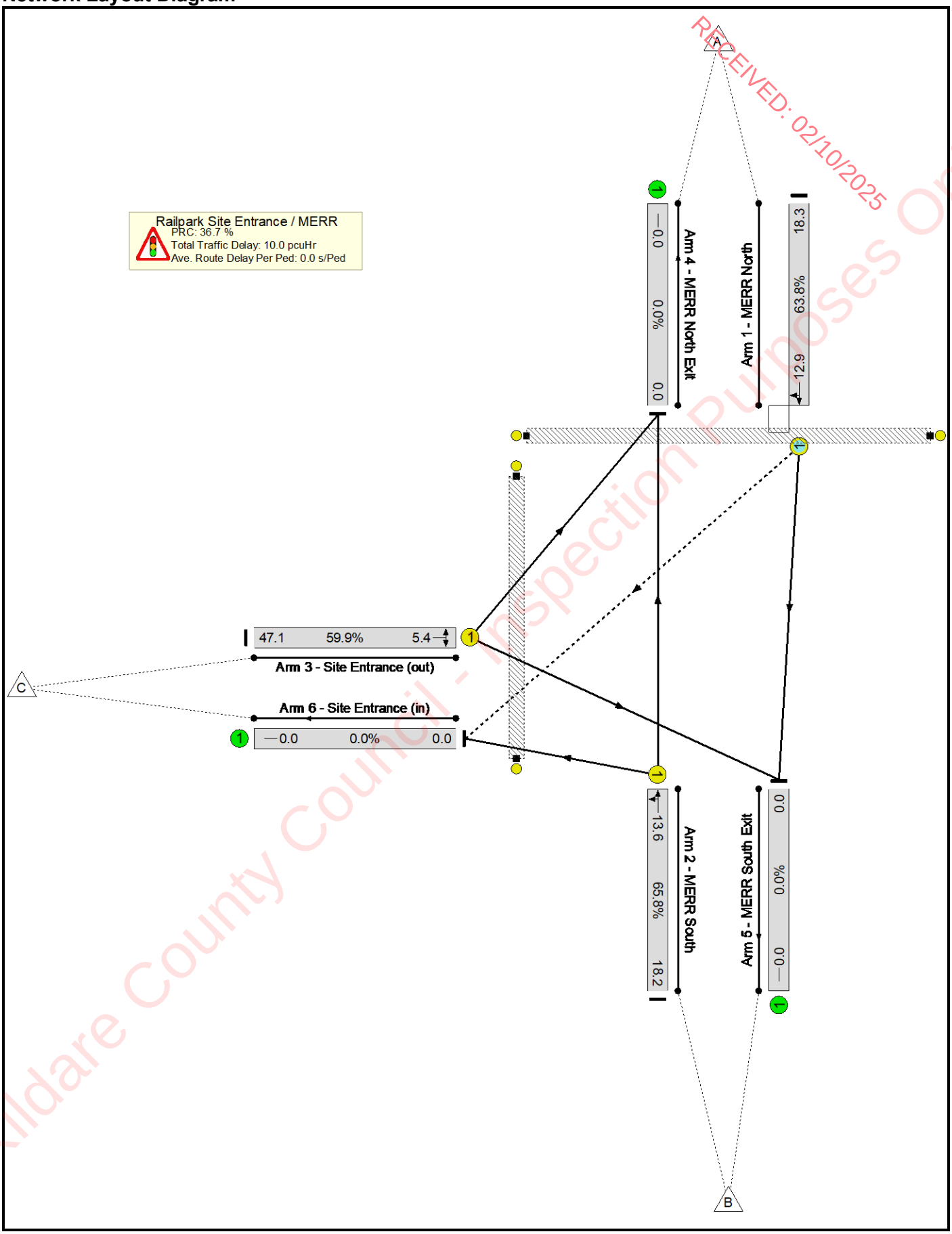
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**65.8%**
Railpark Site Entrance / MERR	-	-	**N/A**	-	-		-	-	-	-	-	-	**65.8%**
1/1	MERR North Ahead Right	O	N/A	N/A	A		1	50	-	710	1965	1113	63.8%
2/1	MERR South Ahead Left	U	N/A	N/A	B		1	50	-	733	1965	1113	65.8%
3/1	Site Entrance (out) Left Right	U	N/A	N/A	C		1	15	-	204	1915	340	59.9%
4/1	MERR North Exit	U	N/A	N/A	-		-	-	-	746	Inf	Inf	0.0%
5/1	MERR South Exit	U	N/A	N/A	-		-	-	-	786	Inf	Inf	0.0%
6/1	Site Entrance (in)	U	N/A	N/A	-		-	-	-	115	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	D		1	10	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	E		1	10	-	0	-	0	0.0%

Full Input Data And Results

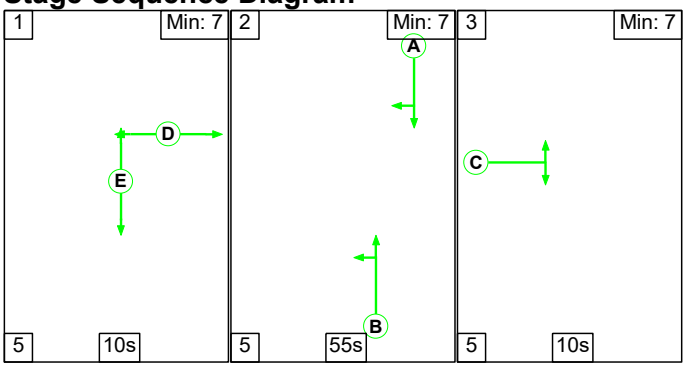
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**46**	**0**	**0**	**7.3**	**2.6**	**0.1**	**10.0**	**-**	**-**	**-**	**-**
Railpark Site Entrance / MERR	**-**	**-**	**46**	**0**	**0**	**7.3**	**2.6**	**0.1**	**10.0**	**-**	**-**	**-**	**-**
1/1	710	710	46	0	0	2.6	0.9	0.1	3.6	18.3	12.0	0.9	12.9
2/1	733	733	-	-	-	2.7	1.0	-	3.7	18.2	12.6	1.0	13.6
3/1	204	204	-	-	-	1.9	0.7	-	2.7	47.1	4.6	0.7	5.4
4/1	746	746	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	786	786	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	115	115	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 36.7 Total Delay for Signalled Lanes (pcuHr): 9.99 Cycle Time (s): 90
PRC Over All Lanes (%): 36.7 Total Delay Over All Lanes(pcuHr): 9.99

Full Input Data And Results

Scenario 2: '2045 DoSom PM' (FG2: 'PM With Development', Plan 2: 'PM Network Control')

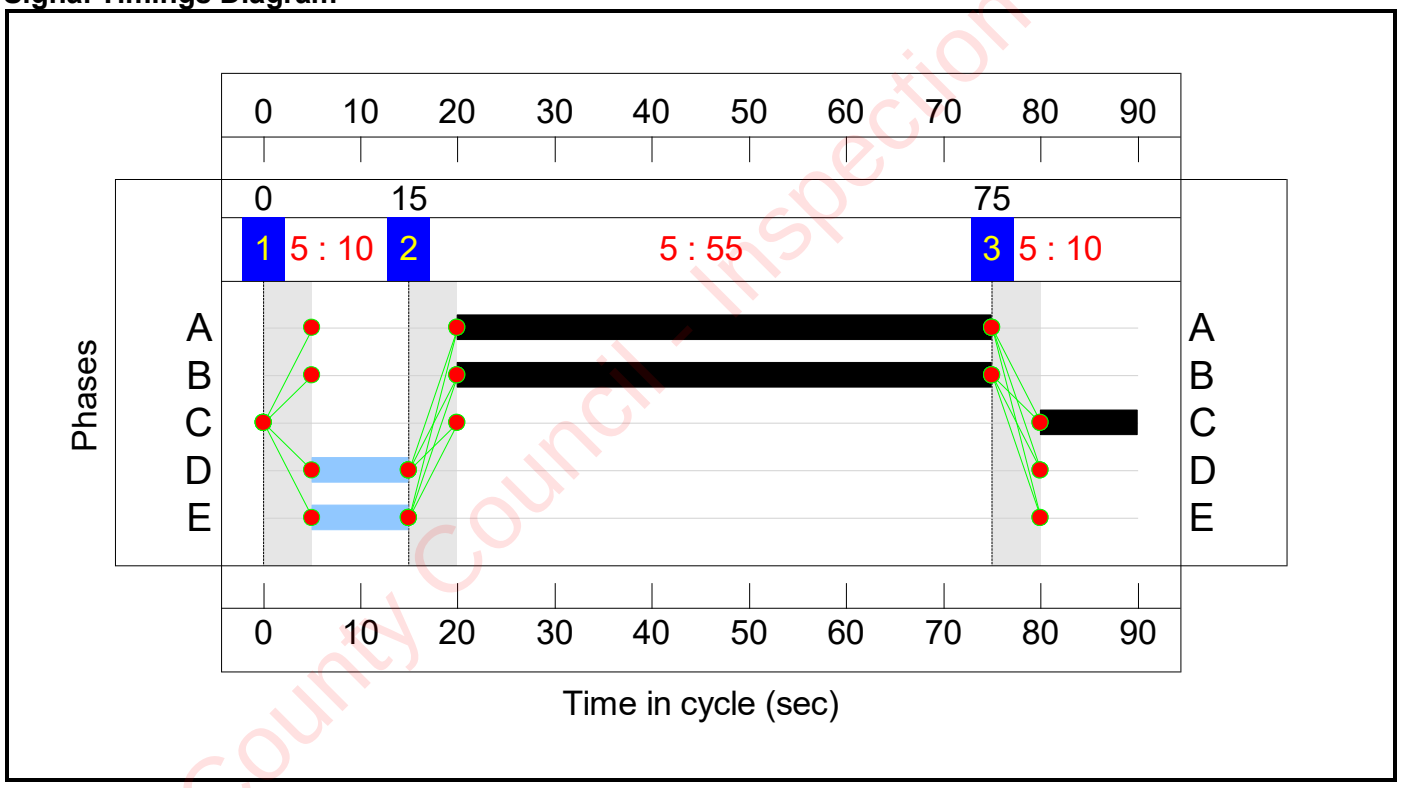
Stage Sequence Diagram



Stage Timings

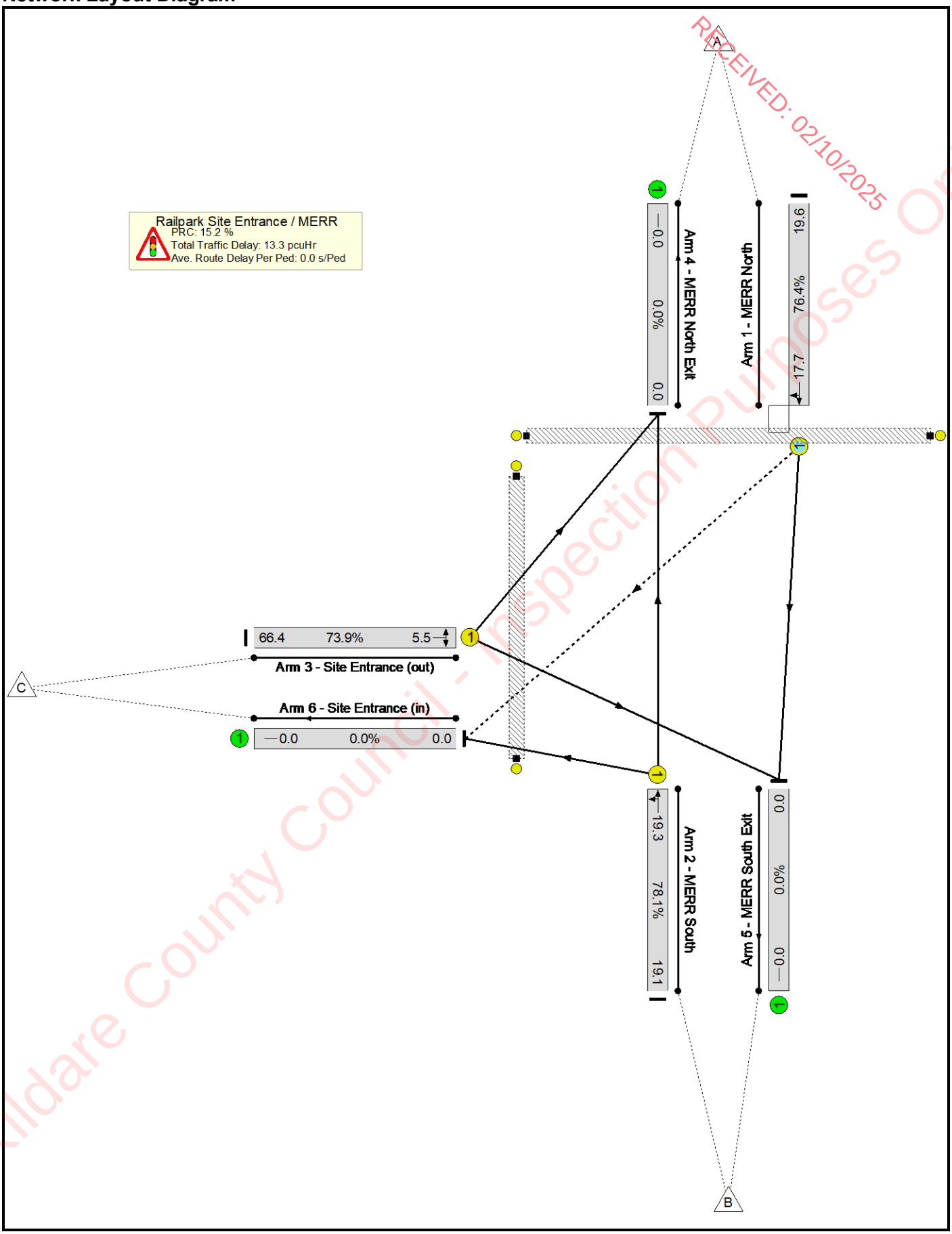
Stage	1	2	3
Duration	10	55	10
Change Point	0	15	75

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**78.1%**
Railpark Site Entrance / MERR	-	-	**N/A**	-	-		-	-	-	-	-	-	**78.1%**
1/1	MERR North Ahead Right	O	N/A	N/A	A		1	55	-	920	1965	1205	76.4%
2/1	MERR South Ahead Left	U	N/A	N/A	B		1	55	-	955	1965	1223	78.1%
3/1	Site Entrance (out) Left Right	U	N/A	N/A	C		1	10	-	173	1915	234	73.9%
4/1	MERR North Exit	U	N/A	N/A	-		-	-	-	920	Inf	Inf	0.0%
5/1	MERR South Exit	U	N/A	N/A	-		-	-	-	955	Inf	Inf	0.0%
6/1	Site Entrance (in)	U	N/A	N/A	-		-	-	-	173	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	D		1	10	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	E		1	10	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**69**	**0**	**0**	**8.2**	**4.7**	**0.3**	**13.3**	**-**	**-**	**-**	**-**
Railpark Site Entrance / MERR	**-**	**-**	**69**	**0**	**0**	**8.2**	**4.7**	**0.3**	**13.3**	**-**	**-**	**-**	**-**
1/1	920	920	69	0	0	3.1	1.6	0.3	5.0	19.6	16.1	1.6	17.7
2/1	955	955	-	-	-	3.3	1.8	-	5.1	19.1	17.5	1.8	19.3
3/1	173	173	-	-	-	1.8	1.4	-	3.2	66.4	4.1	1.4	5.5
4/1	920	920	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	955	955	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	173	173	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 15.2 Total Delay for Signalled Lanes (pcuHr): 13.28 Cycle Time (s): 90
PRC Over All Lanes (%): 15.2 Total Delay Over All Lanes(pcuHr): 13.28