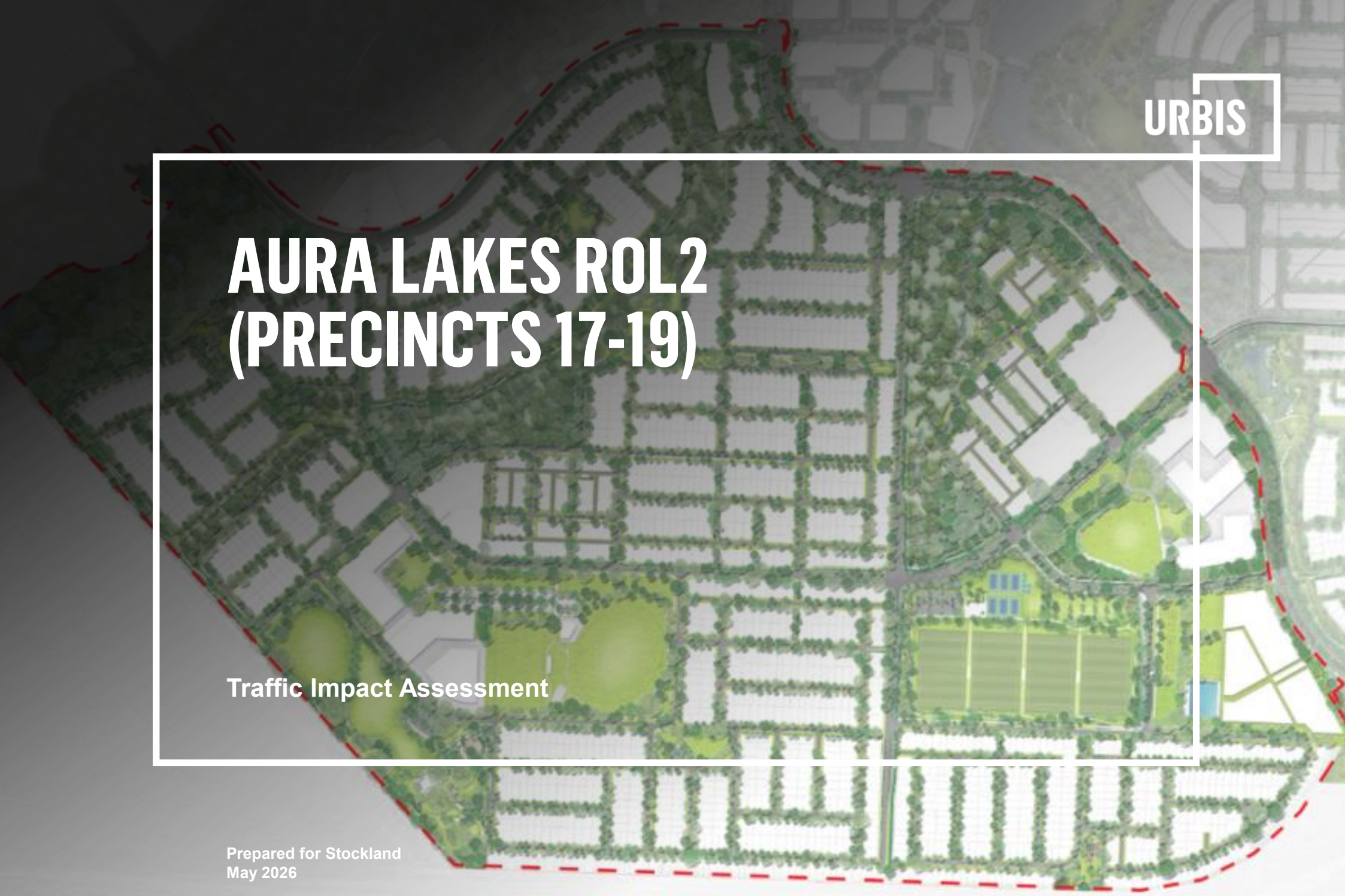
URBIS

AURA LAKES ROL2 (PRECINCTS 17-19)



Traffic Impact Assessment

Prepared for Stockland
May 2026

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Urbis staff responsible for this report were:

Director	Andy Johnston (RPEQ: 24764)
Associate Director	Jadyn Benzie
Senior Consultant	Ryan Peel
Consultant	Lily Schuetz
Project code	P0053364
Report number	01

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

DEVELOPMENT PROFILE

Proposed development is a residential community, multiple schools, multiple sporting grounds, recreation parks and more.

CYCLE NETWORK

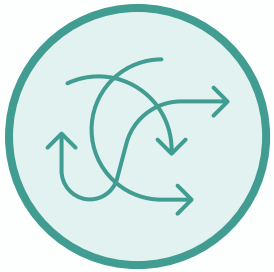
Wider separate cycle track network provides easy connections between precincts and to the wider Caloundra South PDA.

WALKING NETWORK

Active Transport network provides extensive connections from major attractors to internal and external precincts.

PUBLIC TRANSPORT

Future bus and rail networks will provide equitable opportunity for public transport connectivity to all residents.



ROAD NETWORK

Internal road network and nominated typologies are suitable for expected traffic volumes

INTERSECTION ANALYSIS

All key intersections meet Infrastructure Agreement requirements (DOS/Cycle time)

02

PROPOSED DEVELOPMENT

2.1 – SITE LOCATION

The “Gagalba” development is located approximately 8.1km south-west of central Caloundra.

The development is located within the Caloundra South Priority Development Area (PDA), which covers 2,323 hectares. The PDA sits between the Bruce Highway to the west, and Bells Creek Arterial Road to the south and is south of the existing Caloundra urban area, the Aerodrome and Sunshine Coast Regional Business and Industry Park. Once fully developed, the PDA will provide approximately 20,000 dwellings and create 15,000 jobs.

The proposed Gagalba precinct has a total area of approximately 234 hectares.

The development is bound by Bells Creek Arterial Road to the south, Bells Creek to the north, and existing/committed development to the north and east.

The wider Caloundra South PDA development has been progressing in stages and precincts since construction started in 2014.

The proposed site comprises sections of Precincts 17, 18 and 19 of the wider Aura masterplan.

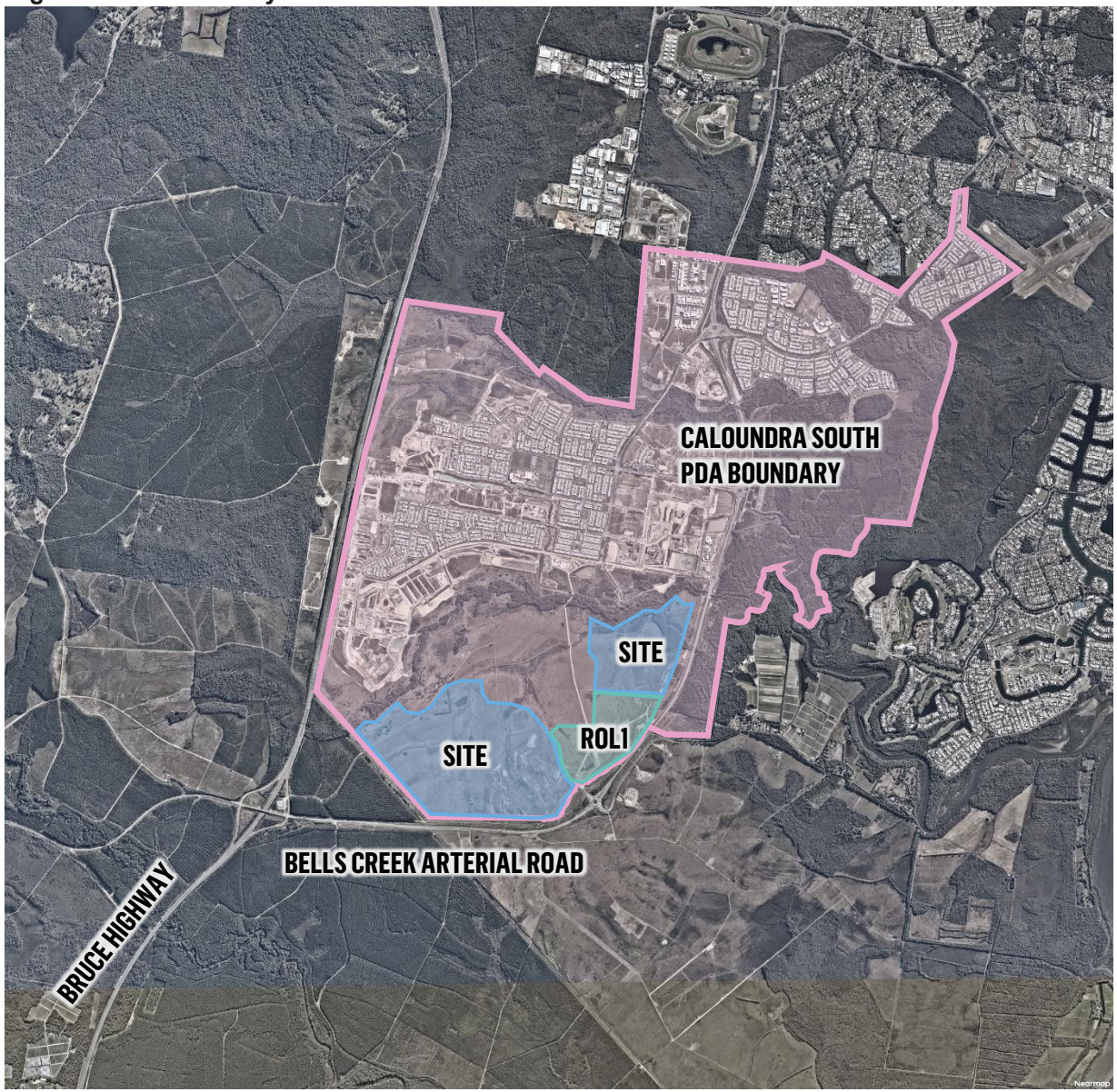
Historically, the site has predominately been vacant freehold land.

ROL1 was approved in 2024 and is located between the precincts that form this assessment.

The spatial extent of the site in relation to the Caloundra South PDA boundary and the existing and committed Aura Lakes developments is shown in Figure 1.

The development sits to the south of Caloundra, and approximately 70km north of Brisbane CBD.

Figure 2-1: Site Locality



2.2 – PROPOSED DEVELOPMENT: ULTIMATE LAND USES AND YIELDS

The proposed precinct will ultimately tie into the existing Aura development north of the site.

The proposed Gagalba precinct will accommodate several residential catchments, a district centre, multiple schools, multiple sporting grounds and recreation parks, a childcare centre and a number of community facilities.

The proposed development masterplan is provided in Appendix A, and shown in Figure 2-2.

The mix of residential, commercial, educational and recreational land uses will contribute to self containment within the wider Caloundra South PDA. This containment will result in increased ability for Active Transport trips and reduce overall traffic volumes.

The proposed uses and their yields are lifted from the Aura Lakes Proposal Plan for Precincts 17-19, as per RPS. The estimated student yield has been assumed from the previous PWC modelling undertaken. A summary of the proposed yields is shown in Table 2-2.

Figure 2-2: Proposed Development Neighbourhoods

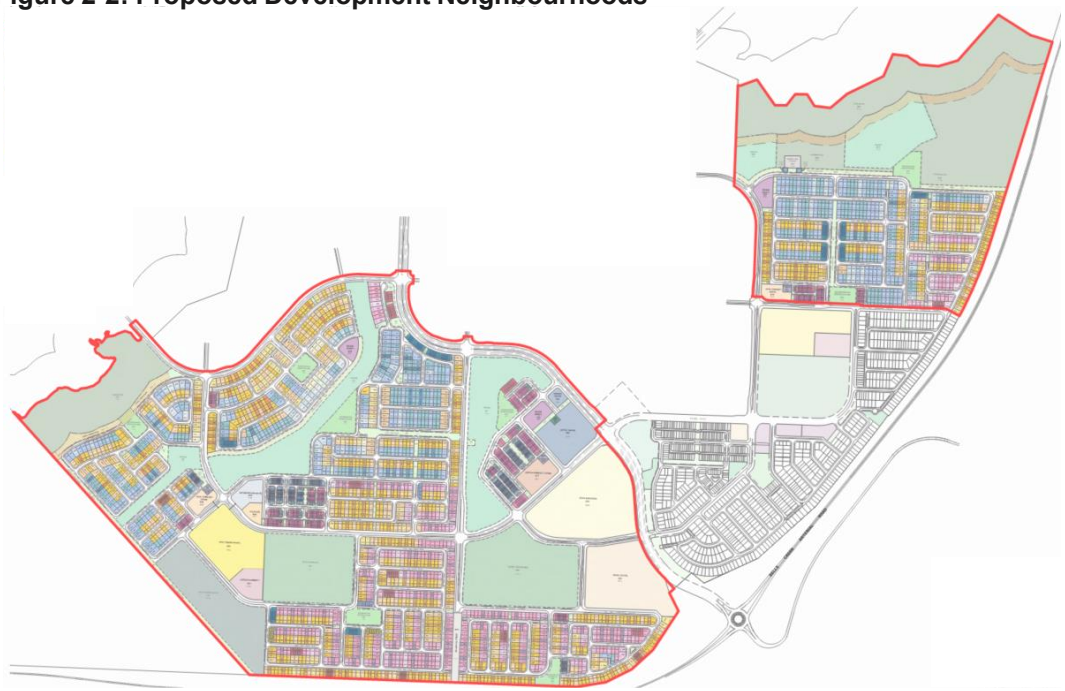


Table 2-2: Proposed Development Yields

Location	Land Use	Yield (unit rate)
Urban Village 1	Dwellings	150 dwellings
	District Centre	7,000m^2
	District Community Centre	9,935m^2
Urban Village 2	Dwellings	147 dwellings
	Childcare Centre	3,350m^2
Lifestyle Central	Dwellings	200 dwellings
Lifestyle West	Dwellings	257 dwellings
Lifestyle North-West	Dwellings	258 dwellings
Lifestyle North-East	Dwellings	394 dwellings
Gateway Central	Dwellings	177 dwellings
Gateway+ Central	Dwellings	295 dwellings
Gateway West	Dwellings	333 dwellings
Gateway East	Dwellings	325 dwellings
Gateway+ North-East	Dwellings	225 dwellings
Primary School	Primary School	1,100 students
State High School	State High School	1,500 students
Private School	Private School	1,800 students

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TRANSPORT NETWORK

3.2 – ACTIVE TRANSPORT NETWORK

3.2.2 – PEDESTRIAN AND SHARED PATH NETWORK

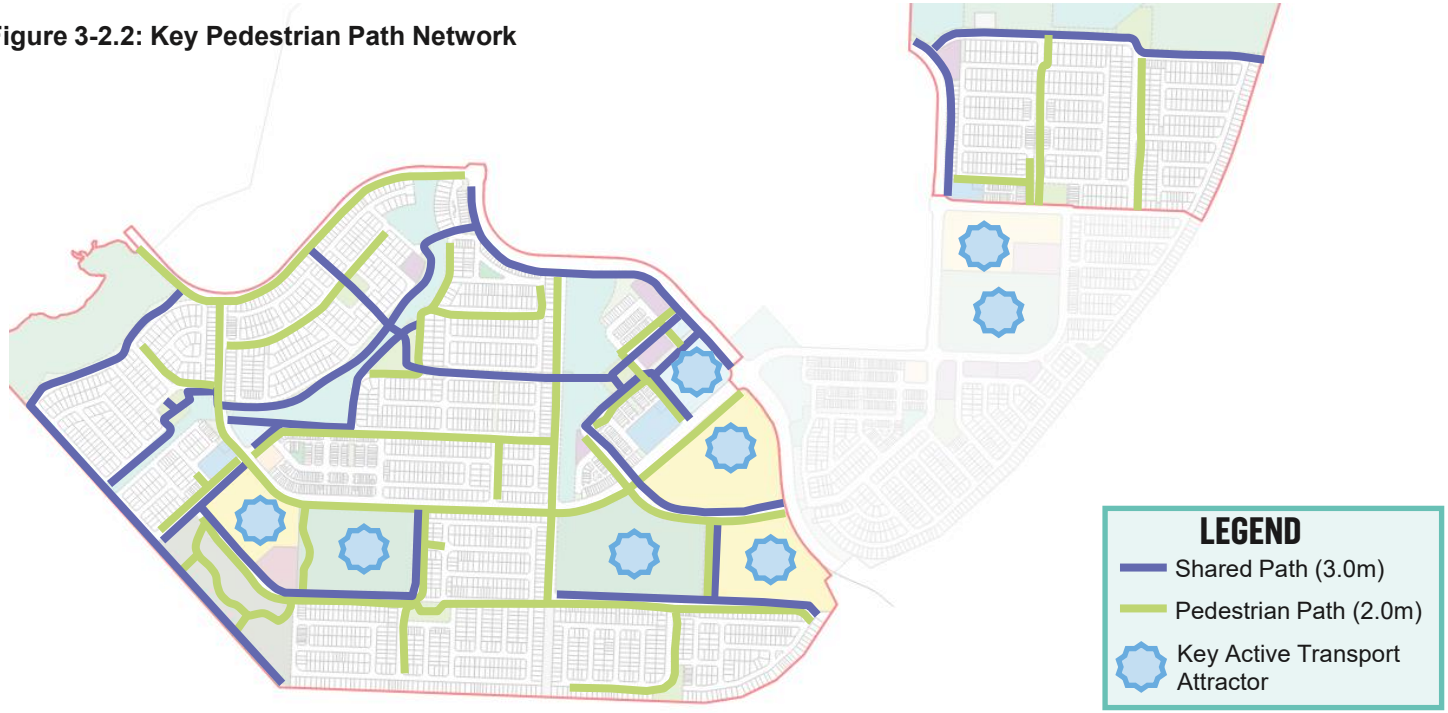
The constructed Caloundra South PDA precinct prioritises active transport connectivity through the site. This is achieved through the design of separated cycle track network at critical intersections and pedestrian paths on at least one side of most road typologies. This vision is continued within the proposed development (i.e. Gagalba) through the continuation of separated cycle ways, separate cycle track network and prioritised pedestrian network.

Figure 3-2.2 shows the key active transport routes within the Gagalba precinct, and includes:

- Aura Boulevard and all trunk connector variants include shared paths on both sides of the road
- Neighbourhood Connectors N1 and N2 have shared paths on both sides of the road.
- Neighbourhood Connector L includes shared paths on one side of the road
- No shared paths are provided for low order roads such as laneways. On lower order roads, pedestrian footpaths are provided for the majority of roads. The only road typologies that don't include footpaths are the 10.5m and 8.0m laneways. However, the shared area design and low speed environment will cater for pedestrians.

Connections between high pedestrian / active transport uses (such as schools and sports grounds) have been prioritised within the precinct. This ensures that genuine alternate modes of travel can be supported, not only reducing reliance on private vehicles but also supporting an effective, efficient and integrated movement network.

Figure 3-2.2: Key Pedestrian Path Network



3.2 – ACTIVE TRANSPORT NETWORK

3.2.3 - SEPARATED CYCLE TRACK NETWORK

The northern portion of the wider Caloundra South PDA development typically provides 3m wide separated cycle tracks, with higher use paths being upgraded to 4m within this application area.

The internal separated cycle track network has been designed with a minimum width of 3m to allow two-way movement along road boundaries. These have been located on the side of the road which reduces conflict points and increases connectivity to the network.

The location of the separated cycle tracks is shown in Figure 3-2.3a. A typical separated cycle track cross section is shown in Figure 3-2.3b.

With a minimum width of 3m, the cycle paths have been designed wider than the desirable minimum widths outlined in Austroads Guide to Road Design Part 6A – Paths for paths along the higher order roads, the separated cycle track network provide will provide easy active transport connections between the key precincts of the site and to the wider Caloundra South PDA. The wider paths will raise the perceived attractiveness of the active transport facilities and will attract cyclists of lower rider levels to utilise the network while providing safe and attractive facilities.

At intersections, the separated cycle track movement has been allowed for as a priority phase within the cycle. This is detailed further in Section 6.3.

Figure 3-2.3a: Dedicated Separate Cycle Track Network

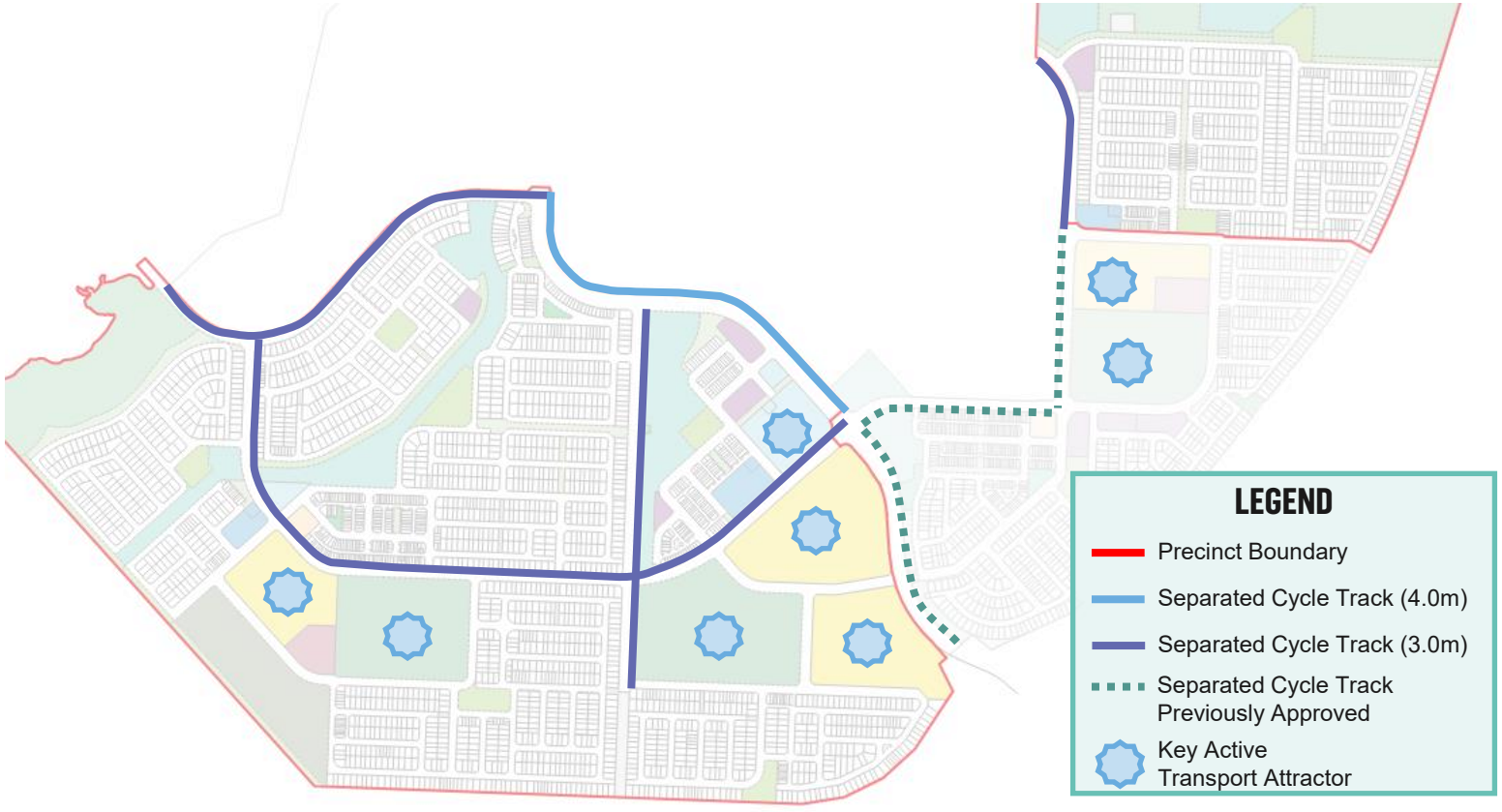
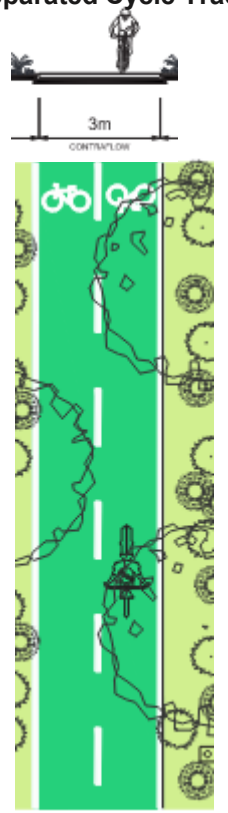


Figure 3-2.3b: Typical 3m Separated Cycle Track Design



Source: RPS

05

IMPACT ASSESSMENT ASSUMPTIONS

5.1 – NETWORK MODELLING

5.1.1 –PREVIOUS ASSESSMENT

As part of previous approvals for the greater Caloundra South PDA, modelling has been undertaken by PWC (published June 2024). The full traffic modelling refresh report is provided in Appendix D. The intersection turning volumes from the model were utilised in the below assessment.

These models were based on modelling data provided by Sunshine Coast Council (SCC) with the additional demands of the Aura Precinct added. This formed a masterplan assessment of the catchment, with the model to be updated as part of subsequent applications.

5.1.2 –MODELLING BACKGROUND

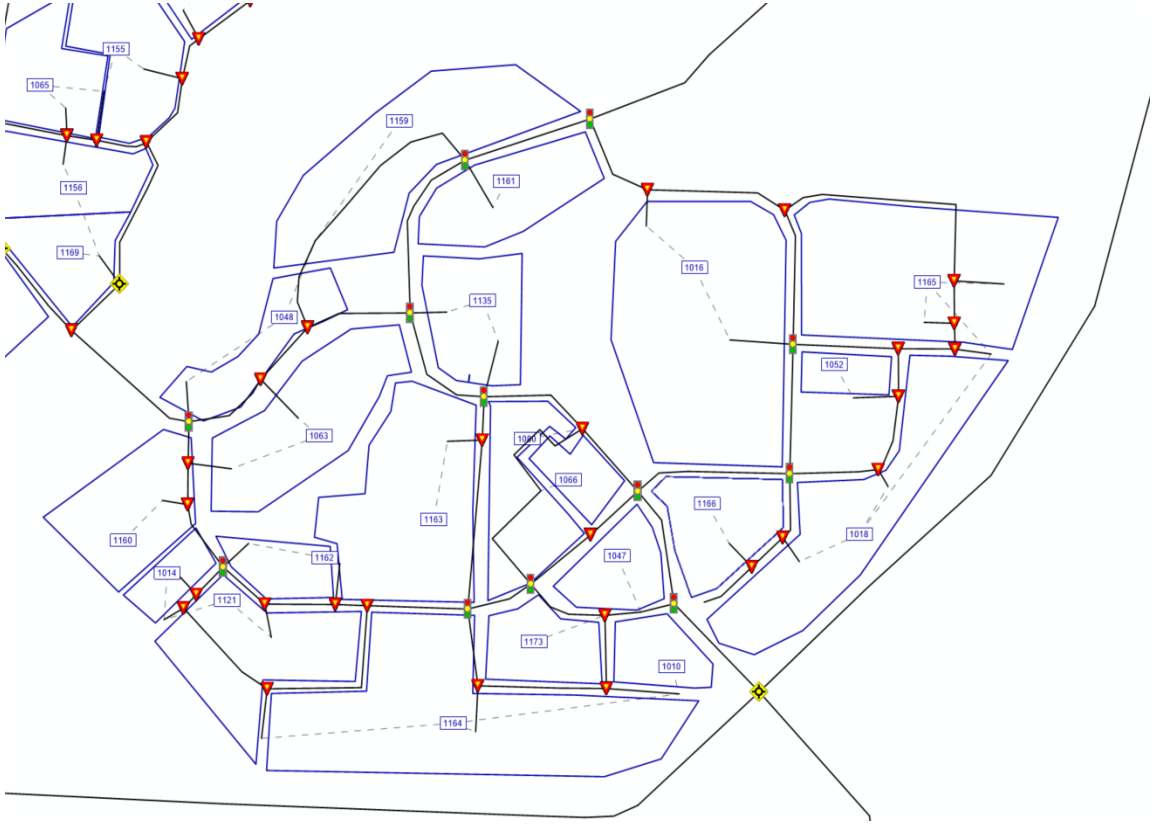
To support this application, BDO has been commissioned by Stockland to update the transport modelling for the greater Caloundra South PDA. The updated model included updates to the previous MHW Aura VISUM Model, ensuring the inputs reflected the latest planning assumptions within Precincts 17-19.

As part of the assessment, the modelling was built to meet the following requirements under the Caloundra South Priority Development Area – Infrastructure Agreement (Local Government Infrastructure):

- *At the time of lodging the first application for an ROL Approval for a Precinct, the Developer must provide to MEDQ and Council, a Precinct Traffic Analysis. Precinct Traffic Analysis means an analysis of the transport network for a Precinct, where that analysis identifies:*
  - *The volume and capacity of road links; and*
  - *The capacity and operation of key intersections.*
  - *For road Classifications of Neighbourhood Connector, Center Connector, Industrial Connector, Trunk Collector, Sub-Arterial and above.*

A summary of the modelling out puts is provided in Figure 5-1.

Figure 5-1: Modelling Report Road Network Summary

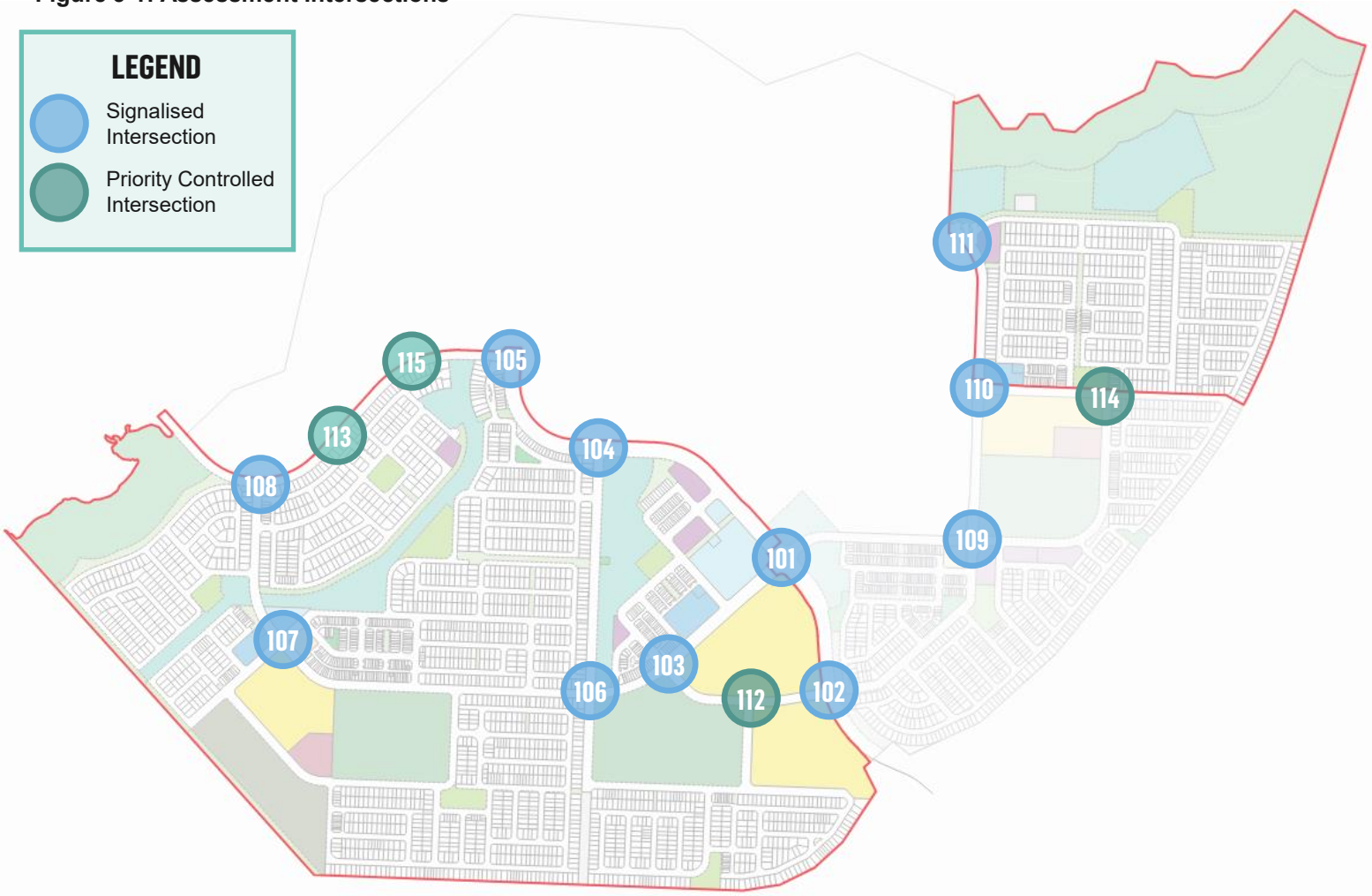


5.2 – ASSESSMENT KEY INTERSECTIONS

A total of fourteen intersections within the precinct have been assessed to determine the suitability of the proposed intersection layouts.

The fifteen intersections have been chosen as key locations across the three precincts. The assessed intersections were anticipated to have significant opposing volumes on different approaches, and as such were deemed to require detailed intersection assessment. The location of the fourteen intersections throughout the development are illustrated in Figure 5-1.

Figure 5-1: Assessment Intersections



5.2 – ASSESSMENT KEY INTERSECTIONS

5.2.2 –SIDRA INPUTS

To ensure a more robust assessment of the traffic network, several additional analyses were conducted as part of this TIA. These included:

- Green Wave Intersections – Two key corridors in the Gagalba network were modelled as networks. This was to ensure that the modelled intersections could be analysed with coordinated signal operation, thus allowing a green wave through successive intersections. The assessment is shown in full in Section 6.5. The assessed networks are:
    - Network 1 – Aura Boulevard (Intersections 101 / 104 / 105)
    - Network 2 – East West Link (Intersections 103 / 106)

- Sensitivity Assessment – The ultimate development yield is expected to complete construction and be operational by 2041. Before the ultimate arrangement, only two accesses to the development will be operational (via Bells Creek Arterial to the south, and via Precinct 15 to the west). As such, the road network and associated intersections in the interim arrangement (2031) have been assessed to review the network performance with the interim access arrangements. The full sensitivity analysis is shown in Section 6.6.

- Model Volume Adjustments – A review of the network model output volumes was undertaken prior to the SIDRA analysis. This was to ensure that the model outputs reflect the expected operation of the movement network. The review identified that there were instances where turn volumes were 50vph or less where volumes were expected to be higher. As such, a nominal 50vph were added in most cases.

- Aura Boulevard – The stretch of Aura Boulevard from Intersection 101 to Intersection 105 has been modelled with one full lane in either direction in accordance with the road cross section plans. Future possible duplication works by others could occur to widen Aura Boulevard as part of wider infrastructure works, however these are not to be provided by Stockland. The road reserves will be constructed to allow for this future widening if necessary.

06

TRAFFIC ASSESSMENT

6.1 –ASSESSMENT BACKGROUND

6.1.1 INFRASTRUCTURE AGREEMENT

As outlined above, the traffic volumes have been implied from the updated model prepared by BDO. The assessment considers the key requirements of the current Infrastructure Agreement (dated 02/11/2015). The key requirements are as follows:

A Works Contribution that is an intersection must be designed in accordance with the following criteria:

- For a proposed **signalised** intersection
  - i. SIDRA Intersection 6.0 (or later generally accepted intersection modelling software) will be adopted for intersection design. SIDRA calculations shall generally use default parameters however alternative parameters can be adopted where technical justification can be made;
  - ii. Shall have a volume on capacity ration of less or equal to 0.90
  - iii. A maximum cycle time of 140 seconds will only be used on Sub-arterial 3. All other roads will have a maximum cycle time of 120 seconds.

- For a proposed **roundabout** controlled intersection:
  - i. SIDRA Intersection 6.0 (or later generally accepted intersection modelling software) will be adopted for intersection design. SIDRA calculations shall generally use default parameters however alternative parameters can be adopted where technical justification can be made;
  - ii. Shall have a volume on capacity ration of less or equal to 0.85

- For a proposed **give way or stop sign** controlled intersection:
  - i. SIDRA Intersection 6.0 (or later generally accepted intersection modelling software) will be adopted for intersection design. SIDRA calculations shall generally use default parameters however alternative parameters can be adopted where technical justification can be made;
  - ii. Shall have a volume on capacity ration of less or equal to 0.80

6.1.2 SIDRA ASSESSMENT

The intersections have been analysed using SIDRA Intersection 9.1.

Based on the requirements of the Caloundra South PDA Infrastructure Agreement, the proposed signalised intersections will be analysed with a maximum cycle time of 140 seconds for sub-arterial roads (Aura Boulevard), while all other roads will be analysed with a maximum cycle time of 120 seconds. The required DoS thresholds are shown in Table 6-1.2.

The assessment has been undertaken for the future year (ultimate design traffic) scenario.

Full SIDRA intersection summaries are provided in **Appendix E**.

Table 6-1.2: Adopted Intersection Performance Threshold – Degree of Saturation

Intersection Treatment	DOS Threshold
Signalised Intersections	Less than or equal to 0.90
Roundabouts	Less than or equal to 0.85
Priority controlled intersections	Less than or equal to 0.80

***Source**: LGIA Agreement (02/11/2015)*

6.2 – ASSESSMENT PARAMETERS

6.2.1 – ADOPTED SIDRA DEFAULTS

A summary of the SIDRA Modelling parameters adopted for this assessment are summarised below:

- The assumed cycle lengths and phasing for the signalised intersections are informed from recent surveys and are presented in the following site summaries.
- Signalised intersections with pedestrian crossings have been modelled to apply a delayed start for opposed left turn movements running in the same phase.
- Peak Flow Factor – **0.95 (30min/60min)**
- Basic Saturation Flow – **1,950tcu/hr.**
- A heavy vehicle rate of 5% has been applied to through movements on Aura Boulevard, capturing anticipated public transport and service vehicles.
- This growth rate is considered to be a reasonable estimate for the surrounding external road network.
- In accordance with the infrastructure agreement, all signalised intersections have been configured with a maximum cycle time of 120 seconds.

6.3 – SIGNALISED INTERSECTION PHASING

As part of Urbis' assessment, the optimal signal phasing for each intersection has been identified. In order to ensure safe and efficient cyclist and pedestrian movement, each signal design includes a priority separated cycle track movement in the phase design. A maximum 120 second cycle time has been adopted for al intersections.

All proposed signalised intersections within the development include at least one separated cycle track crossing. As such, phasing at these intersections includes a specific separated cycle track movement. This can be seen below in Figure 6-3.1 (adopted for Intersection 101) - during Phase A, the north-south separated cycle track movement on the eastern approach runs without any conflicting movements. The separated cycle tracks have been configured as dedicated lanes in the key intersections, denoted in green. These lanes are used solely by the cycle user class. Each movement has been given a nominal 50 bicycle trips in the AM and PM peaks to ensure a conservative active transport input.

Typical examples of the different phasing design utilised in this assessment is shown in Figure 6-3.1 and Figure 6-3.2 below. The signal phasing utilised for each intersection has been included as part of the SIDRA results provided in Appendix E.

Ultimately, all intersection phasing for the development will need to be co-ordinated with EDQ, Sunshine Coast Council, and any other relevant authority.

Figure 6-3.1: Multiple Separated Cycle Track Crossing Signal Design (Staged Crossing)

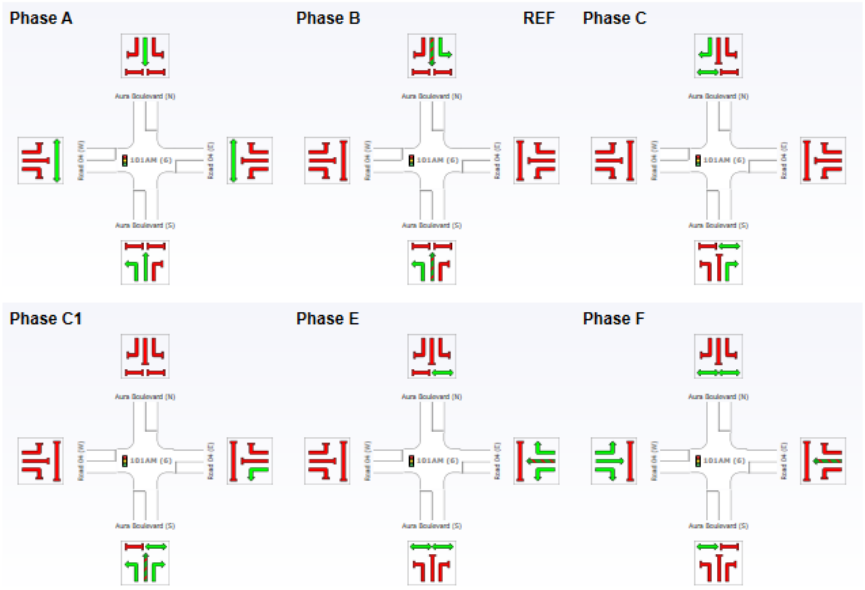
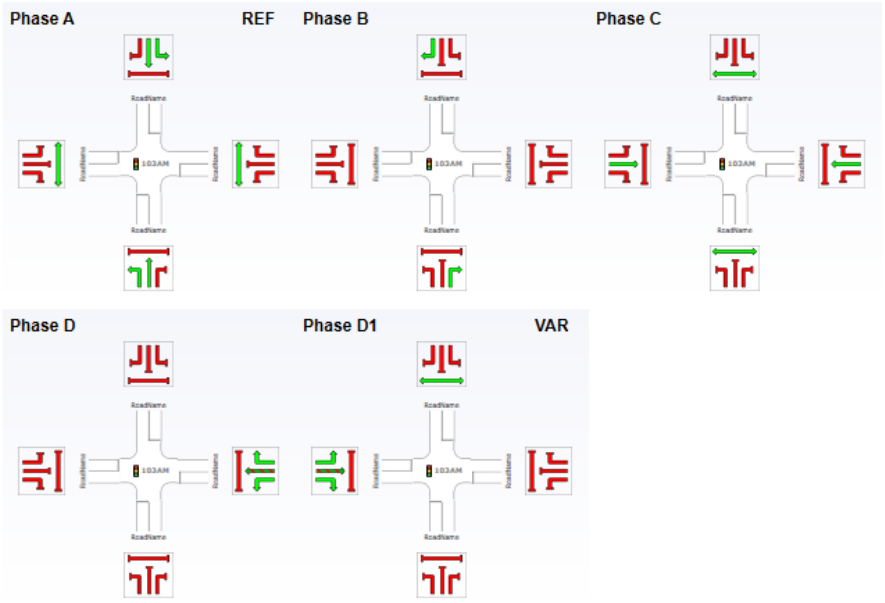


Figure 6-3.2: Single Separated Cycle Track Crossing Signal Design



6.4 – SIDRA RESULTS

6.4.1 – SUMMARY TABLE

A summary of the full SIDRA intersection assessment is provided below in Table 6-4.1. Detailed analysis of each intersection is provided in the subsequent slides. Full intersection summaries are provided in Appendix E. Where results comply with the requirements of the Caloundra South PDA Infrastructure Agreement, they are shown below in green.

Table 6-4.1: Traffic Impact Assessment Scenarios

Intersection	Intersection Type	AM Peak			PM Peak		
		Cycle Time	Degree of Saturation	Intersection Delay	Cycle Time	Degree of Saturation	Intersection Delay
Int 101	Signals	120s	0.862	42s	116s	0.817	36s
Int 102	Signals	84s	0.480	12s	96s	0.358	10s
Int 103	Signals	120s	0.878	52s	120s	0.883	52s
Int 104	Signals	120s	0.546	48s	120s	0.522	44s
Int 105	Signals	120s	0.457	47s	120s	0.557	47s
Int 106	Signals	120s	0.832	52s	120s	0.747	47s
Int 107	Signals	102s	0.855	45s	96s	0.678	41s
Int 108	Signals	98s	0.876	46s	98s	0.706	45s
Int 109	Signals	89s	0.644	29s	89s	0.665	31s
Int 110	Signals	90s	0.691	41s	87s	0.684	39s
Int 111	Give-Way	-	0.117	4s	-	0.112	4s
Int 112	Give-Way	-	0.230	8s	-	0.071	3s
Int 113	Give-Way	-	0.250	4s	-	0.062	5s
Int 114	Give-Way	-	0.086	4s	-	0.088	4s
Int 115	Give-Way	-	0.421	4s	-	0.685	9s

6.4 – SIDRA RESULTS

6.4.2 – INTERSECTION 101

Intersection 101 is a critical intersection within Precincts 17-19, as it is the only intersection to provide major access points to the catchments on both sides of Aura Boulevard.

The operation of Intersection 101 is within acceptable ranges.

Based on the model inputs, the SIDRA results show that the intersection is expected to operate with a **maximum DoS of 0.862**. Average intersection delay is 42 seconds, and a maximum queue length of 130m (on the eastern approach).

The intersection includes two separated cycle track crossings, on the northern and eastern approaches. Given the number of lanes on the north and south approaches, staged signalised crossings have been assigned to these approaches.

The intersection performance results include a **120 second** cycle time for the AM peak and **116 second** cycle time for the PM peaks. This is within the 120 second cycle time nominated within the IA.

Overall, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement

Figure 6-4.2: SIDRA Intersection Layout

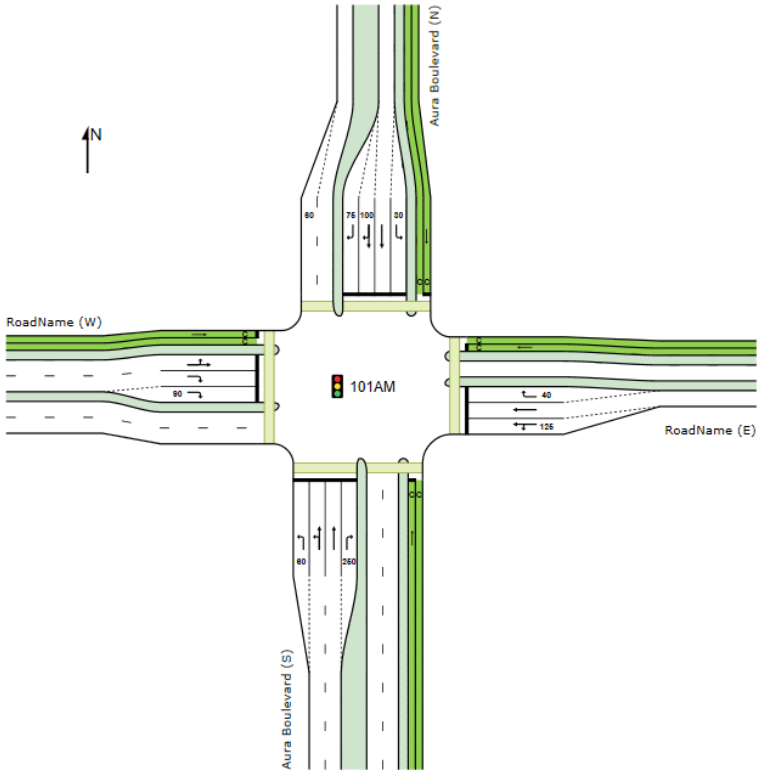


Table 6-4.2: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Ultimate	0.326	61.1	68.5	N-R	0.739	55.3	130	S-R	0.862	67	120	E-L	0.810	78.4	74.4	W-L	0.862	42	130	W-L
PM Peak - Ultimate	0.284	67.2	54.8	N-L	0.530	52.4	84.7	S-R	0.624	58.9	68.3	E-R	0.817	77.4	48.6	W-L	0.817	36.2	84.7	W-L

6.4 – SIDRA RESULTS

6.4.3 – INTERSECTION 102

The operation of Intersection 102 is within acceptable ranges.

The SIDRA results show that the intersection operates with a **maximum DoS of 0.480.** The intersection operates with a delay of 12 seconds, and a maximum queue length of 92m.

The intersection performance includes a **84 second** and **96 second** cycle time for the AM and PM peaks respectively. Note: no separated cycle track movements occurs at this intersection.

Overall, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-4.3: SIDRA Intersection Layout

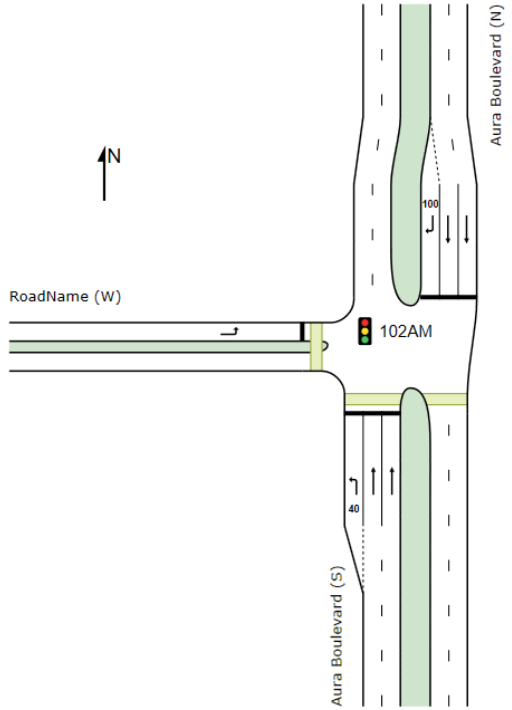


Table 6-4.3: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Southern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Ultimate	0.480	42.7	91.9	N-R	0.397	48.7	55.4	S-L	0.197	40.8	13.7	W-L	0.480	12	91.9	S-L
PM Peak - Ultimate	0.354	47.6	69.4	N-R	0.358	53.2	59	S-L	0.225	47.5	16	W-L	0.358	10.3	69.4	S-L

6.4 – SIDRA RESULTS

6.4.4 – INTERSECTION 103

The operation of Iintersection 103 is within acceptable ranges.

Based on the model outputs, the intersection operates with a **maximum DoS of 0.883.** The average intersection delay is 51.8 seconds, and the maximum queue length is 180m.

The intersection performance results include a **120 second** cycle time for the AM and PM peaks respectively.

Overall, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-4.4: SIDRA Intersection Layout

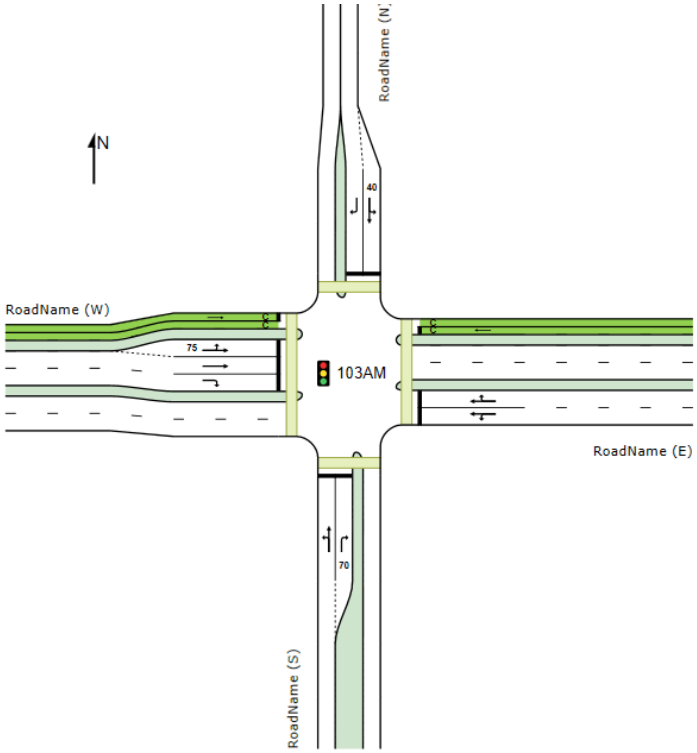


Table 6-4.4: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Ultimate	0.312	62.7	36	N-R	0.817	70.3	61.2	S-R	0.878	85.2	180	E-R	0.348	57	37.8	W-R	0.878	51.5	180	E-R
PM Peak - Ultimate	0.400	66	36	N-R	0.872	75.6	53	S-R	0.883	70.2	121	E-L	0.224	54.7	24.1	W-R	0.883	51.8	121	S-R

6.4 – SIDRA RESULTS

6.4.5 – INTERSECTION 104

The operation of Intersection 104 is within acceptable ranges.

As shown, the intersection operates with a **maximum DoS of 0.546.** The average intersection delays is 47.6 seconds, and a queue length of 121m.

The intersection performance results include a **120 second** cycle time for the AM and PM peaks.

Overall, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement

Figure 6-4.5: SIDRA Intersection Layout

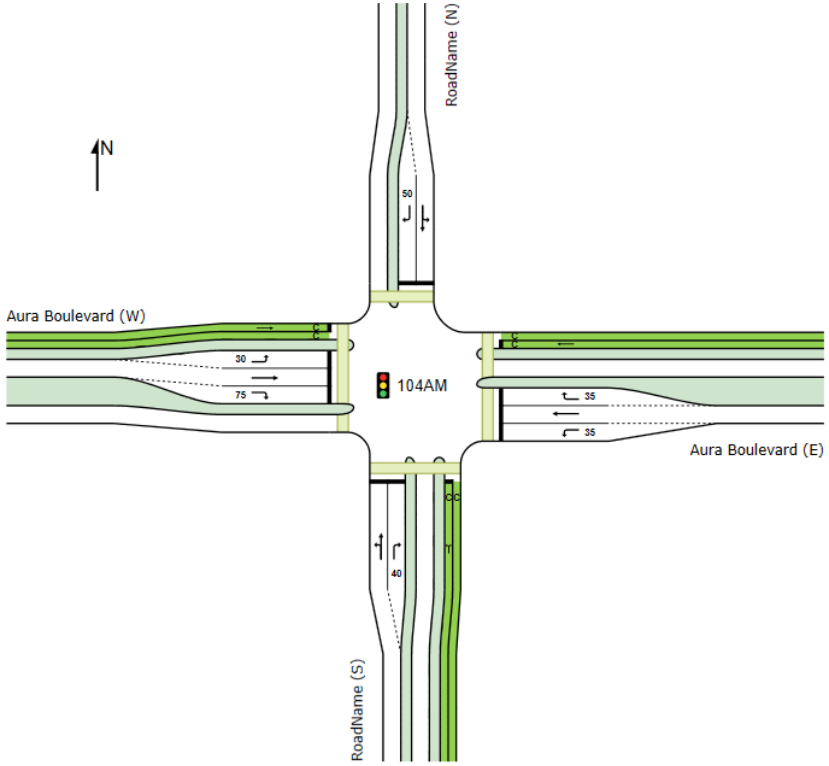


Table 6-4.5: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Ultimate	0.334	56.8	38.7	N-L	0.530	62	45.1	S-L	0.416	66.5	57.4	E-R	0.546	74.9	121	W-L	0.546	47.6	121	W-L
PM Peak - Ultimate	0.522	68.7	42.3	N-T	0.522	62.6	42.3	S-L	0.504	45.9	83.7	E-R	0.509	76.2	95.3	W-L	0.522	43.5	95.3	W-L

6.4 – SIDRA RESULTS

6.4.6 – INTERSECTION 105

The operation of Intersection 105 is within acceptable ranges.

As shown, the intersection operates with a **maximum DoS of 0.557.** The average intersection delay is 47.2 seconds, and a queue length is 106m.

The intersection performance results include a **120 second** cycle time for both the AM and PM peaks.

The intersection includes two separated cycle track crossings, on the northern and eastern approaches. Given the number of lanes on the north and south approaches, staged signalised crossings have been assigned to these approaches.

As such, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-4.6: SIDRA Intersection Layout

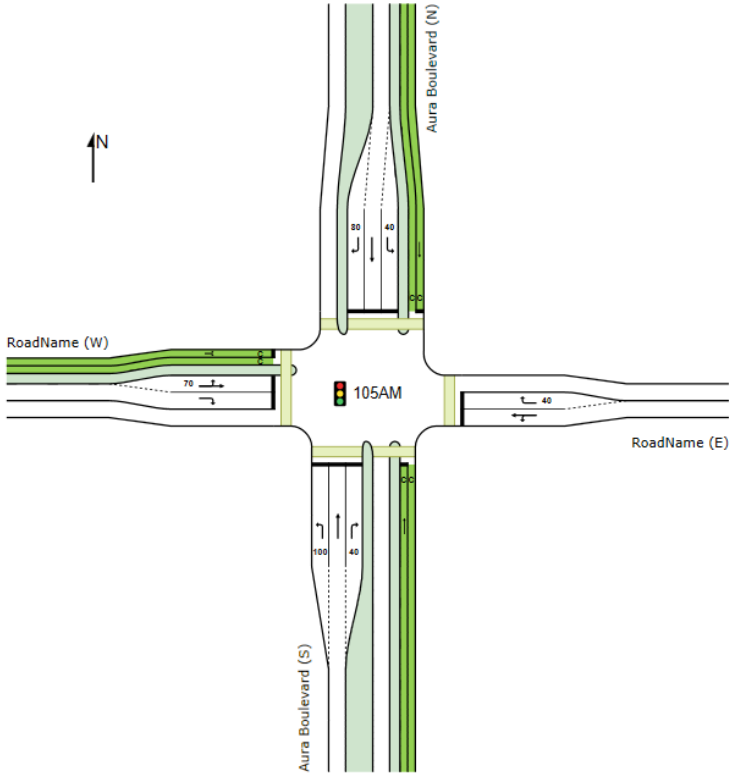


Table 6-4.6: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Ultimate	0.425	66.8	36.6	N-T	0.425	66.8	50.9	S-T	0.457	63.1	41.3	E-	0.457	48.9	81.4	W-	0.457	47.2	81.4	N-T
PM Peak - Ultimate	0.425	66.8	29	N-T	0.521	66.8	106	S-T	0.557	66.5	42.8	E-	0.549	61.2	71.9	W-	0.557	46.5	106	N-T

6.4 – SIDRA RESULTS

6.4.7 – INTERSECTION 106

The operation of the Intersection 106 is within acceptable ranges.

As shown, the intersection operates with a **maximum DoS of 0.832.** The average intersection delays is 51.9 seconds, and queue length is 99.8m.

The intersection includes two separated cycle track crossings, on the northern and eastern approaches. These have been factored into the phasing.

The intersection performance results include a **120 second** cycle time for the AM and PM peaks.

Overall, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-4.7: SIDRA Intersection Layout

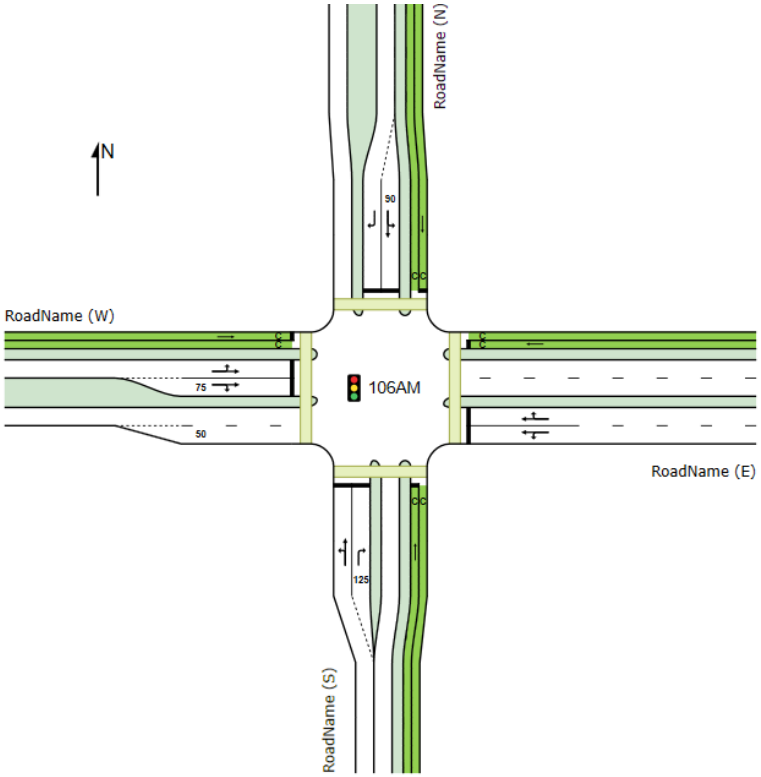


Table 6-4.7: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Ultimate	0.747	86.3	45.8	N-L	0.747	86.8	45.8	S-L	0.415	46.1	50.9	E-R	0.832	98.8	99.8	W-L	0.832	51.9	99.8	W-L
PM Peak - Ultimate	0.747	86.3	45.8	N-L	0.747	86.9	45.8	S-L	0.490	49	61.8	E-R	0.506	76.6	60.7	W-L	0.747	47	61.8	S-L

6.4 – SIDRA RESULTS

6.4.8 – INTERSECTION 107

The operation of Intersection 107 is within acceptable ranges.

As shown, the intersection operates with a **maximum DoS of 0.855**, average intersection delays of 45.1 seconds, and a queue length of 127m.

The intersection includes one separated cycle track crossing at the eastern approach. This has been factored into the phasing of the intersection.

The intersection performance results include a **102 second** and **96 second** cycle time for the AM and PM peaks respectively.

Overall, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-4.8: SIDRA Intersection Layout

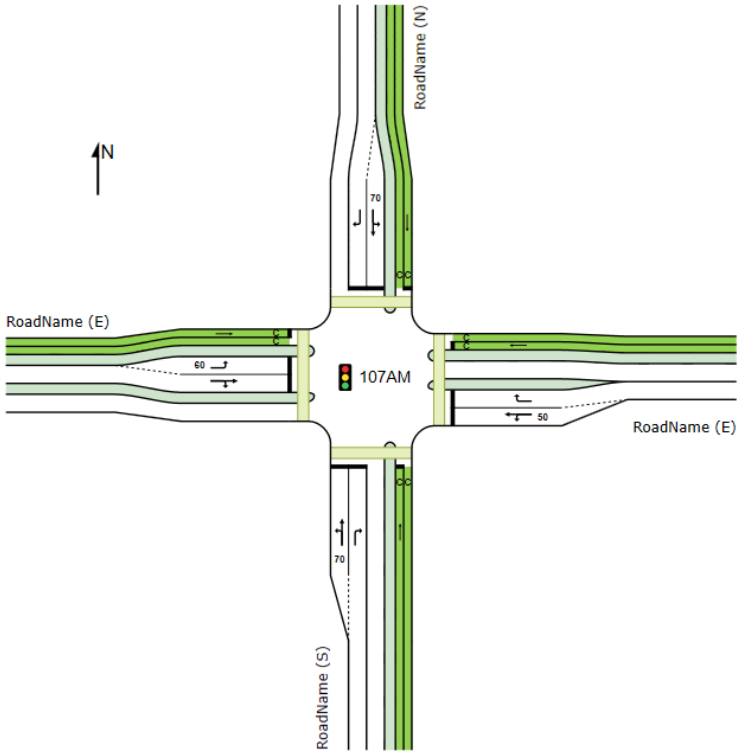


Table 6-4.8: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Ultimate	0.855	84.5	127	N-L	0.482	59.5	30.3	S-R	0.439	58.5	23.1	E-R	0.715	73.8	38.9	W-R	0.855	45.1	127	N-L
PM Peak - Ultimate	0.678	70.8	36.9	N-L	0.453	55.8	50	S-R	0.453	55.8	21	E-R	0.672	69.6	36.2	W-R	0.678	40.5	50	N-L

6.4 – SIDRA RESULTS

6.4.9 – INTERSECTION 108

The operation of Intersection 108 is within acceptable ranges.

As shown, the intersection operates with a **maximum DoS of 0.876.** The average intersection delays is 46 seconds, and a queue length of 140m.

The intersection performance results include a **98 second** cycle time for the AM and PM peaks.

Overall, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement

Figure 6-4.9: SIDRA Intersection Layout

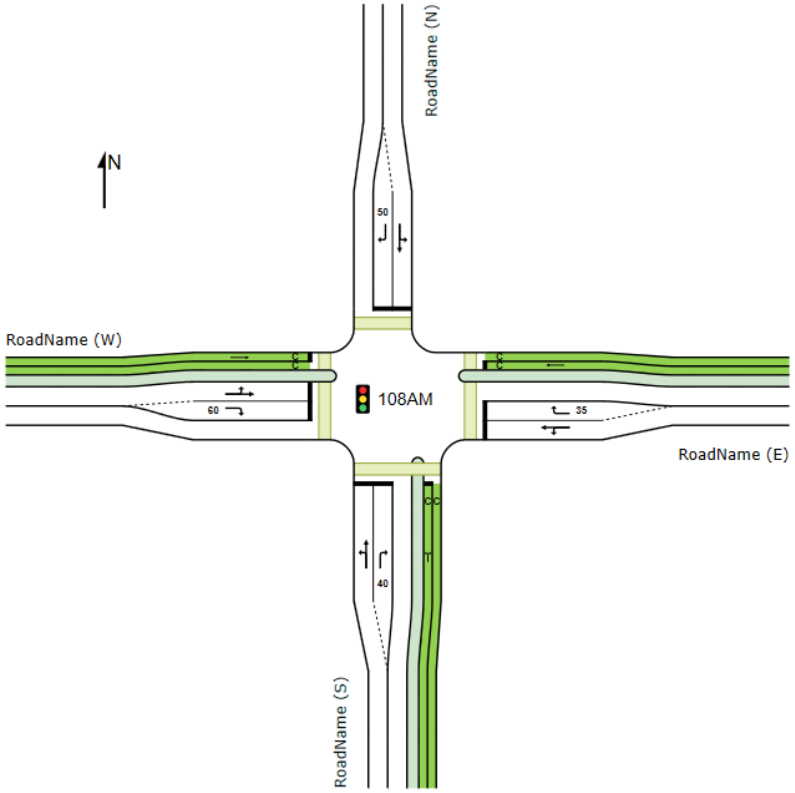


Table 6-4.9: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Ultimate	0.706	60.9	37.5	N-L	0.610	54.4	39.4	S-L	0.443	52	73.4	E-R	0.876	75.5	112	W-L	0.876	46.2	112	W-L
PM Peak - Ultimate	0.705	60.8	37.4	N-L	0.703	55.5	46.7	S-L	0.706	66.4	140	E-R	0.592	65.8	77.9	W-L	0.706	45.4	140	E-R

6.4 – SIDRA RESULTS

6.4.10 – INTERSECTION 109

The operation of the Intersection 109 is within acceptable ranges.

As shown, the intersection operates with a **maximum DoS of 0.665.** The average intersection delays is 31.1 seconds, and queue length is 33m.

The intersection performance results include a **89.2 second** cycle time in both the AM and PM peak scenarios.

As such, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-4.10: SIDRA Intersection Layout

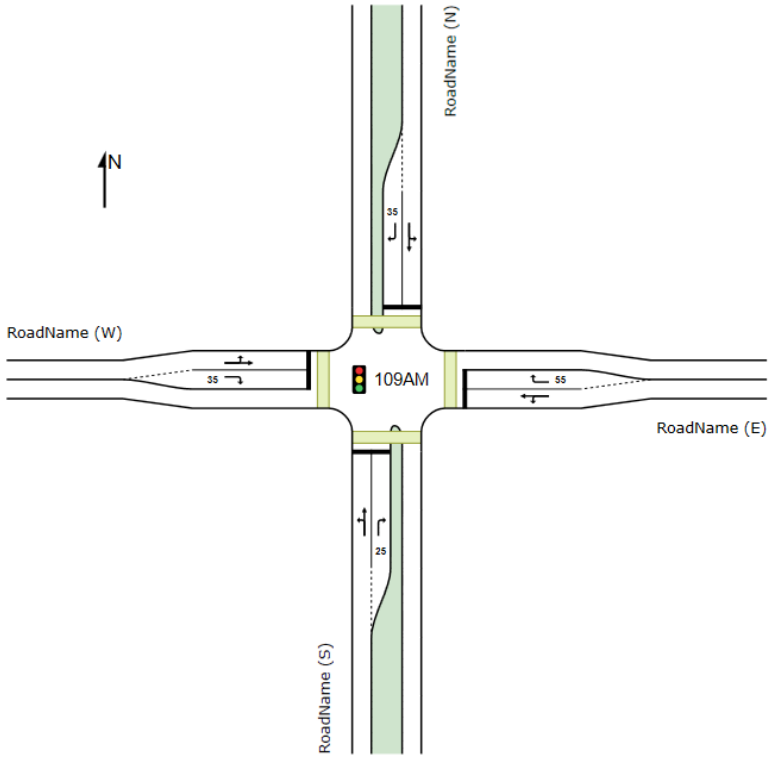


Table 6-4.10: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Ultimate	0.564	52.7	22.6	N-R	0.644	50.6	32.6	S-R	0.421	51.8	26.2	E-R	0.527	51.8	28.5	W-R	0.644	28.8	32.6	N-R
PM Peak - Ultimate	0.531	52.4	21.1	N-R	0.467	50.6	22.6	S-R	0.421	51.8	19.6	E-R	0.665	53.7	27.2	W-R	0.665	31.1	27.2	W-R

6.4 – SIDRA RESULTS

6.4.11 – INTERSECTION 110

The operation of the Intersection 110 is within acceptable ranges.

As shown, the intersection operates with a **maximum DoS of 0.691.** The average intersection delays is 40.5 seconds, and queue length is 45.6m.

The intersection performance results include a **90 second** and **87.3 second** cycle time for the AM and PM peaks respectively.

As such, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-4.11: SIDRA Intersection Layout

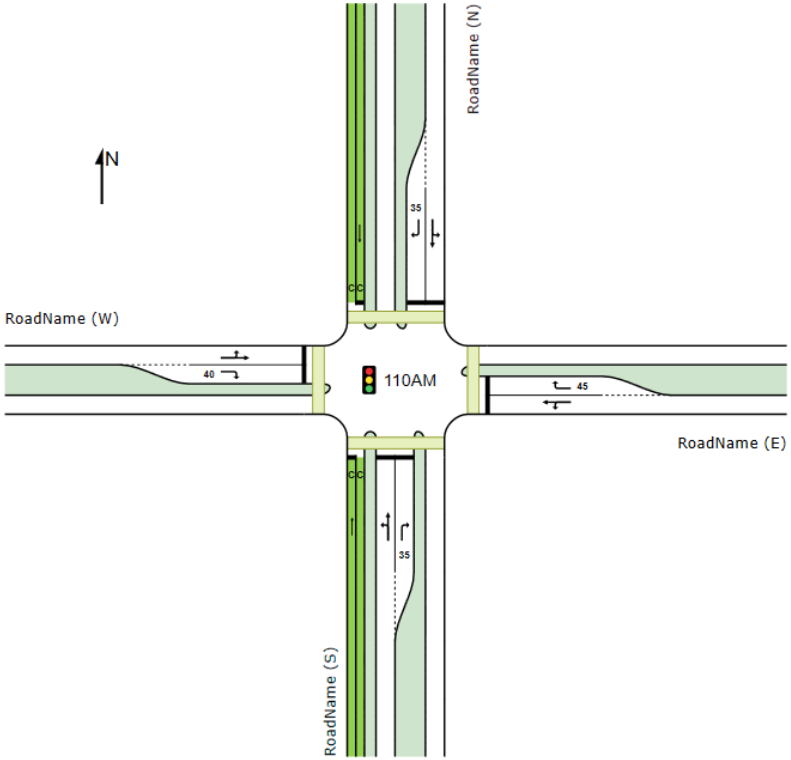


Table 6-4.11: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Ultimate	0.691	59.2	45.6	N-L	0.425	52.3	23.5	S-R	0.425	52.3	26.8	E-R	0.425	52.4	26.8	W-R	0.691	40.5	45.6	N-L
PM Peak - Ultimate	0.684	65.3	41.2	N-L	0.413	50.8	23.6	S-R	0.413	50.8	25.8	E-R	0.413	50.8	24	W-R	0.684	38.6	41.2	N-L

6.4 – SIDRA RESULTS

6.4.12 – INTERSECTION 111

The operation of Intersection 111 is within acceptable ranges.

As shown,, the intersection operates with a **maximum DoS of 0.117**, average intersection delays of 4 seconds, and a queue length of 3.3m.

As such, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-4.12: SIDRA Intersection Layout

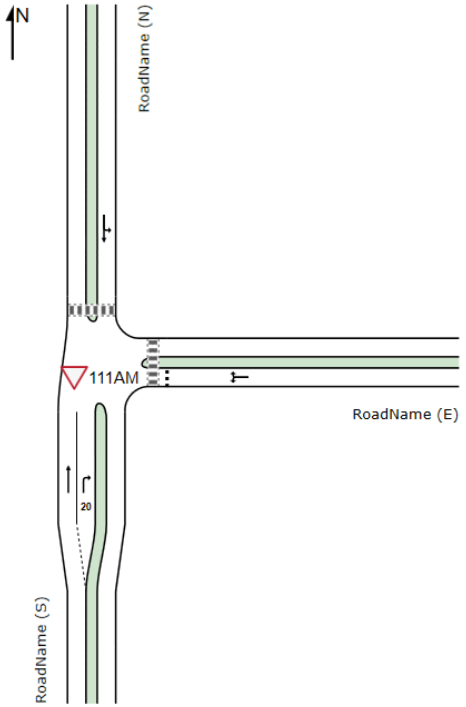


Table 6-4.12: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Southern Approach				Eastern Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Ultimate	0.115	5.6	0	N-L	0.048	6.2	1.1	S-R	0.102	7.7	2.9	E-R	0.115	2.9	2.9	E-R
PM Peak - Ultimate	0.108	5.6	0	N-L	0.035	6.1	1.1	S-R	0.098	7.3	2.8	E-R	0.108	3.1	2.8	E-R

6.4 – SIDRA RESULTS

6.4.13 – INTERSECTION 112

The operation of Intersection 112 is within acceptable ranges.

As shown, the intersection operates with a **maximum DoS of 0.230.** The average intersection delays is 4 seconds, and queue length is 7.9m.

As such, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-4.13: SIDRA Intersection Layout

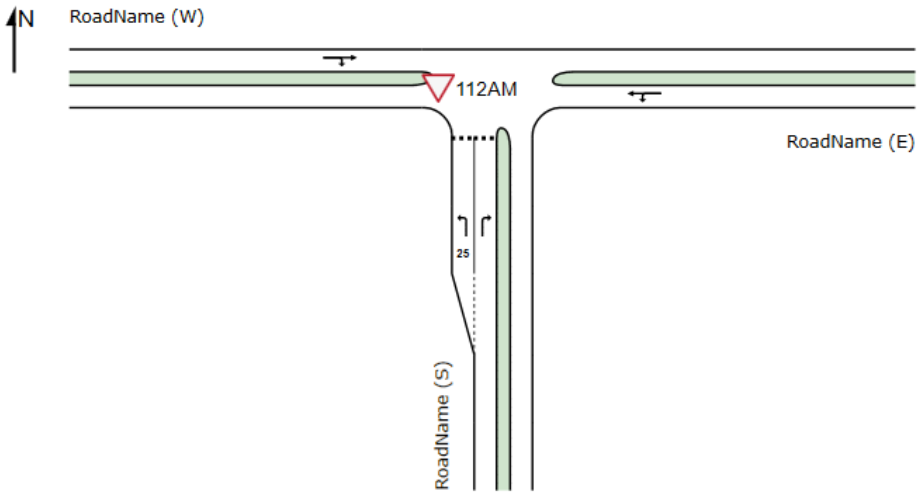


Table 6-4.13: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Ultimate	0.108	8.1	2.6	S-R	0.065	5.6	0	E-L	0.230	6.1	7.9	W-R	0.230	4	7.9	S-R
PM Peak - Ultimate	0.050	6.3	1.3	S-R	0.059	5.6	0	E-L	0.071	6	2.3	W-R	0.071	4.1	2.3	S-R

6.4 – SIDRA RESULTS

6.4.14 – INTERSECTION 113

The operation of Intersection 113 is within acceptable ranges.

As shown, the intersection operates with a maximum **DoS of 0.250**. The average intersection delay is 4.8 seconds, and queue length is 8.4m.

Overall, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-4.14: SIDRA Intersection Layout

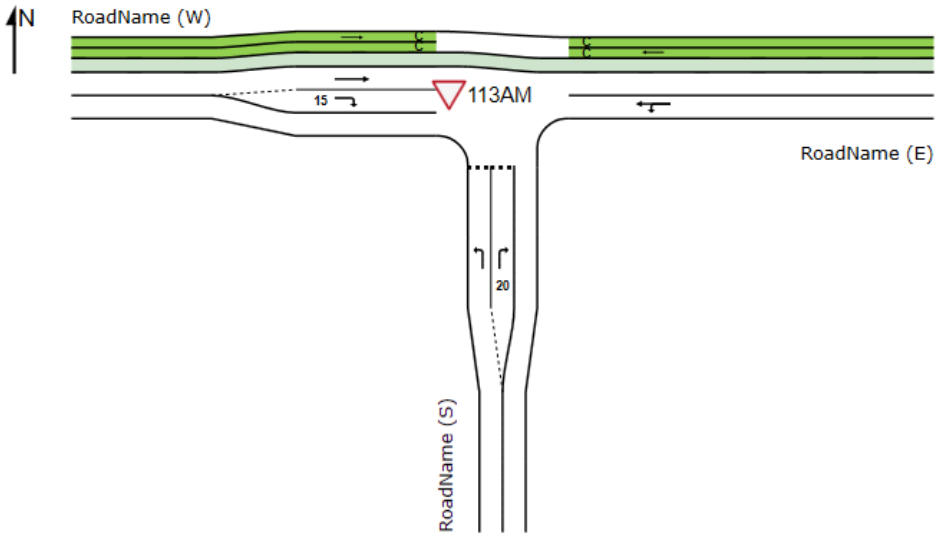


Table 6-4.14: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Ultimate	0.155	14.4	3.7	S-R	0.154	5.6	0	E-L	0.165	6.9	1.4	W-R	0.165	2	3.7	S-R
PM Peak - Ultimate	0.207	19.1	5	S-R	0.267	5.6	0	E-L	0.123	8.4	1.7	W-R	0.267	2.2	5	S-R

6.4 – SIDRA RESULTS

6.4.15 – INTERSECTION 114

The operation of Intersection 114 is within acceptable ranges.

As shown, the intersection operates with a **maximum DoS of 0.088.** The average intersection delays is 4.3 seconds, and queue length is 2.8m.

Overall, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-4.15: SIDRA Intersection Layout

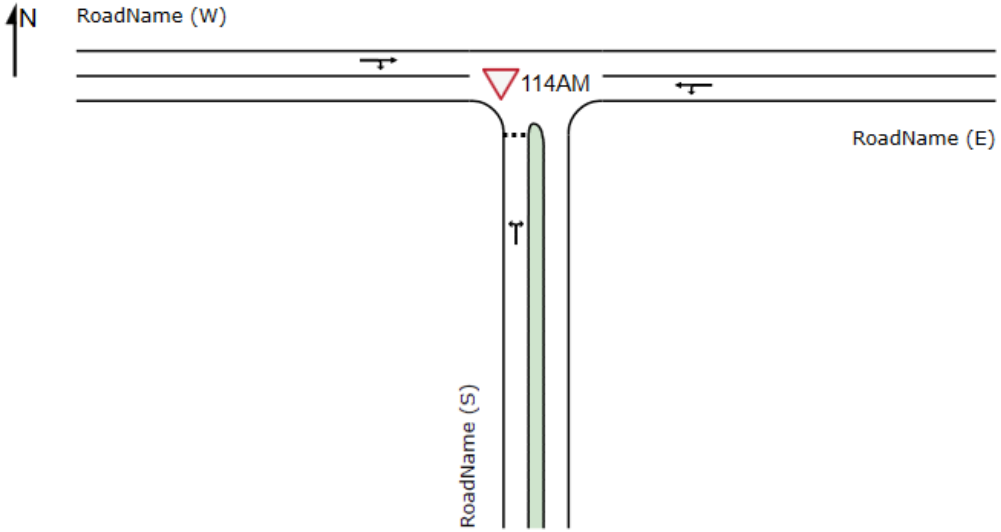


Table 6-4.15: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Ultimate	0.086	6.4	2.3	S-R	0.068	5.6	0	E-L	0.082	6	2.8	W-R	0.086	4.3	2.8	S-R
PM Peak - Ultimate	0.088	6.3	2.4	S-R	0.057	5.6	0	E-L	0.061	5.9	1.9	W-R	0.088	4	2.4	S-R

6.4 – SIDRA RESULTS

6.4.16 – INTERSECTION 115

The operation of Intersection 115 is within acceptable ranges.

As shown, the intersection operates with a **maximum DoS of 0.685.** The average intersection delays is 8.9 seconds, and queue length is 55.7m.

Overall, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-4.15: SIDRA Intersection Layout

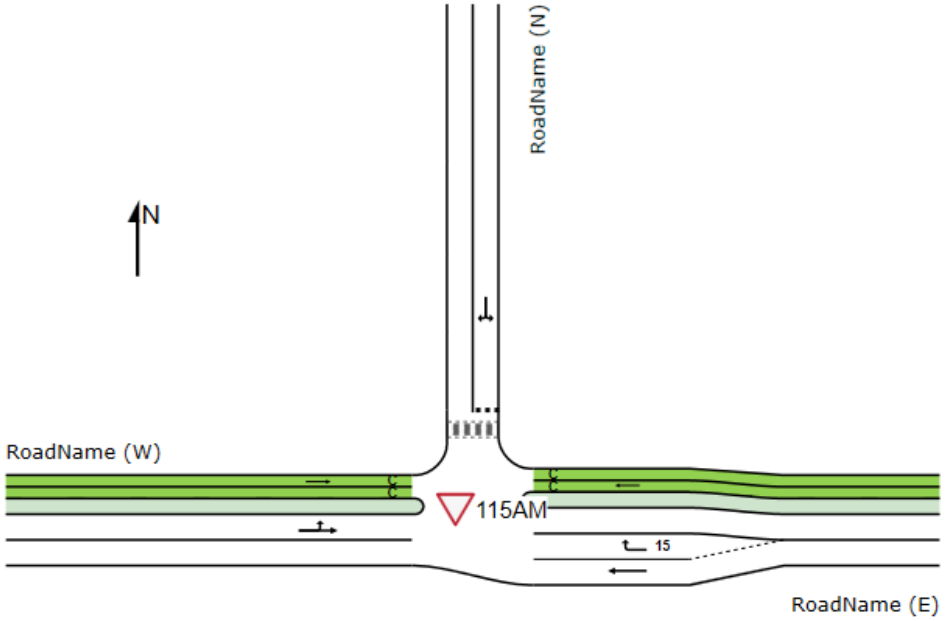


Table 6-4.15: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Ultimate	0.356	20.7	11.5	N-R	0.103	8.1	1.7	E-R	0.249	5.6	0	W-L	0.356	3.1	11.5	N-R
PM Peak - Ultimate	0.589	23	40.2	N-R	0.153	6.7	1.3	E-R	0.138	5.6	0	W-L	0.589	6.4	40.2	N-R

6.5 – SIDRA NETWORK RESULTS

6.5.1 – NETWORK ASSESSMENT

As requested by EDQ, two networks have been assessed as part of the intersection analysis for the developments. The two networks (shown in Figure 6.5.1) are:

- Network 1: Aura Boulevard – Intersections 101/104/105
- Network 2: East-West Link – Intersections 103/106

To adhere to the Caloundra South PDA Infrastructure Agreement, the networks have been configured with a consistent cycle time (120 seconds) to enable coordinated signal operations.

The results of the network assessment are shown in the following sections

Figure 5-1: Assessment Intersections

6.5 – SIDRA NETWORK RESULTS

6.5.2 – NETWORK 1 – AURA BOULEVARD

The operation of the intersections in the network are within acceptable ranges.

As shown, the network operates with a **maximum DoS of 0.83.** The highest intersection delay in the network is 48.4 seconds at Intersection 105, with the highest queue length being 146m, at Intersection 101.

Each intersection and the network were configured with a 120 second cycle time in accordance with the Caloundra South PDA Infrastructure Agreement.

As noted previously, all signal phasing for the development will need to be co-ordinated with EDQ, Sunshine Coast Council, and any other relevant authority.

Overall, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-5.2: SIDRA Network Layout

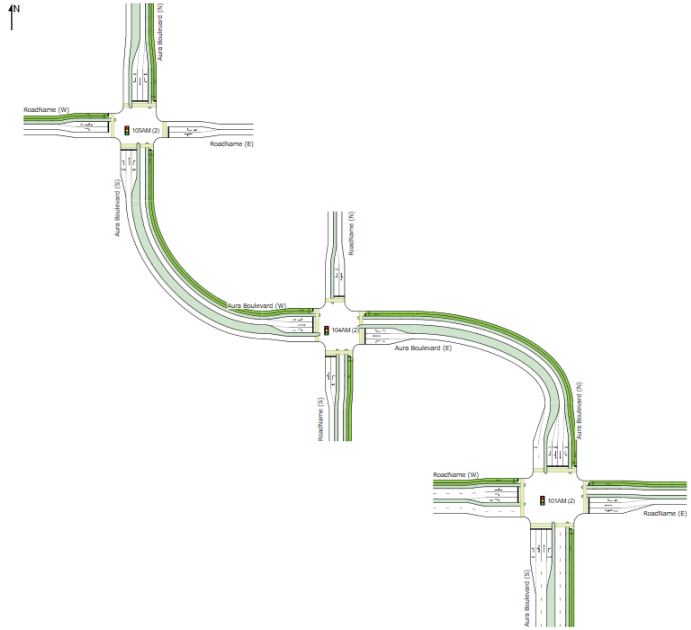


Table 6-5.2: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
Intersection 101																				
AM Peak - Ultimate	0.38	84.7	94.4	N-L	0.83	52.6	146	S-R	0.81	62	114	E-L	0.80	78.1	74.2	W-L	0.83	47.6	146	N-L
PM Peak - Ultimate	0.30	74.8	60.3	N-L	0.55	54.9	92.3	S-R	0.62	60.1	70.4	E-R	0.61	71.5	48.7	W-L	0.62	37.1	92.3	N-L
Intersection 104																				
AM Peak - Ultimate	0.30	51.6	37.7	N-L	0.45	56.1	43.8	S-L	0.44	65.3	48.9	E-R	0.48	69.8	80.3	W-R	0.48	38	80.3	W-R
PM Peak - Ultimate	0.29	51.1	37.4	N-L	0.49	58.1	41.8	S-L	0.50	68.4	81.1	E-R	0.42	69.7	23.4	W-R	0.50	31.8	81.1	W-R
Intersection 105																				
AM Peak - Ultimate	0.43	66.8	36.6	N-R	0.25	56.6	36.3	S-R	0.60	65.8	43.5	E-T	0.60	51.1	90.2	W-R	0.60	43.1	90.2	N-R
PM Peak - Ultimate	0.43	66.8	29	N-R	0.52	56.3	116	S-R	0.56	66.5	42.8	E-L	0.55	61.2	71.9	W-L	0.56	48.4	116	N-R

6.5 – SIDRA NETWORK RESULTS

6.5.3 – NETWORK 2– EAST-WEST LINK

The operation of the intersections in the network are within acceptable ranges.

As shown, the network operates with a **maximum DoS of 0.88.** The highest average intersection delay is 53.1 seconds at Intersection 106, and queue length is 180m, occurring at intersection 103.

Each intersection and the network were configured with a 120 second cycle time in accordance with the Caloundra South PDA Infrastructure Agreement.

As noted previously, all signal phasing for the development will need to be co-ordinated with EDQ, Sunshine Coast Council, and any other relevant authority.

Overall, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-5.3: SIDRA Network Layout

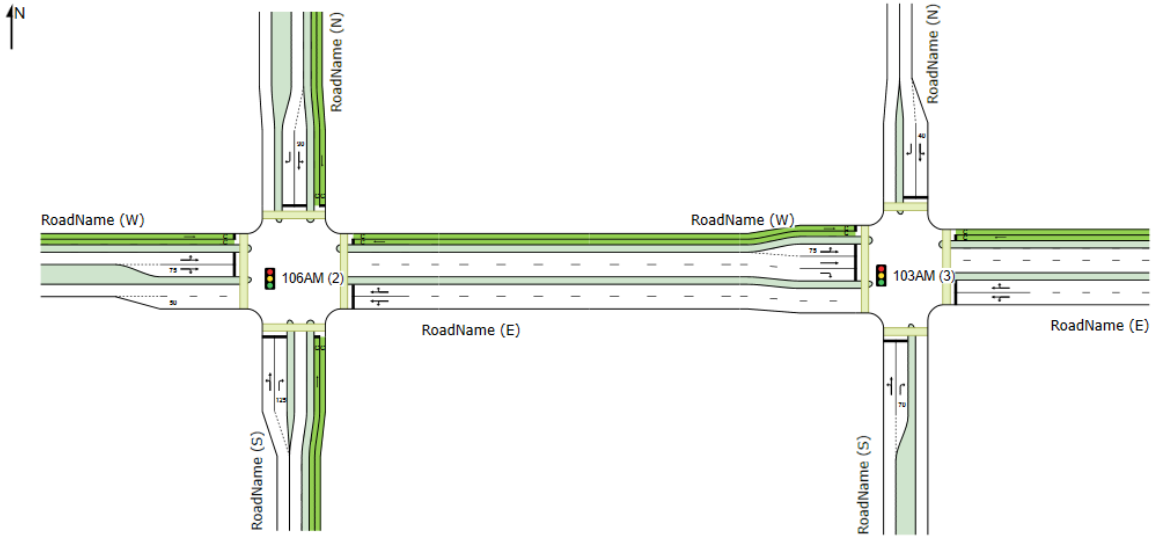


Table 6-5.3: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
Intersection 103																				
AM Peak - Ultimate	0.31	62.7	34.1	N-R	0.82	70.3	61.2	S-R	0.88	85.2	180	E-R	0.35	63.4	40	W-R	0.88	52	180	E-R
PM Peak - Ultimate	0.40	66	36	N-R	0.87	75.6	53	S-R	0.88	70.2	121	E-L	0.22	62	23.4	W-R	0.88	52.3	121	S-R
Intersection 106																				
AM Peak - Ultimate	0.75	86.3	45.8	N-L	0.75	86.8	45.8	S-L	0.42	57.7	59.7	E-R	0.83	98.8	99.8	W-L	0.83	53.4	99.8	W-L
PM Peak - Ultimate	0.75	86.3	45.8	N-L	0.75	86.9	45.8	S-L	0.49	49.2	61.8	E-R	0.50	76.5	60.5	W-L	0.75	47.3	61.8	S-L

6.6 – SENSITIVITY ASSESSMENT

The ultimate development yield is expected to complete construction and be operational by 2041. Prior to the ultimate construction, there will be only two connections to the development site, being:

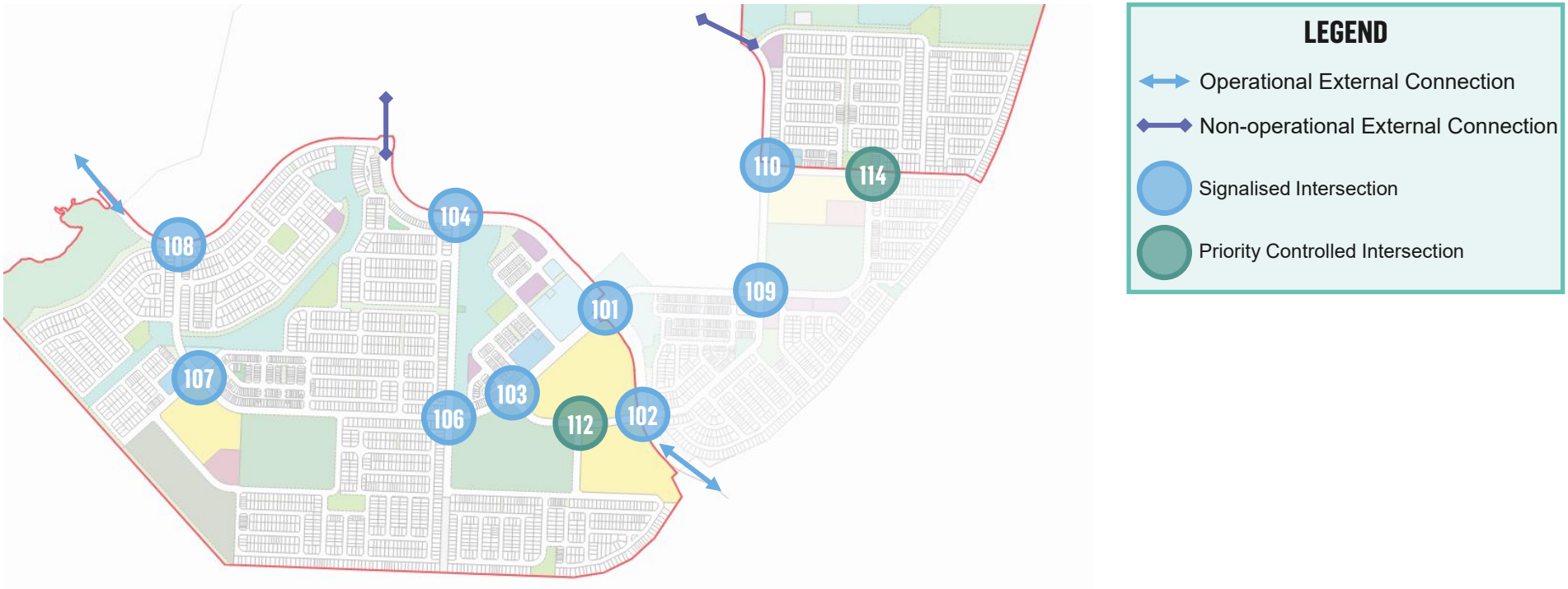
- Aura Boulevard, via Bells Creek Arterial to the south
- East-West link to Aura Precinct 15 to the west

A sensitivity assessment has been undertaken to analyse the operations of the interim traffic network. The traffic volumes have been sourced from BDO's 2031 updated model data. It is understood that 11 study intersections will be operational during the interim scenario.

The intersections understood to not be operational at the interim 2031 scenario are:

- Intersection 105, Intersection 111, Intersection 113 and Intersection 115

Table 6-6.1: Sensitivity Assessment Traffic Scenarios



6.6 – SENSITIVITY ASSESSMENT

6.6.1 – SIDRA SUMMARY TABLE

A summary of the full SIDRA intersection assessment is provided below in Table 6-6.1. Detailed analysis of each intersection is provided in the subsequent slides. Full intersection summaries are provided in Appendix E. Where results comply with the requirements of the Caloundra South PDA Infrastructure Agreement, they are shown below in green.

Table 6-6.1: Sensitivity Assessment - Traffic Impact Results

Intersection	Intersection Type	AM Peak			PM Peak		
		Cycle Time	Degree of Saturation	Intersection Delay	Cycle Time	Degree of Saturation	Intersection Delay
Int 101	Signals	120s	0.862	45s	116s	0.815	40s
Int 102	Signals	78s	0.363	13s	76s	0.287	12s
Int 103	Signals	112s	0.745	46s	110s	0.652	46s
Int 104	Signals	94s	0.633	37s	94s	0.603	36s
Int 105	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Int 106	Signals	120s	0.747	52s	120s	0.747	50s
Int 107	Signals	96s	0.678	42s	96s	0.678	42s
Int 108	Give-Way	-	0.102	3s	-	0.124	3s
Int 109	Signals	98s	0.852	36s	89s	0.884	34s
Int 110	Signals	87s	0.503	37s	87s	0.644	37s
Int 111	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Int 112	Give-Way	-	0.069	4s	-	0.064	4s
Int 113	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Int 114	Give-Way	-	0.103	3s	-	0.085	3s
Int 115	N/A	N/A	N/A	N/A	N/A	N/A	N/A

6.6 – SENSITIVITY ASSESSMENT

6.6.2 – INTERSECTION 101

Intersection 101 is a critical intersection within Precincts 17-19, as it is the only intersection to provide major access points to the catchments on both sides of Aura Boulevard.

The operation of Intersection 101 is within acceptable ranges.

Based on the model inputs, the SIDRA results show that the intersection is expected to operate with a **maximum DoS of 0.862**. Average intersection delay is 45 seconds, and a maximum queue length of 131m (on the eastern approach).

The intersection includes two separated cycle track crossings, on the northern and eastern approaches. Given the number of lanes on the north and south approaches, staged signalised crossings have been assigned to these approaches.

The intersection performance results include a **120 second** cycle time for the AM peak and **116 second** cycle time for the PM peaks. This is within the 120 second cycle time nominated within the IA.

Overall, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement

Figure 6-6.2: SIDRA Intersection Layout

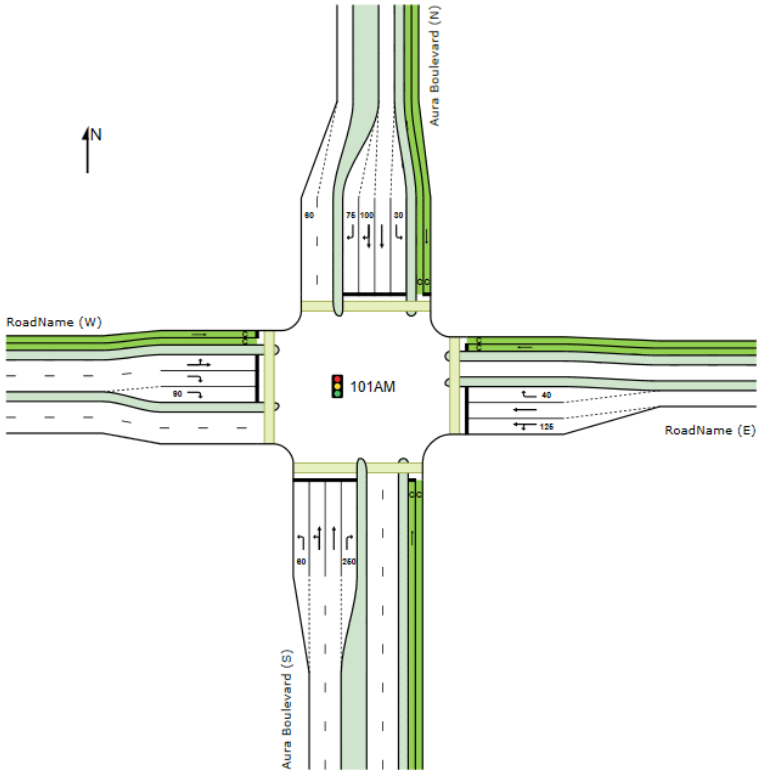


Table 6-6.2: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Interim	0.283	61.2	36.4	N-L	0.360	52.4	44.4	S-R	0.862	65.6	131	E-L	0.852	80.8	48.9	W-L	0.862	45.4	131	W-L
PM Peak - Interim	0.274	58.9	35.2	N-L	0.681	54.6	88.4	S-R	0.548	59	59.1	E-R	0.815	76.7	47.4	W-L	0.815	40.1	88.4	W-L

6.6 – SENSITIVITY ASSESSMENT

6.6.3 – INTERSECTION 102

The operation of Intersection 102 is within acceptable ranges.

The SIDRA results show that the intersection operates with a **maximum DoS of 0.363.** The intersection operates with a delay of 13 seconds, and a maximum queue length of 59m.

The intersection performance includes a **78 second** and **76 second** cycle time for the AM and PM peaks respectively. Note: no separated cycle track movements occurs at this intersection.

Overall, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-6.3: SIDRA Intersection Layout

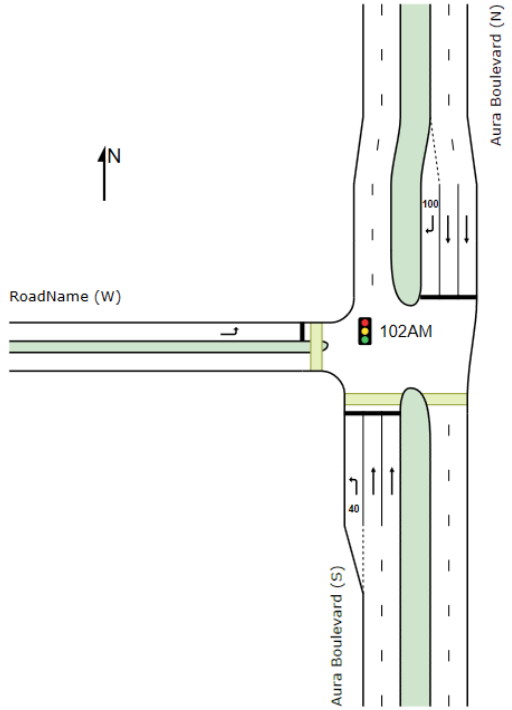


Table 6-6.3: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Southern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Interim	0.363	37.5	59.2	N-R	0.363	45	20.2	S-L	0.183	37.4	12.6	W-L	0.363	12.5	59.2	S-L
PM Peak - Interim	0.287	36.3	43.7	N-R	0.287	41.8	34.1	S-L	0.178	36.3	12.2	W-R	0.287	11.5	43.7	S-L

6.6 – SENSITIVITY ASSESSMENT

6.6.4 – INTERSECTION 103

The operation of Iintersection 103 is within acceptable ranges.

Based on the model outputs, the intersection operates with a **maximum DoS of 0.745.** The average intersection delay is 46.3 seconds, and the maximum queue length is 48m.

The intersection performance results include a **112 second and 110 second** cycle time for the AM and PM peaks respectively.

Overall, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-6.4: SIDRA Intersection Layout

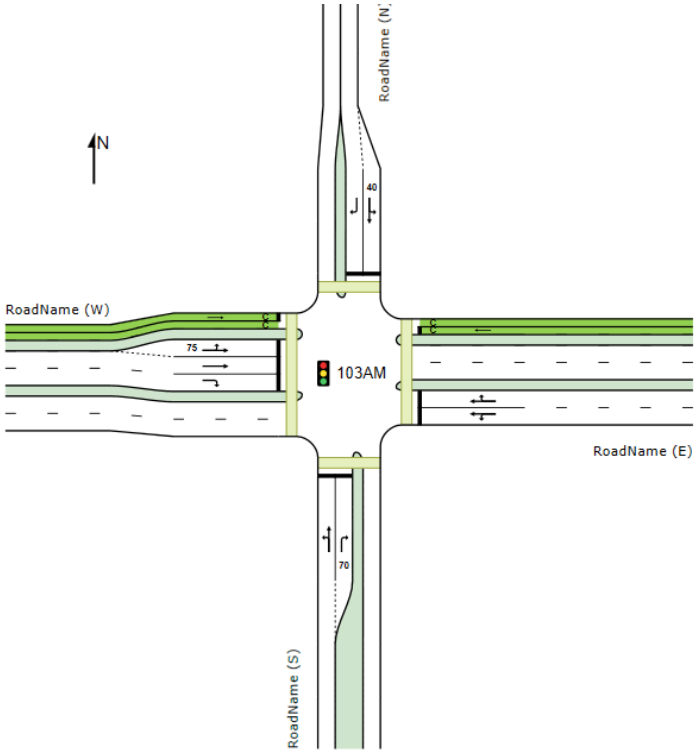


Table 6-6.4: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Interim	0.449	63.6	32.9	N-R	0.745	67	36.1	S-R	0.745	70.9	48.1	E-R	0.163	47.3	19.7	W-R	0.745	46.3	48.1	E-R
PM Peak - Interim	0.520	64.3	32.1	N-R	0.520	64.3	32.1	S-R	0.652	74.2	48.6	E-R	0.151	46.2	16.7	W-R	0.652	46.3	48.6	E-R

6.6 – SENSITIVITY ASSESSMENT

6.6.5 – INTERSECTION 104

The operation of Intersection 104 is within acceptable ranges.

As shown, the intersection operates with a **maximum DoS of 0.633.** The average intersection delays is 37.1 seconds, and a queue length of 45.6m.

The intersection performance results include a **94 second** cycle time for the AM and PM peaks.

Overall, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement

Figure 6-6.5: SIDRA Intersection Layout

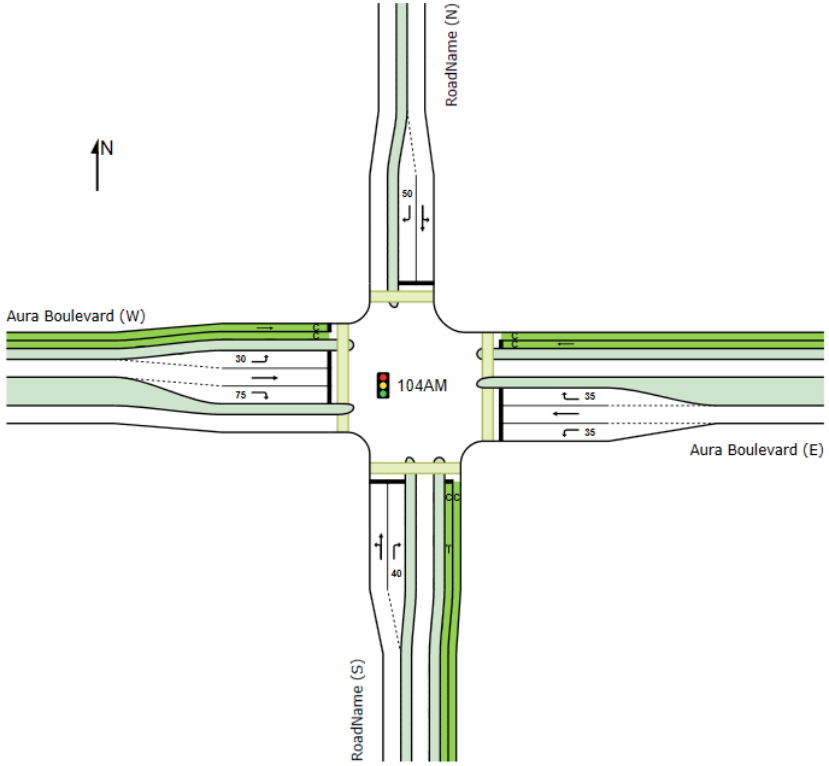


Table 6-6.5: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Interim	0.633	56.1	36.5	N-L	0.628	53.5	36.4	S-L	0.377	52.8	24.5	E-R	0.377	52.9	45.6	W-R	0.633	37.1	45.6	N-L
PM Peak - Interim	0.603	55.9	34.5	N-L	0.599	53.1	34.5	S-L	0.377	52.8	38.6	E-R	0.377	52.9	37.3	W-R	0.603	36.4	38.6	N-L

6.6 – SENSITIVITY ASSESSMENT

6.6.6 – INTERSECTION 106

The operation of the Intersection 106 is within acceptable ranges.

As shown, the intersection operates with a **maximum DoS of 0.747.** The average intersection delays is 51.5 seconds, and queue length is 45.8m.

The intersection includes two separated cycle track crossings, on the northern and eastern approaches. These have been factored into the phasing.

The intersection performance results include a **120 second** cycle time for the AM and PM peaks.

Overall, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-6.6: SIDRA Intersection Layout

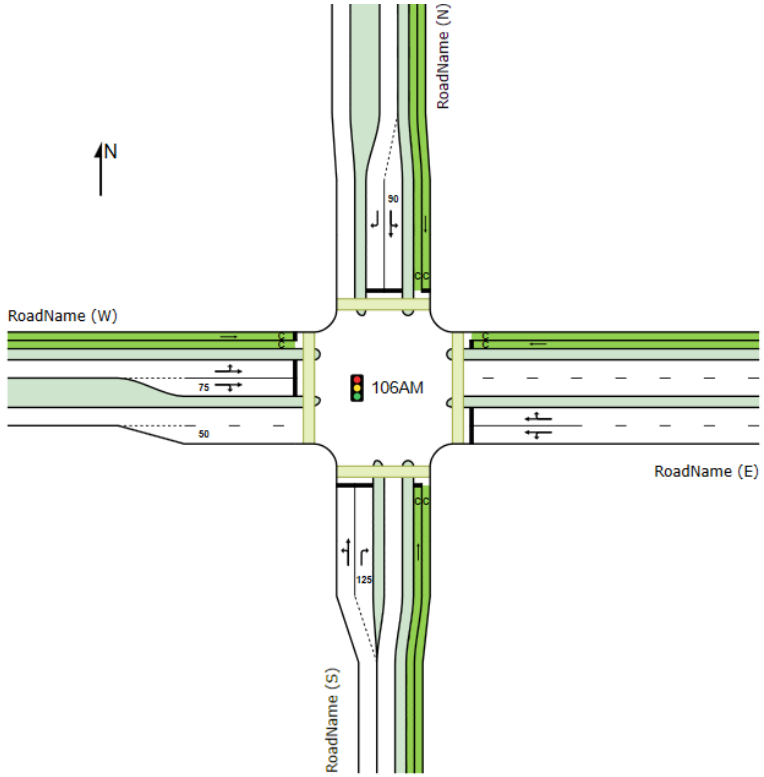


Table 6-6.6: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Interim	0.747	86.3	45.8	N-L	0.747	86.5	45.8	S-L	0.190	33.9	21.6	E-R	0.398	71	43.6	W-R	0.747	51.5	45.8	S-L
PM Peak - Interim	0.747	86.3	45.8	N-L	0.747	86.6	45.8	S-L	0.227	36.5	26	E-R	0.363	69.1	38.5	W-R	0.747	50.3	45.8	S-L

6.6 – SENSITIVITY ASSESSMENT

6.6.7 – INTERSECTION 107

The operation of Intersection 107 is within acceptable ranges.

As shown, the intersection operates with a **maximum DoS of 0.678**, average intersection delays of 41.8 seconds, and a queue length of 36.9m.

The intersection includes one separated cycle track crossing at the eastern approach. This has been factored into the phasing of the intersection.

The intersection performance results include a **96 second** cycle time for the AM and PM peaks respectively.

Overall, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-6.7: SIDRA Intersection Layout

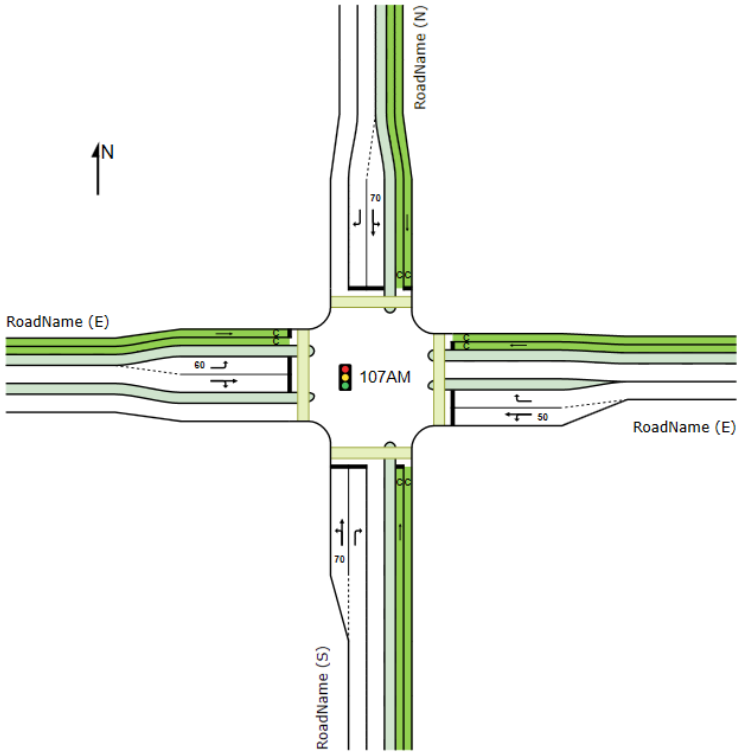


Table 6-6.7: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Interim	0.678	70.8	36.9	N-L	0.453	55.8	25.2	S-R	0.453	55.8	21	E-R	0.672	69.6	36.2	W-R	0.678	41.8	36.9	N-L
PM Peak - Interim	0.678	70.8	36.9	N-L	0.453	55.8	25.2	S-R	0.453	55.8	21	E-R	0.672	69.6	36.2	W-R	0.678	41.8	36.9	N-L

6.6 – SENSITIVITY ASSESSMENT

6.6.8 – INTERSECTION 108

The operation of Intersection 108 is within acceptable ranges.

As shown, the intersection operates with a **maximum DoS of 0.124.** The average intersection delays is 3.4 seconds, and a queue length of 2.2m.

Overall, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement

Figure 6-6.8: SIDRA Intersection Layout

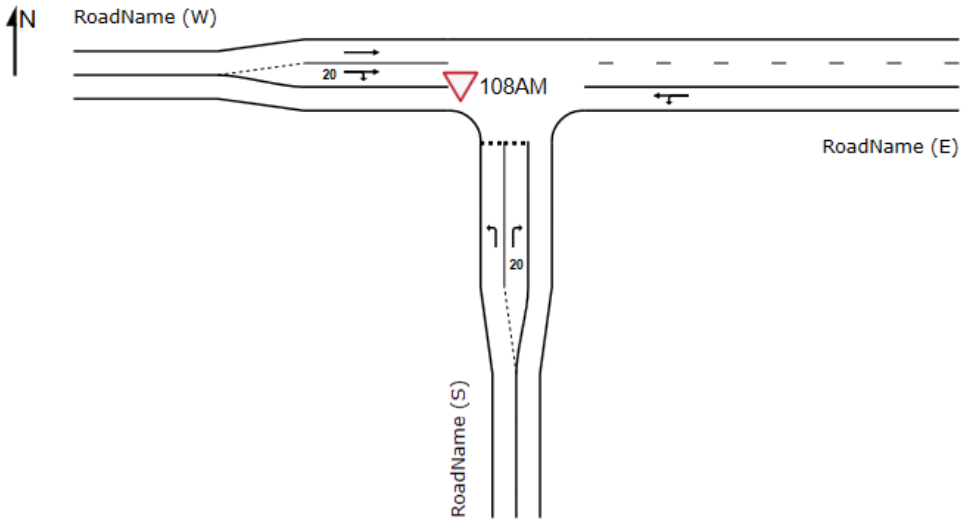


Table 6-6.8: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Interim	0.071	8.1	1.9	S-R	0.102	5.6	0	E-L	0.068	6.1	2	W-R	0.102	2.8	2	S-R
PM Peak - Interim	0.072	8.2	1.9	S-R	0.124	5.6	0	E-L	0.061	6.3	1.9	W-R	0.124	2.6	1.9	S-R

6.6 – SENSITIVITY ASSESSMENT

6.6.9 – INTERSECTION 109

The operation of the Intersection 109 is within acceptable ranges.

As shown, the intersection operates with a **maximum DoS of 0.884.** The average intersection delays is 36.1 seconds, and queue length is 55.5m.

The intersection performance results include an **87.3 second** cycle time in the AM and PM peak scenarios.

As such, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-6.9: SIDRA Intersection Layout

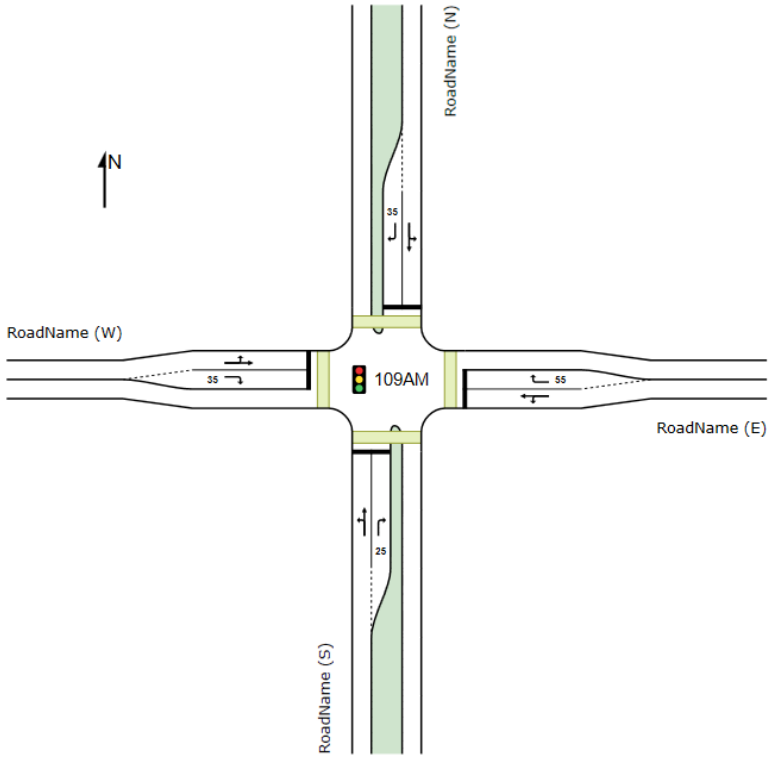


Table 6-6.9: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Interim	0.852	61.2	55.5	N-R	0.566	47.9	40.2	S-R	0.463	57.1	18.3	E-R	0.574	57.8	23.1	W-R	0.852	36.1	55.5	N-R
PM Peak - Interim	0.691	54	28.4	N-R	0.526	50.6	25.7	S-R	0.421	51.8	16.6	E-R	0.884	60.6	39.4	W-R	0.884	34.4	39.4	W-R

6.6 – SENSITIVITY ASSESSMENT

6.6.10 – INTERSECTION 110

The operation of the Intersection 110 is within acceptable ranges.

As shown, the intersection operates with a **maximum DoS of 0.644.** The average intersection delays is 37 seconds, and queue length is 53.7m.

The intersection performance results include an **87.3 second** cycle time for both the AM and PM peaks.

As such, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-6.10: SIDRA Intersection Layout

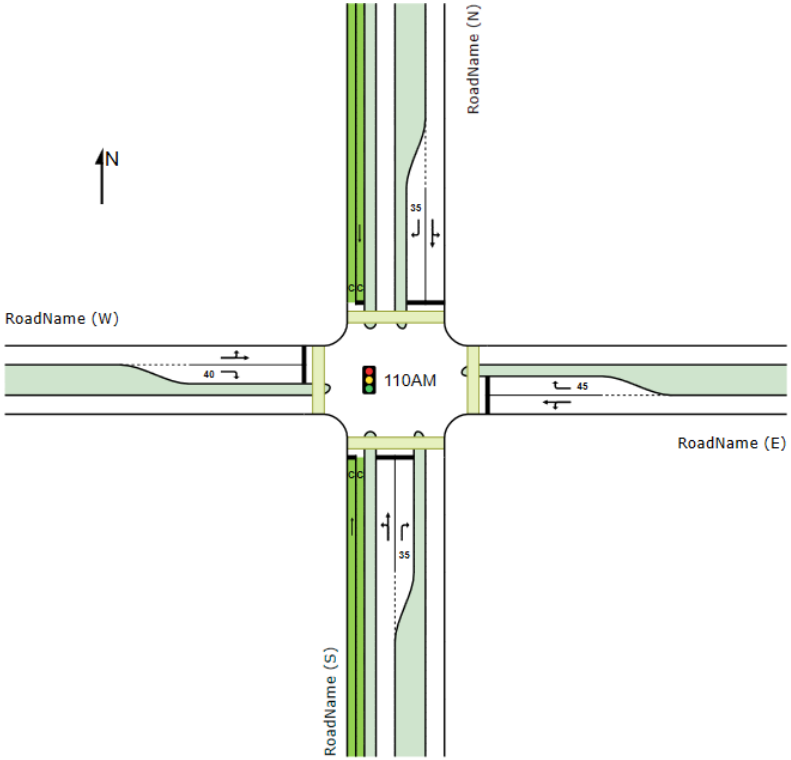


Table 6-6.10: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Interim	0.413	50.8	23.6	N-R	0.503	51.2	23.6	S-R	0.483	50.8	53.7	E-R	0.413	50.8	25.8	W-R	0.503	36.9	53.7	S-R
PM Peak - Interim	0.413	50.8	23.6	N-R	0.644	52.4	26.2	S-R	0.413	50.8	35.8	E-R	0.413	50.8	25.8	W-R	0.644	36.9	35.8	S-R

6.6 – SENSITIVITY ASSESSMENT

6.6.11 – INTERSECTION 112

The operation of Intersection 112 is within acceptable ranges.

As shown, the intersection operates with a **maximum DoS of 0.071.** The average intersection delays is 4.2 seconds, and queue length is 2.3m.

As such, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-6.11: SIDRA Intersection Layout

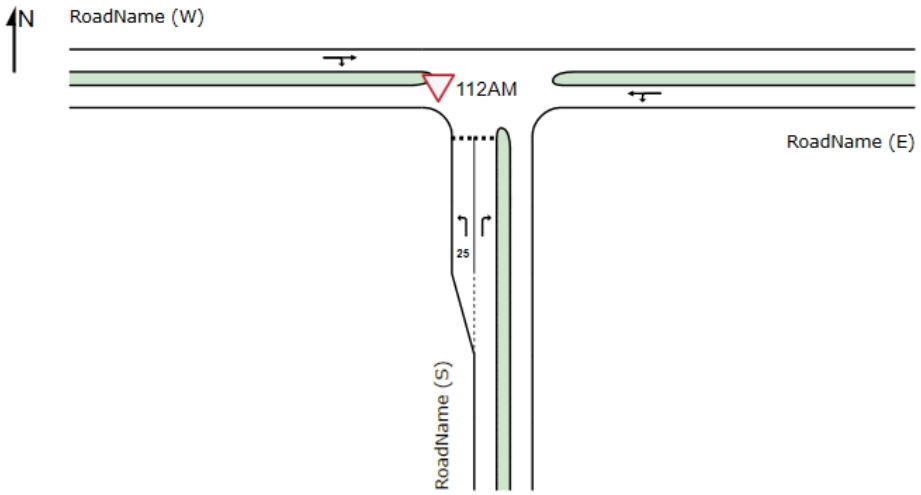


Table 6-6.11: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Interim	0.053	6.3	1.6	S-R	0.057	5.6	0	E-L	0.071	5.9	2.3	W-R	0.071	4.2	2.3	S-R
PM Peak - Interim	0.050	6.3	1.2	S-R	0.057	5.6	0	E-L	0.066	6	2.1	W-R	0.066	4	2.1	S-R

6.6 – SENSITIVITY ASSESSMENT

6.6.12 – INTERSECTION 114

The operation of Intersection 114 is within acceptable ranges.

As shown, the intersection operates with a **maximum DoS of 0.106.** The average intersection delays is 3.4 seconds, and queue length is 2.4m.

Overall, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-6.12: SIDRA Intersection Layout

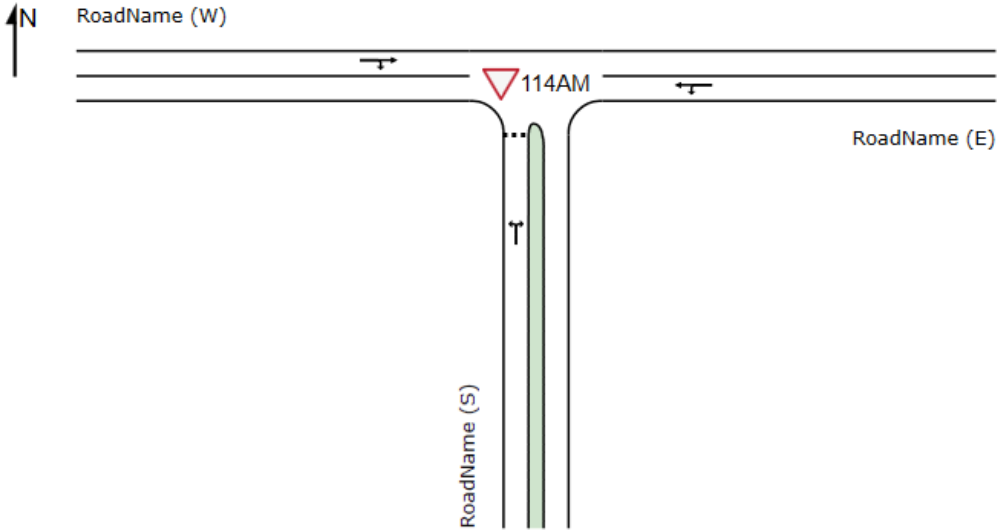


Table 6-6.12: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
AM Peak - Interim	0.092	6.8	2.4	S-R	0.106	5.6	0	E-L	0.071	6.2	2.2	W-R	0.106	3.2	2.4	S-R
PM Peak - Interim	0.087	6.5	2.3	S-R	0.072	5.6	0	E-L	0.078	6	2.2	W-R	0.087	3.4	2.3	S-R

6.7 – SENSITIVITY NETWORK RESULTS

6.7.1 – NETWORK 1 – AURA BOULEVARD

The operation of the intersections in the network are within acceptable ranges.

As shown, the network operates with a **maximum DoS of 0.86.** The highest intersection delay in the network is 45.6 seconds, with the highest queue length being 131m, at Intersection 101.

Each intersection and the network were configured with a 120 second cycle time in accordance with the Caloundra South PDA Infrastructure Agreement.

As noted previously, all signal phasing for the development will need to be co-ordinated with EDQ, Sunshine Coast Council, and any other relevant authority.

Overall, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-5.2: SIDRA Network Layout

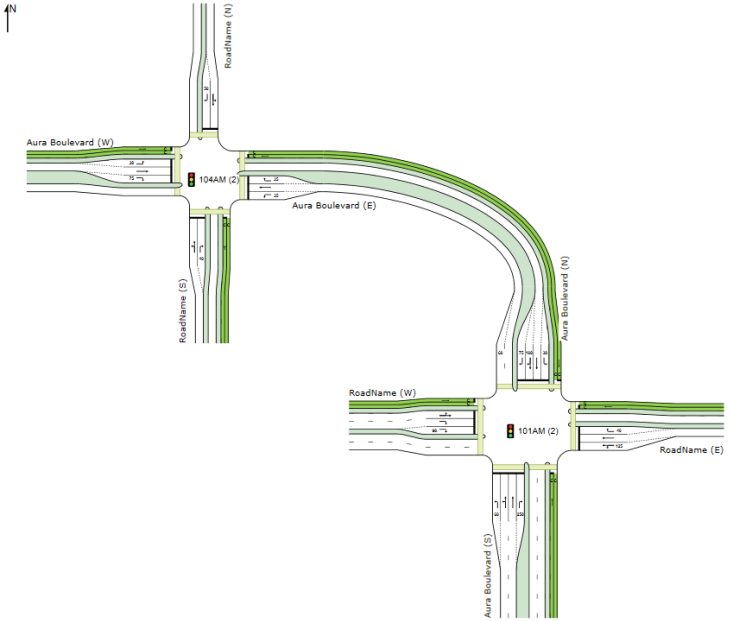


Table 6-5.2: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
Intersection 101																				
AM Peak - Interim	0.28	59.1	37.7	N-L	0.36	52.4	44.4	S-R	0.86	65.6	131	E-L	0.85	80.8	48.9	W-L	0.86	45.6	131	W-L
PM Peak - Interim	0.28	58.2	38.8	N-L	0.62	53.2	88.1	S-R	0.57	65.1	61.6	E-R	0.58	69.6	44.5	W-L	0.62	40.9	88.1	W-L
Intersection 104																				
AM Peak - Interim	0.40	57.4	41.9	N-L	0.40	57.4	42	S-L	0.17	54.4	19.7	E-R	0.37	68.1	67.2	W-L	0.40	45.4	67.2	W-L
PM Peak - Interim	0.38	57.2	39.9	N-L	0.38	57.2	39.9	S-L	0.26	53.4	29.3	E-R	0.34	63.8	54.6	W-R	0.38	41.7	54.6	W-R

6.7 – SENSITIVITY NETWORK RESULTS

6.7.2 – NETWORK 2– EAST-WEST LINK

The operation of the intersections in the network are within acceptable ranges.

As shown, the network operates with a **maximum DoS of 0.57.** The highest average intersection delay is 50.3 seconds at Intersection 106, and queue length is 44.3m, occurring at intersection 103.

Each intersection and the network were configured with a 120 second cycle time in accordance with the Caloundra South PDA Infrastructure Agreement.

As noted previously, all signal phasing for the development will need to be co-ordinated with EDQ, Sunshine Coast Council, and any other relevant authority.

Overall, the intersection performance meets the requirements outlined within the Caloundra South PDA Infrastructure Agreement.

Figure 6-5.3: SIDRA Network Layout

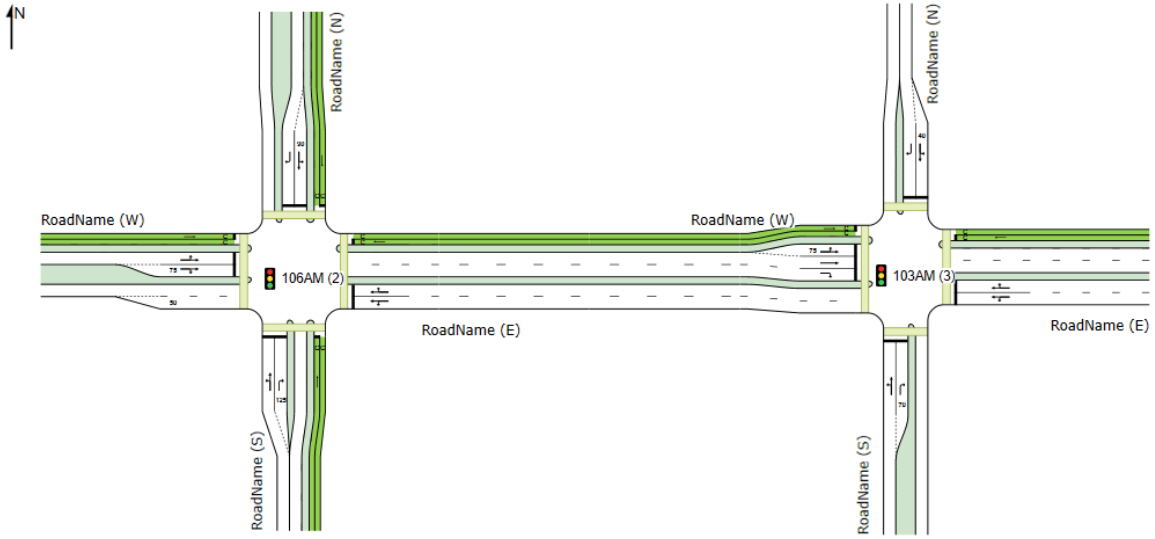


Table 6-5.3: SIDRA Intersection Results

Scenario *DoS - Degree of Saturation (%)* *Delay of Critical Approach Movement (s)* *95th Percentile Queue Length (m)* *Critical Movement of Approach*	Northern Approach				Southern Approach				Eastern Approach				Western Approach				Total Int			
	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement	DoS	Delay (s)	95th Queue (m)	Crit Movement
Intersection 103																				
AM Peak - Interim	0.37	64.9	36	N-R	0.61	66.7	36.7	S-R	0.61	72.9	48.5	E-R	0.17	58.8	21	W-R	0.61	48.2	48.5	E-R
PM Peak - Interim	0.46	67.8	36	N-R	0.46	67.8	22.1	S-R	0.46	73	48	E-R	0.17	60.1	21.4	W-R	0.46	48.5	48	E-R
Intersection 106																				
AM Peak - Interim	0.75	86.3	45.8	N-L	0.75	86.5	45.8	S-L	0.19	33.7	14.7	E-L	0.40	71	43.6	W-R	0.75	51.4	45.8	S-L
PM Peak - Interim	0.75	86.3	45.8	N-L	0.75	86.6	45.8	S-L	0.23	36.9	23.3	E-L	0.36	69.1	38.5	W-R	0.75	50.8	45.8	S-L

07

SUMMARY

7.1 - SUMMARY

Findings

Urbis' Transport Advisory team has been engaged by Stockland to provide traffic and transport engineering advice in relation to the proposed Aura South development.

- The development comprises Precincts 17, 18, and 19 of the wider Caloundra South DPA.
- Across the three precincts, the development is proposed to include 2,761 dwellings, 3 schools, a District Centre, and multiple recreational parks.
- SIDRA intersection assessment was undertaken on the 15 key internal intersections. The analysis found that all intersections perform operate within acceptable practical capacity limits
    - The Infrastructure Agreement requirements (DOS limits and cycle time limits) were met for all intersections
- A review of the movement network found that the development will cater for all movement types.
    - The active transport network through all precincts provides extensive connections from major attractors to the internal precinct, and to the wider development catchment. This will increase the likelihood of reduced traffic on the internal roads, and to help self-containment within the development.
    - The internal road network and nominated road typologies are suitable for the expected traffic volumes of each sub-precinct.
- The proposed active transport network includes shared paths, dedicated off-road cycle paths (separated cycle tracks) and pedestrian paths along the majority of roads through the precincts.
- Key public transport initiatives including dedicated transit lanes, dedicated but jump/turning lanes are provided along Aura Boulevard. Within the development site, bus routes will utilise the higher order road network to provide significant options for public transport connectivity to all residents.
    - The future Direct Sunshine Coast Rail Line stop at Nirimba to the north of the site will further provide significant public transport options to residents.

08

APPENDICES

APPENDIX A - MASTERPLAN

Legend

- Application Boundary
- Adjoining Approval - DEV2023/1458
- Lifestyle Buffer
- Access Easement

Land Uses

- Town Square / Civic Park
- District Centre
- Neighbourhood Centre
- Neighbourhood Meeting Room
- District Community Centre
- Local Community Centre
- State High School
- State Primary School
- Emerging Community
- Private School
- Child Care
- Medium Density
- Conservation Open Space
- Drainage Open Space
- District Sports Park
- District Recreation Park
- District Linear Park
- Neighbourhood Recreation Park
- Local Recreation Park
- Local Linear Park
- Embellishment (Road Reserve)
- Sewer Pump Station
- Balance Allotment

Lot Type

Other

- Urban Warehouse - 12m x 14m
- Fonzie Front - 8m x 25m
- Fonzie Back (Micro Unit) - 4.7m x 11.5m
- Urban Loft Type A - 8.5m x 12m
- Urban Loft Type B - 8.2m x 12m
- Urban Loft Type C - 8.3m x 12m
- Bower Type A - 6.5m x 15m
- Bower Type B - 8.5m x 15m
- Bower Type C - 6.5m x 15m

21m Deep

- Rear Loaded Laneway Terrace - 4.6m Wide
- Rear Loaded Laneway Terrace - 6.6m Wide
- Rear Loaded Laneway Terrace - 6.6m+ Wide (Ends)
- Front Loaded Terrace - 7.5m Wide
- Front Loaded Terrace - 9m+ Wide (Ends)

25m Deep

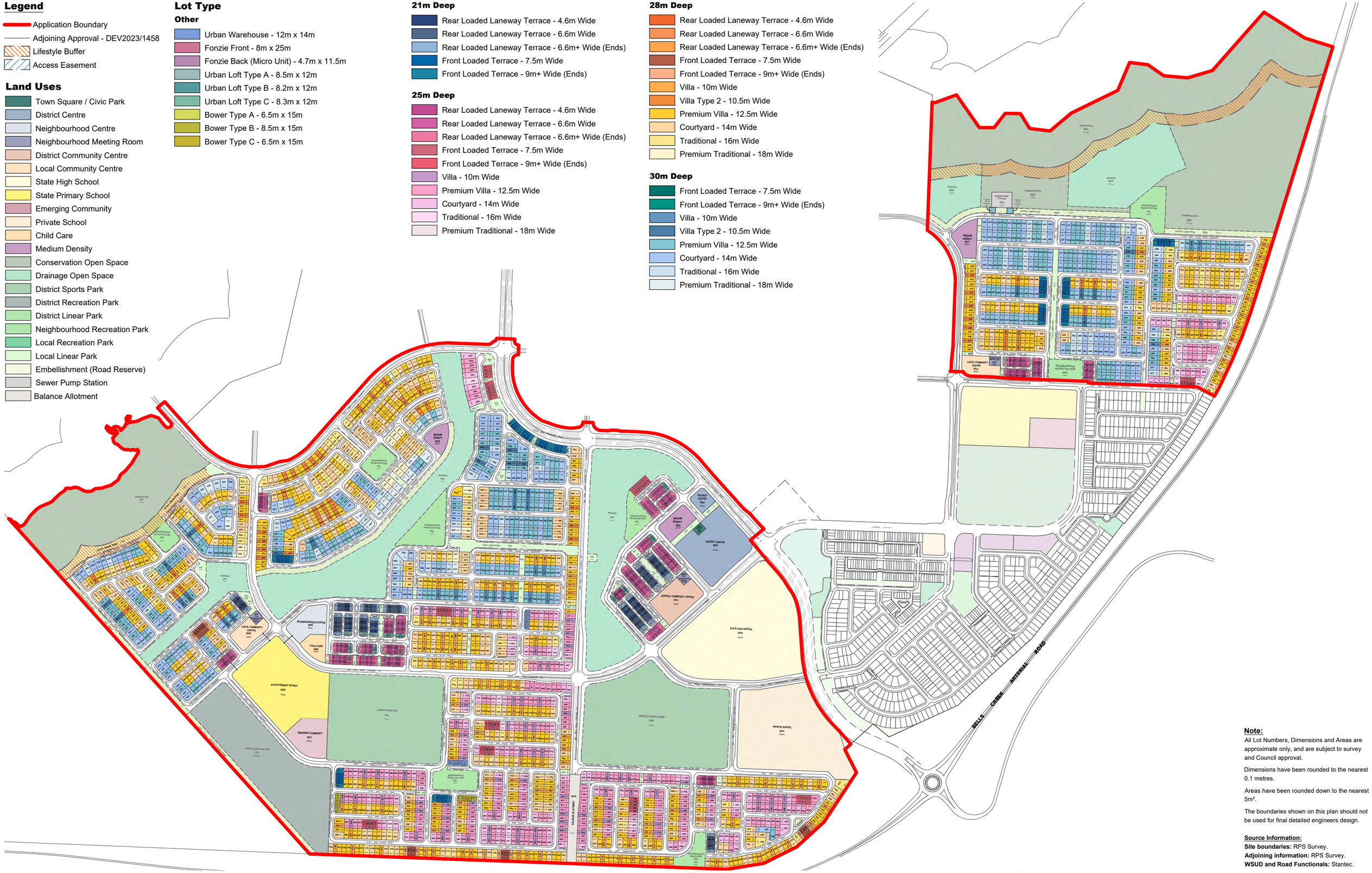
- Rear Loaded Laneway Terrace - 4.6m Wide
- Rear Loaded Laneway Terrace - 6.6m Wide
- Rear Loaded Laneway Terrace - 6.6m+ Wide (Ends)
- Front Loaded Terrace - 7.5m Wide
- Front Loaded Terrace - 9m+ Wide (Ends)
- Villa - 10m Wide
- Premium Villa - 12.5m Wide
- Courtyard - 14m Wide
- Traditional - 16m Wide
- Premium Traditional - 18m Wide

28m Deep

- Rear Loaded Laneway Terrace - 4.6m Wide
- Rear Loaded Laneway Terrace - 6.6m Wide
- Rear Loaded Laneway Terrace - 6.6m+ Wide (Ends)
- Front Loaded Terrace - 7.5m Wide
- Front Loaded Terrace - 9m+ Wide (Ends)
- Villa - 10m Wide
- Villa Type 2 - 10.5m Wide
- Premium Villa - 12.5m Wide
- Courtyard - 14m Wide
- Traditional - 16m Wide
- Premium Traditional - 18m Wide

30m Deep

- Front Loaded Terrace - 7.5m Wide
- Front Loaded Terrace - 9m+ Wide (Ends)
- Villa - 10m Wide
- Villa Type 2 - 10.5m Wide
- Premium Villa - 12.5m Wide
- Courtyard - 14m Wide
- Traditional - 16m Wide
- Premium Traditional - 18m Wide



Note:

All Lot Numbers, Dimensions and Areas are approximate only, and are subject to survey and Council approval.

Dimensions have been rounded to the nearest 0.1 metres.

Areas have been rounded down to the nearest 5m².

The boundaries shown on this plan should not be used for final detailed engineers design.

Source Information:

Site boundaries: RPS Survey.
Adjoining information: RPS Survey.
WSUD and Road Functionals: Stantec.

PLAN REF: AU12885 – 53
Rev No: E
DATE: 18 MAY 2026
SHEET: 1 OF 15
DRAWN BY: JC
CHECKED BY: PHE

0 90 180 270 360 450 **1 : 9,000 @ A3**

AURA LAKES
PROPOSAL PLAN
PRECINCT 17 (PART), PRECINCT 18 (PART) & PRECINCT 19

Stockland
AURA

URBAN DESIGN
Level 8
31 Duncan Street
PO Box 1559
Fortitude Valley QLD 4006
T +61 7 3539 9500
W rpsgroup.com

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A TETRA TECH COMPANY

APPENDIX B – EDQ ROAD TYPOLOGIES

Street types and specifications

The PDA street types fall into four categories, as outlined in Table 1 and listed below:

- Trunk connector
- Neighbourhood
  - Connector street
  - Access streets
  - Lane
- Centre
  - Connector street
  - Access street
  - Lane
- Industrial
  - Connector street
  - Access street.

The following sections provide street characteristics and demonstration examples for all the streets listed above.

Trunk connector

Trunk connectors play an important role in the overall street network and carry relatively high traffic volumes. They provide the link between the arterial road network and the lower-order streets (connector and access streets). Trunk connectors can include a bus and a safe family friendly cycling route. Typically, trunk connectors have few driveways serving larger consolidated development parcels.

Table 2 Trunk connector characteristics

Street type	Trunk connector (Figs 5A, 5B & 5C)
Function	Distributes traffic volumes from the arterial network to the connector network. Pedestrian, cycle and bus transport modes are supported.
Traffic volume	7,500 – 18,000 vpd (2 lane) 18,001 – 30,000 vpd (4 lane)
Reservation	22 – 24 m (2 lane); 33 m (4 lane no parking)
Median (width)	» 2 lane: optional » 4 lane: 6 m
Trafficable lanes	3.5 m wide
Parking	» Posted speed – 60 kph or less: 2.4 m indented where practicable » Posted speed > 60 kph: no parking
Footpath	» 1.5m minimum width on both sides
Bus route	Yes
Cycle track	» 2m wide one-way separated cycle tracks on each verge » 3m wide two way cycle track in one verge acceptable for interim 2 lane configurations
Property access	no direct access for traffic volumes > 10,000 vpd or posted speed > 60 kph
Traffic calming	No
Kerb type	Upright
Posted speed	50 – 70 km/h
Intersection spacing	300 metres minimum

Figure 5A: Demonstration example - trunk connector (2 lane - no parking)

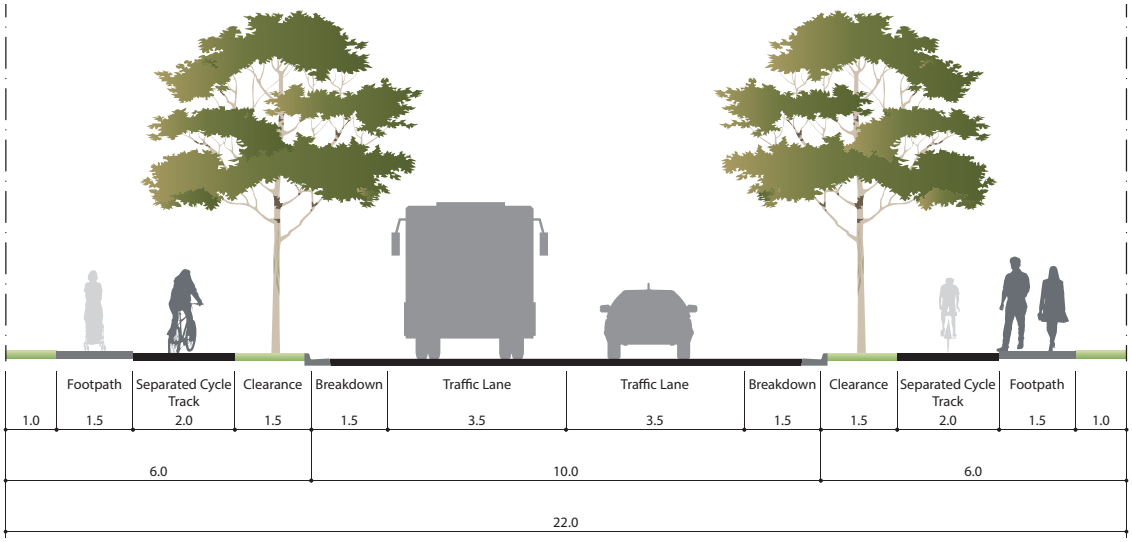


Figure 5B Demonstration example - trunk connector (2 lane - parking)

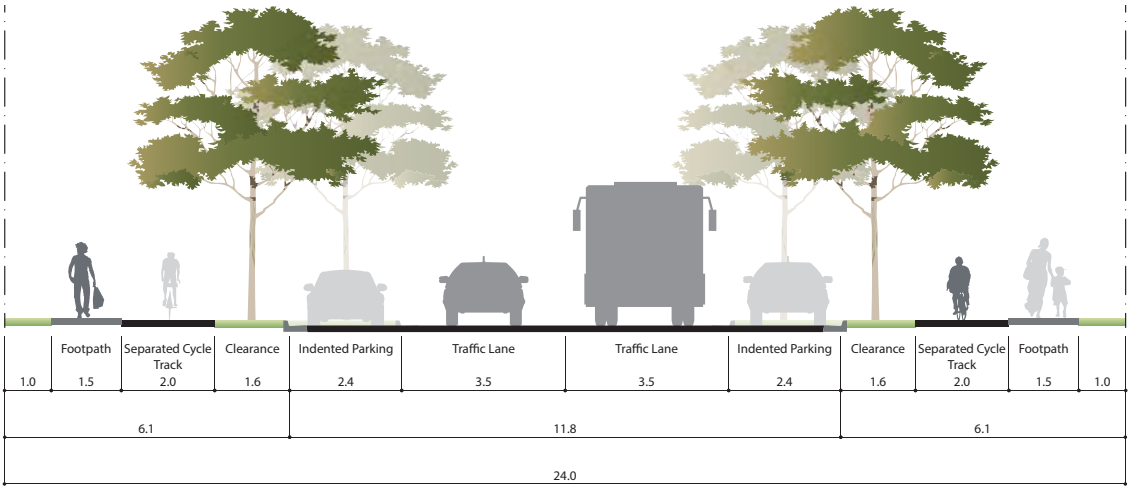
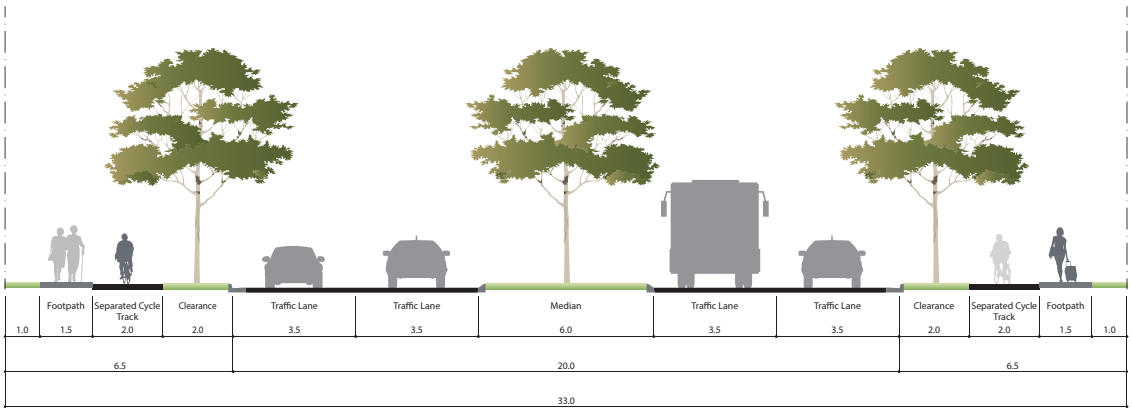


Figure 5C: Demonstration example - trunk collector (4 lane - no parking)



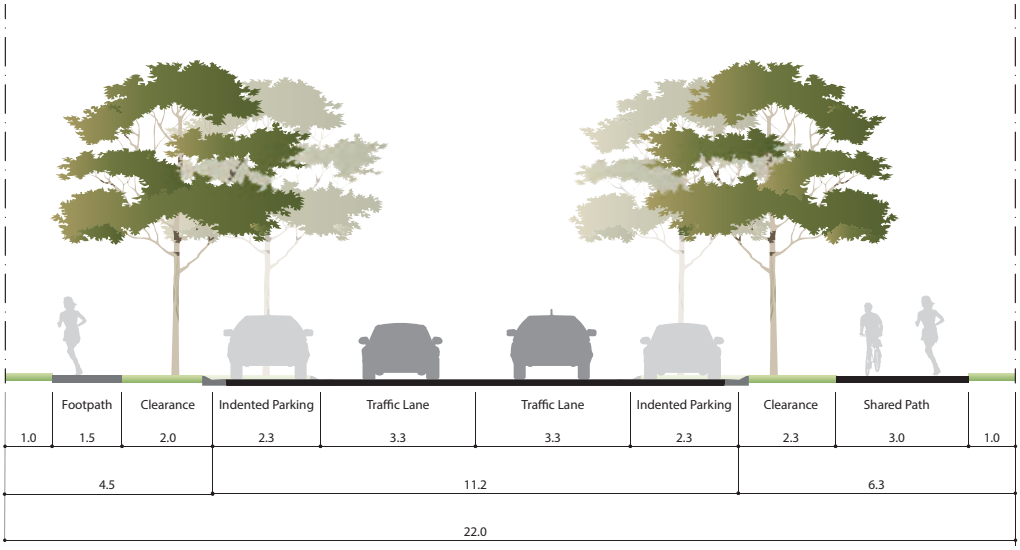
Neighbourhood street network

Neighbourhood connector

Table 3 Neighbourhood connector street characteristics

Street type	Neighbourhood connector street (Fig 6)
Function	Neighbourhood connector streets connect neighbourhood destinations including shops and parks, provide access to the surrounding road network and can include a bus and a safe family friendly cycling route.
Traffic volume	3000 - 7499 vpd
Reserve width	22 m
Median	No
Trafficable lanes	1 x 3.3 m lane in each direction
Parking	2.3 m minimum indented where practicable on both sides
Footpath	1.5 m minimum on one side
Shared path	3 m wide on one side
Bus route	Where required as part of overall network
Property access	Direct
Traffic calming	No
Kerb type	Upright/ rollover
Posted speed	Default 50 km/h
Intersection spacing	120 metres

Figure 6: Demonstration example - neighbourhood connector



Neighbourhood access streets

Neighbourhood access streets provide high levels of connectivity throughout the neighbourhood, are of an appropriate length and have carriageways with sufficient width to enable safe and efficient through vehicle movement in association with on-street parking and passing opportunities. Streets and driveways are designed to ensure motorists are able to enter on-site parking space/s in one movement in a forward gear.

Table 4 Neighbourhood access streets characteristics

Street type	Neighbourhood access street	
	7.5 m (Fig 7A)	6 m[1] (Fig 7B)
Function	Provide direct residential property access. Also allow for vehicle, pedestrian and cyclist connectivity.	
Traffic volume	< 3000 vpd	< 3000 vpd
Reserve width	16 m[2]	15.5 m
Carriageway width	7.5 m	6 m
Maximum block length	200 m	200 m
Median	No	No
Trafficable lanes	Varies, minimum one traffic lane with passing opportunities	Varies, minimum one traffic lanes with passing opportunities
Parking[3]	kerbside	2.3 m minimum indented on one side
Footpath	1.5 m minimum on one side[4]	1.5 m minimum on one side[4]
Bus route	No	No
Cycle track	No	No
Property access	Direct	Direct except via indented parking bays
Traffic calming	Generally not supported	Generally not supported
Kerb type	Roll Over	Roll Over
Posted speed	Default 50 km/h	Default 50 km/h
Intersection spacing	na	na

1 A preferred alternative profile where no access driveways are requried via the indented parking bays eg. where rear lane product is porposed.
2 Verge widths must be increased appropriately to accommodate any proposed WSUD devices
3 A parking analysis plan* is required to demonstrate compliance with the above standards if the proposed neighbourhood access street will provide access to:

- lots less than 12.5m wide, or
- a multiple residential development including up to 6 dwellings.

Refer to the PDA practice note for more information on parking analysis plans.
4 For additional information see PDA practice note on footpath provision in residential subdivisions.

Figure 7A: Demonstration example - neighbourhood access street - 7.5 m

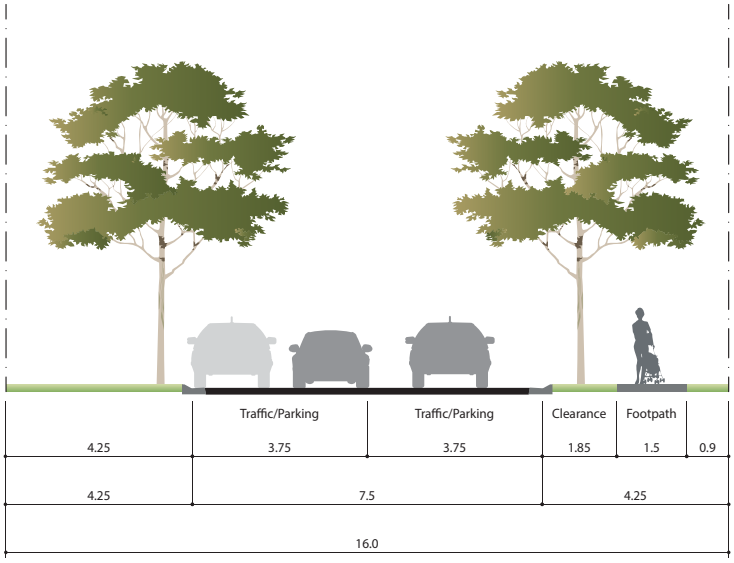
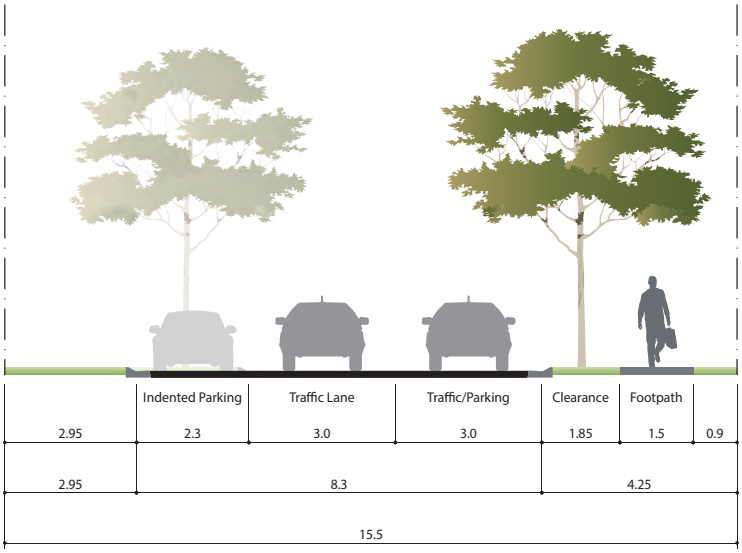


Figure 7B: Demonstration example - neighbourhood access street - 6 m



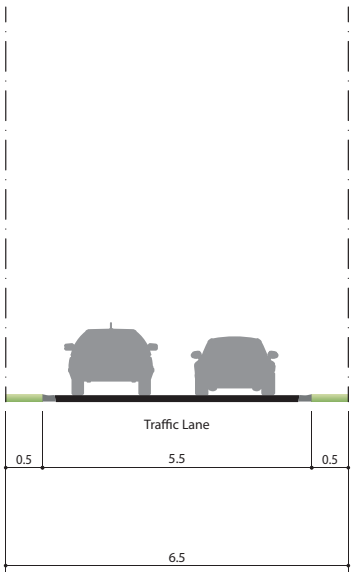
Neighbourhood lane

(refer to PDA Practice Note no.12 Rear lanes: design and development for detailed design guidance)

Table 5 Neighbourhood lane characteristics

Street type	Neighbourhood lane (Fig 8)
Function	Lanes provide direct access to properties including for refuse collection and other service vehicles. Lanes typically provide rear access to garages but can also provide "front door" access to loft apartments and other small dwellings.
Traffic volume	‹ 500 vpd
Reserve width	6.5 m
Carriageway width	5.5 m
Median	No
Trafficable lanes	1 in each direction
Parking	No
Services	Yes
Footpath	No
Bus route	No
Cycle track	No
Property access	Direct property access
Traffic calming	No
Kerb type	Flush
Posted speed	Default 50 km/h, unless signed otherwise.
Intersection spacing	na

Figure 8: Demonstration example - neighbourhood lane



Centre street network

Centre connector street

Table 6 Centre connector street characteristics

Street type	Centre connector street	
	Fig 9A (parking)	Fig 9B (no parking)
Function	Centre connector streets provide limited property access and provide routes via access streets to centre destinations. They also accommodate a high level of pedestrian and cycle activity.	
Traffic volume	7,500 – 15,000 vpd	
Reservation	38 m	34 m
Carriageway width	19 m	15 m
Median	6 m	6 m
Lanes	2 x 3.5 m in each direction	2 x 3.5 m in each direction
Parking	2.5 m minimum on both sides	No
Footpath	3 m both sides	3 m both sides
Bus route	Yes, allowed for in parking lane, separate lane marking.	Yes, provision for indented bus bays where required
Cycle track	2 m one -way separated cycle track in each verge	2 m one-way cycle track on road separated from travel lane by 2m median
Property access	Limited direct access	Limited direct access
Traffic calming	No	No
Kerb type	Upright	Upright
Posted speed	60 km/h	50 - 60 km/h
Intersection spacing	100 metres minimum	100 metres minimum

Figure 9A: Demonstration example - centre connector (parking)

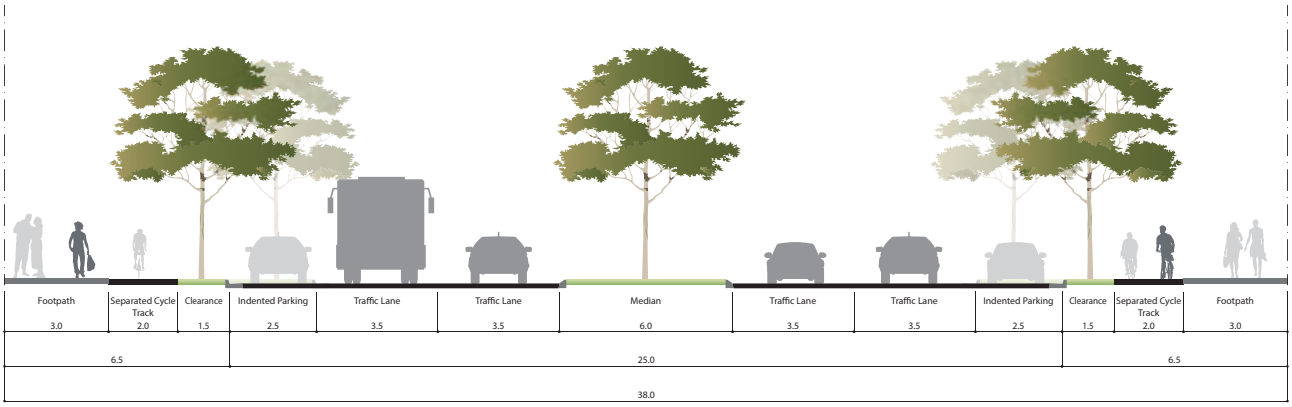
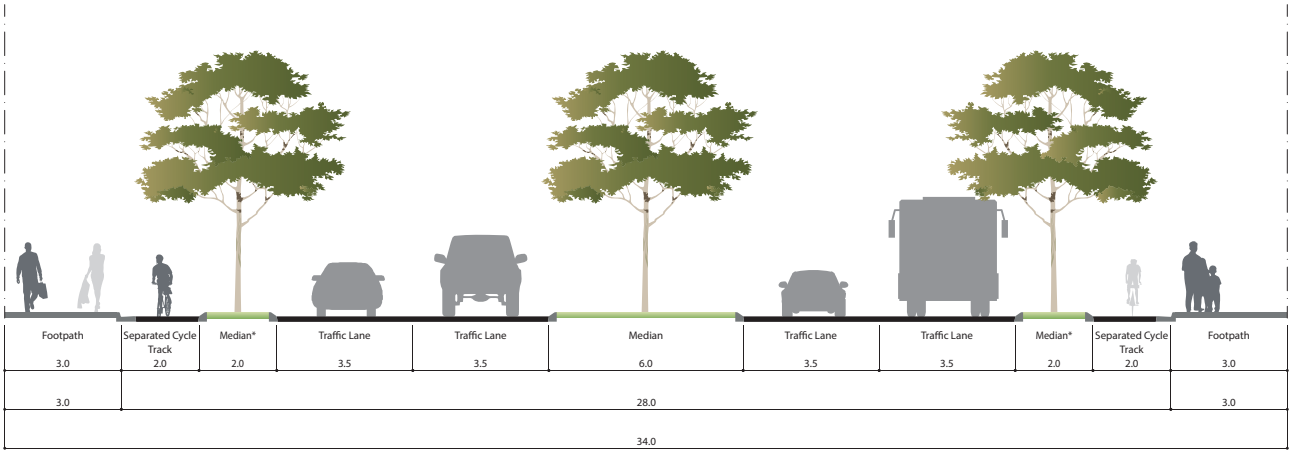


Figure 9B: Demonstration example - centre connector (no parking)

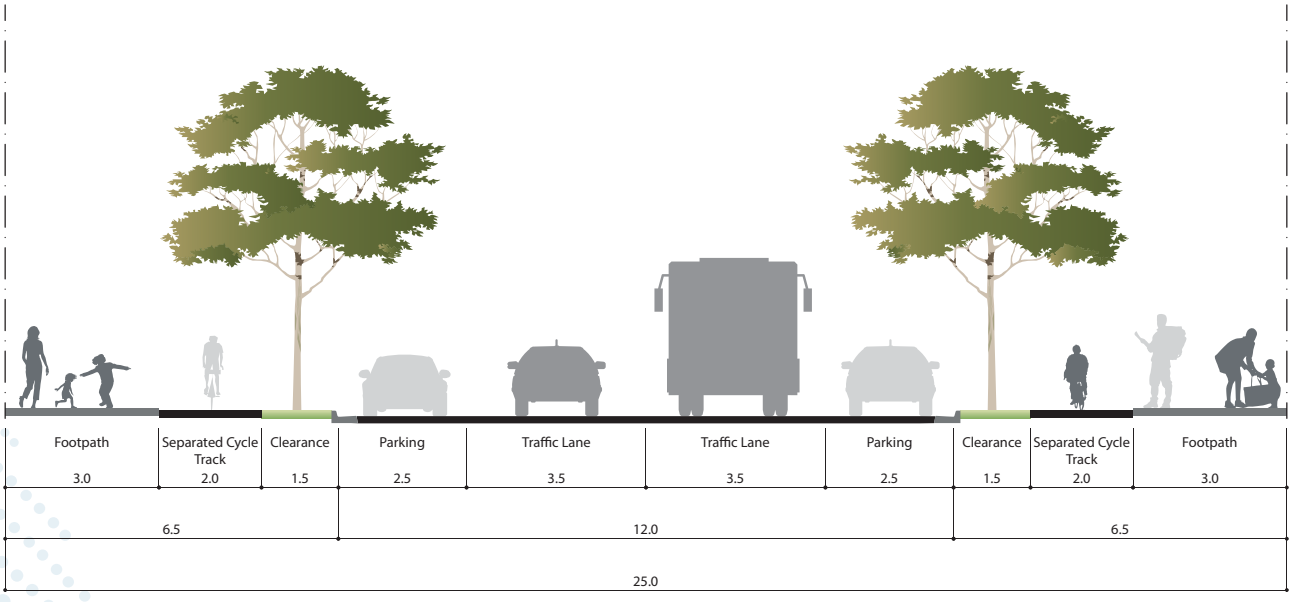


Centre access street

Table 7 Centre access street characteristics

Street type	Centre access street (Fig 10)
Function	Centre access streets provide direct property access to commercial centre activities, and support a high level of pedestrian and cycle activity.
Traffic volume	‹ 7,500 vpd
Reservation	25 m
Median	No
Trafficable lanes	3.5 m in each direction
Parking	2.5 m minimum on both sides
Footpath	3 m both sides
Bus route	Not usually permitted
Cycleway	2 m one-way separated cycle track in each verge
Property access	Direct property access
Traffic calming	No
Kerb type	Upright
Posted speed	Default 50 km/h, unless signed otherwise
Intersection spacing	100 metres minimum

Figure 10: Demonstration example - centre access street

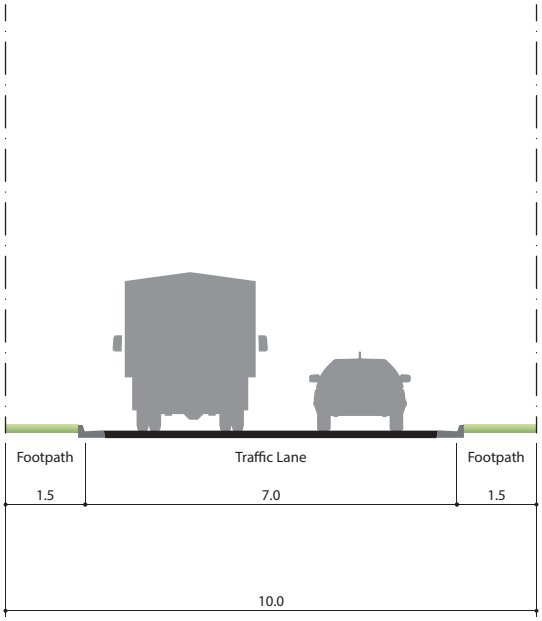


Centre lane

Table 8 Centre lane characteristics

Street type	Centre lane (Fig 11)
Function	Centre lanes provide access to the rear of buildings, including access for loading and delivery vehicles. Centre lanes are not intended as an alternative route option for through traffic, and should not be designed as such.
Traffic volume	‹ 1,000 vpd
Reservation	10 m
Median	No
Trafficable lanes	3.5 m in each direction
Parking	No, short-term loading/unloading excepted
Footpath	1.5 m both sides
Bus route	No
Cycleway	No
Property access	Direct property access
Traffic calming	No
Kerb type	Flush
Posted speed	Default 50 km/h, unless signed otherwise.
Intersection spacing	50 metres minimum

Figure 11: Demonstration example - Centre lane



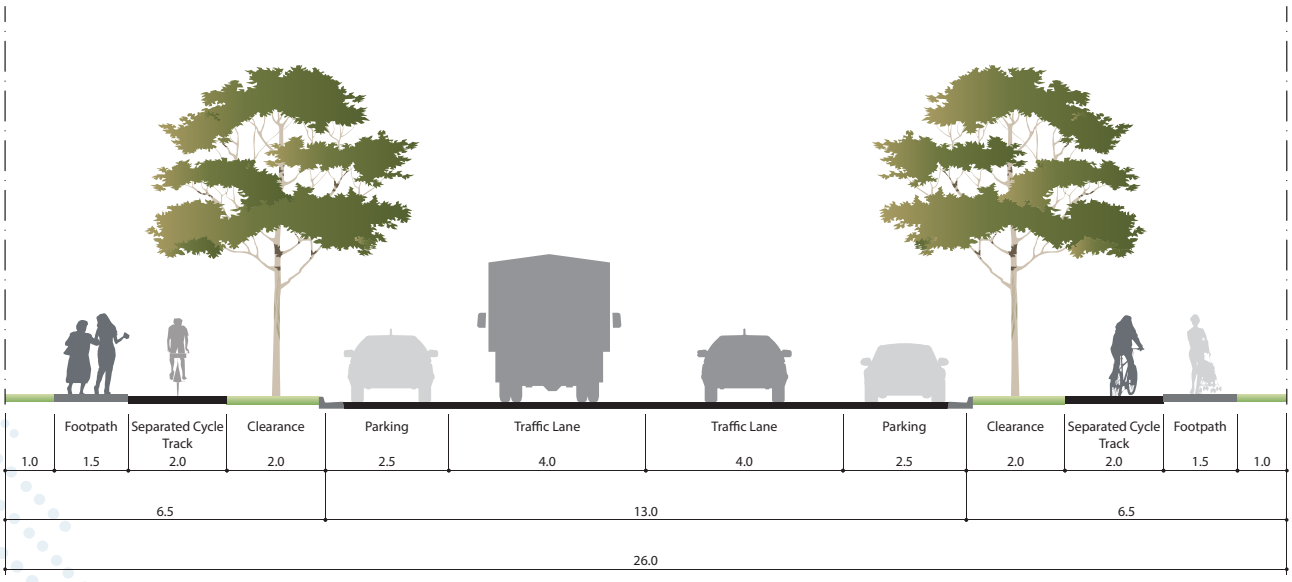
Industrial street network

Industrial connector street

Table 9 Industrial connector street characteristics

Street type	Industrial connector street (Fig 12)
Function	Provide routes via access streets to industrial destinations. Low requirement for cyclists and pedestrians accessibility.
Traffic volume	‹ 7,500 vpd
Reservation	26 m
Median	No
Trafficable lanes	4 m in each direction
Parking	2.5 m parking lane both sides
Footpath	1.5 m on both sides
Bus route	No
Cycleway	No
Property access	Limited direct access
Traffic calming	No
Kerb type	Upright
Posted speed	60 km/h
Intersection spacing	150 metres minimum

Figure 12: Demonstration example - industrial connector

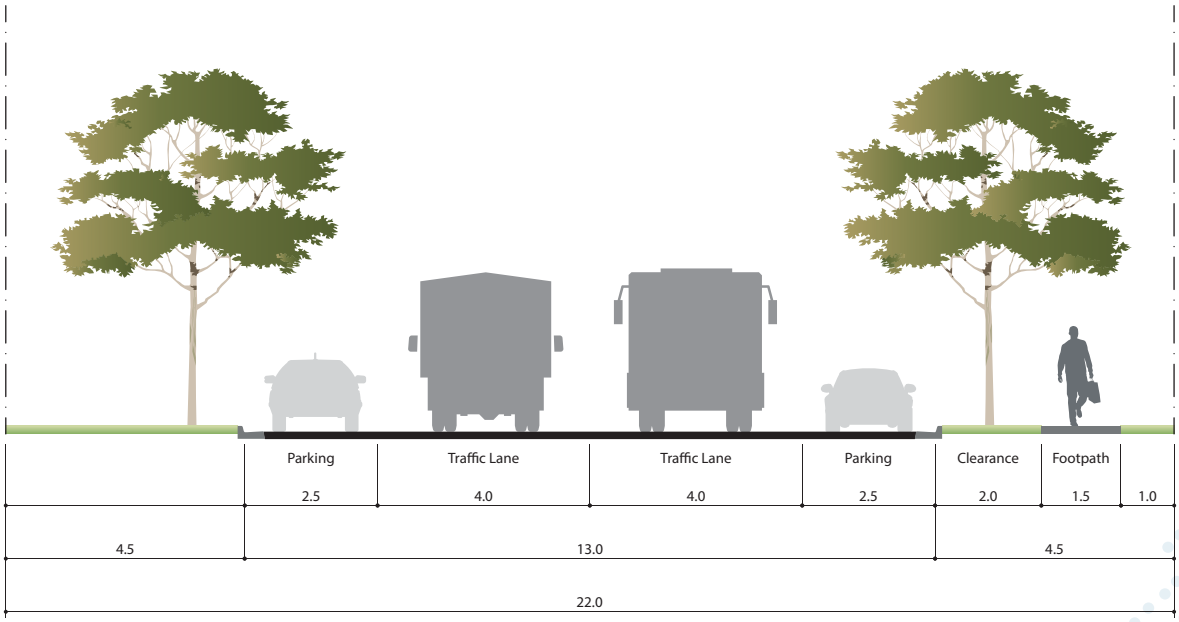


Industrial access street

Table 10 Industrial access street characteristics

Street type	Industrial Access Street (Fig 13)
Function	Industrial access streets provide direct access to properties. Parking lanes are to be provided on both sides to cater for employees and a footpath on one side of the street.
Traffic volume	‹ 3,000 vpd
Reservation	22 m
Median	No
Trafficable lanes	4.0 m in each direction
Parking	2.5 m parking lane both sides
Footpath	1.5 m minimum on one side
Bus route	No
Cycleway	No
Property access	Direct property access
Traffic calming	No
Kerb type	Upright
Posted speed	Default 50 km/h, unless signed otherwise
Intersection spacing	100 metres minimum

Figure 13: Demonstration example - industrial access street



APPENDIX C – PROPOSED ROAD CROSS SECTIONS

SUB-ARTERIAL 3A
42.3m

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CHECKED BY: MD

0 2 4 6 8 10 **1 : 150 @ A3**

AURA LAKES - DA2
ROAD CROSS SECTIONS

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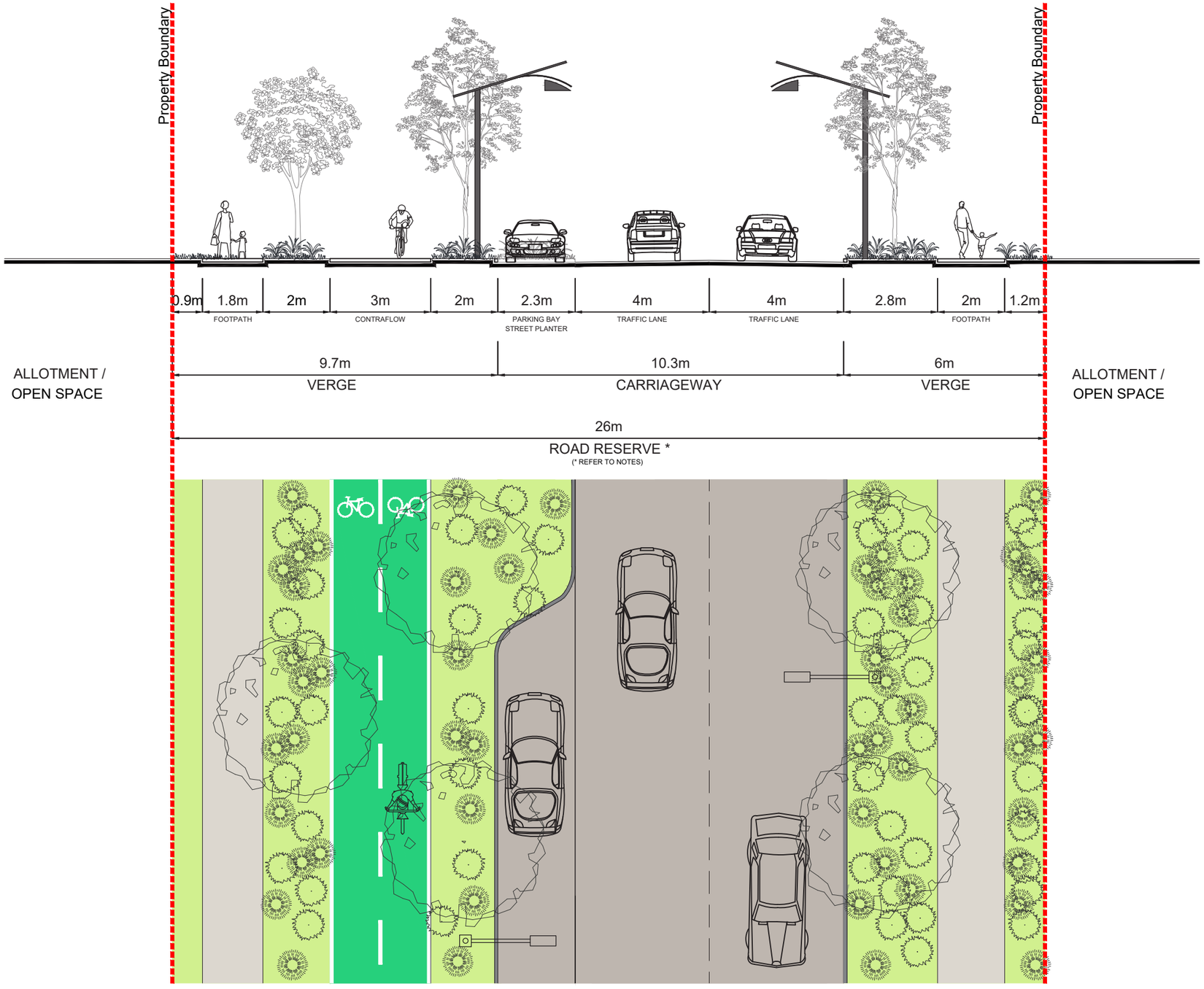
TRUNK CONNECTOR C2 [NORTH-SOUTH VARIANT]

26m



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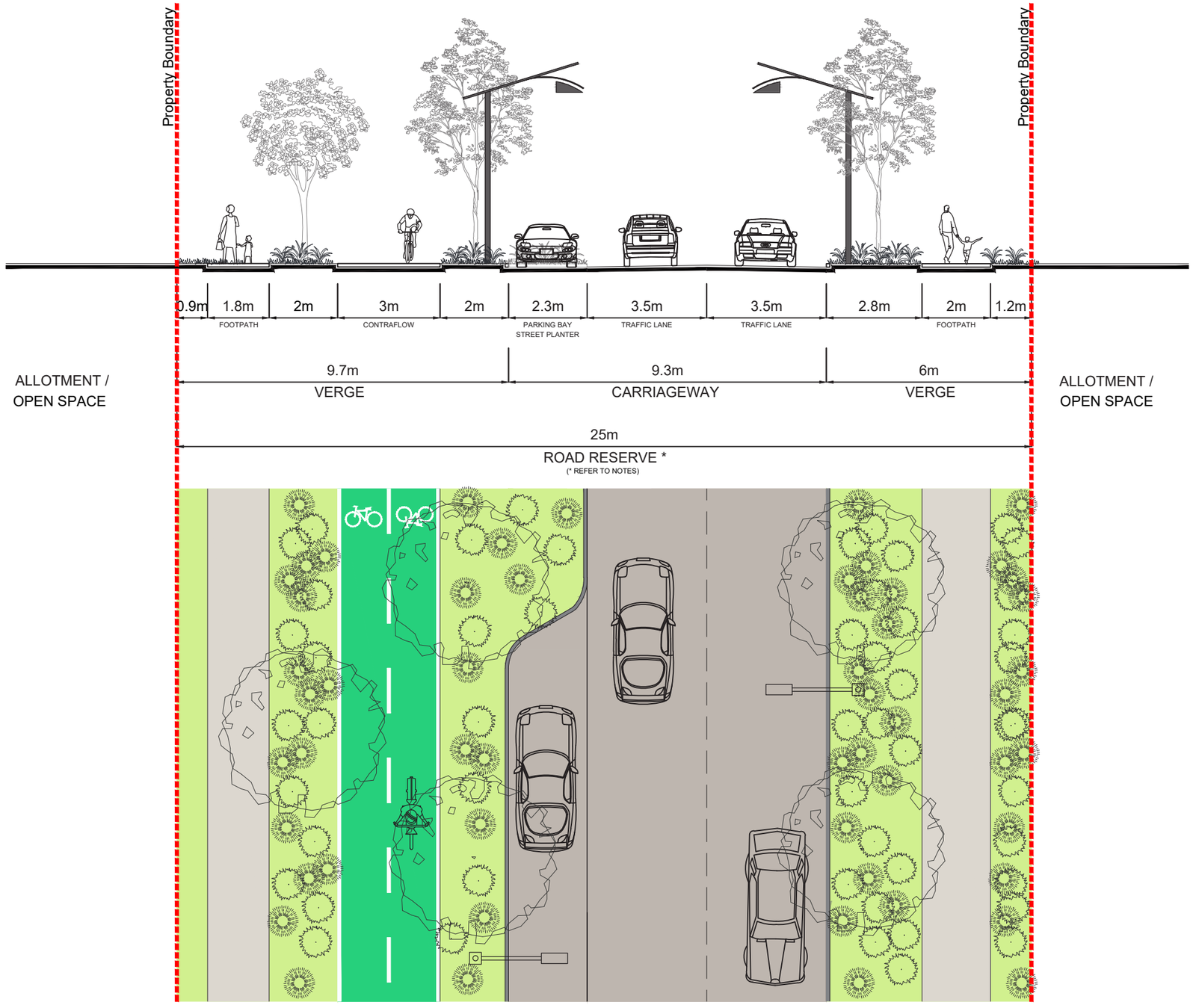
TRUNK CONNECTOR C2
25m



NOTES

* Road cross section where road crosses culvert to be reviewed in detailed design.

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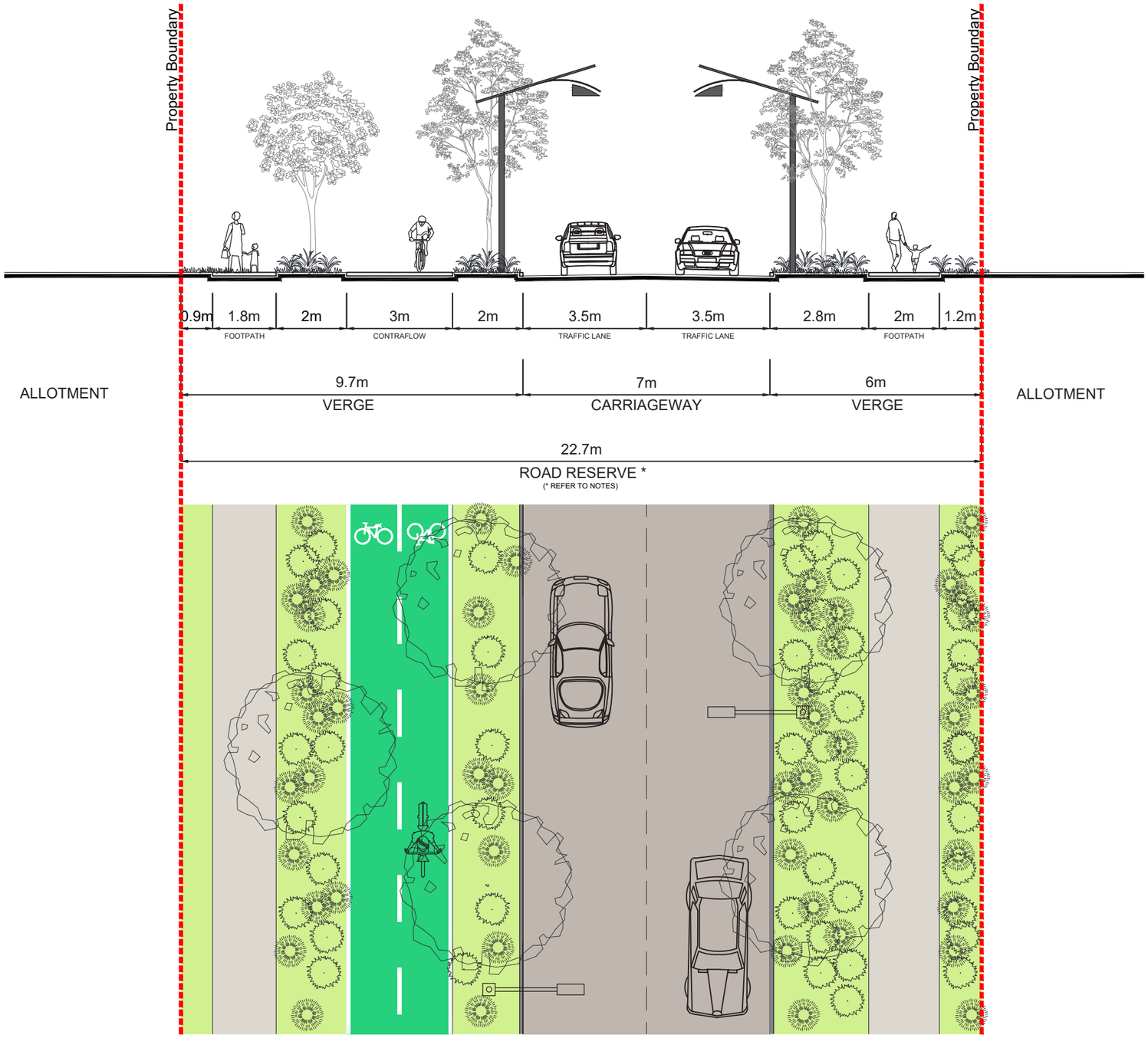
TRUNK CONNECTOR C2 [NO PARKING VARIANT]

22.7m



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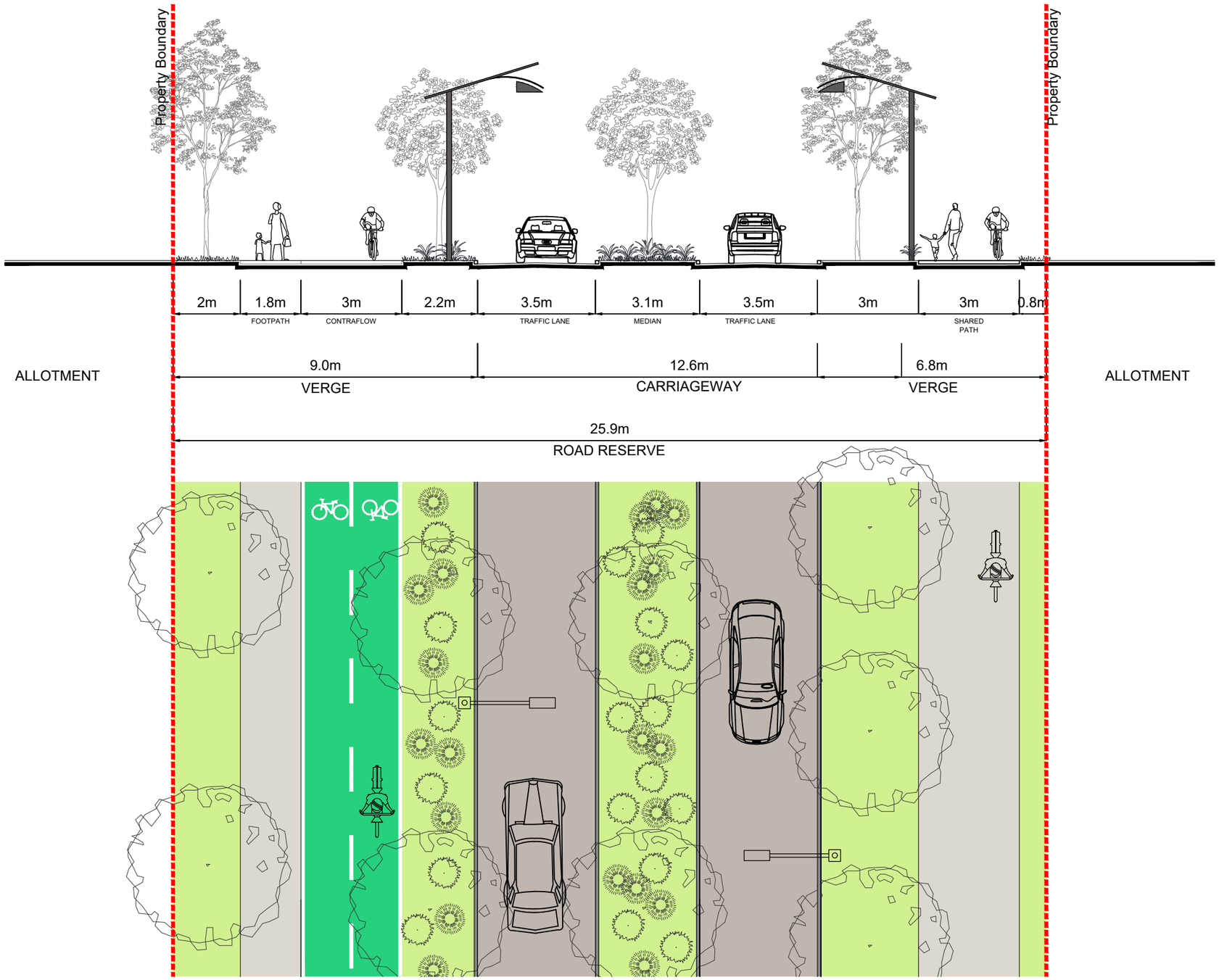
TRUNK CONNECTOR G
25.9m



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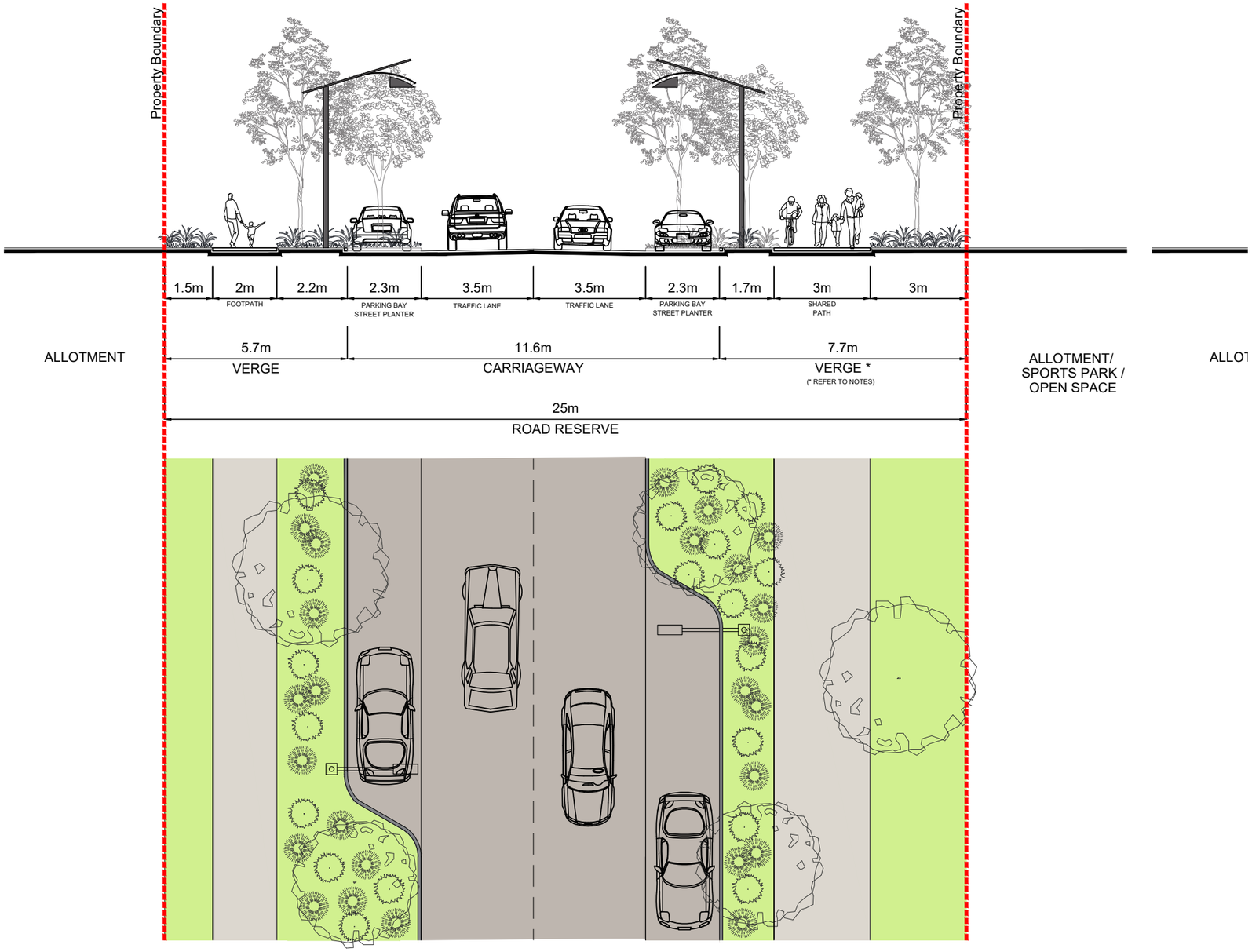
NEIGHBOURHOOD CONNECTOR N1

25m



NOTES

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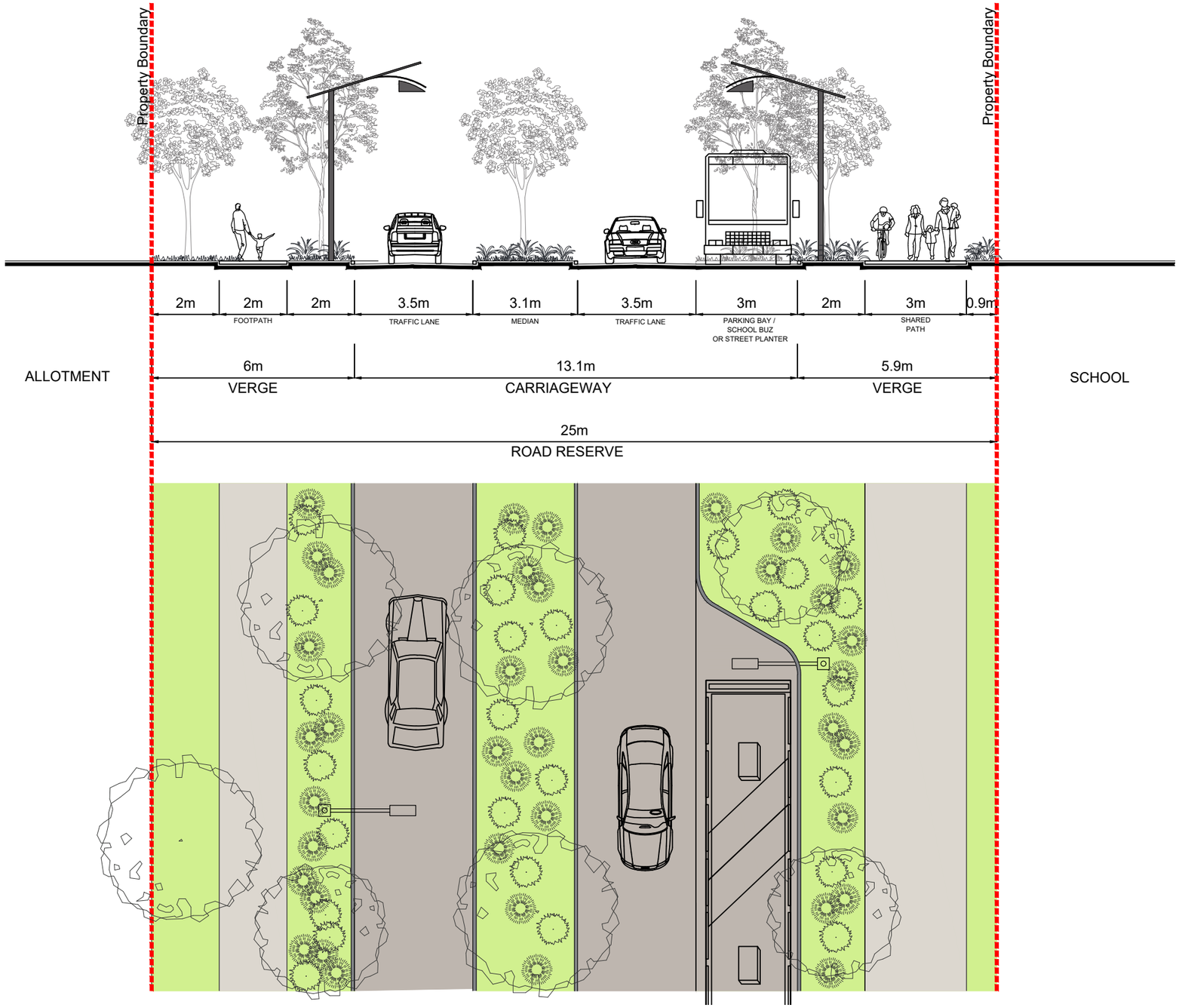
NEIGHBOURHOOD CONNECTOR N2

25m



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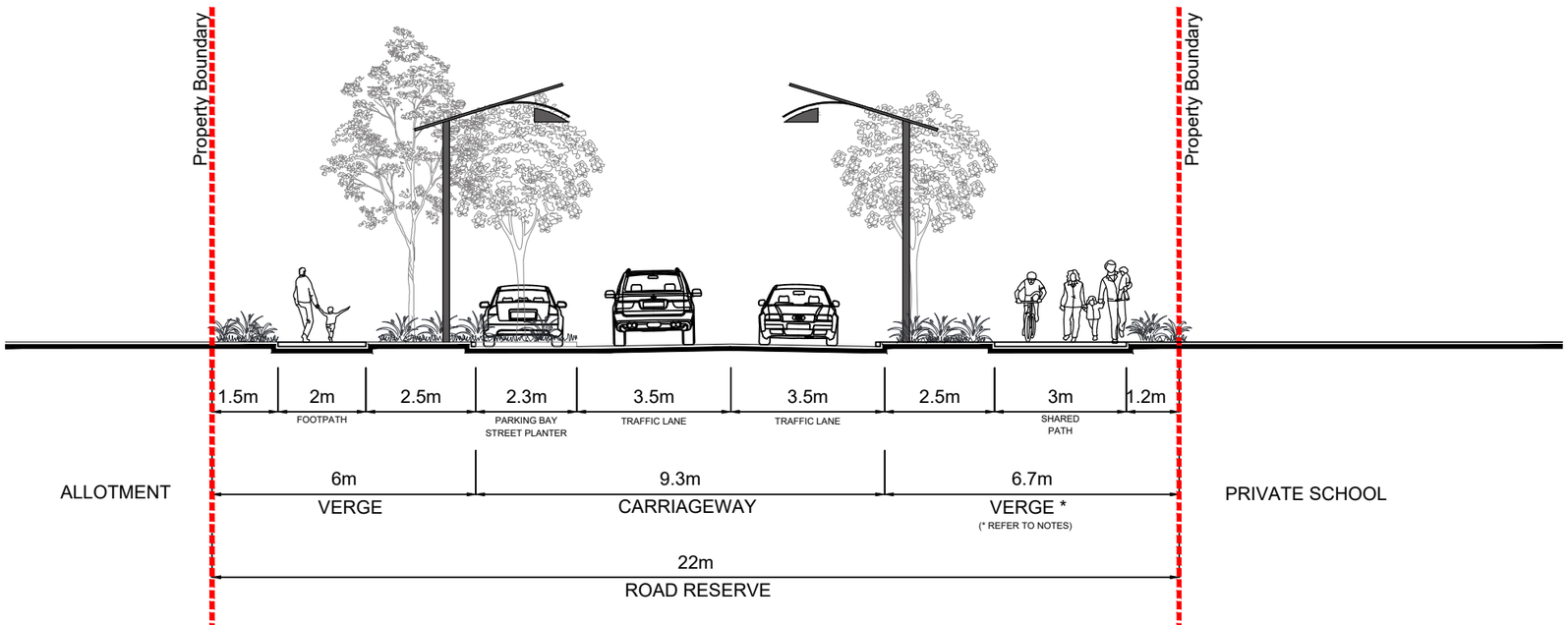
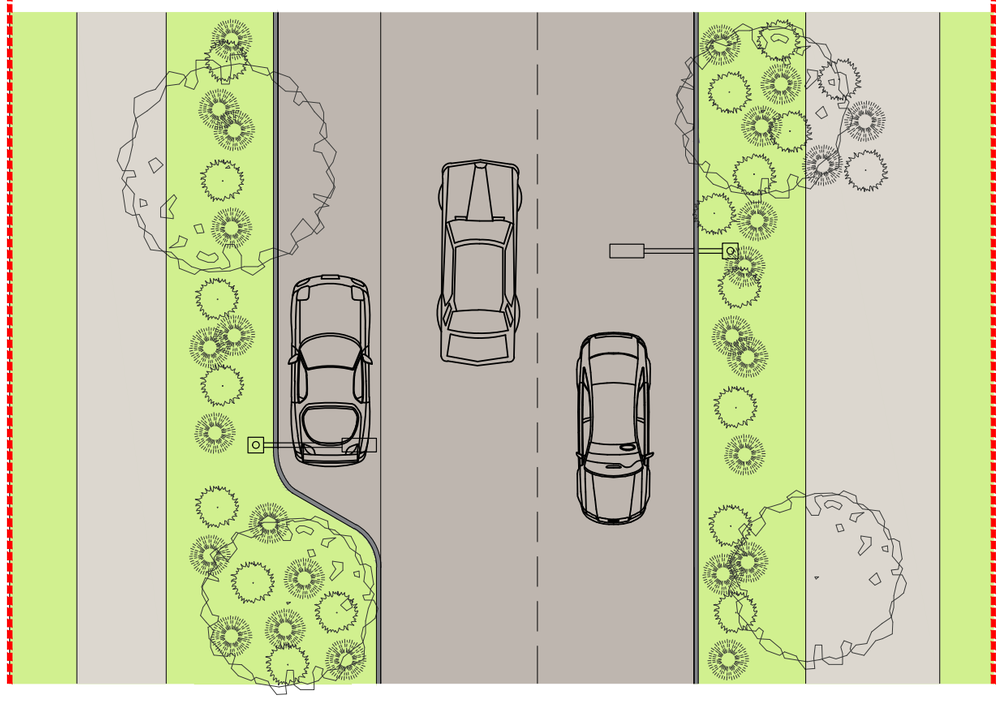
NEIGHBOURHOOD CONNECTOR N3

22m





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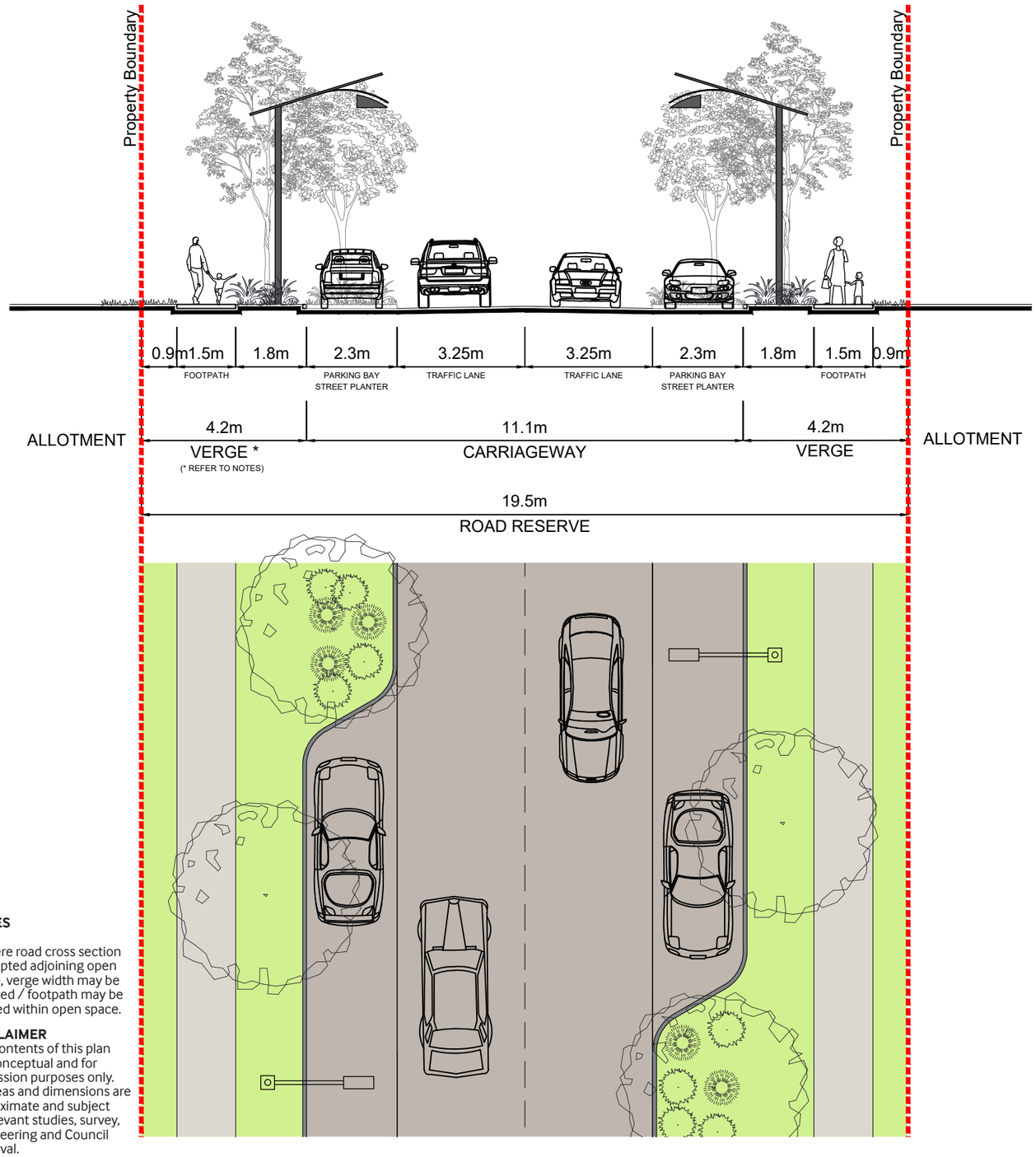
URBAN ACCESS A1
19.5m



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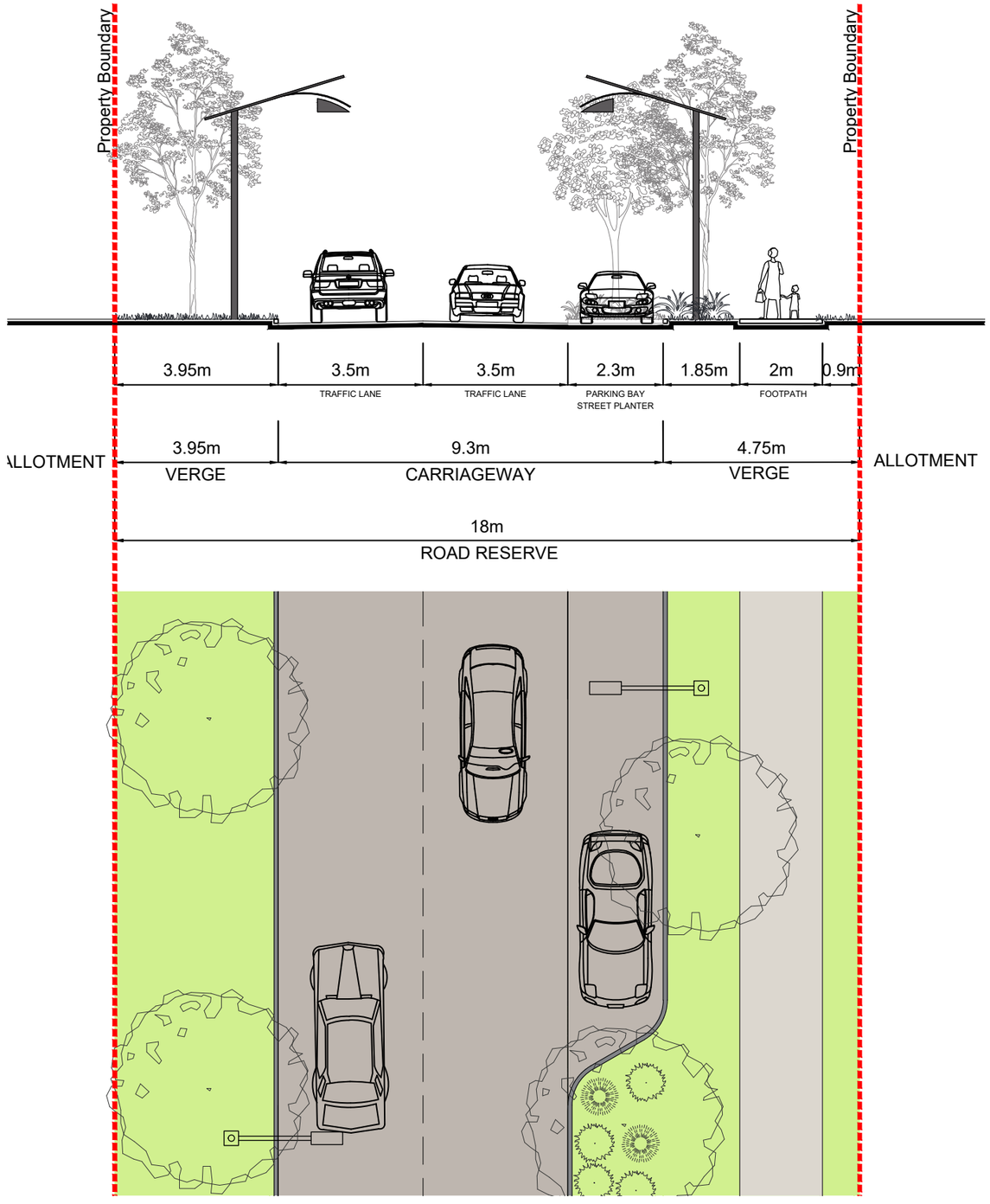
18m



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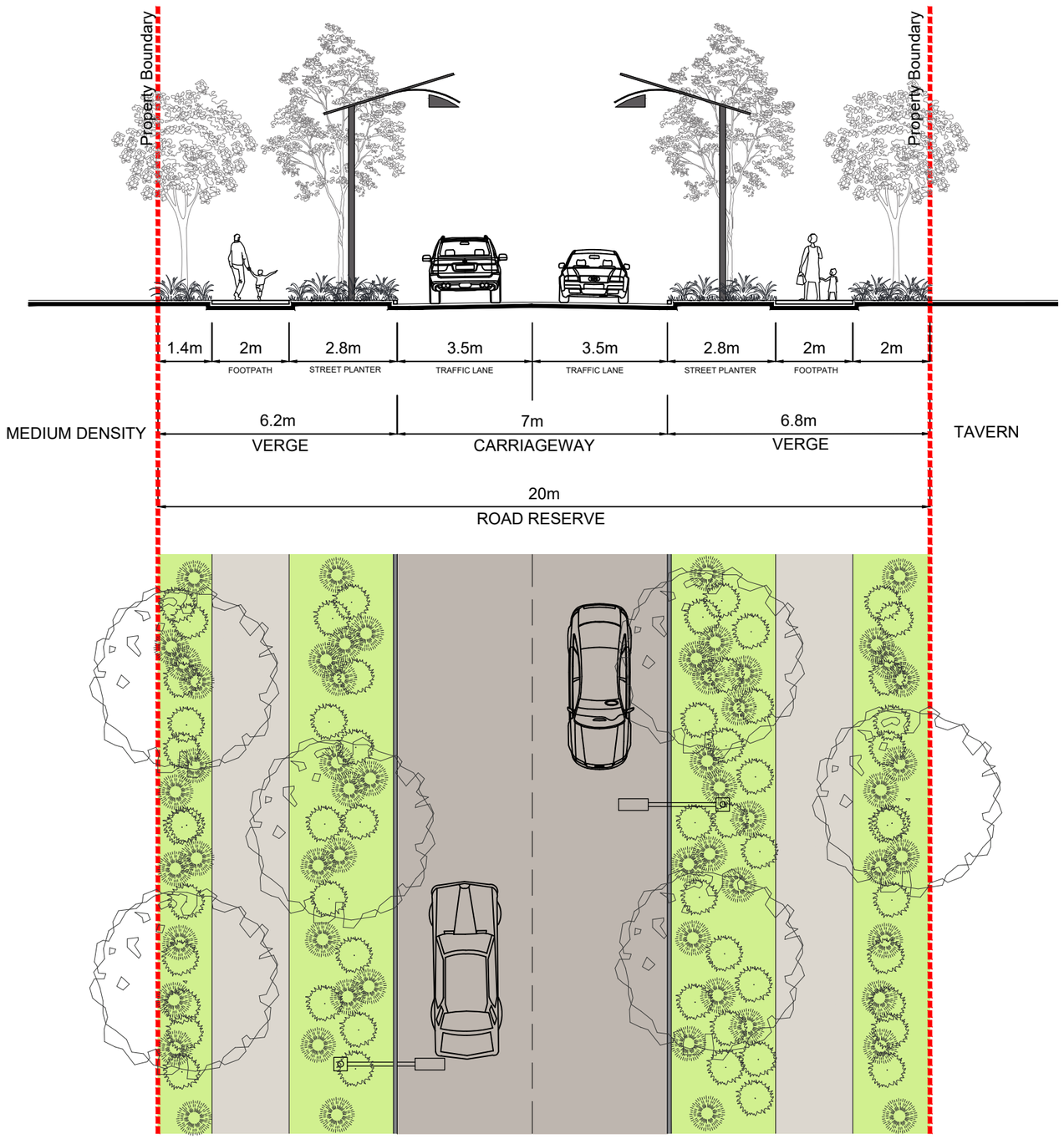
20m



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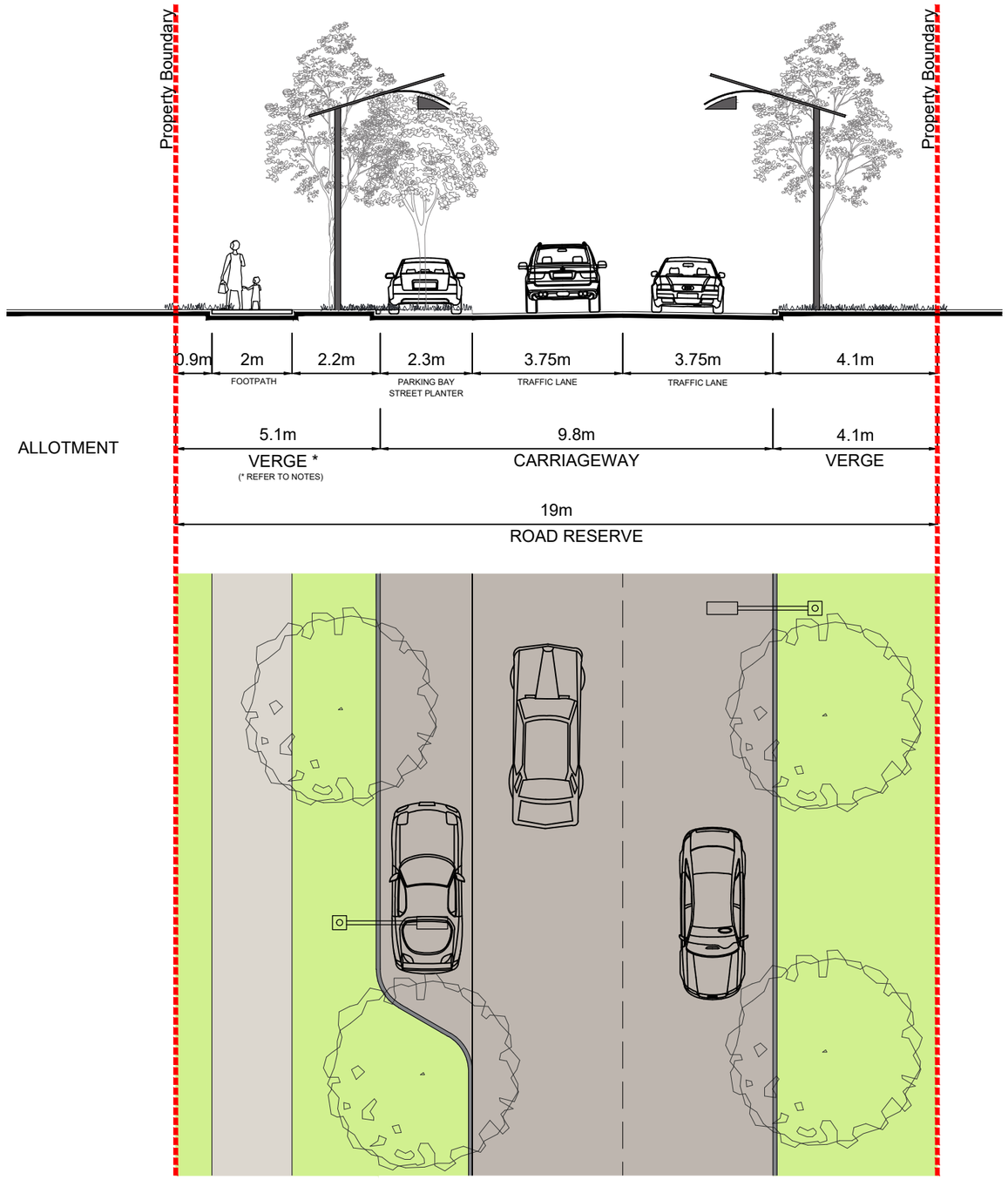
NEIGHBOURHOOD CONNECTOR L
19m



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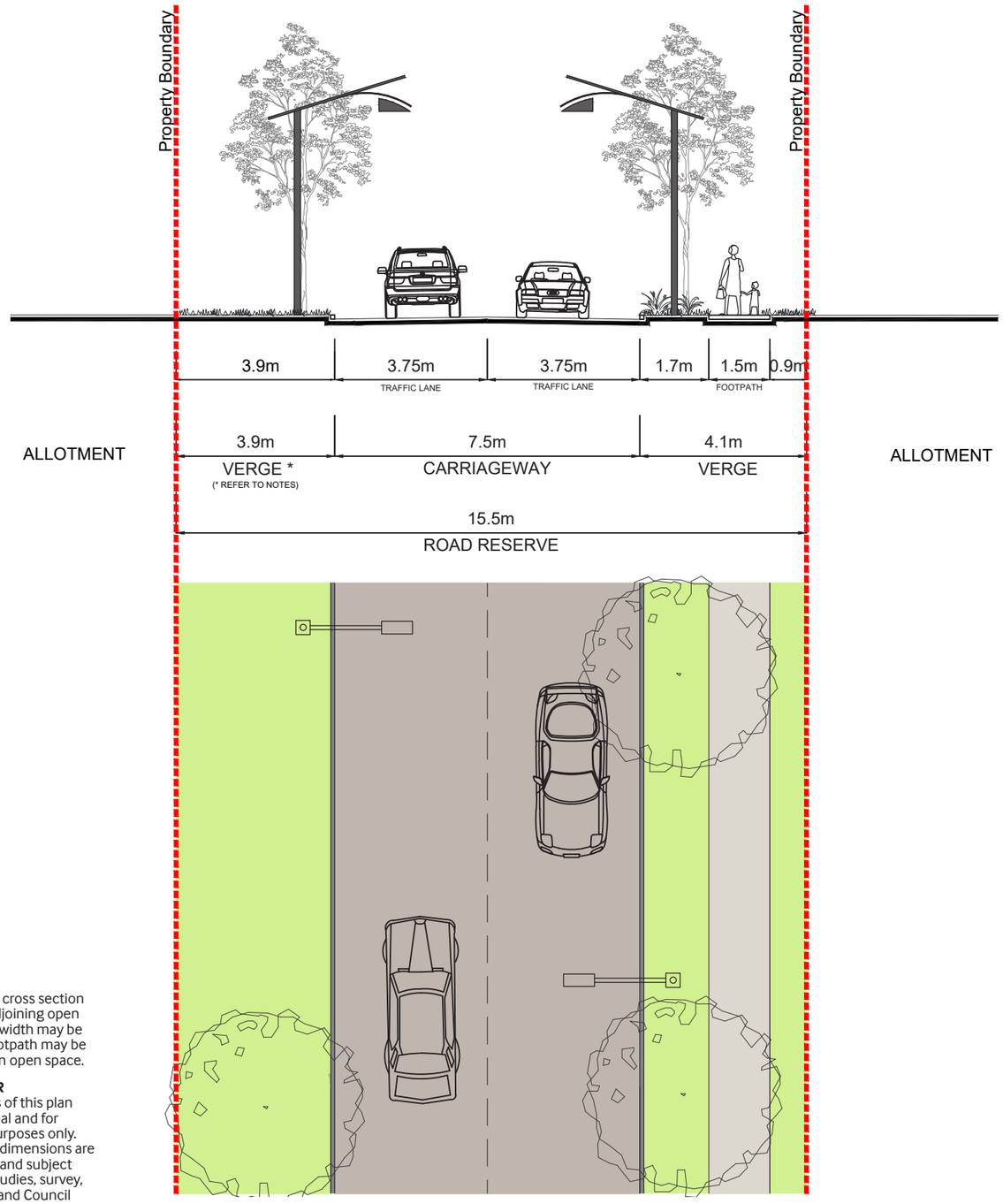
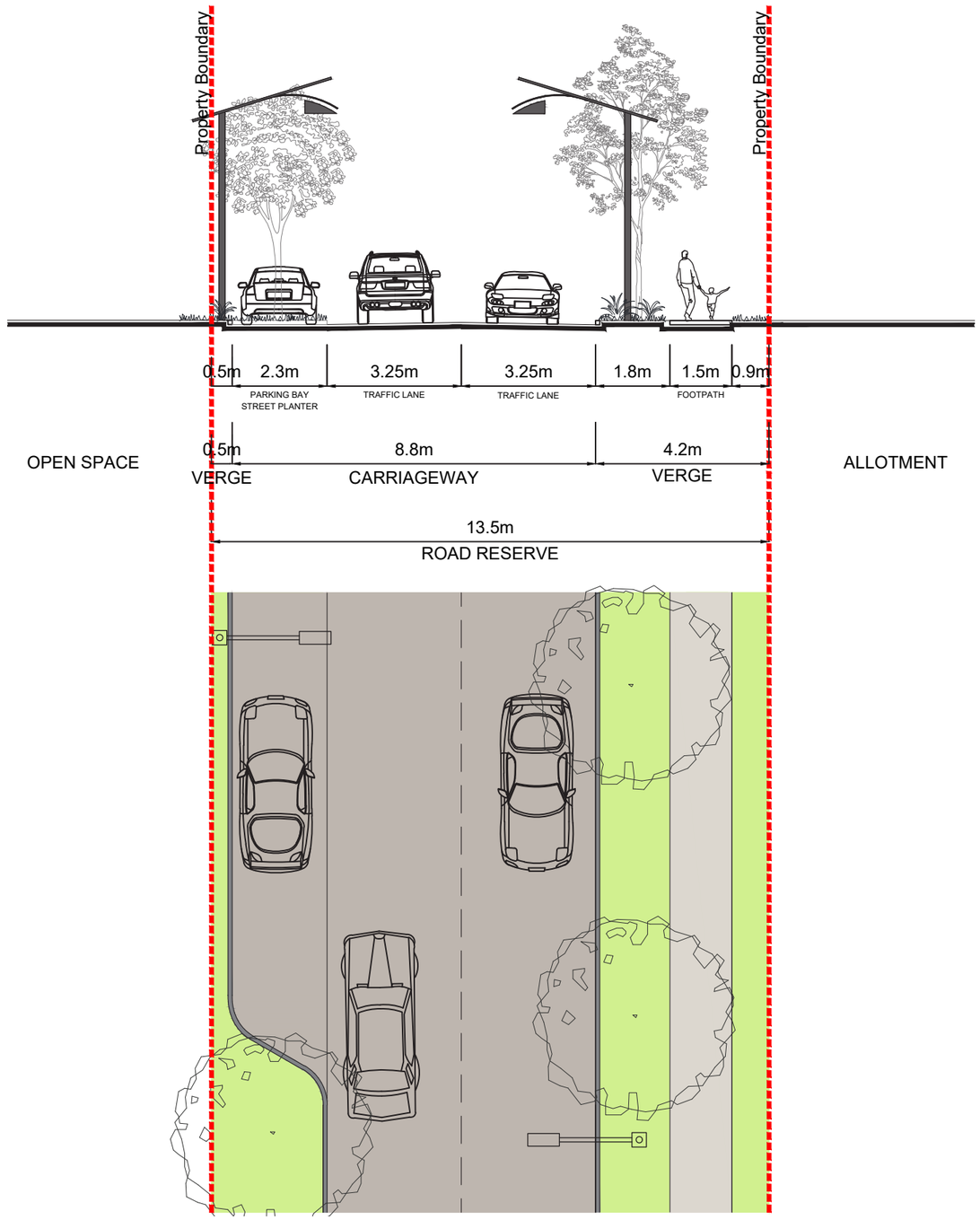
ACCESS STREET P
15.5m



ACCESS STREET ESPLANADE
13.5m



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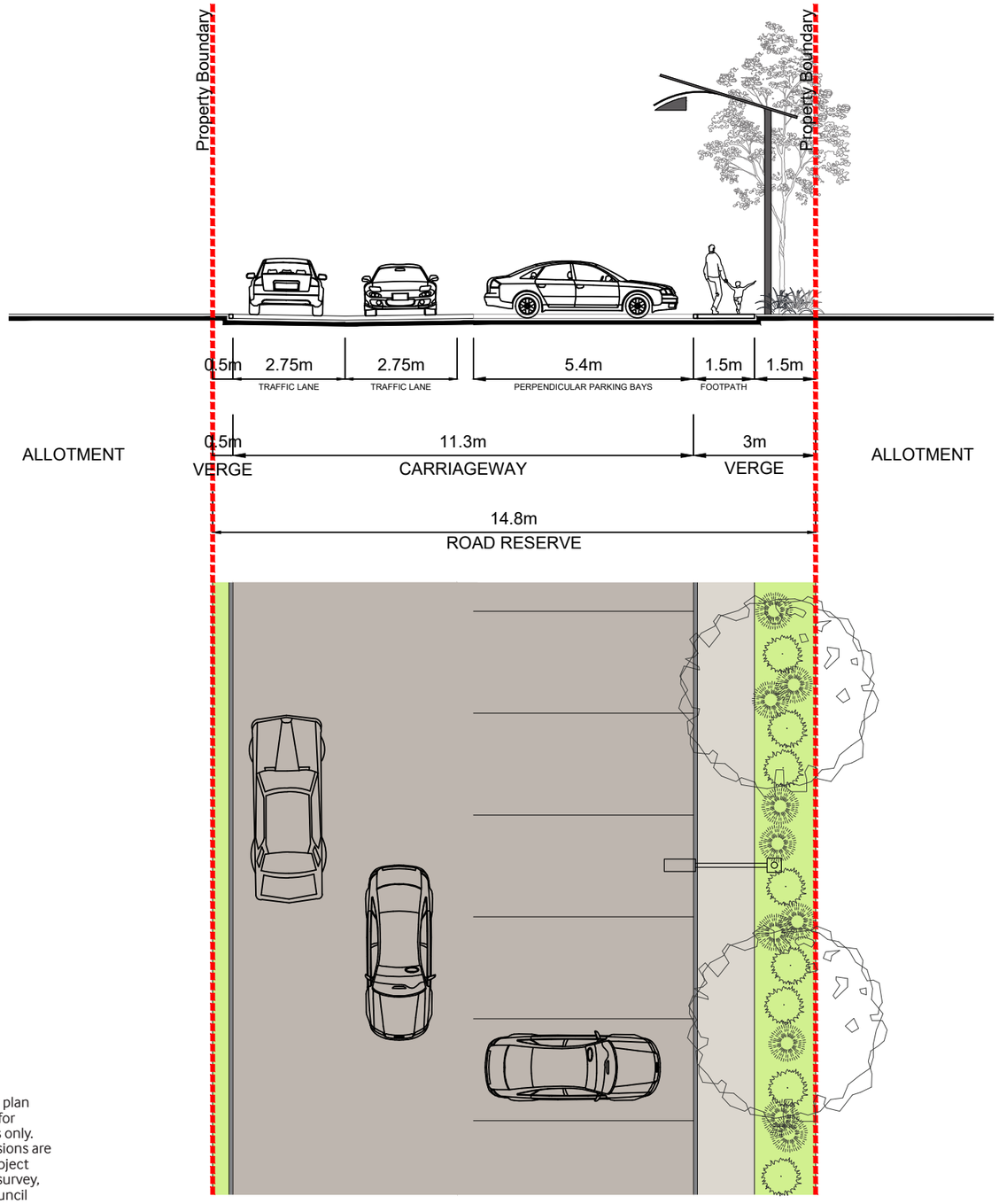
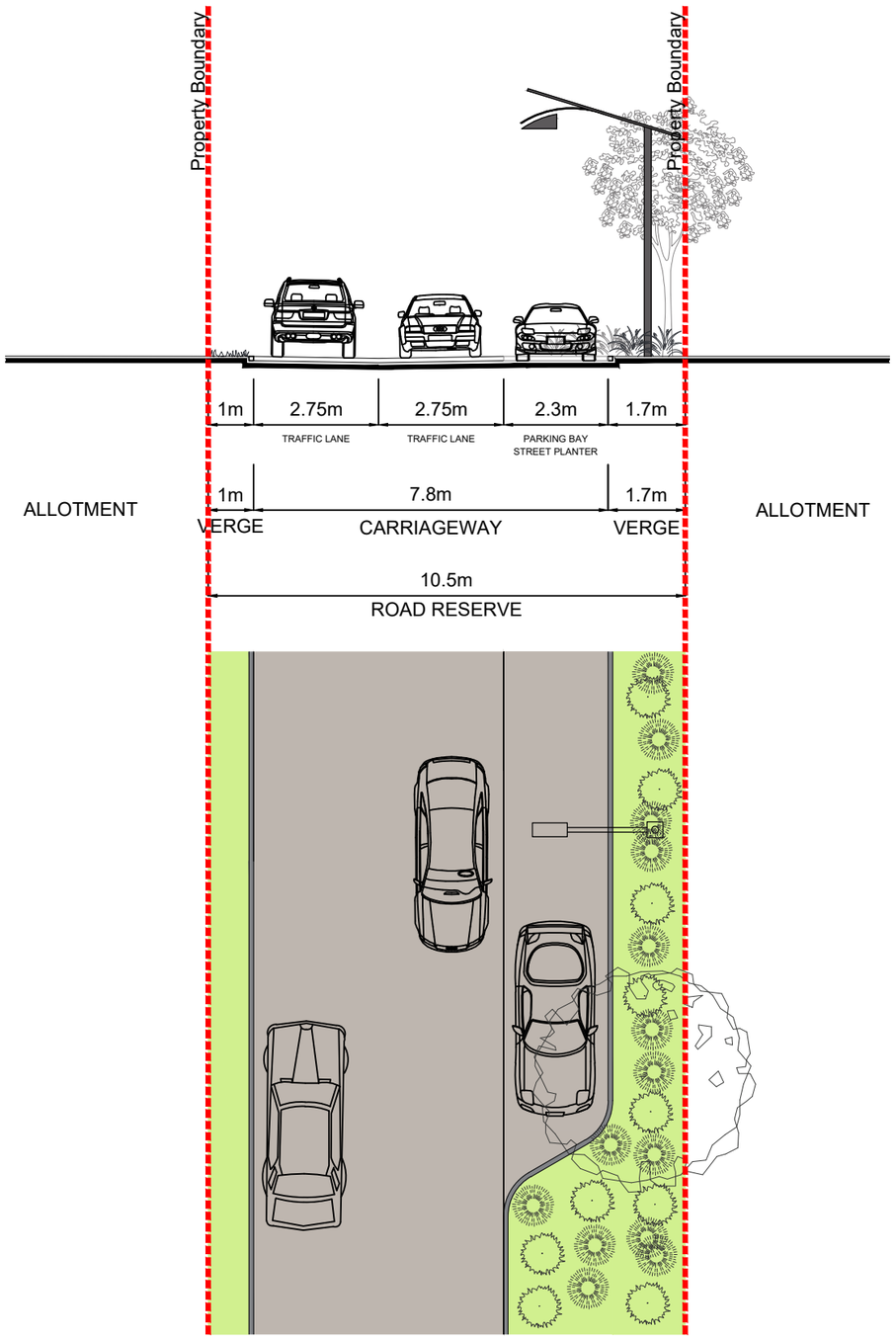
LANEWAY LINK
14.8m



LANEWAY
10.5m



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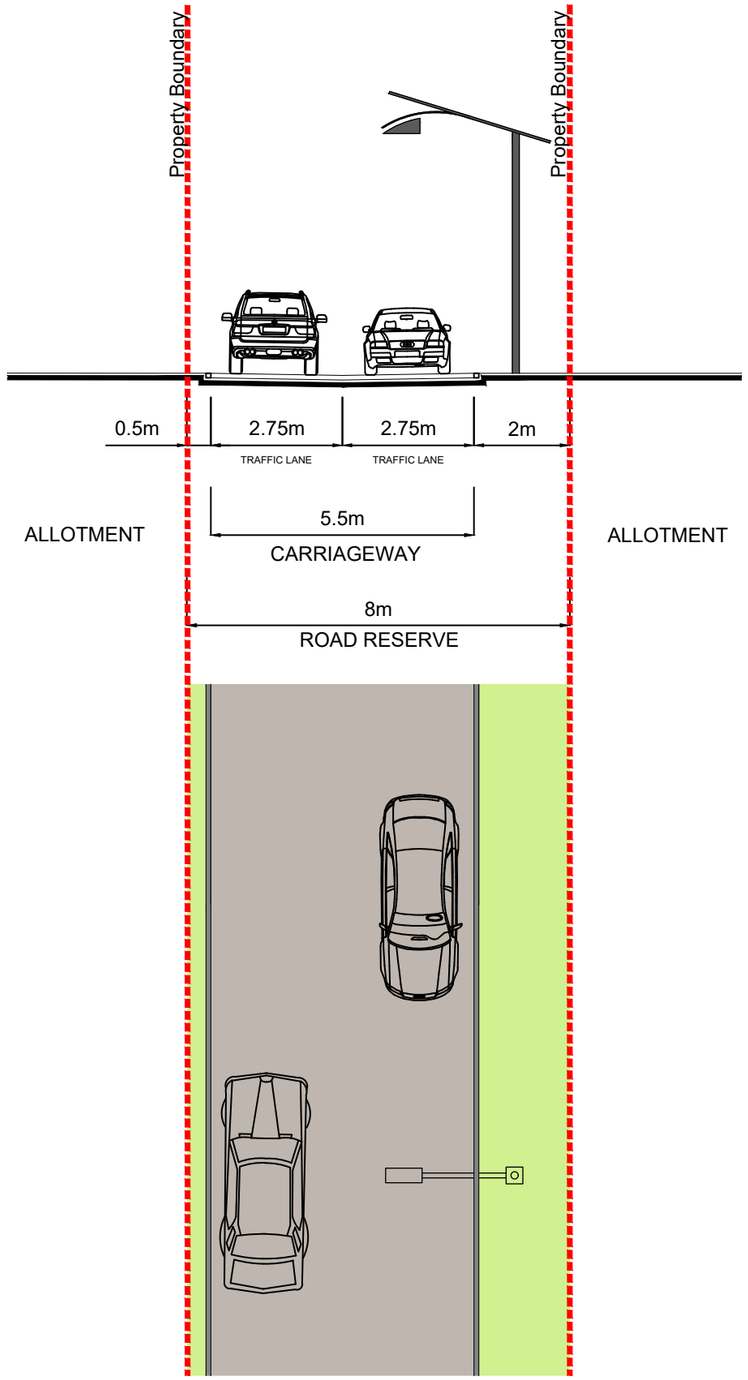
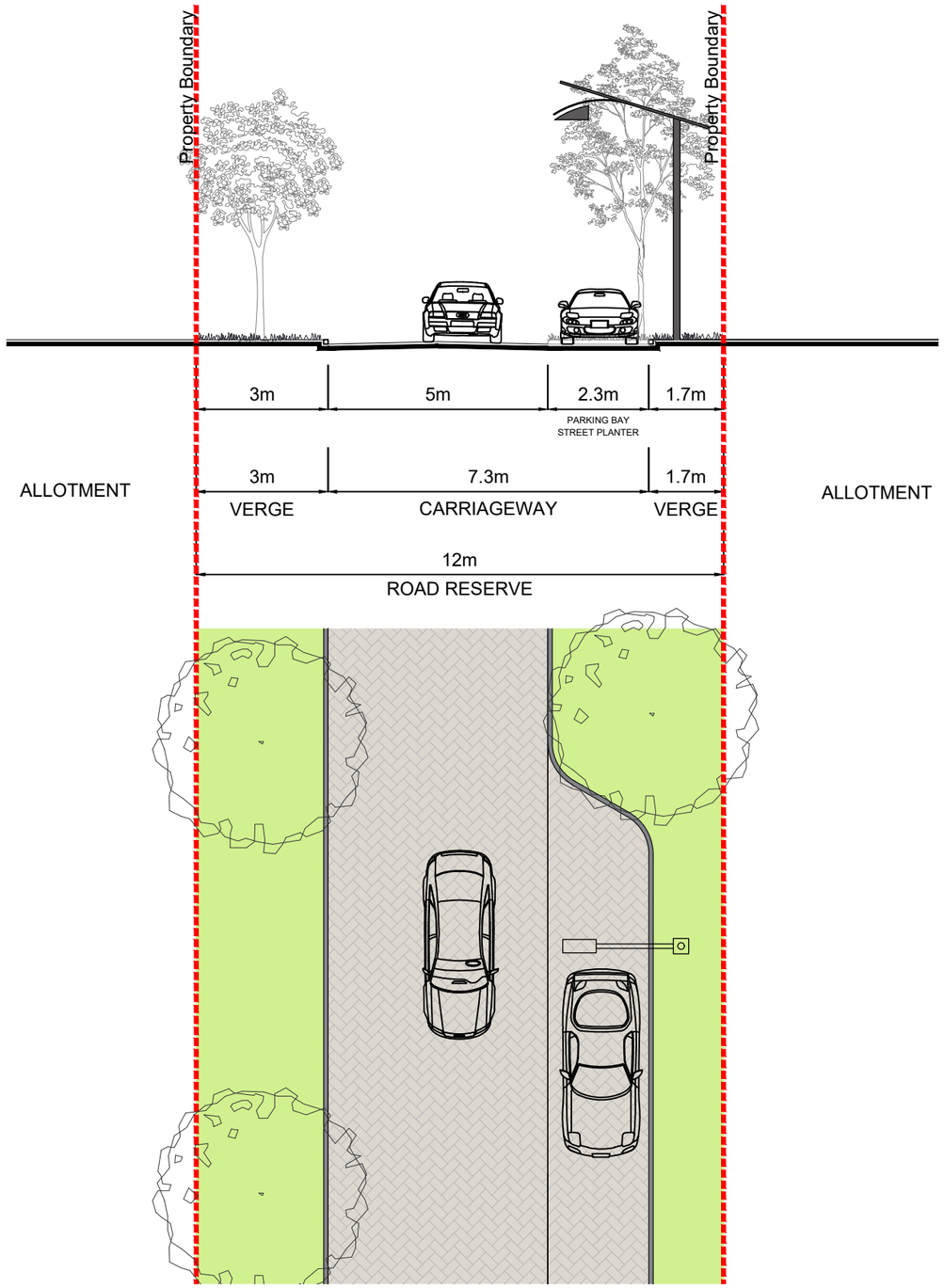
LANEWAY
8m



SHARED VEHICULAR / PEDESTRIAN ACCESS (DRIVEWAY)
12m



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APPENDIX D – MODELLING REPORT

Aura Traffic Modelling

April 2026

IDEAS | PEOPLE | TRUST

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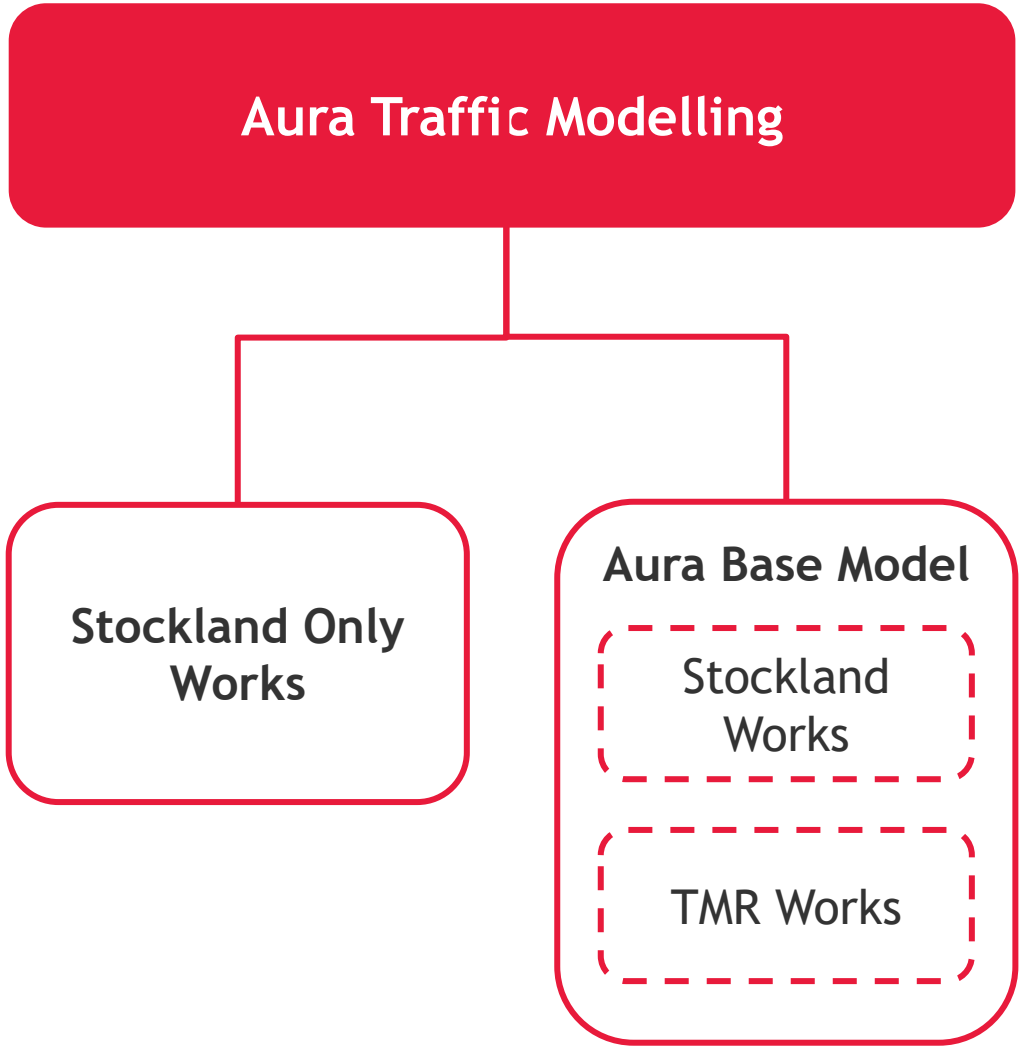
5	2041 Stockland Only Works	50

Summary of Modelling

Scenario Definition and Assumptions

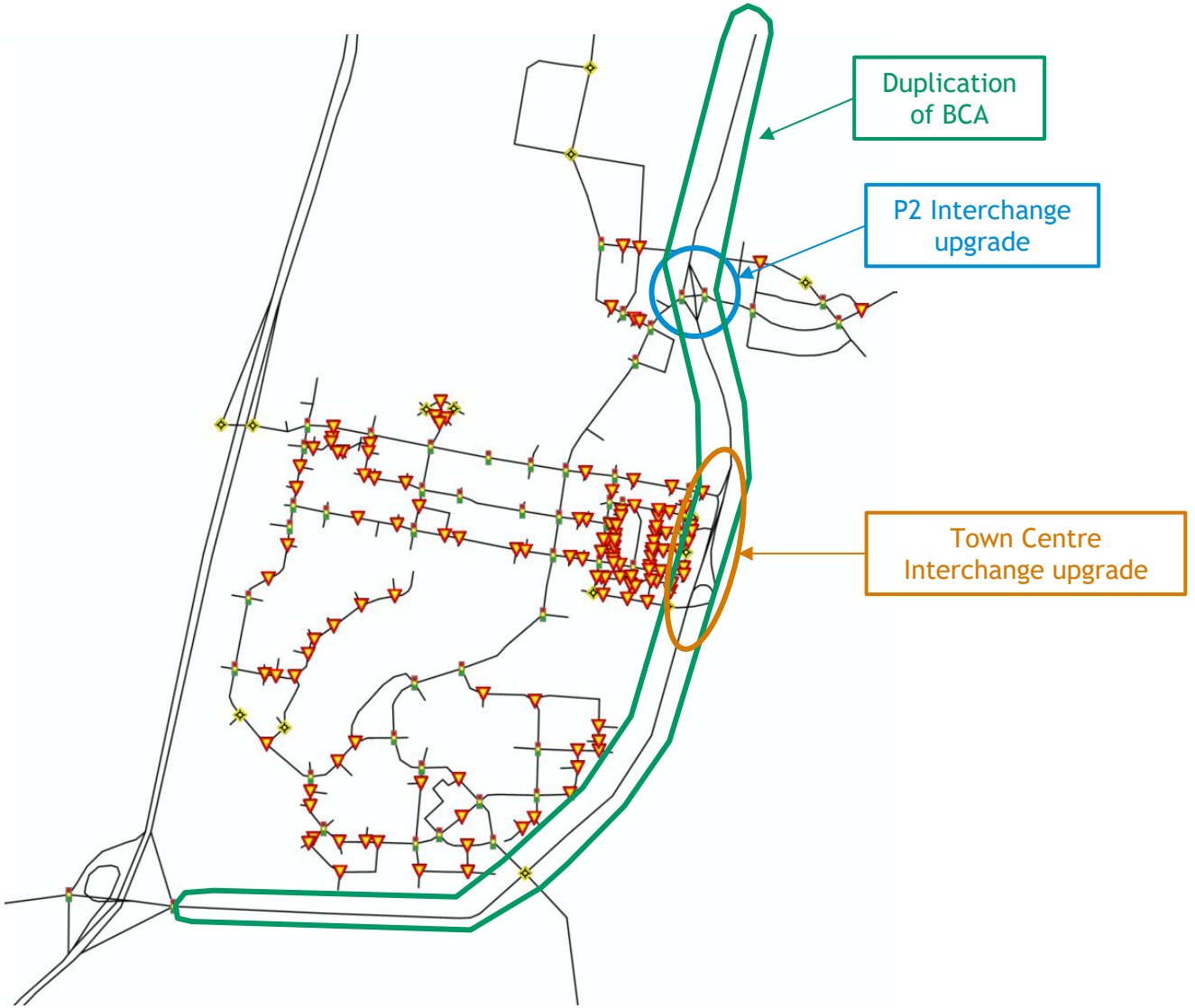
- Initial network planning for the development of Aura assumed several upgrades delivered by the Department of Transport and Main Roads (TMR), consistent with the State Transport Infrastructure Agreement (STIA).
- Traffic modelling was completed for two scenarios with consistent land use assumptions:
  - Aura Base Model: Ultimate scenario showing both Stockland and TMR delivered infrastructure.
  - Stockland Only Works: A sensitivity scenario showing Isolated network performance with only infrastructure delivering by Stockland (i.e. removing infrastructure assumed to be delivered by TMR).



TMR Upgrades

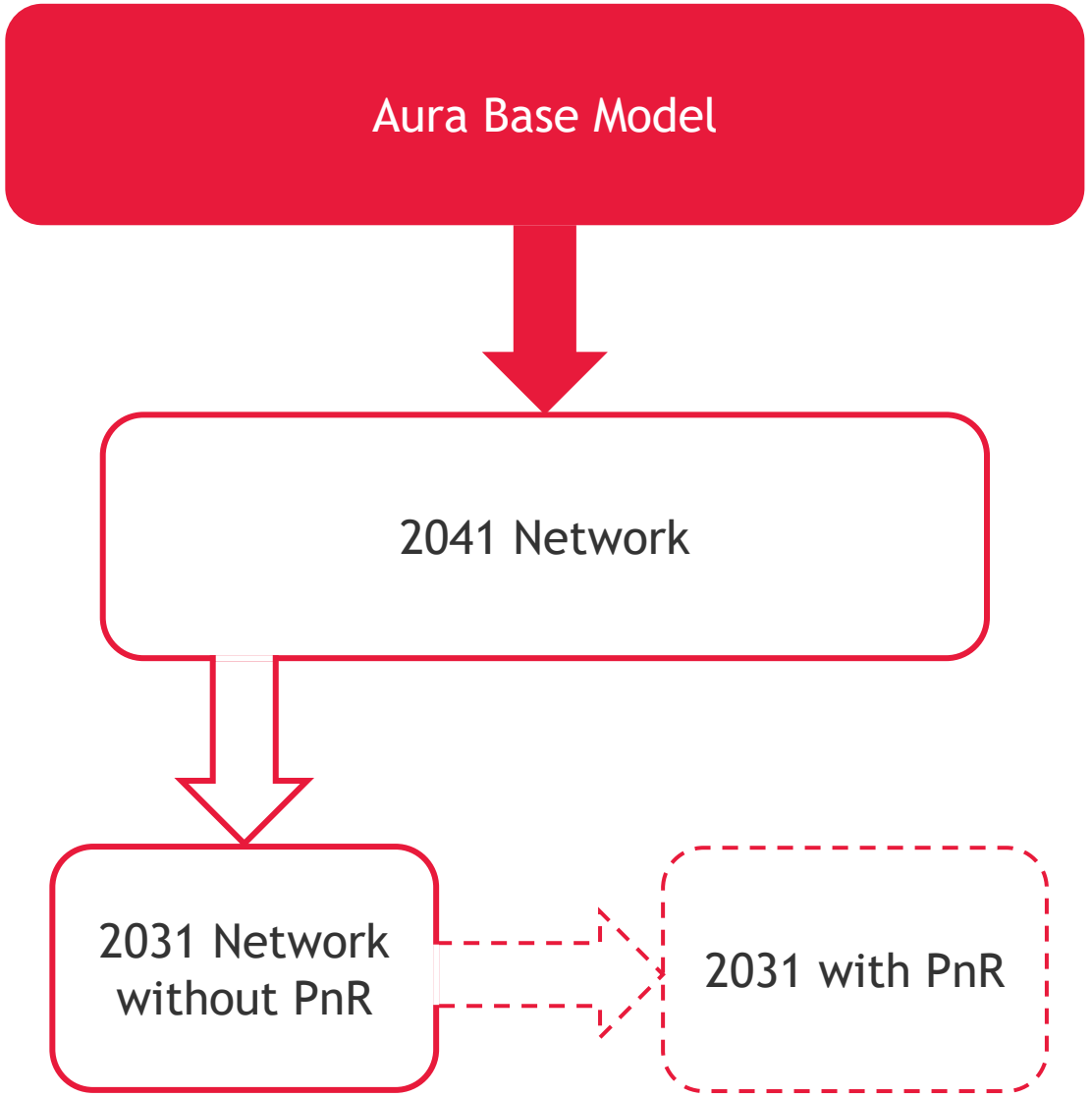
TMR Upgrades in the 2041 modelling include:

- Upgrade of P2 Bells Creek Arterial Rd and Aura Blvd intersection from roundabout to grade separated interchange
- Upgrade of interchange connections from Bells Creek Arterial Rd to the Aura Town Centre
- Duplication of Bells Creek Arterial Road



Aura Base Model

- The Aura Base Model models the associated network for 2041, inclusive of the planned upgrades by TMR and acts as the full build ultimate horizon.
- The 2031 model represents an interim development horizon for Aura. A base network scenario was modelled, as well as a sensitivity scenario that introduces a Park ‘n’ Ride (PnR) connection associated with the proposed Wave rail link station at the Aura Town Centre.
  - The PnR sensitivity scenario indicates improved network performance following the introduction of the Aura Blvd connection to Gagalba. This connection reduces the number of internal trips using Bells Creek Arterial Rd. The trip generation assumptions for the Town Centre had assumed a higher uplift in public transport use, with and without the PnR, and no further adjustments as a result of the Wave and associated works.

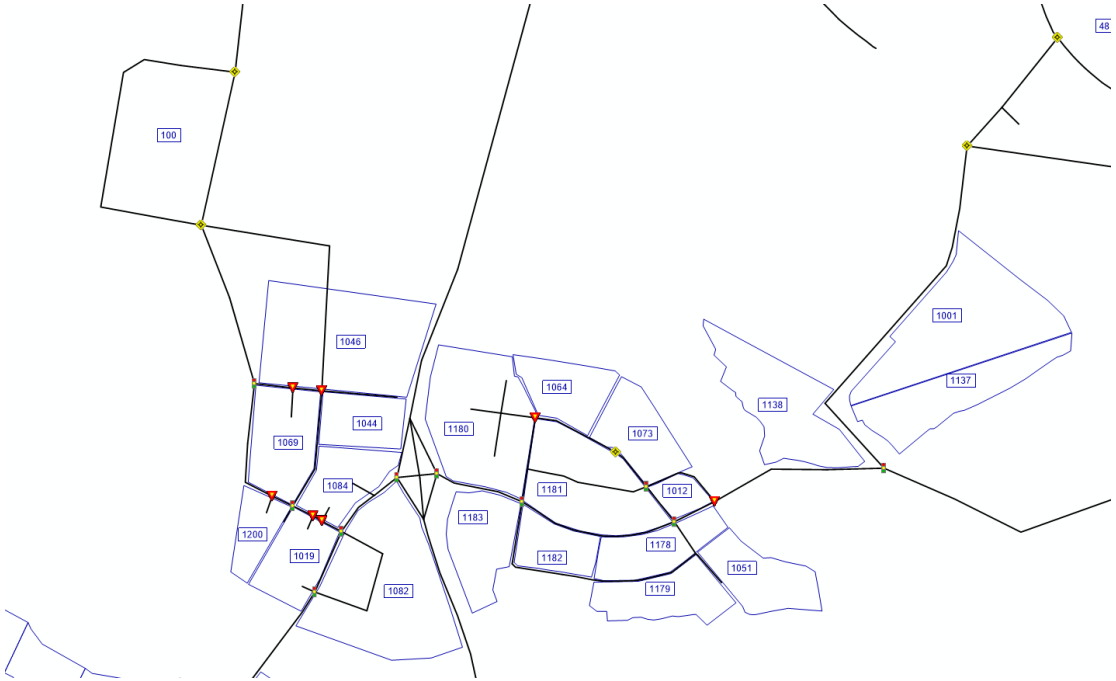


2041 Aura Base Model Results

2041 Network

2041 Network

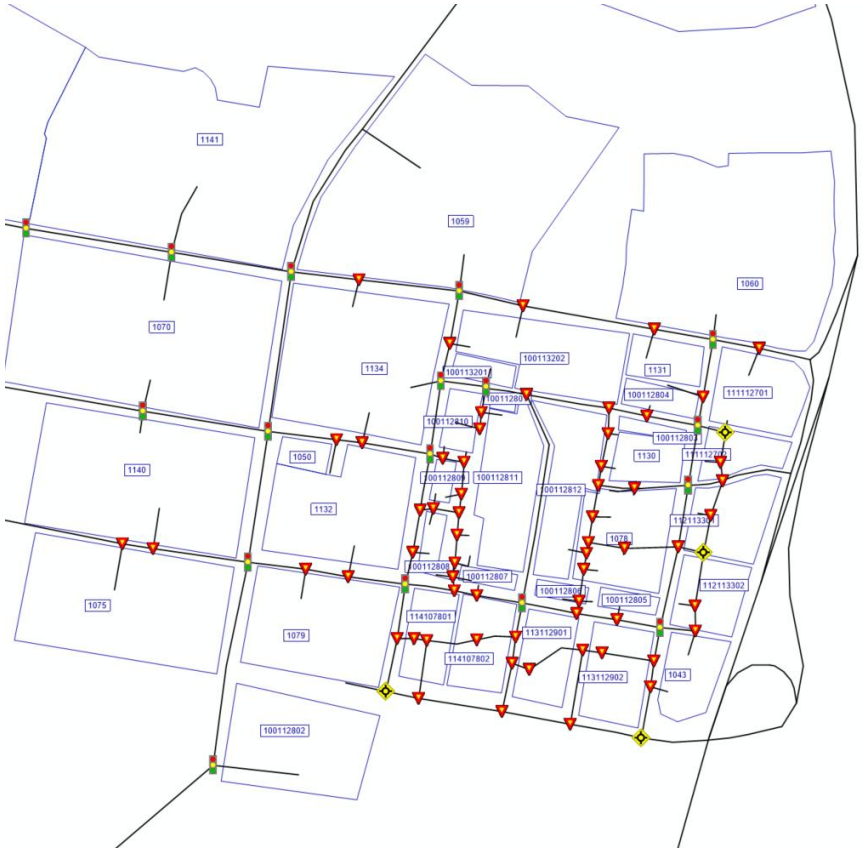
2041 Land Use Precincts 1-5



Zone	Land Use	Yield	Unit
1001	Residential	593	dwellings
	Retail	320	m2
1137	Residential	252	dwellings
1138	Residential	289	dwellings
1012	District Centre	10,500	m2
1051	Residential	136	dwellings
1064	P-12 School	1,800	students
1073	P-6 School	1,100	students
	Community	125	students
	Community	600	m2
1178	Residential	125	dwellings
1179	Residential	121	dwellings
1180	Residential	463	dwellings
1181	Residential	367	dwellings
	Childcare Centre	130	Children
	Retirement Village	170	dwellings
	Retail	550	m2
	Commercial	950	m2
1182	Residential	197	dwellings
1183	Residential	336	dwellings
1046	Industry and Business	137,000	m2

Zone	Land Use	Yield	Unit
1044	Industry and Business	55,000	m2
1069	Industry and Business	57,000	m2
1200	Industry and Business	16,600	m2
	Fast Food	1	shop
	Service Station	1	station
1019	Commercial	30,000	m2
	Childcare Centre	100	Children
1082	Fast Food	1	shop
	Service Station	1	station
	Showroom	26,000	m2
	Indoor Sports & Rec	4,000	m2
1084	Fast Food	1	shop
	Showroom	18,000	m2
	Indoor Sports & Rec	2,000	m2

2041 Land Use Precincts 7-9



Zone	Land Use	Yield	Unit
1059	Residential	650	dwellings
1060	Residential	650	dwellings
1043	Health & Ambulance	9,500	m2
1131	Residential	0	dwellings
	Retail	500	m2
	Education	10,000	m2
100112804	Indoor Entertainment	4,850	m2
100112801	Retail	350	m2
	Commercial	6,000	m2
100112802	PT Carpark	1,000	spaces
100112803	Commercial	5,000	m2
100112805	Residential	100	dwellings
	Commercial	500	m2
100112806	Residential	100	dwellings
	Retail	750	m2
	Commercial	500	m2
100112807	Residential	100	dwellings
	Retail	750	m2
	Commercial	500	m2
100112808	Residential	150	dwellings
	Retail	1,000	m2
	Commercial	750	m2
100112809	Residential	150	dwellings
100112810	Residential	150	dwellings
	Retail	1,250	m2
100112811	Retail	22,000	m2
	Commercial	1,100	m2
100112812	Retail	49,000	m2
	Commercial	3,900	m2

Zone	Land Use	Yield	Unit
1129	Retail	8,000	m2
1130	Retail	7,000	m2
1078	Retail	13,000	m2
100113201	Retail	500	m2
	Community	6,850	m2
100113202	Retail	150	m2
	Community	0	m2
111112701	Retail	4,000	m2
	Commercial	10,000	m2
111112702	Residential	210	dwellings
	Retail	1,000	m2
112113301	Residential	210	dwellings
	Commercial	8,000	m2
112113302	Community	5,000	m2
	Commercial	2,000	m2
	Indoor Sports & Rec	3,500	m2
113112901	Residential	200	dwellings
113112902	Residential	190	dwellings
	Retail	1,000	m2
	Commercial	4,000	m2
114107801	Residential	190	dwellings
	Retail	1,000	m2
	Commercial	6,000	m2
114107802	Residential	200	dwellings
1132	Residential	500	dwellings
	Childcare Centre	132	Children
1050	Residential	47	dwellings
	Commercial	4,000	m2
1079	Private School	1,800	students
1134	Residential	600	dwellings

2041 Land Use Precincts 10-14

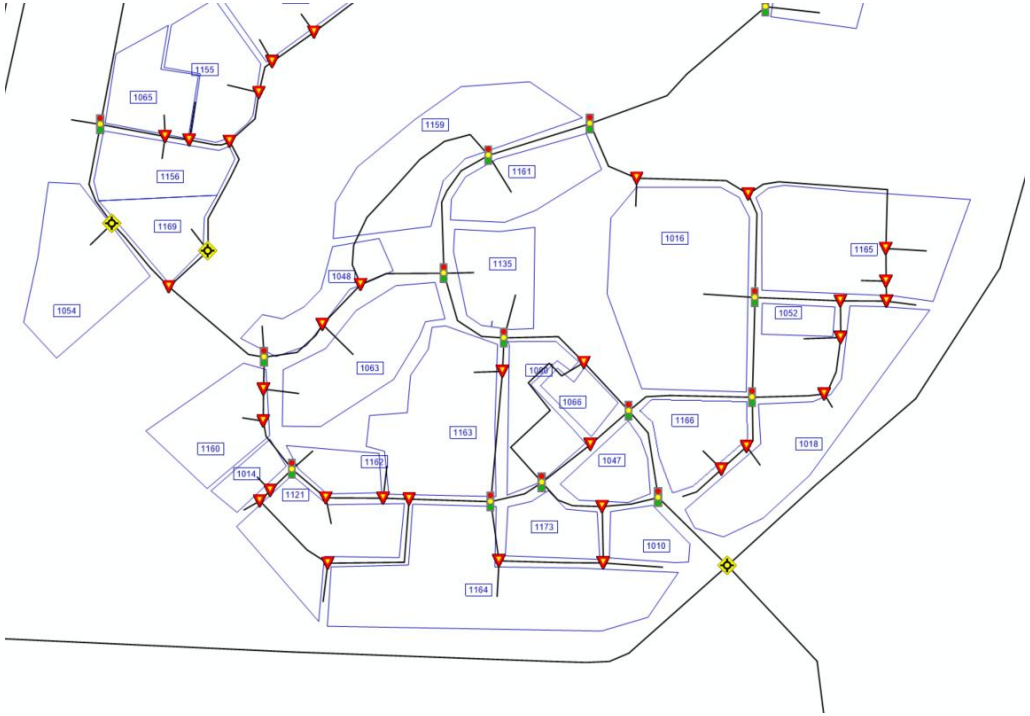
Zone	Land Use	Yield	Unit
1070	Residential	325	dwellings
1075	Retirement Village	244	dwellings
1140	Residential	250	dwellings
1141	Residential	543	dwellings
1070	Residential	160	dwellings
1140	Residential	65	dwellings
1015	Community	2,500	m2
1142	Childcare Centre	140	places
	Residential	275	dwellings
	Retail	1,500	m2
	Commercial	1,000	m2
1074	Primary School	1,100	students
1143	Residential	274	dwellings
1144	Residential	200	dwellings
1013	Neighbourhood Centre	750	m2
	Childcare Centre	130	places
	Residential	8	dwellings
1133	Residential	169	dwellings
1145	Residential	302	dwellings
1146	Residential	260	dwellings
1147	Residential	286	dwellings

Zone	Land Use	Yield	Unit
1175	Community	400	m2
1176	Residential	97	dwellings
1177	Residential	72	dwellings
1045	Industry and Business	150,000	m2
1083	Showroom	22,401	m2
1011	District Centre	8,795	m2
1049	Community	1,000	m2
1067	P-6 Primary School	1,100	students
1071	Residential	240	dwellings
1127	Residential	216	dwellings
1128	Residential	216	dwellings
1150	Residential	337	dwellings
1151	Residential	79	dwellings
1152	Residential	225	dwellings
1153	Residential	236	dwellings
1154	Residential	240	dwellings
1148	Residential	240	dwellings
	Childcare Centre	130	places

2041 Land Use Precinct 15

Zone	Land Use	Yield	Unit
1155	Residential	170	dwellings
1017	Residential	298	dwellings
1157	Residential	236	dwellings
1053	Residential	123	dwellings
1156	Retirement Village	250	dwellings
1169	Retirement Village	250	dwellings
1065	Residential	294	dwellings
1054	Childcare Centre	130	places
	Residential	370	dwellings
	Neighbourhood Centre	2,500	m2

2041 Land Use Precincts 17-19



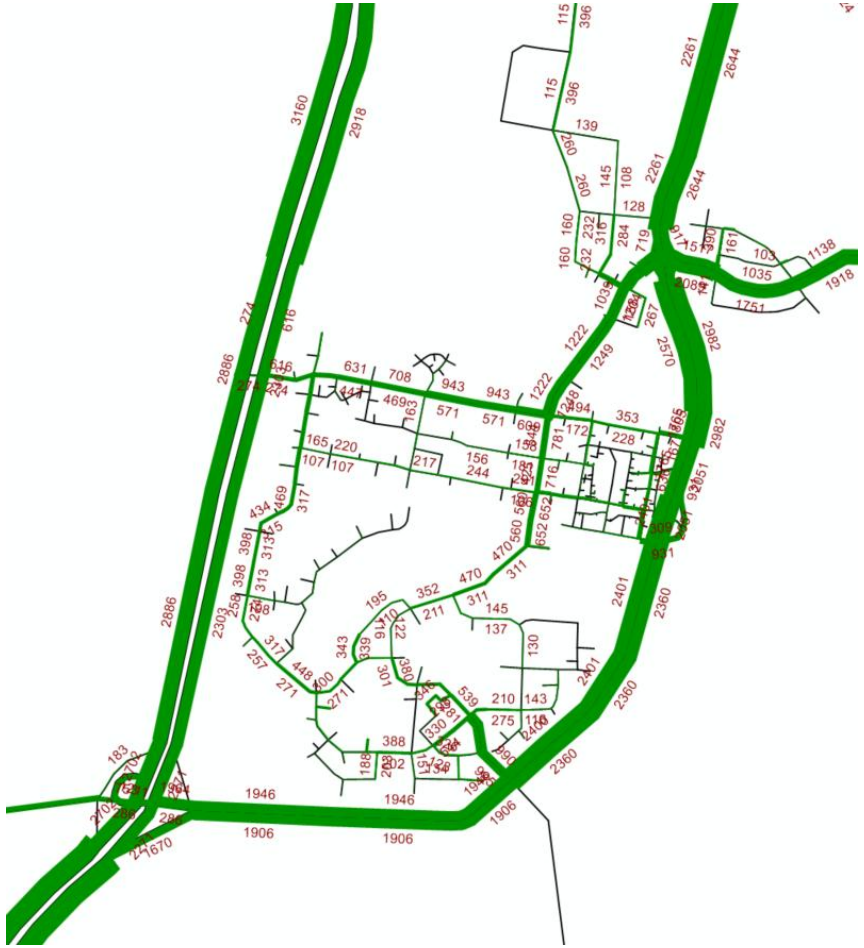
Zone	Land Use	Yield	Unit
1048	Residential	100	dwellings
	Emerging Sports Park	55,000	m2
1063	Residential	300	dwellings
1159	Residential	470	dwellings
1160	Residential	180	dwellings
1161	Residential	396	dwellings
1135	Neighbourhood Centre	4,500	m2
	Residential	600	dwellings
	Childcare Centre	120	Children
1016	Residential	405	dwellings
	Childcare Centre	120	Children
	Neighbourhood Centre	2,500	m2
1166	Residential	272	dwellings
	Childcare Centre	120	Children
1165	Residential	700	dwellings
	Community	5,000	m2
1052	State Primary School	1,100	students
1076	Neighbourhood sports park	65,750	m2
1018	Residential	620	dwellings

Zone	Land Use	Yield	Unit
1014	Residential	80	dwellings
	Community	5,000	m2
1121	State Primary School	1,100	students
	District Rec Park	60,000	m2
	District Sports Park	72,500	m2
1162	Residential	200	dwellings
	Neighbourhood Centre	2,500	m2
	Childcare Centre	120	Children
1163	Residential	500	dwellings
1080	Residential	340	dwellings
	Community	1,000	m2
1066	District Centre	8,000	m2
	Childcare Centre	120	Children
1047	State High School	1,800	students
1173	District Sports Park	93,250	m2
1010	Private School	1,800	students
1164	Residential	860	dwellings

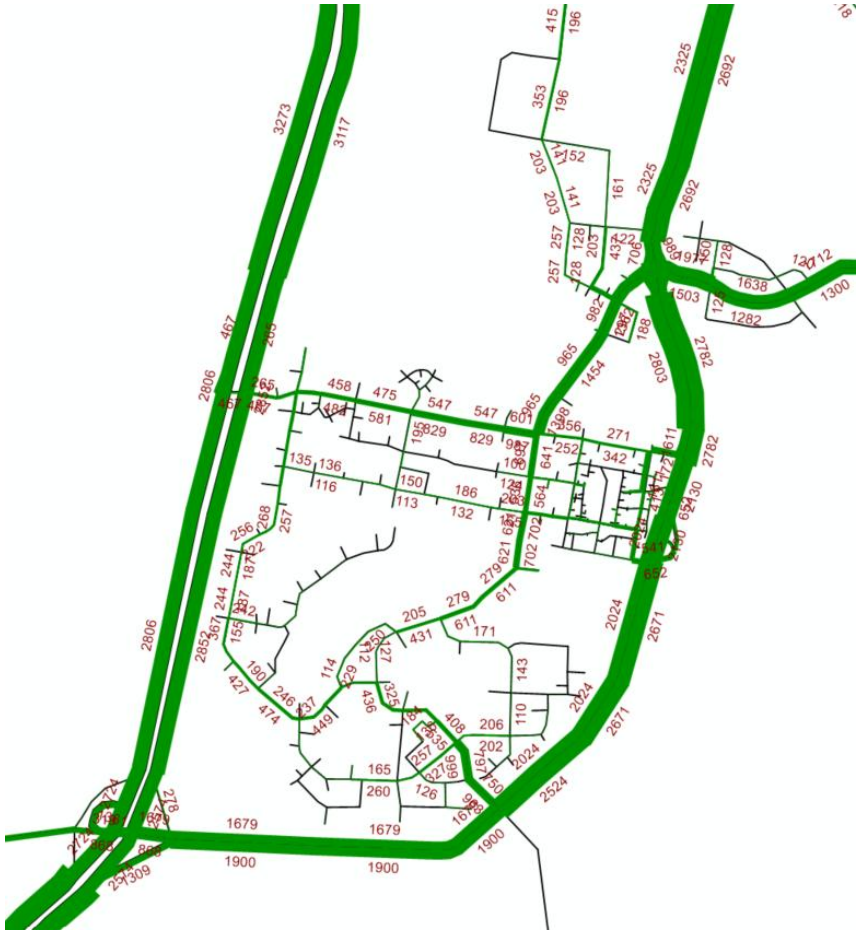
2041 Link Volumes

Aura Base Model

AM Peak



PM Peak



2041 Link Level of Service

Aura Base Model

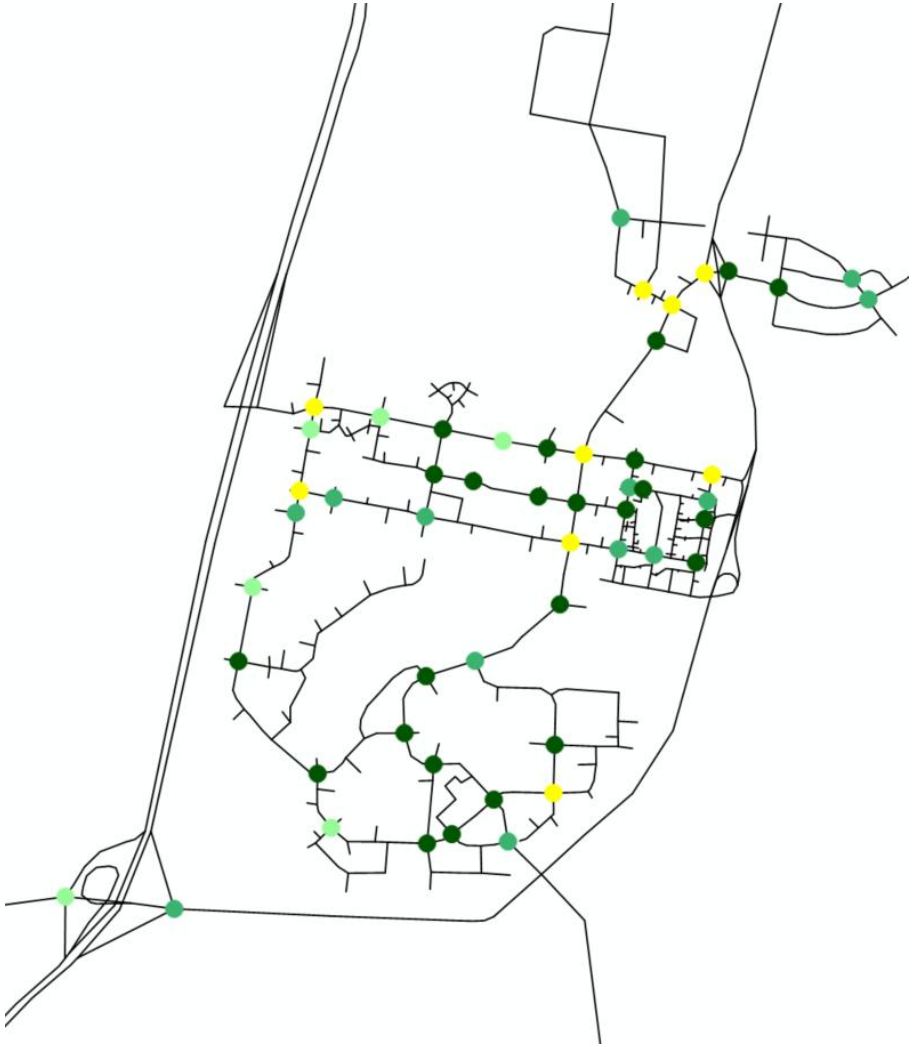
AM Peak

PM Peak

2041 Signalised Intersection Level of Service

Aura Base Model

AM Peak

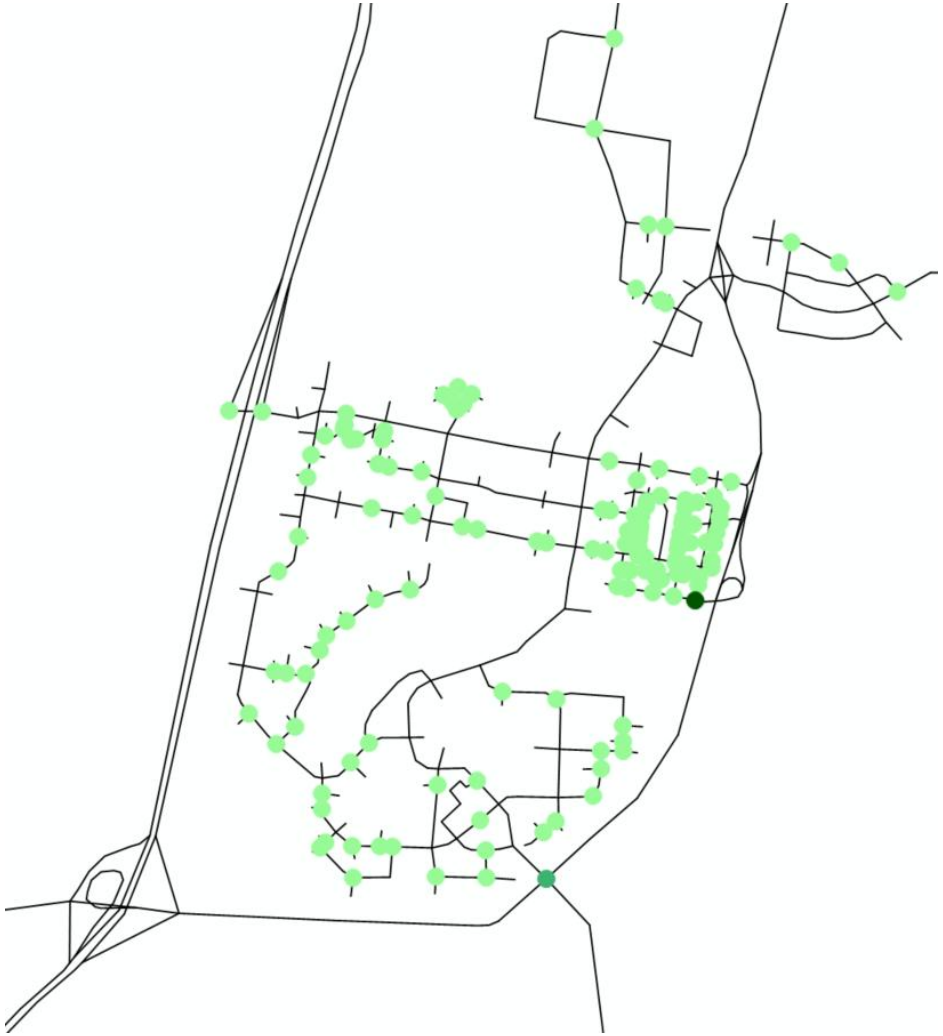


PM Peak

2041 Unsignalised Intersection Level of Service

Aura Base Model

AM Peak

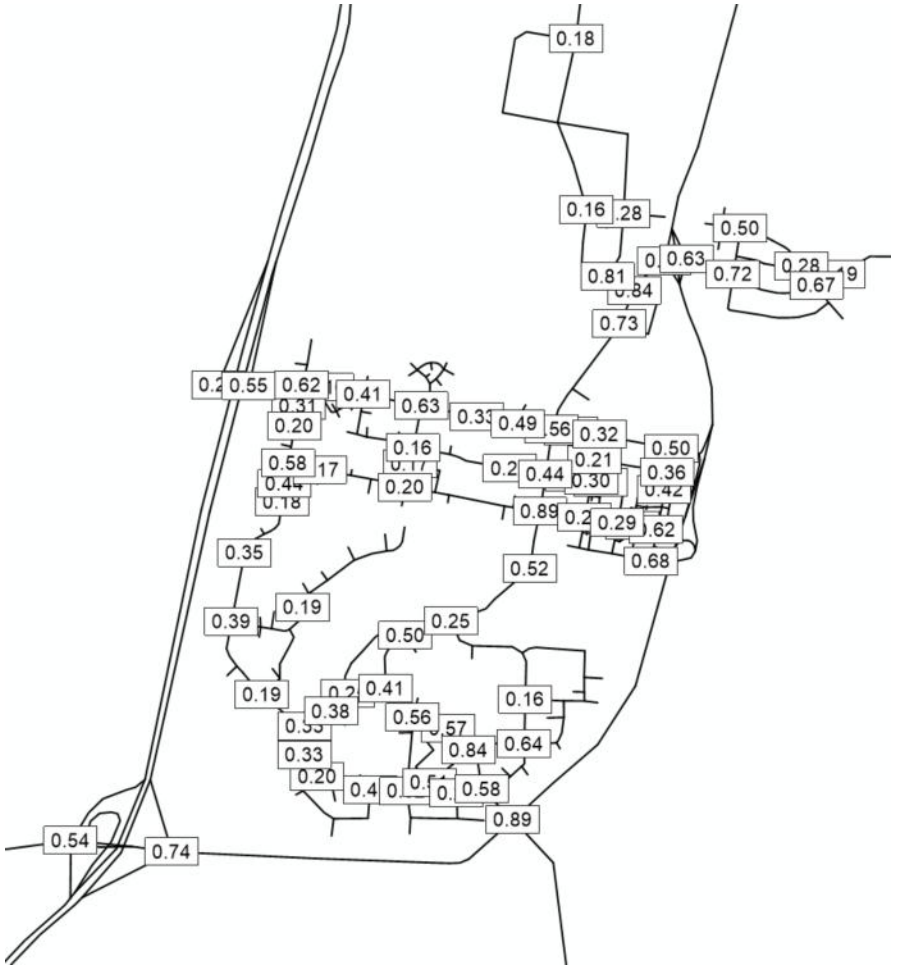


PM Peak

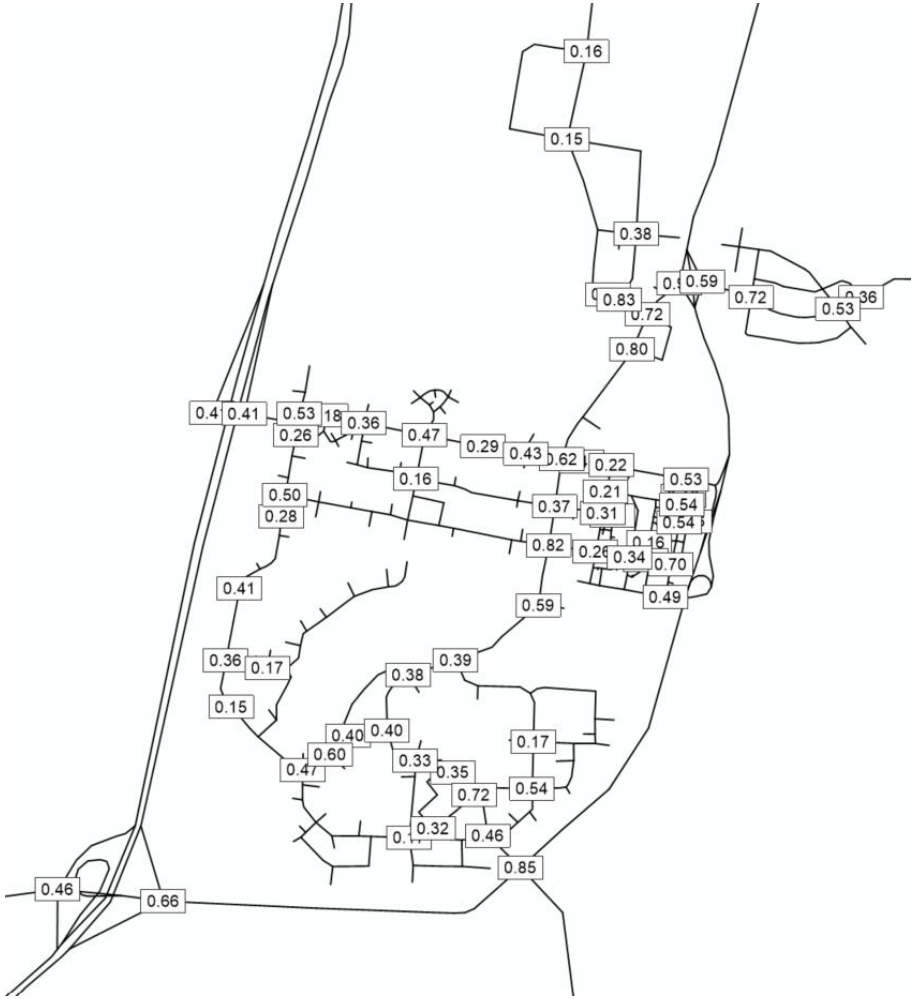
2041 Intersection Degree of Saturation

Aura Base Model

AM Peak



PM Peak



Bells Creek Arterial Traffic Impacts

We have two current modelling scenarios with similar assumptions providing different outcomes. The 2041 Stockland Only Works scenario and the Aura Model Results.

The key differences in assumptions between these two scenarios are the intersection forms around the Town Centre and the northern BCA / Aura Blvd roundabout – with the Stockland Only Works scenario having these as at grade roundabouts and the Aura Model scenario having these as grade separated interchanges.

With the improved interchanges on the BCA, we see an improvement in travel time along the BCA – this means that for regional traffic (that is, traffic that does not start or end their trip in Aura) the BCA becomes a more attractive route to the alternative of the Bruce Highway / Caloundra Rd. For example, to travel the whole length of the BCA from Caloundra Rd to Bruce Hwy (see overpage for example of this route choice) with the improved interchanges in the AM Peak approximately 2 minutes of travel time is saved. This was one of the benefits of bringing forward the delivery of the BCA with the State government.

The improved attractiveness of the BCA results in an increase in regional traffic of ~570 veh/hour in the AM Peak and ~500veh/hour in the PM Peak, this is enough to push the southern section of the BCA between Gagalba and Bruce Hwy over the notional capacity of 1,900 vehicles per hour.

With the current lane configuration of one lane each way on the BCA between Gagalba and Bruce Hwy and the improved interchanges, this section of road reaches capacity. A solution to this would be to duplicate this section of road to two lanes in each direction.

Bells Creek Arterial Traffic Impacts

With upgraded interchanges, the BCA has improved travel time on external trips (e.g. Caloundra Rd to Bruce Hwy)

Aura Base Model

2041 Aura Model - Summary

The updated model results indicate that the proposed traffic network for operate efficiently with the model forecasting:

- Each link operates at LOS D or better in both peak periods, except for the BCA between Aura Blvd and Bruce Hwy which is at LOS F.
- Each intersection operates at LOS D or better in both peak periods (with respect to average delay).
- Each intersection operates at a level that meets the benchmarks from the LGIA.

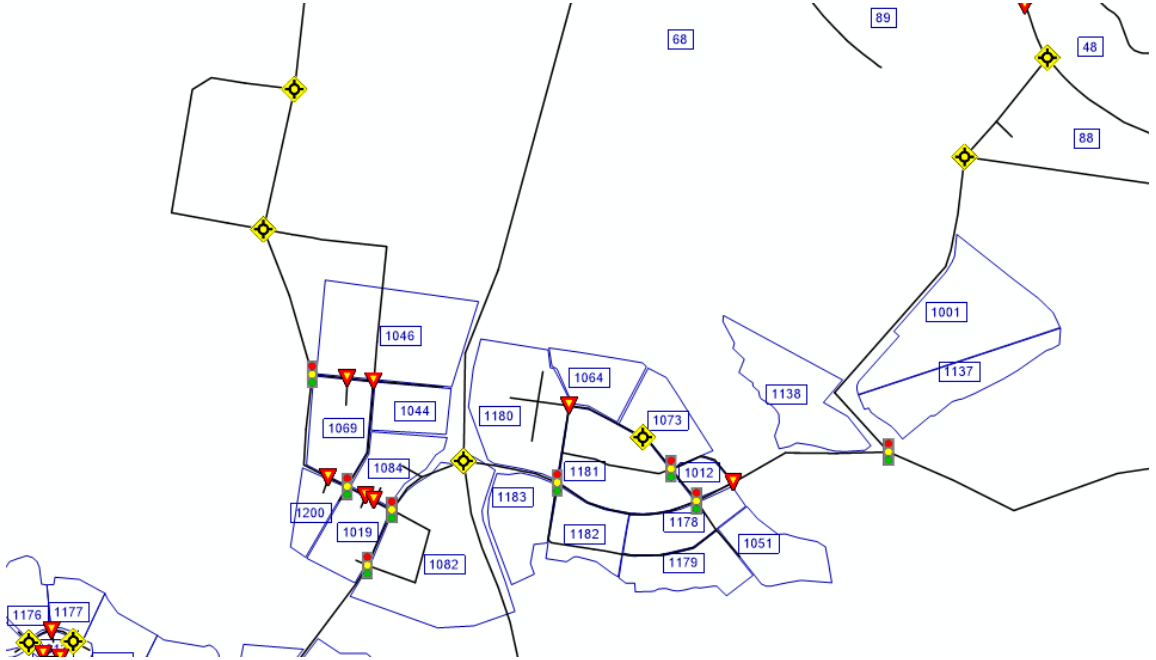
As such, the proposed road infrastructure for Aura is considered appropriate to support the development's target land use.

2031 Aura Base Model Results

2031 (Base) Network

2031 (Base) Network

2031 (Base) Land Use Precincts 1-5



Zone	Land Use	Yield	Unit
1001	Residential	593	dwellings
	Retail	320	m2
1137	Residential	252	dwellings
1138	Residential	289	dwellings
1012	District Centre	10,500	m2
1051	Residential	136	dwellings
1064	P-12 School	1,800	students
1073	P-6 School	1,100	students
	Community	125	students
	Community	600	m2
1178	Residential	125	dwellings
1179	Residential	121	dwellings
1180	Residential	463	dwellings
1181	Residential	367	dwellings
	Childcare Centre	130	Children
	Retirement Village	170	dwellings
	Retail	550	m2
	Commercial	950	m2
1182	Residential	197	dwellings
1183	Residential	336	dwellings
1046	Industry and Business	137,000	m2

Zone	Land Use	Yield	Unit
1044	Industry and Business	55,000	m2
1069	Industry and Business	57,000	m2
1200	Industry and Business	16,600	m2
	Fast Food	1	shop
	Service Station	1	station
1019	Commercial	20,000	m2
1082	Fast Food	1	shop
	Service Station	1	station
	Showroom	15,000	m2
1084	Fast Food	1	shop
	Showroom	18,000	m2
	Indoor Sports & Rec	2,000	m2

2031 (Base) Land Use Precincts 7-9

Zone	Land Use	Yield	Unit
1059	Residential	100	dwellings
1060	Residential	-	dwellings
1043	Community	2,500	m2
1131	Retail	-	m2
	Education	-	m2
100112804	Indoor Entertainment	4,850	m2
100112801	Retail	331	m2
	Commercial	6,000	m2
100112802	PT Carpark	-	spaces
10112803	Retail	1,183	m2
	Commercial	-	m2
100112805	Residential	-	dwellings
	Commercial	-	m2
100112806	Residential	-	dwellings
	Retail	-	m2
	Commercial	-	m2
100112807	Residential	-	dwellings
	Retail	-	m2
	Commercial	-	m2
100112808	Residential	50	dwellings
	Retail	-	m2
	Commercial	-	m2
100112809	Residential	78	dwellings
100112810	Residential	128	dwellings
	Retail	1,386	m2
100112811	Retail	-	m2
	Commercial	-	m2
100112812	Retail	20,000	m2
	Commercial	3,900	m2

Zone	Land Use	Yield	Unit
1130	Retail	7,000	m2
1078	Retail	13,000	m2
100113201	Retail	-	m2
	Community	500	m2
100113202	Retail	150	m2
111112701	Retail	-	m2
	Commercial	-	m2
111112702	Residential	-	dwellings
	Retail	-	m2
112113301	Residential	-	dwellings
	Commercial	-	m2
	Community	5,000	m2
112113302	Commercial	-	m2
	Indoor Sports and Rec	3,500	m2
113112901	Residential	-	dwellings
113112902	Residential	-	dwellings
	Retail	-	m2
	Commercial	-	m2
114107801	Residential	-	dwellings
	Retail	-	m2
	Commercial	-	m2
114107802	Residential	-	dwellings
1132	Residential	300	dwellings
1050	Commercial	-	m2
1079	Private School	1,800	students
1134	Residential	350	dwellings

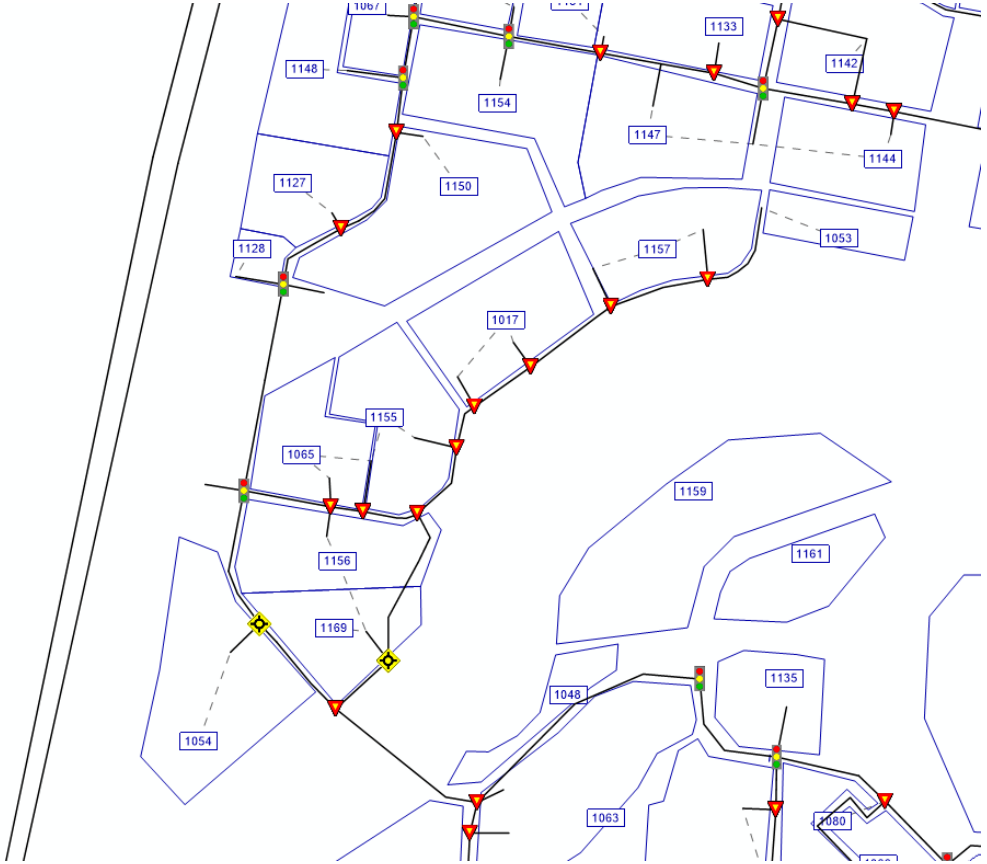
Aura Base Model

2031 (Base) Land Use Precincts 10-14

Zone	Land Use	Yield	Unit
1070	Residential	325	dwellings
1075	Retirement Village	244	dwellings
1140	Residential	250	dwellings
1141	Residential	543	dwellings
1070	Residential	160	dwellings
1140	Residential	65	dwellings
1015	Community	-	m2
1142	Childcare Centre	140	places
	Residential	275	dwellings
	Retail	1,500	m2
	Commercial	1,000	m2
1074	Primary School	1,100	students
1143	Residential	274	dwellings
1144	Residential	200	dwellings
1013	Neighbourhood Centre	750	m2
	Childcare Centre	130	places
	Residential	8	dwellings
1133	Residential	169	dwellings
1145	Residential	302	dwellings
1146	Residential	260	dwellings
1147	Residential	286	dwellings

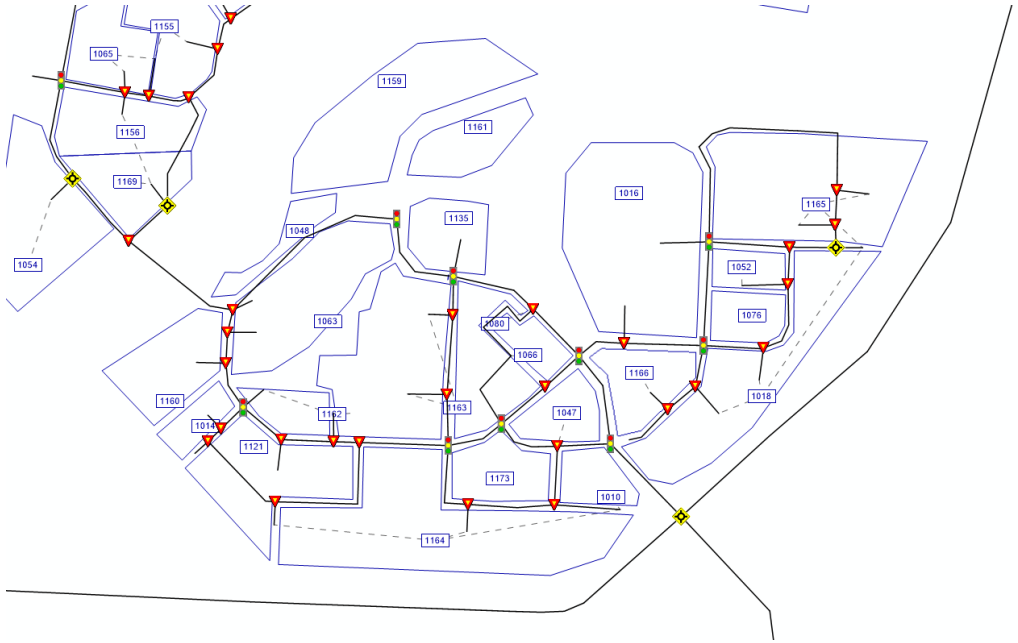
Zone	Land Use	Yield	Unit
1175	Community	400	m2
1176	Residential	97	dwellings
1177	Residential	72	dwellings
1045	Industry and Business	-	m2
1083	Showroom	-	m2
1011	District Centre	-	m2
1049	Community	1,000	m2
1067	P-6 Primary School	1,100	students
1071	Residential	240	dwellings
1127	Residential	108	dwellings
1128	Residential	108	dwellings
1150	Residential	337	dwellings
1151	Residential	79	dwellings
1152	Residential	225	dwellings
1153	Residential	236	dwellings
1154	Residential	240	dwellings
1148	Residential	240	dwellings
	Childcare Centre	130	places

2031 (Base) Land Use Precinct 15



Zone	Land Use	Yield	Unit
1155	Residential	170	dwellings
1017	Residential	298	dwellings
1157	Residential	236	dwellings
1053	Residential	123	dwellings
1156	Retirement Village	250	dwellings
1169	Retirement Village	250	dwellings
1065	Residential	294	dwellings
1054	Childcare Centre	120	places
	Residential	370	dwellings
	Neighbourhood Centre	2,500	m2

2031 (Base) Land Use Precincts 17-19

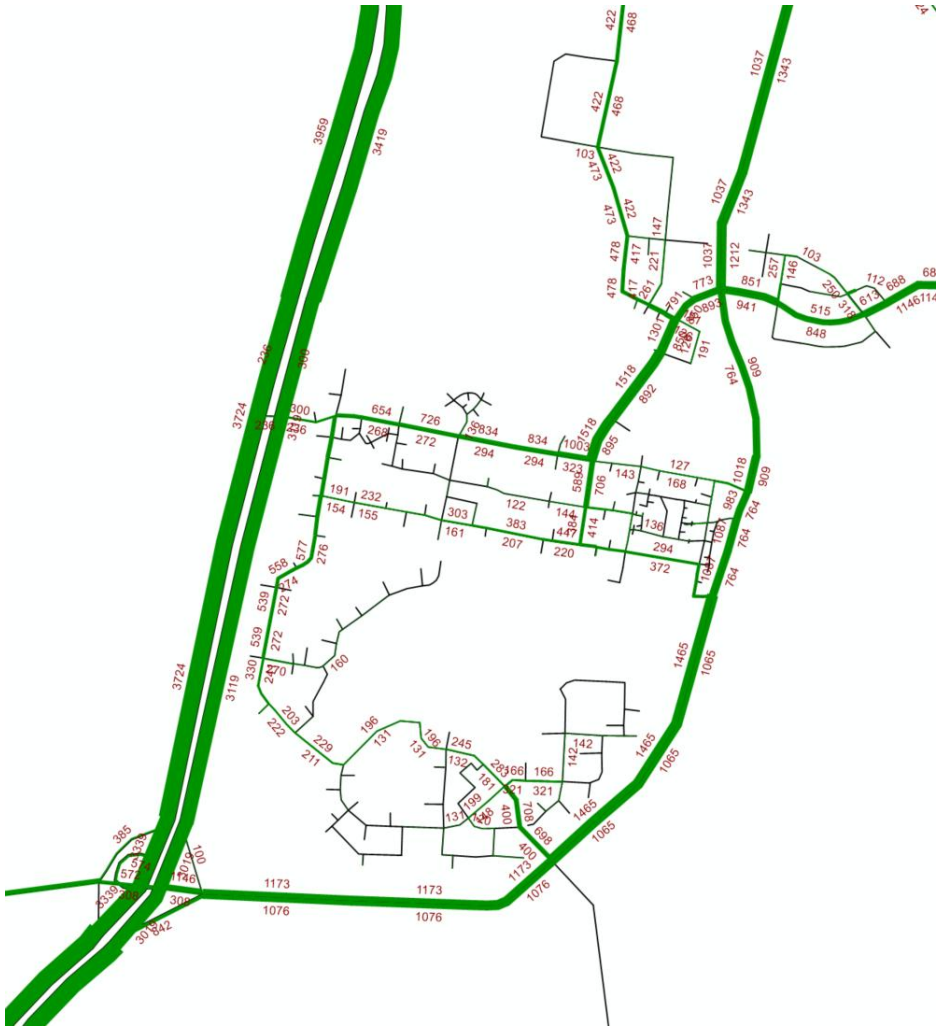


Zone	Land Use	Yield	Unit
1048	Residential	-	dwellings
	Emerging Sports Park	-	m2
1063	Residential	-	dwellings
1159	Residential	-	dwellings
1160	Residential	-	dwellings
1161	Residential	-	dwellings
1135	Neighbourhood Centre	-	m2
	Residential	-	dwellings
	Childcare Centre	-	Children
1016	Residential	-	dwellings
	Childcare Centre	-	Children
	Neighbourhood Centre	-	m2
1166	Residential	272	dwellings
	Childcare Centre	120	Children
1165	Residential	360	dwellings
	Community	-	m2
1052	State Primary School	200	students
1076	Neighbourhood sports park	65,750	m2
1018	Residential	600	dwellings

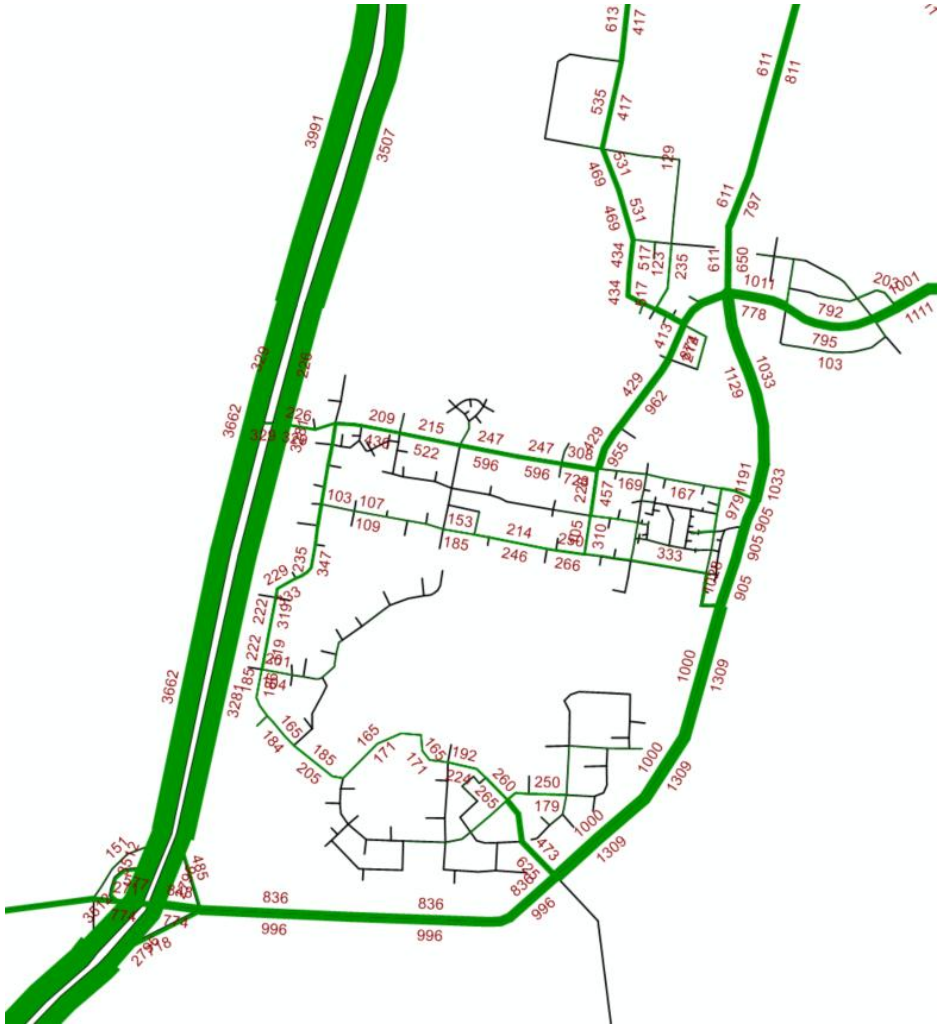
Zone	Land Use	Yield	Unit
1014	Residential	-	dwellings
	Community	-	m2
1121	State Primary School	-	students
	District Rec Park	60,000	m2
	District Sports Park	-	m2
1162	Residential	200	dwellings
	Neighbourhood Centre	-	m2
	Childcare Centre	-	Children
1163	Residential	350	dwellings
1080	Residential	100	dwellings
	Community	-	m2
1066	District Centre	4,000	m2
	Childcare Centre	120	Children
1047	State High School	300	students
1173	District Sports Park	93,250	m2
1010	Private School	300	students
1164	Residential	968	dwellings

2031 (Base) Link Volumes

AM Peak



PM Peak



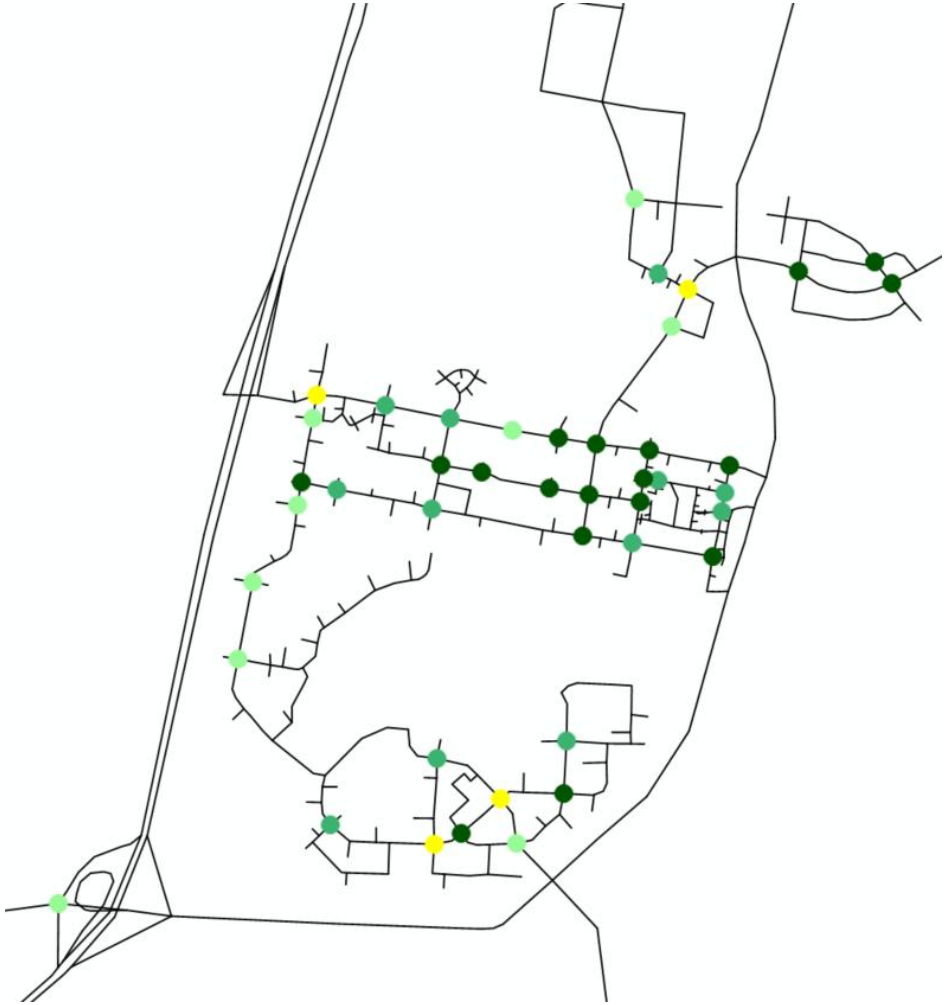
2031 (Base) Link Level of Service

AM Peak

PM Peak

2031 (Base) Signalised Intersection Level of Service

AM Peak



PM Peak

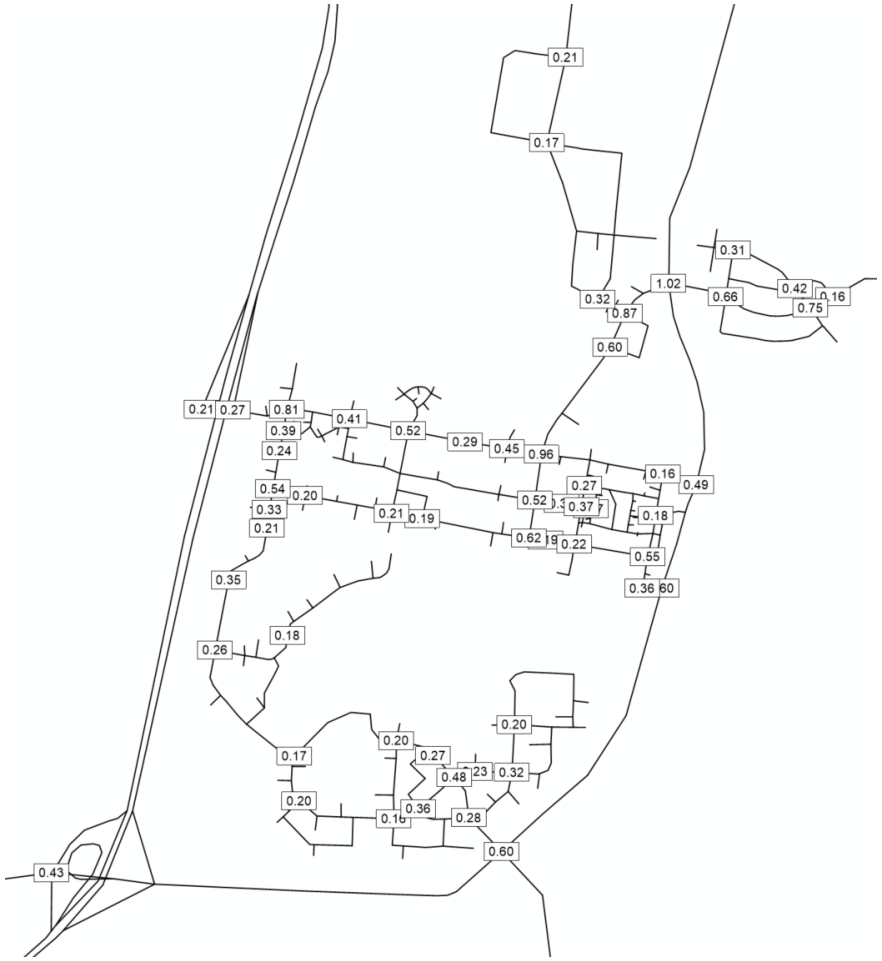
2031 (Base) Unsignalised Intersection Level of Service

AM Peak

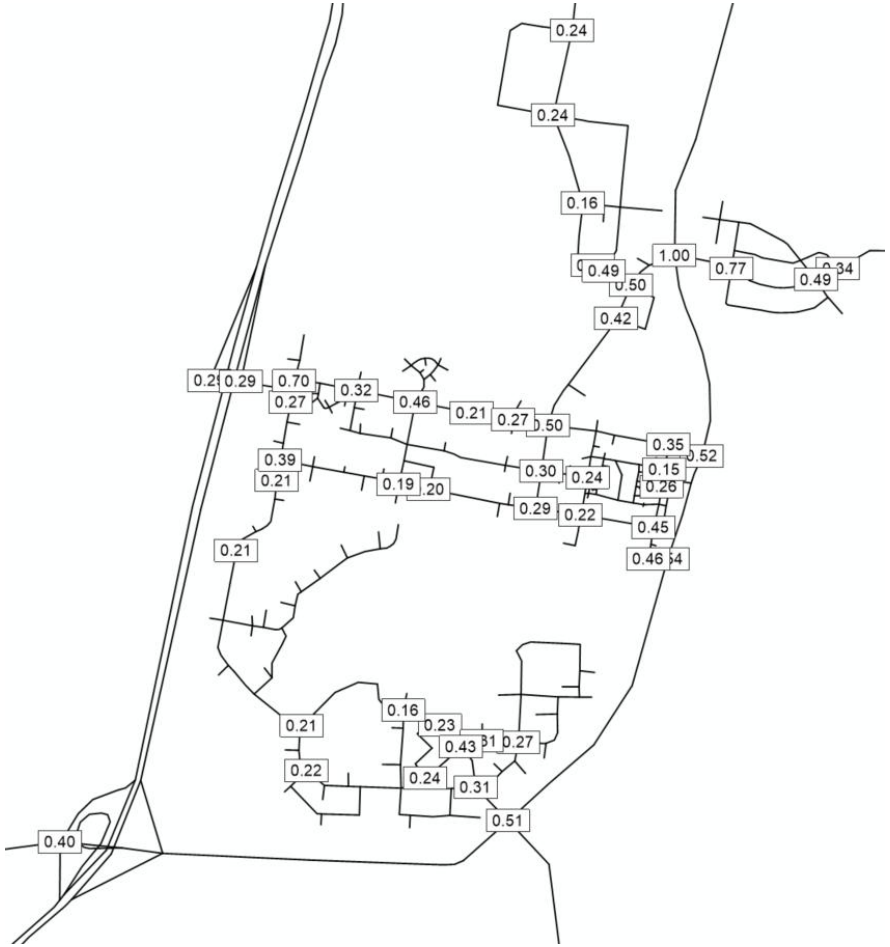
PM Peak

2031 (Base) Intersection Degree of Saturation

AM Peak



PM Peak



2031 Aura Model - Summary

The updated model results indicate that the proposed traffic network for operate efficiently with the model forecasting:

- Each link operates at LOS D or better in both peak periods.
- Each intersection operates at LOS D or better in both peak periods (with respect to average delay).
- Each intersection operates at a level that meets the benchmarks from the LGIA.
- The existing roundabout at Aura Boulevard and Bells Creek Arterial Road currently operates at LOS F. An interim at-grade solution has been developed to ensure that the intersection meets performance criteria.

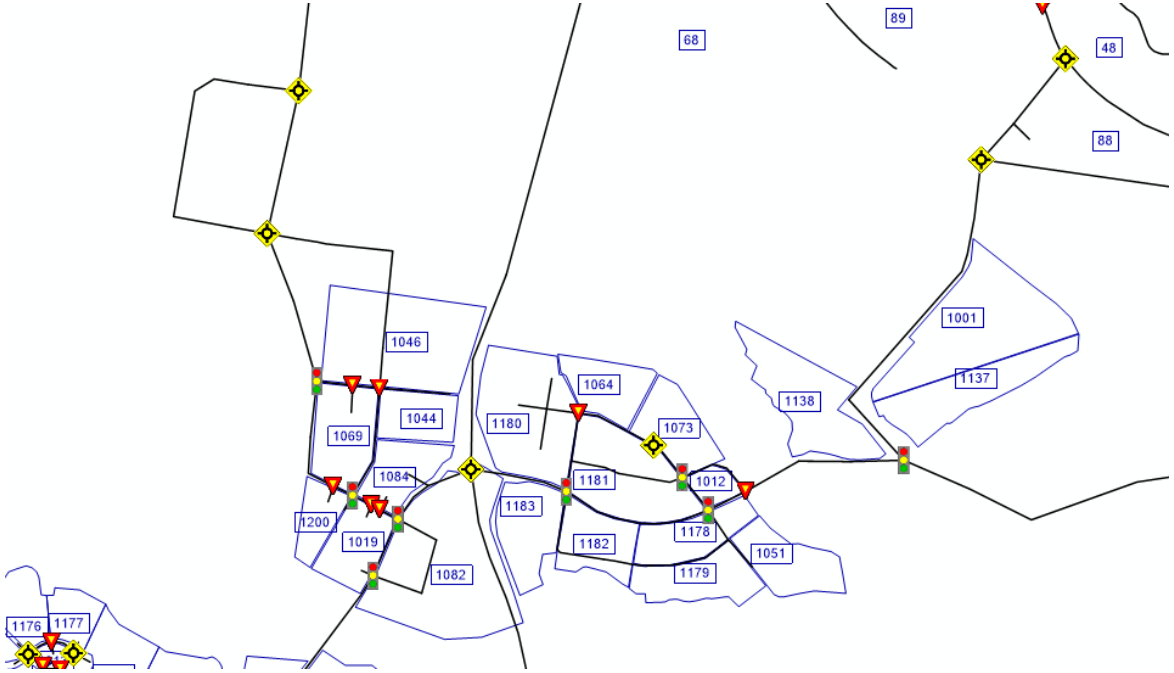
As such, the proposed road infrastructure for Aura is considered appropriate to support the development's target land use.

2031 Aura Model 2031 – with Park ‘n’ Ride

2031 (with PnR) Network

2031 (with PnR) Network

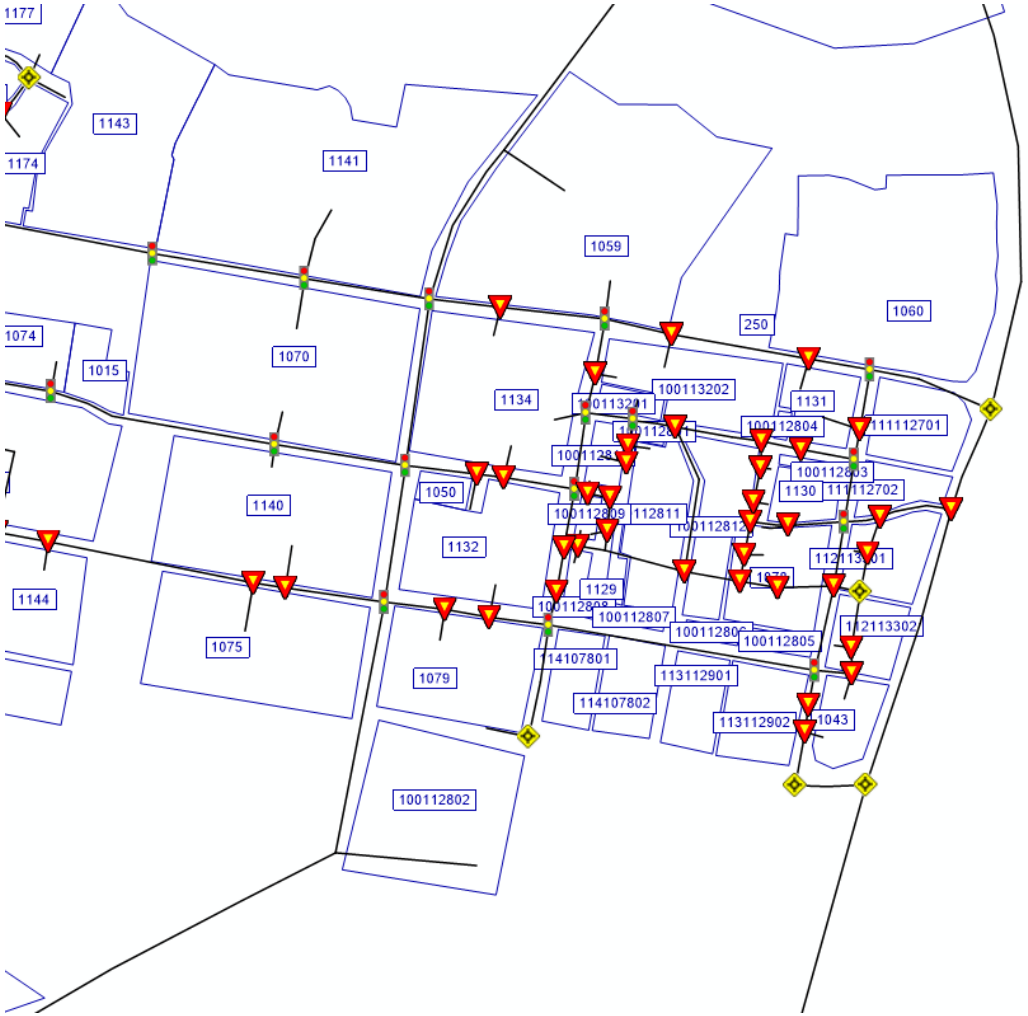
2031 (with PnR) Land Use Precincts 1-5



Zone	Land Use	Yield	Unit
1001	Residential	593	dwellings
	Retail	320	m2
1137	Residential	252	dwellings
1138	Residential	289	dwellings
1012	District Centre	10,500	m2
1051	Residential	136	dwellings
1064	P-12 School	1,800	students
1073	P-6 School	1,100	students
	Community	125	students
	Community	600	m2
1178	Residential	125	dwellings
1179	Residential	121	dwellings
1180	Residential	463	dwellings
1181	Residential	367	dwellings
	Childcare Centre	130	Children
	Retirement Village	170	dwellings
	Retail	550	m2
	Commercial	950	m2
1182	Residential	197	dwellings
1183	Residential	336	dwellings
1046	Industry and Business	137,000	m2

Zone	Land Use	Yield	Unit
1044	Industry and Business	55,000	m2
1069	Industry and Business	57,000	m2
1200	Industry and Business	16,600	m2
	Fast Food	1	shop
	Service Station	1	station
1019	Commercial	20,000	m2
1082	Fast Food	1	shop
	Service Station	1	station
	Showroom	15,000	m2
1084	Fast Food	1	shop
	Showroom	18,000	m2
	Indoor Sports & Rec	2,000	m2

2031 (with PnR) Land Use Precincts 7-9



Zone	Land Use	Yield	Unit
1059	Residential	100	dwellings
1060	Residential	-	dwellings
1043	Community	2,500	m2
1131	Retail	-	m2
	Education	-	m2
100112804	Indoor Entertainment	4,850	m2
100112801	Retail	331	m2
	Commercial	6,000	m2
100112802	PT Carpark	1,000	spaces
10112803	Retail	1,183	m2
	Commercial	-	m2
100112805	Residential	-	dwellings
	Commercial	-	m2
100112806	Residential	-	dwellings
	Retail	-	m2
	Commercial	-	m2
100112807	Residential	-	dwellings
	Retail	-	m2
	Commercial	-	m2
100112808	Residential	50	dwellings
	Retail	-	m2
	Commercial	-	m2
100112809	Residential	78	dwellings
100112810	Residential	128	dwellings
	Retail	1,386	m2
100112811	Retail	-	m2
	Commercial	-	m2
100112812	Retail	20,000	m2
	Commercial	3,900	m2

Zone	Land Use	Yield	Unit
1130	Retail	7,000	m2
1078	Retail	13,000	m2
100113201	Retail	-	m2
	Community	500	m2
100113202	Retail	150	m2
111112701	Retail	-	m2
	Commercial	-	m2
111112702	Residential	-	dwellings
	Retail	-	m2
112113301	Residential	-	dwellings
	Commercial	-	m2
	Community	5,000	m2
112113302	Commercial	-	m2
	Indoor Sports and Rec	3,500	m2
113112901	Residential	-	dwellings
113112902	Residential	-	dwellings
	Retail	-	m2
	Commercial	-	m2
114107801	Residential	-	dwellings
	Retail	-	m2
	Commercial	-	m2
114107802	Residential	-	dwellings
1132	Residential	300	dwellings
1050	Commercial	-	m2
1079	Private School	1,800	students
1134	Residential	350	dwellings

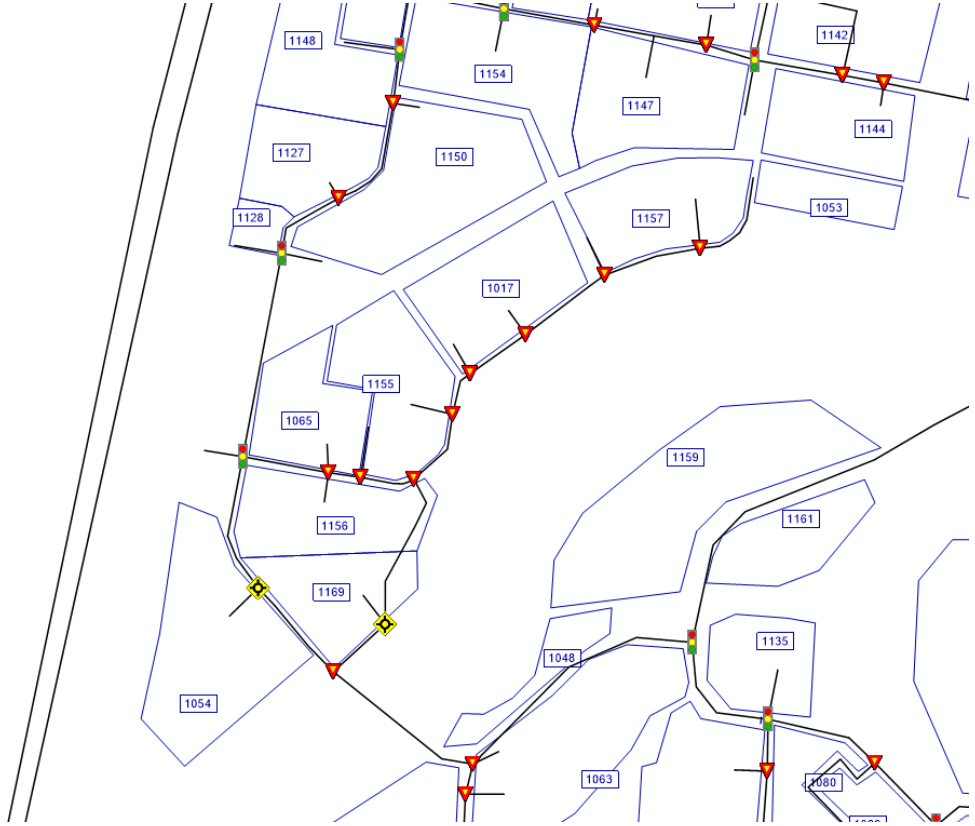
Aura Base Model

2031 (with PnR) Land Use Precincts 10-14

Zone	Land Use	Yield	Unit
1070	Residential	325	dwellings
1075	Retirement Village	244	dwellings
1140	Residential	250	dwellings
1141	Residential	543	dwellings
1070	Residential	160	dwellings
1140	Residential	65	dwellings
1015	Community	-	m2
1142	Childcare Centre	140	places
	Residential	275	dwellings
	Retail	1,500	m2
	Commercial	1,000	m2
1074	Primary School	1,100	students
1143	Residential	274	dwellings
1144	Residential	200	dwellings
1013	Neighbourhood Centre	750	m2
	Childcare Centre	130	places
	Residential	8	dwellings
1133	Residential	169	dwellings
1145	Residential	302	dwellings
1146	Residential	260	dwellings
1147	Residential	286	dwellings

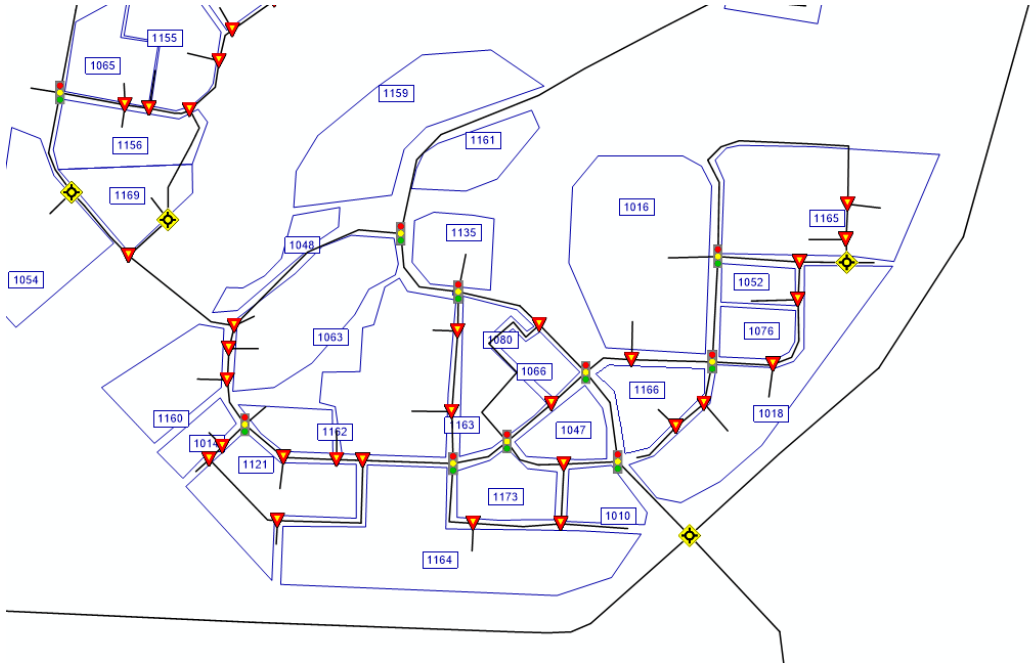
Zone	Land Use	Yield	Unit
1175	Community	400	m2
1176	Residential	97	dwellings
1177	Residential	72	dwellings
1045	Industry and Business	-	m2
1083	Showroom	-	m2
1011	District Centre	-	m2
1049	Community	1,000	m2
1067	P-6 Primary School	1,100	students
1071	Residential	240	dwellings
1127	Residential	108	dwellings
1128	Residential	108	dwellings
1150	Residential	337	dwellings
1151	Residential	79	dwellings
1152	Residential	225	dwellings
1153	Residential	236	dwellings
1154	Residential	240	dwellings
1148	Residential	240	dwellings
	Childcare Centre	130	places

2031 (with PnR) Land Use Precinct 15



Zone	Land Use	Yield	Unit
1155	Residential	170	dwellings
1017	Residential	298	dwellings
1157	Residential	236	dwellings
1053	Residential	123	dwellings
1156	Retirement Village	250	dwellings
1169	Retirement Village	250	dwellings
1065	Residential	294	dwellings
1054	Childcare Centre	120	places
	Residential	370	dwellings
	Neighbourhood Centre	2,500	m2

2031 (with PnR) Land Use Precincts 17-19

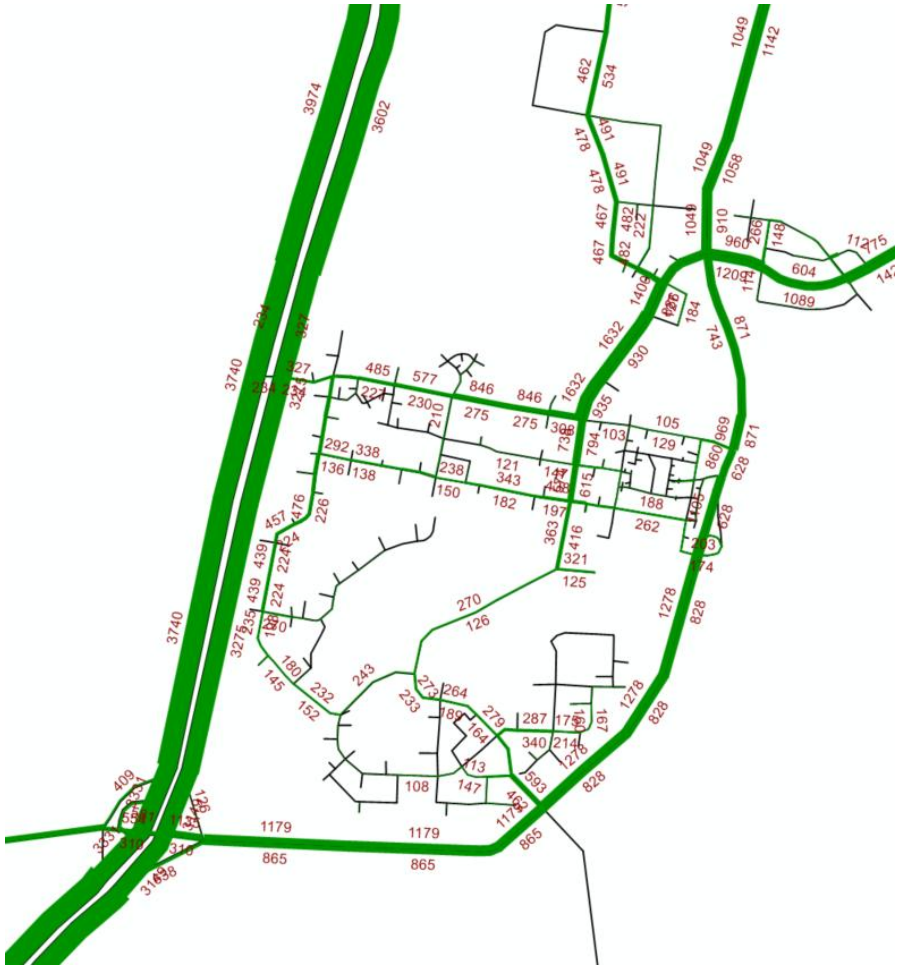


Zone	Land Use	Yield	Unit
1048	Residential	-	dwellings
	Emerging Sports Park	-	m2
1063	Residential	-	dwellings
1159	Residential	-	dwellings
1160	Residential	-	dwellings
1161	Residential	-	dwellings
1135	Neighbourhood Centre	-	m2
	Residential	-	dwellings
	Childcare Centre	-	Children
1016	Residential	-	dwellings
	Childcare Centre	-	Children
	Neighbourhood Centre	-	m2
1166	Residential	272	dwellings
	Childcare Centre	120	Children
1165	Residential	360	dwellings
	Community	-	m2
1052	State Primary School	1,100	students
1076	Neighbourhood sports park	65,750	m2
1018	Residential	600	dwellings

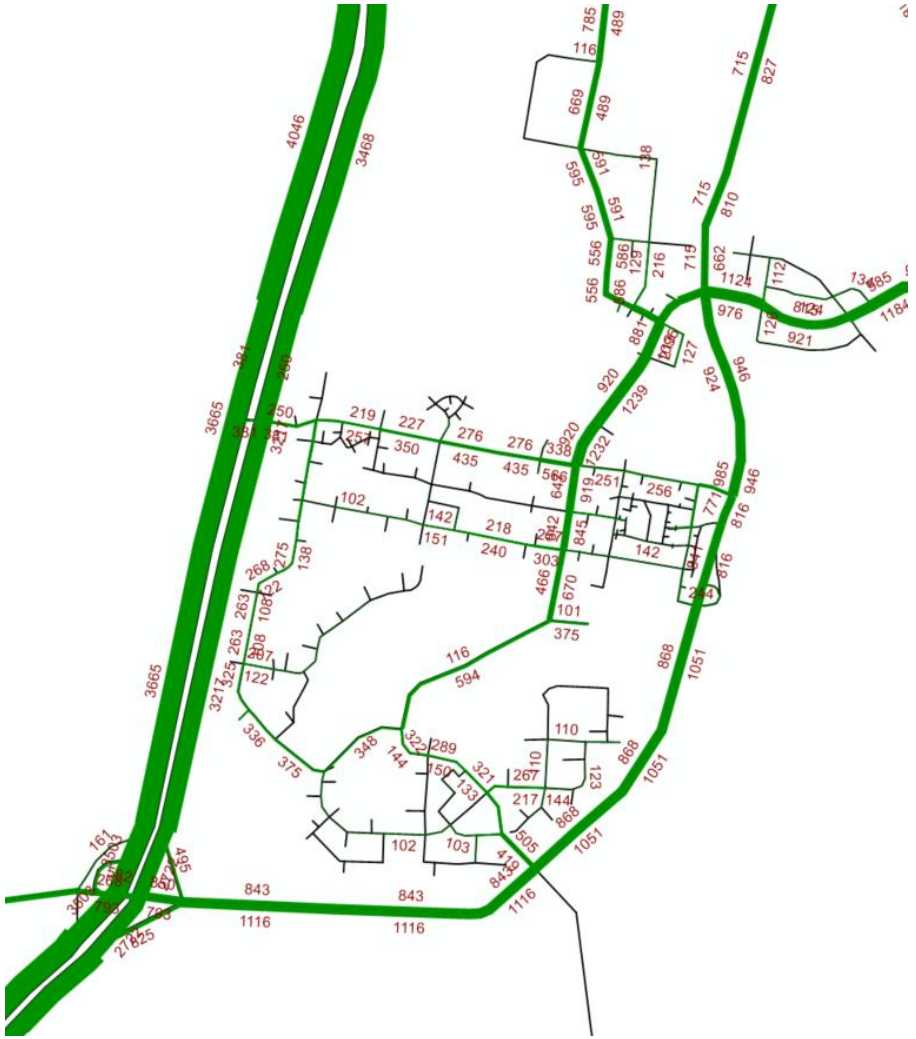
Zone	Land Use	Yield	Unit
1014	Residential	-	dwellings
	Community	-	m2
1121	State Primary School	-	students
	District Rec Park	60,000	m2
	District Sports Park	-	m2
1162	Residential	200	dwellings
	Neighbourhood Centre	-	m2
	Childcare Centre	-	Children
1163	Residential	350	dwellings
1080	Residential	100	dwellings
	Community	-	m2
1066	District Centre	4,000	m2
	Childcare Centre	120	Children
1047	State High School	300	students
1173	District Sports Park	93,250	m2
1010	Private School	300	students
1164	Residential	968	dwellings

2031 (with PnR) Link Volumes

AM Peak



PM Peak



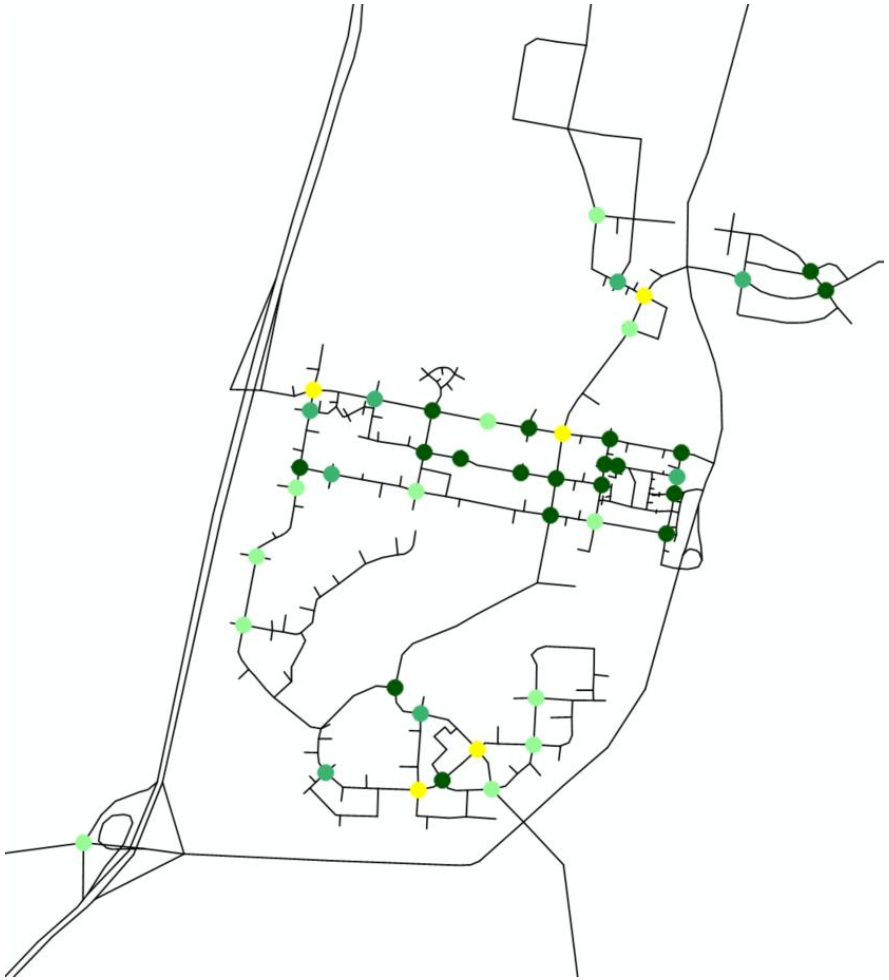
2031 (with PnR) Link Level of Service

AM Peak

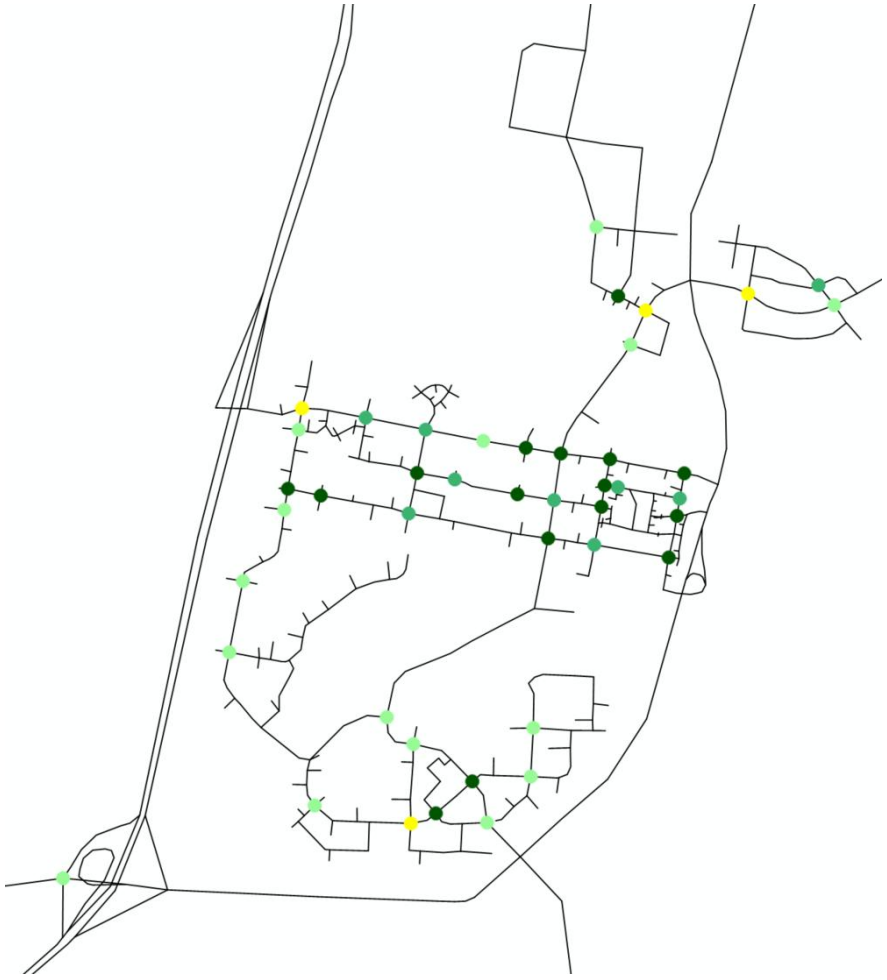
PM Peak

2031 (with PnR) Signalised Intersection Level of Service

AM Peak



PM Peak



2031 (with PnR) Unsignalised Intersection Level of Service

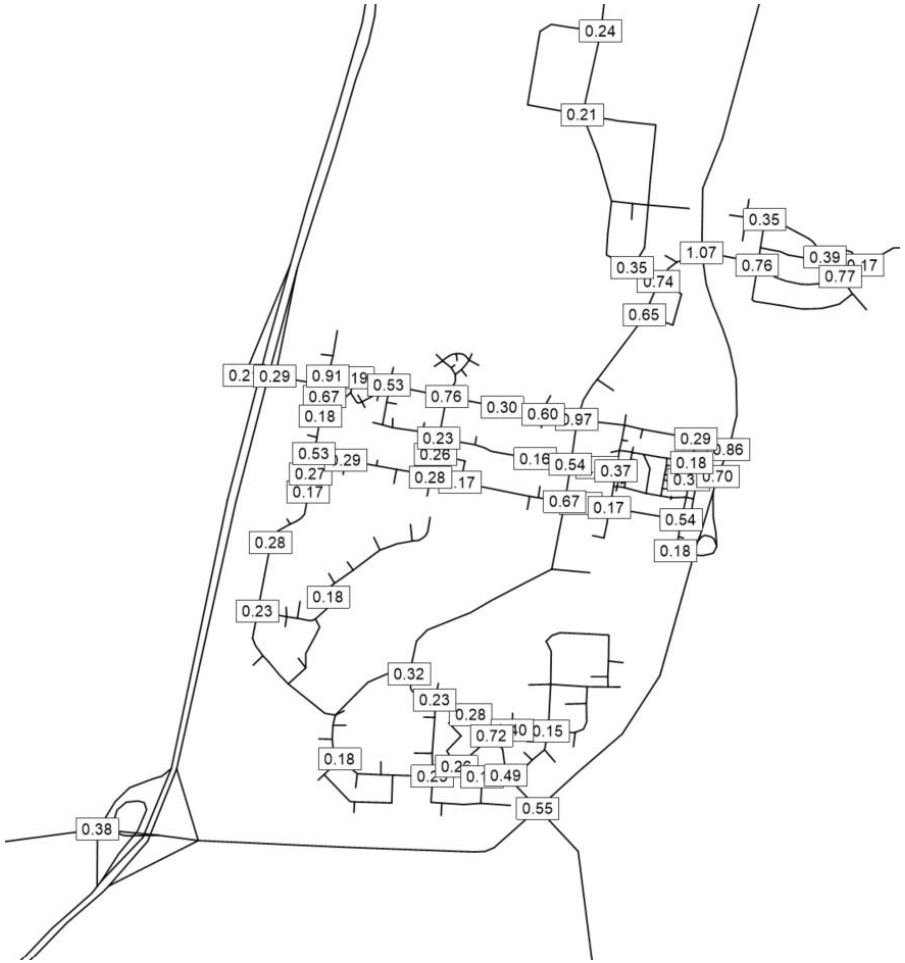
Aura Base Model

AM Peak

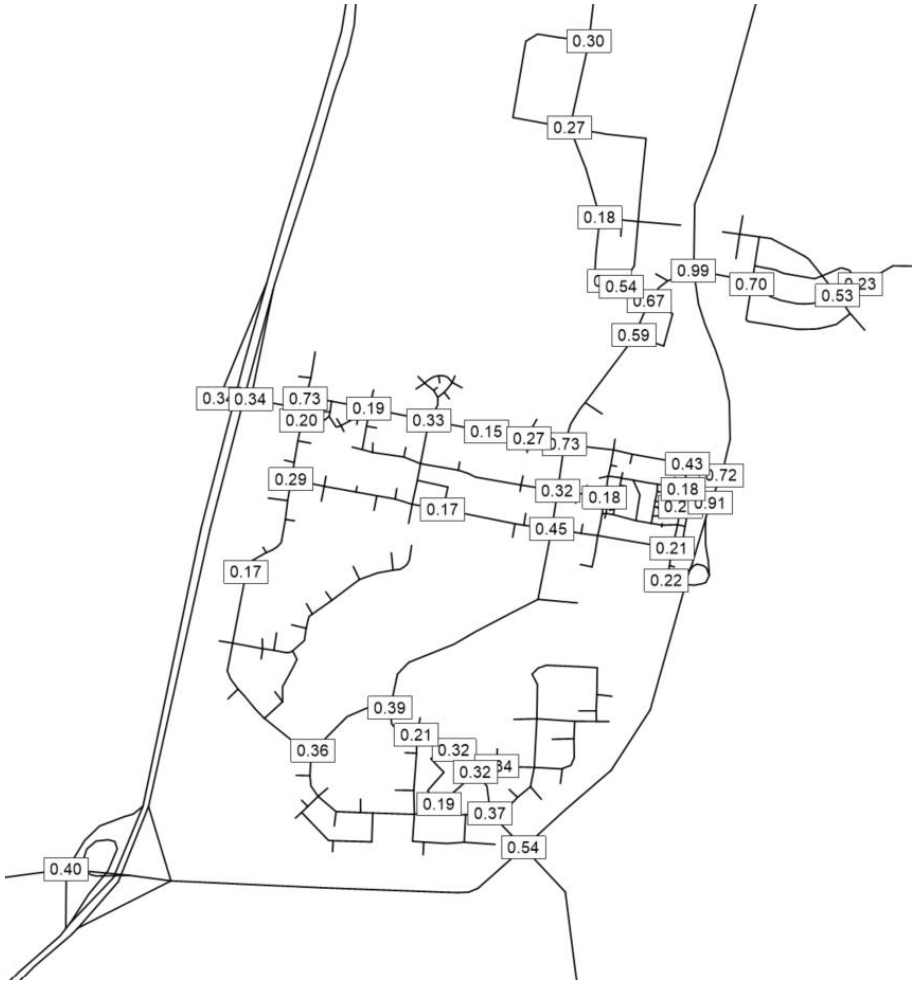
PM Peak

2031 (with PnR) Intersection Degree of Saturation

AM Peak



PM Peak



2031 Aura Model - Summary

The updated model results indicate that the proposed traffic network for operate efficiently with the model forecasting:

- Each link operates at LOS D or better in both peak periods.
- Each intersection operates at LOS D or better in both peak periods (with respect to average delay).
- Each intersection operates at a level that meets the benchmarks from the LGIA.
- The existing roundabout at Aura Boulevard and Bells Creek Arterial Road currently operates at LOS F. An interim at-grade solution has been developed to ensure that the intersection meets performance criteria.

As such, the proposed road infrastructure for Aura is considered appropriate to support the development's target land use.

2041 Stockland Only Works

2041 Stockland Only Works

Network Layout

Stockland Only Works

2041 Stockland Only Works

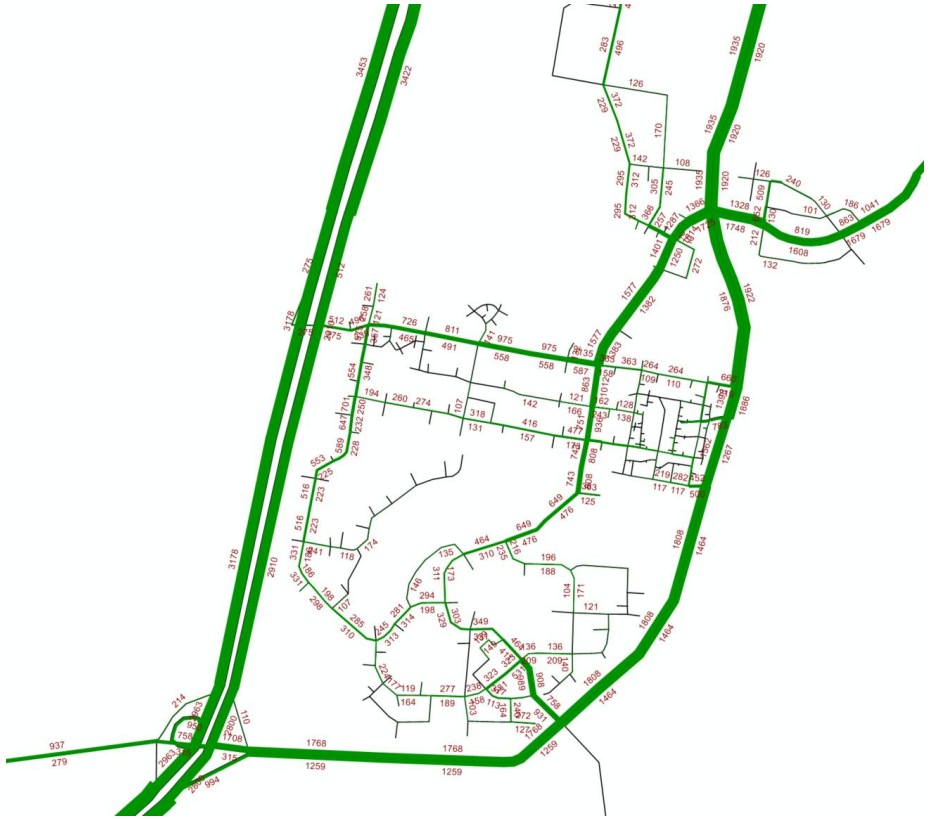
Network Layout

2041 Stockland Only Works

Lane Configuration

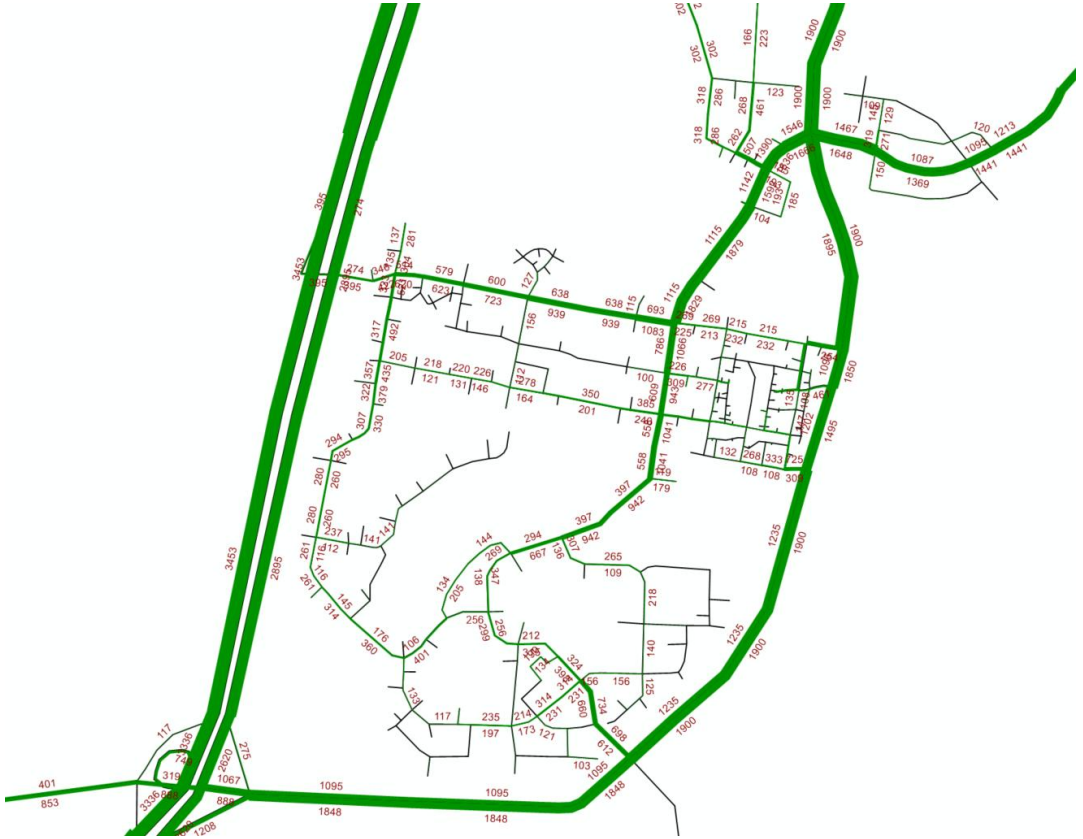
2041 Stockland Only Works

Link Volumes – AM Peak



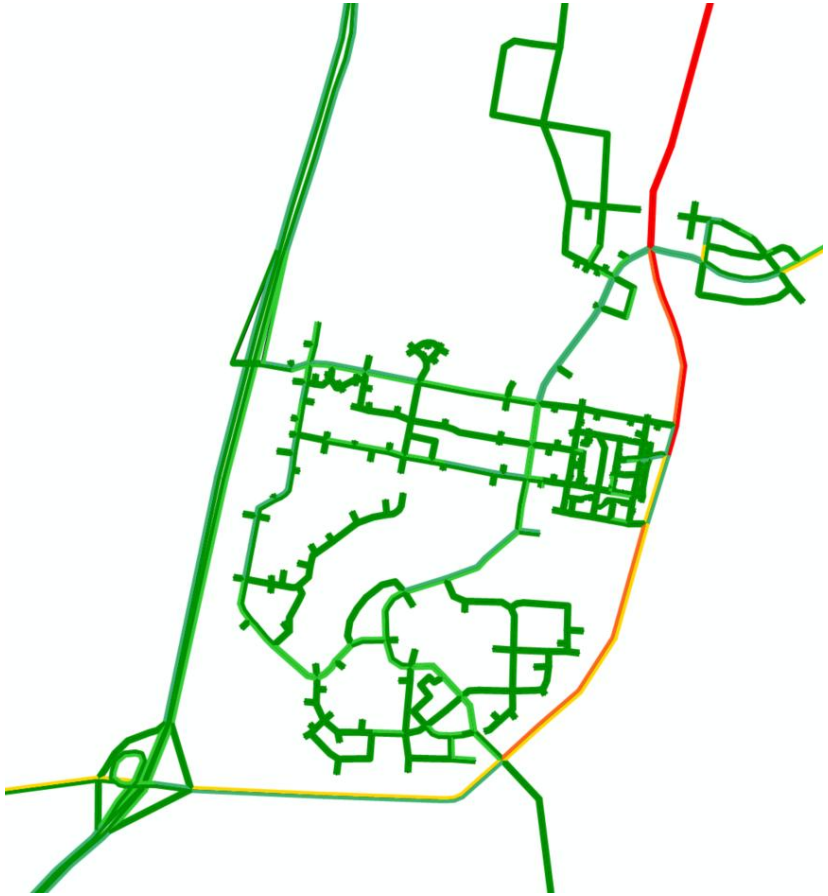
2041 Stockland Only Works

Link Volumes – PM Peak



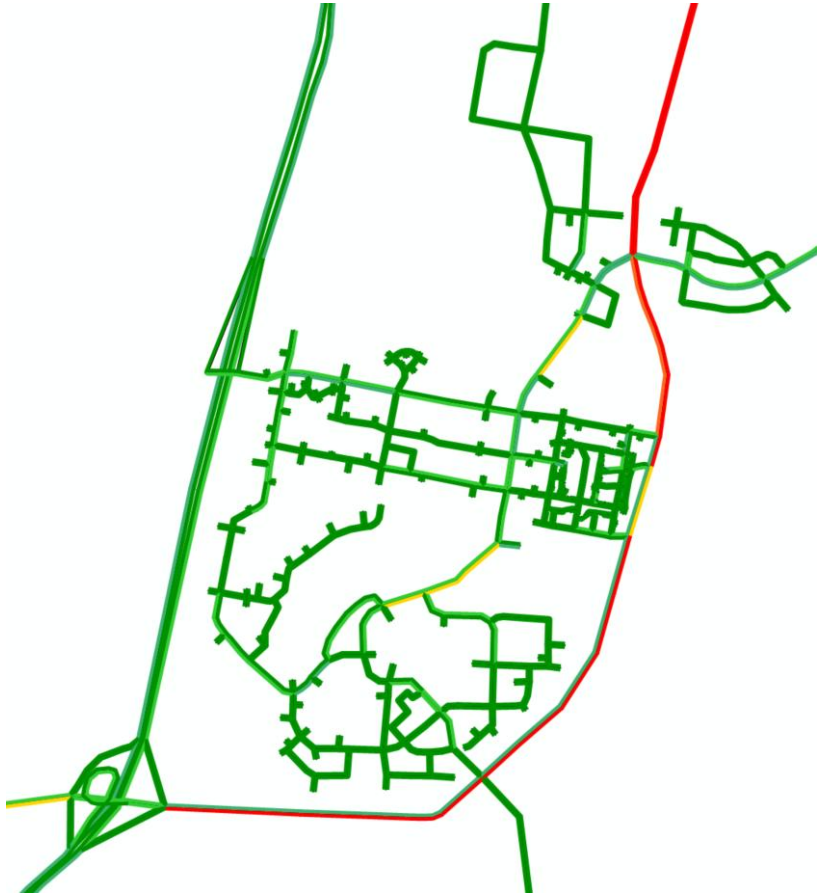
2041 Stockland Only Works

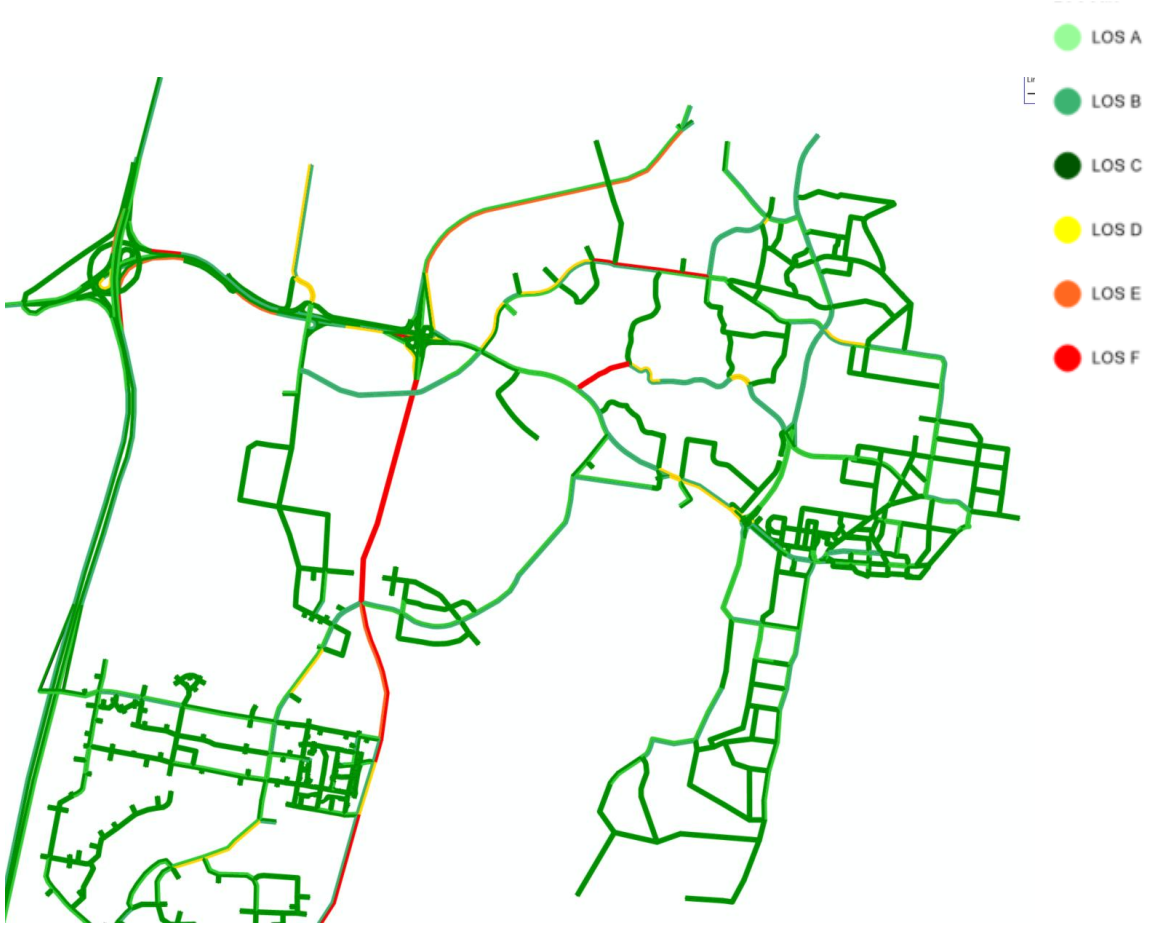
Link Level of Service – AM Peak



2041 Stockland Only Works

Link Level of Service – PM Peak

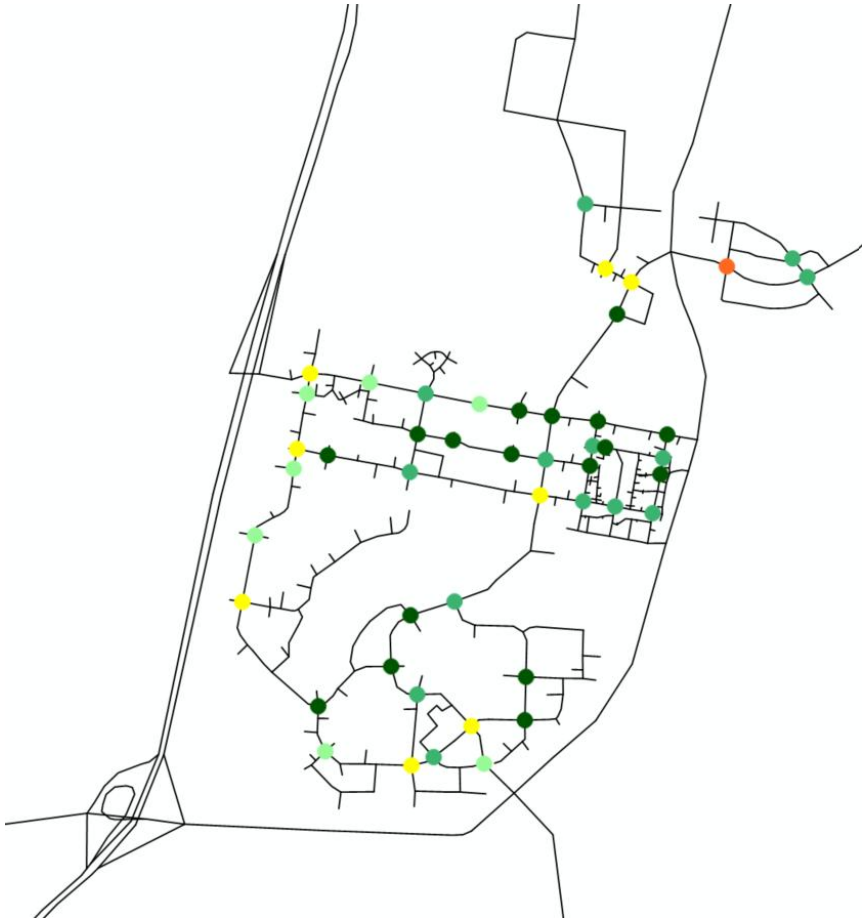




2041 Stockland Only Works

Intersection Level of Service – AM Peak

Signalised Intersections



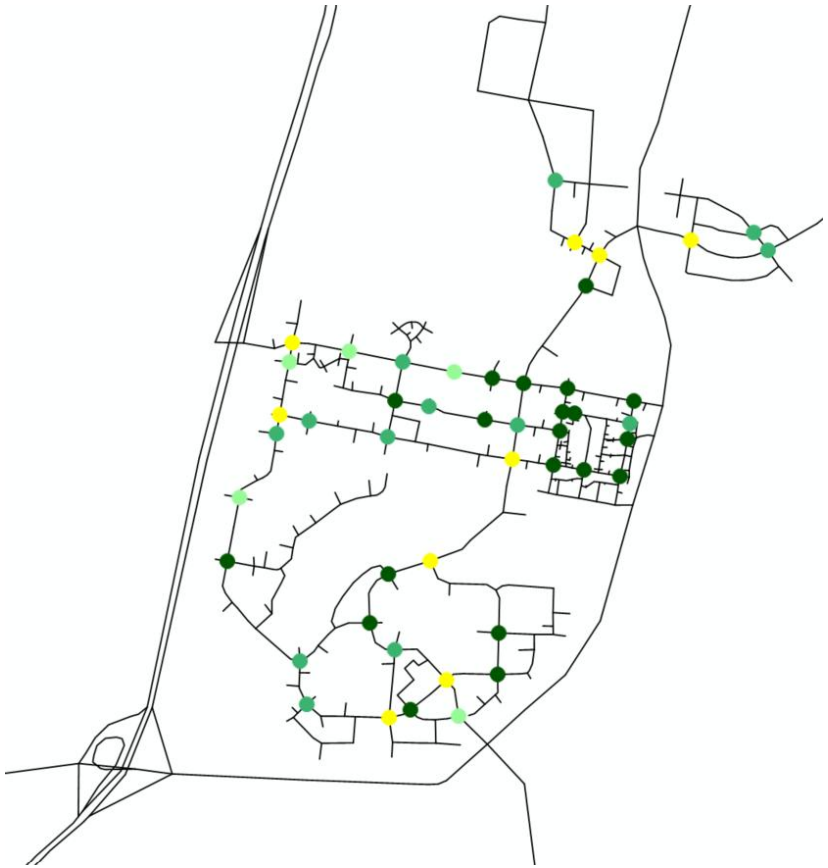
Unsignalised Intersections

Stockland Only Works

2041 Stockland Only Works

Intersection Level of Service – PM Peak

Signalised Intersections



Unsignalised Intersections

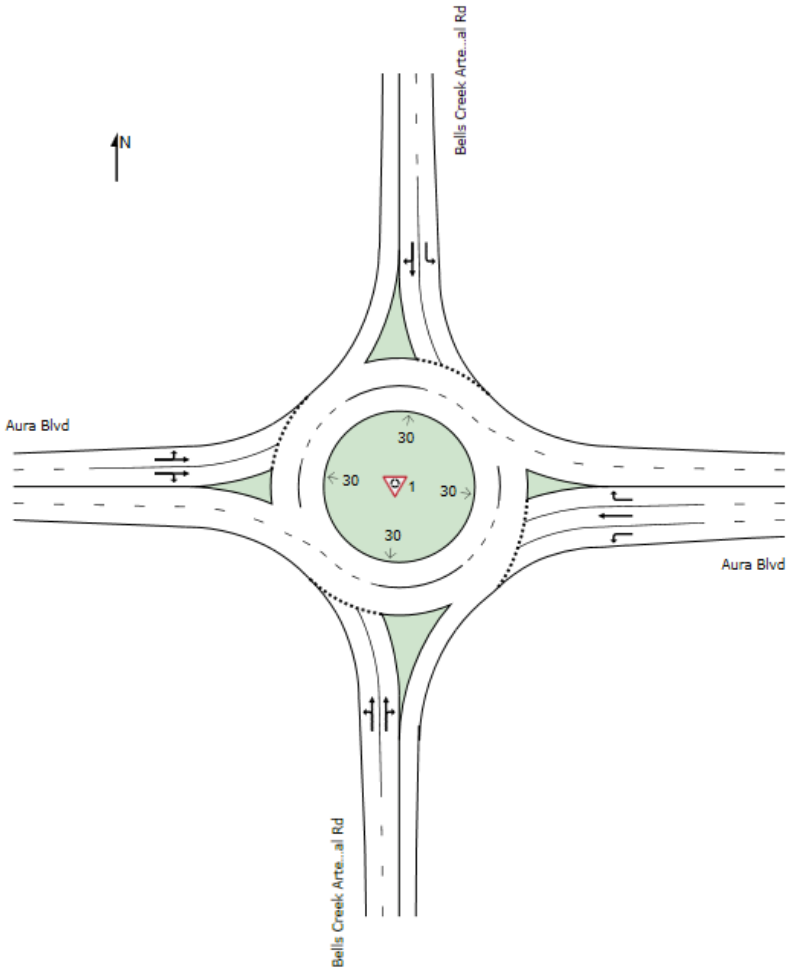
2041 Stockland Only Works

Roundabout SIDRA Modelling

- SIDRA has been used to assess the three roundabouts, as it is seen to provide more reasonable results when compared to Visum. SIDRA is a well used and trusted modelling suite for individual intersections across Australia.
- The three intersections assessed are:
  - The P2 Aura Blvd/Bells Creek Arterial Rd, and
  - Two town centre/Bells Creek Arterial Rd roundabouts.
- Results on the following slides show that the roundabouts are forecast to be at or over capacity and operate at LOS F.

P2 Aura Blvd / Bells Creek Arterial Roundabout

SIDRA Modelling

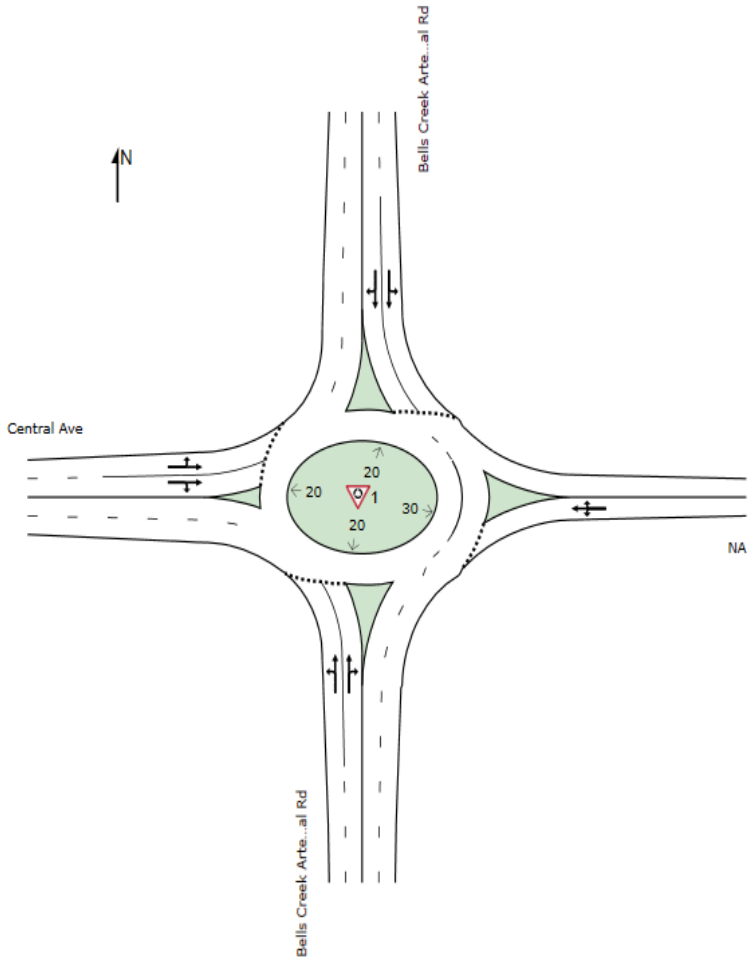


Approach	Turn	AM Peak			PM Peak		
		Volume	Average Delay (sec.)	Level of Service	Volume	Average Delay (sec.)	Level of Service
South	Left	364	19.8	LOS B	273	12.1	LOS B
	Through	965	1143.0	LOS F	958	1178.9	LOS F
	Right	645	1148.9	LOS F	765	1184.8	LOS F
East	Left	935	193.1	LOS F	893	244.9	LOS F
	Through	609	93.1	LOS F	597	167.9	LOS F
	Right	297	17.1	LOS B	245	17.9	LOS B
North	Left	251	13.8	LOS B	299	16.4	LOS B
	Through	928	1221.0	LOS F	817	1173.8	LOS F
	Right	842	1226.5	LOS F	884	1179.4	LOS F
West	Left	776	104.9	LOS F	802	250.5	LOS F
	Through	502	107.5	LOS F	480	251.6	LOS F
	Right	161	113.6	LOS F	344	257.9	LOS F

Stockland Only Works

Central Ave / Bells Creek Arterial Roundabout

SIDRA Modelling

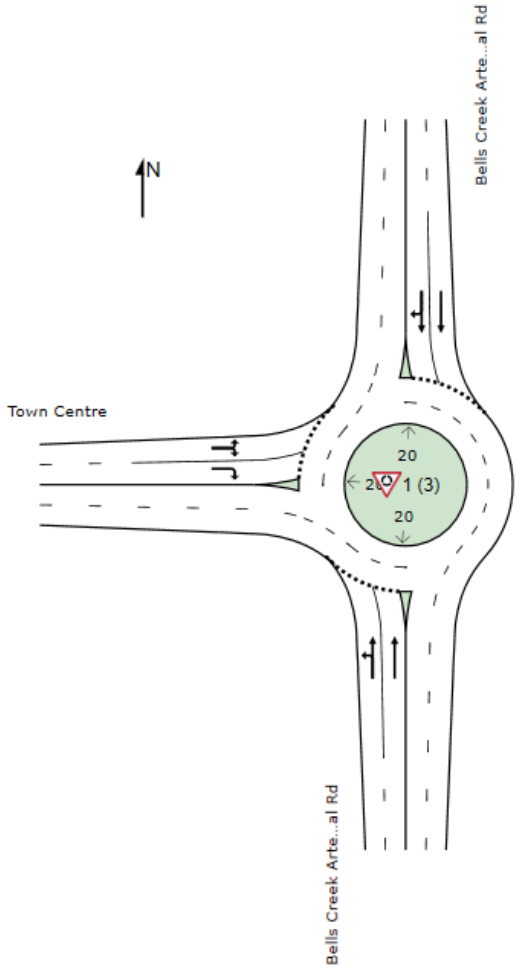


Approach	Turn	AM Peak			PM Peak		
		Volume	Average Delay (sec.)	Level of Service	Volume	Average Delay (sec.)	Level of Service
South	Left	36	5.4	LOS A	64	5.2	LOS A
	Through	1436	5.3	LOS A	1089	5.2	LOS A
	Right	1	10.3	LOS B	1	10.1	LOS B
East	Left	2	10.5	LOS B	2	10.3	LOS B
	Through	5	10.8	LOS B	5	10.6	LOS B
	Right	3	15.8	LOS B	3	15.6	LOS B
North	Left	1	5.5	LOS A	1	5.5	LOS A
	Through	1829	5.4	LOS A	1797	5.4	LOS A
	Right	195	10.5	LOS B	203	10.5	LOS B
West	Left	539	592.7	LOS F	905	372.3	LOS F
	Through	1	61.7	LOS E	1	15.2	LOS B
	Right	157	66.6	LOS E	157	20.1	LOS C

Stockland Only Works

Southern Town Centre / Bells Creek Arterial Roundabout

SIDRA Modelling



Approach	Turn	AM Peak			PM Peak		
		Volume	Average Delay (sec.)	Level of Service	Volume	Average Delay (sec.)	Level of Service
South	Left	448	4.7	LOS A	248	4.5	LOS A
	Through	1455	4.7	LOS A	1051	4.5	LOS A
North	Through	1256	5.9	LOS A	1497	11.9	LOS B
	Right	78	10.6	LOS B	77	17.0	LOS B
West	Left	189	9.9	LOS A	215	8.6	LOS A
	Right	286	15.5	LOS B	548	13.7	LOS B

Stockland Only Works

2041 Stockland Only Works

Network Performance Summary

- Key roundabouts such as the P2 Aura Blvd/Bells Creek Arterial Rd intersection and town centre connections reach capacity in the Aura Traffic Model. Roundabout congestion is often not modelled accurately in the Aura Traffic Model and therefore these intersections have been modelled in SIDRA as it provides a more reliable assessment method. The SIDRA modelling shows that the roundabouts reach capacity operating at LOS F.
- With the reduction of Bells Creek Arterial Rd to one lane each way, these links reach capacity. Particular sections of Bells Creek Arterial Rd that are put under pressure from the reduction in lanes is from Aura town centre to Caloundra Road and to a smaller degree south of the town centre to Aura Blvd. As a result, some traffic is rerouted from Bells Creek Arterial Rd to Bruce Hwy.
- Additionally, the section of Bells Creek Arterial Rd south of Gagalba between Aura Blvd and the Bruce Hwy reaches capacity in the "Stockland Only Works". Testing of North vs South facing ramps (with TMR works) in May 2025 shows an increase of traffic on this section of road with north facing ramps. The "Stockland Only Works" sensitivity testing shows that with one lane on Bells Creek Arterial Rd and north facing ramps this section is at capacity.
- In summary, the "Stockland Only Works" sensitivity scenario fails at three points on Bells Creek Arterial Rd:
  - The lane reduction to one lane each way
  - P2 Bells Creek Arterial Rd/Aura Blvd roundabout
  - Roundabout connections from Bells Creek Arterial Rd to the Aura Town Centre.

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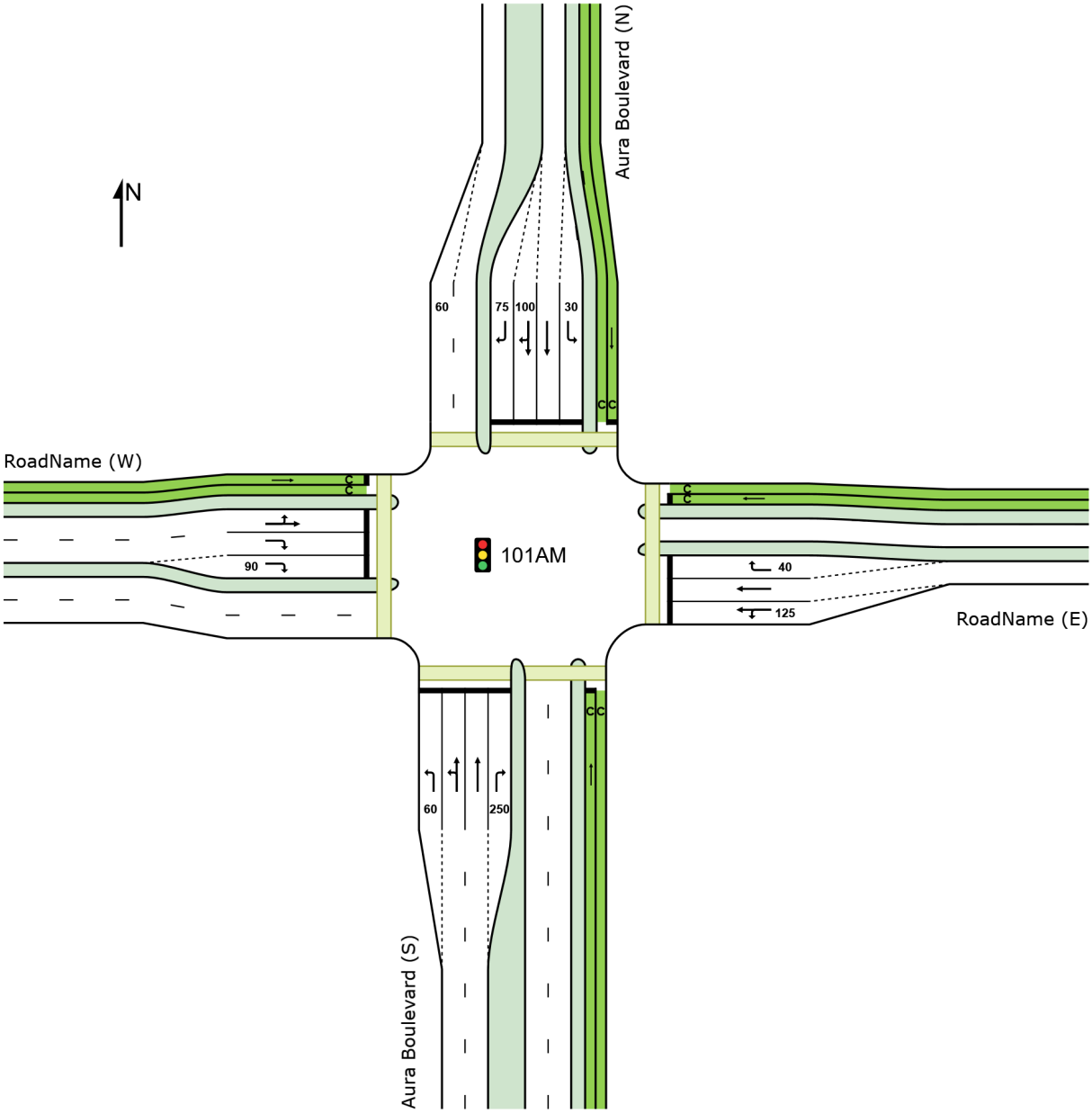
APPENDIX E – SIDRA INTERSECTION SUMMARIES

SITE LAYOUT

Site: [101AM] 101 - AM Peak (Intersection 101 - 2041)

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Organisation: URBIS | Licence: NETWORK / 1PC | Created: Friday, 15 May 2026 10:16:29 AM
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MOVEMENT SUMMARY

Site: [101AM] 101 - AM Peak (Intersection 101 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Phase Times)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Aura Boulevard (S)															
1	L2	All MCs	635	0.0	635	0.0	*0.739	31.5	LOS C	18.5	129.5	0.90	1.05	0.90	20.9
2	T1	All MCs	269	3.9	269	3.9	0.313	19.9	LOS B	5.4	40.0	0.70	0.78	0.70	31.9
3	R2	All MCs	113	0.0	113	0.0	0.385	55.3	LOS E	6.0	42.2	0.94	0.78	0.94	27.9
Approach			1017	1.0	1017	1.0	0.739	31.0	LOS C	18.5	129.5	0.85	0.95	0.85	24.2
East: RoadName (E)															
4	L2	All MCs	257	0.0	257	0.0	*0.862	67.0	LOS E	16.8	119.6	1.00	0.96	1.23	24.8
5	T1	All MCs	105	5.0	105	5.0	0.862	51.0	LOS D	16.8	119.6	0.93	0.69	0.94	21.4
6	R2	All MCs	53	0.0	53	0.0	0.258	59.8	LOS E	2.9	20.3	0.95	0.75	0.95	29.5
Approach			415	1.3	415	1.3	0.862	62.0	LOS E	16.8	119.6	0.98	0.86	1.12	24.6
North: Aura Boulevard (N)															
7	L2	All MCs	28	0.0	28	0.0	0.106	60.1	LOS E	1.5	10.2	0.90	0.72	0.90	30.5
8	T1	All MCs	564	0.0	564	0.0	0.326	26.3	LOS C	9.8	68.5	0.72	0.64	0.72	34.1
9	R2	All MCs	53	0.0	53	0.0	*0.326	61.1	LOS E	9.6	67.4	0.90	0.71	0.90	24.1
Approach			645	0.0	645	0.0	0.326	30.6	LOS C	9.8	68.5	0.75	0.65	0.75	32.1
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	*0.810	78.4	LOS E	7.0	50.5	1.00	0.92	1.25	21.8
11	T1	All MCs	111	2.9	111	2.9	0.810	53.9	LOS D	7.0	50.5	0.95	0.79	1.08	20.1
12	R2	All MCs	365	0.0	365	0.0	0.694	60.8	LOS E	10.6	74.4	1.00	0.85	1.05	20.0
Approach			528	0.6	528	0.6	0.810	61.1	LOS E	10.6	74.4	0.99	0.84	1.08	20.3
All Vehicles			2605	0.7	2605	0.7	0.862	42.0	LOS D	18.5	129.5	0.87	0.84	0.92	25.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Aura Boulevard (S)												

P11 Stage 1	150	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
P12 Stage 2	150	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
East: RoadName (E)											
P2 Full	150	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
North: Aura Boulevard (N)											
P31 Stage 1	150	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
P32 Stage 2	150	158	24.8	LOS C	0.3	0.3	0.91	0.91	178.6	200.0	1.12
West: RoadName (W)											
P4 Full	150	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
All Pedestrians	900	947	49.6	LOS E	0.5	0.5	0.95	0.95	203.4	200.0	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [101AM] 101 - AM Peak (Intersection 101 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Phase Times)
Site Scenario: 1 | Local Volumes

Timings based on settings in the Site Phasing & Timing dialog
Phase Times specified by the user
Phase Sequence: Two-Approach Contraflow with Staged Crossings
Input Phase Sequence: A, B, C, C1, F, E
Output Phase Sequence: A, B, C, C1, F, E
Reference Phase: Phase B

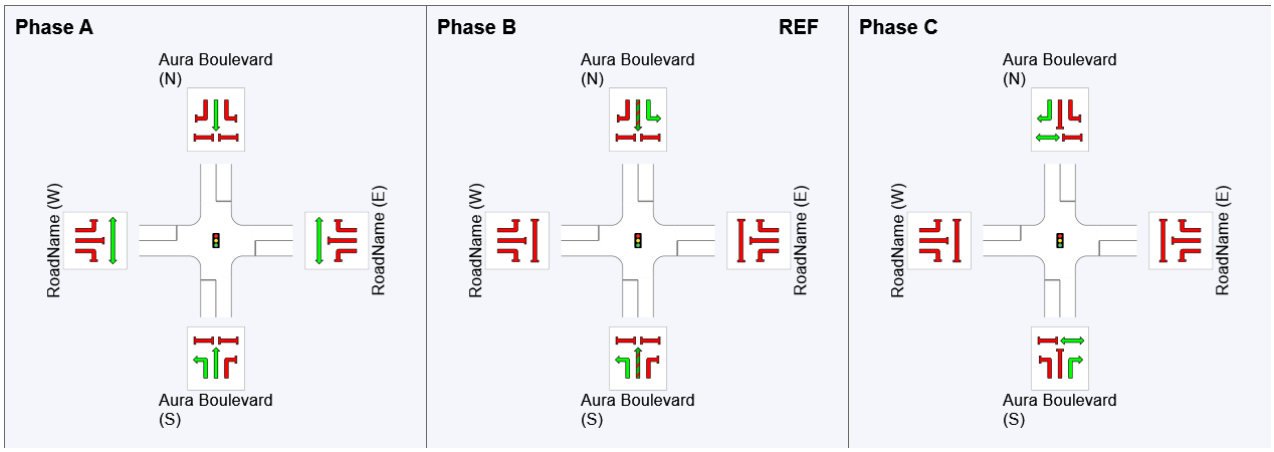
Phase Timing Summary

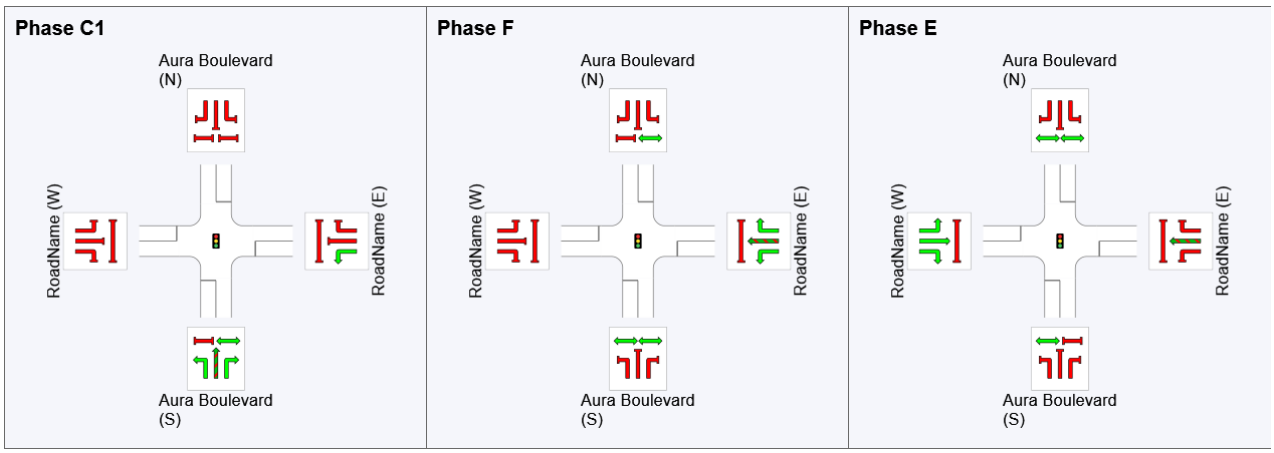
Phase	A	B	C	C1	F	E
Phase Change Time (sec)	90.3	0.0	23.2	36.5	48.1	67.3
Green Time (sec)	23.7	17.3	7.3	6.9	13.2	17.0
Phase Time (sec)	29.6	23.3	12.0	12.9	19.2	23.0
Phase Split	25%	19%	10%	11%	16%	19%
Phase Frequency (%)	97.9[2]	100.0	78.3[2]	100.0	100.0	100.0

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

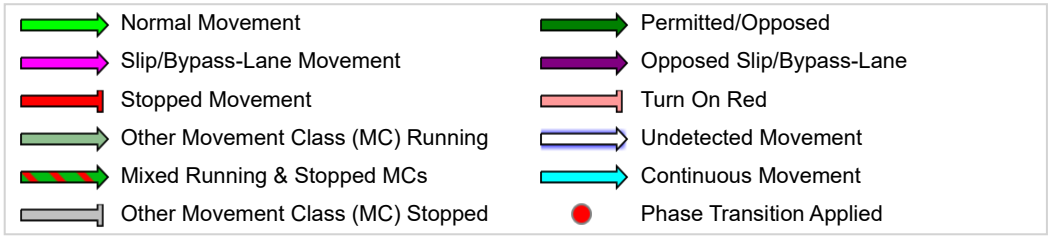
2 Phase Frequency is implied by a Phase Time specified by the user that is less than the Required Movement Time.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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MOVEMENT SUMMARY

Site: [101PM] 101 - PM Peak (Intersection 101 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 115.8 seconds (Site User-Given Phase Times)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Aura Boulevard (S)															
1	L2	All MCs	333	0.0	333	0.0	*0.521	25.8	LOS C	10.5	73.8	0.86	1.08	0.86	21.4
2	T1	All MCs	591	4.6	591	4.6	0.521	17.2	LOS B	12.1	84.7	0.79	0.96	0.79	33.1
3	R2	All MCs	181	0.0	181	0.0	0.530	52.4	LOS D	9.4	65.9	0.95	0.81	0.95	28.7
Approach			1104	2.5	1104	2.5	0.530	25.6	LOS C	12.1	84.7	0.84	0.97	0.84	29.1
East: RoadName (E)															
4	L2	All MCs	176	0.0	176	0.0	*0.624	56.1	LOS E	9.7	68.3	0.99	0.81	0.99	27.4
5	T1	All MCs	105	2.0	105	2.0	0.624	49.1	LOS D	9.7	68.3	0.93	0.69	0.93	21.8
6	R2	All MCs	53	0.0	53	0.0	0.273	58.9	LOS E	2.8	19.9	0.96	0.75	0.96	29.7
Approach			334	0.6	334	0.6	0.624	54.3	LOS D	9.7	68.3	0.96	0.76	0.96	26.0
North: Aura Boulevard (N)															
7	L2	All MCs	24	0.0	24	0.0	0.252	67.2	LOS E	1.4	9.8	0.99	0.71	0.99	27.7
8	T1	All MCs	457	4.4	457	4.4	0.284	24.6	LOS C	7.8	54.8	0.73	0.64	0.73	33.9
9	R2	All MCs	53	0.0	53	0.0	*0.284	58.0	LOS E	7.8	54.8	0.92	0.72	0.92	24.6
Approach			534	3.7	534	3.7	0.284	29.8	LOS C	7.8	54.8	0.76	0.65	0.76	32.4
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	*0.817	77.4	LOS E	6.5	46.5	1.00	0.92	1.28	22.0
11	T1	All MCs	105	2.0	105	2.0	0.817	52.0	LOS D	6.5	46.5	0.95	0.79	1.09	20.3
12	R2	All MCs	259	0.0	259	0.0	0.495	56.4	LOS E	6.9	48.6	0.97	0.79	0.97	21.0
Approach			417	0.5	417	0.5	0.817	58.0	LOS E	6.9	48.6	0.97	0.81	1.04	21.0
All Vehicles			2388	2.2	2388	2.2	0.817	36.2	LOS D	12.1	84.7	0.86	0.84	0.87	27.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Aura Boulevard (S)												

P11 Stage 1	150	158	52.4	LOS E	0.5	0.5	0.95	0.95	206.2	200.0	0.97
P12 Stage 2	150	158	52.4	LOS E	0.5	0.5	0.95	0.95	206.2	200.0	0.97
East: RoadName (E)											
P2 Full	150	158	52.4	LOS E	0.5	0.5	0.95	0.95	206.2	200.0	0.97
North: Aura Boulevard (N)											
P31 Stage 1	150	158	52.4	LOS E	0.5	0.5	0.95	0.95	206.2	200.0	0.97
P32 Stage 2	150	158	23.7	LOS C	0.3	0.3	0.90	0.90	177.5	200.0	1.13
West: RoadName (W)											
P4 Full	150	158	52.4	LOS E	0.5	0.5	0.95	0.95	206.2	200.0	0.97
All Pedestrians	900	947	47.6	LOS E	0.5	0.5	0.95	0.95	201.5	200.0	0.99

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [101PM] 101 - PM Peak (Intersection 101 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 115.8 seconds (Site User-Given Phase Times)
Site Scenario: 1 | Local Volumes

Timings based on settings in the Site Phasing & Timing dialog
Phase Times specified by the user
Phase Sequence: Two-Approach Contraflow with Staged Crossings
Input Phase Sequence: A, B, C, C1, F, E
Output Phase Sequence: A, B, C, C1, F, E
Reference Phase: Phase B

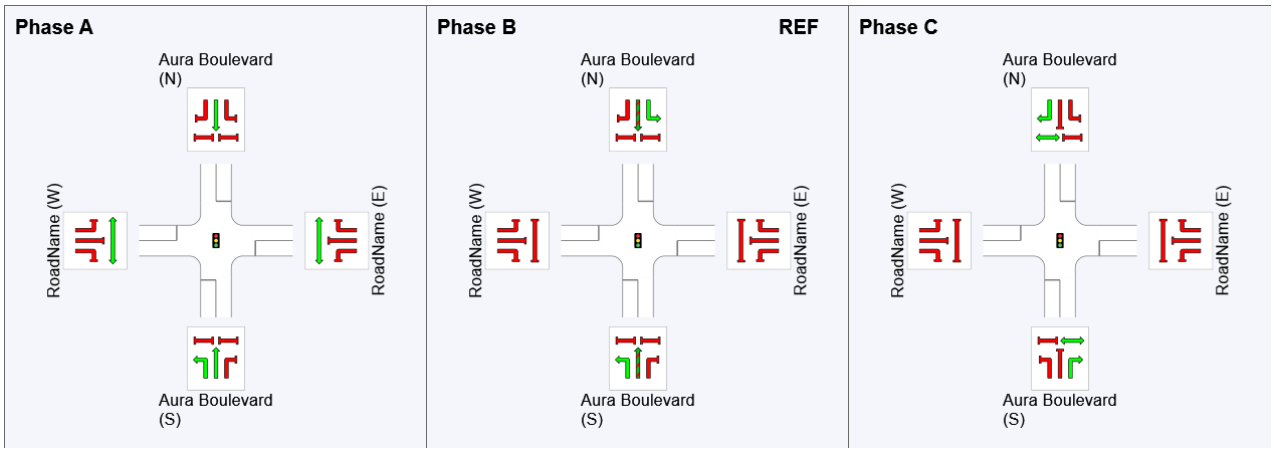
Phase Timing Summary

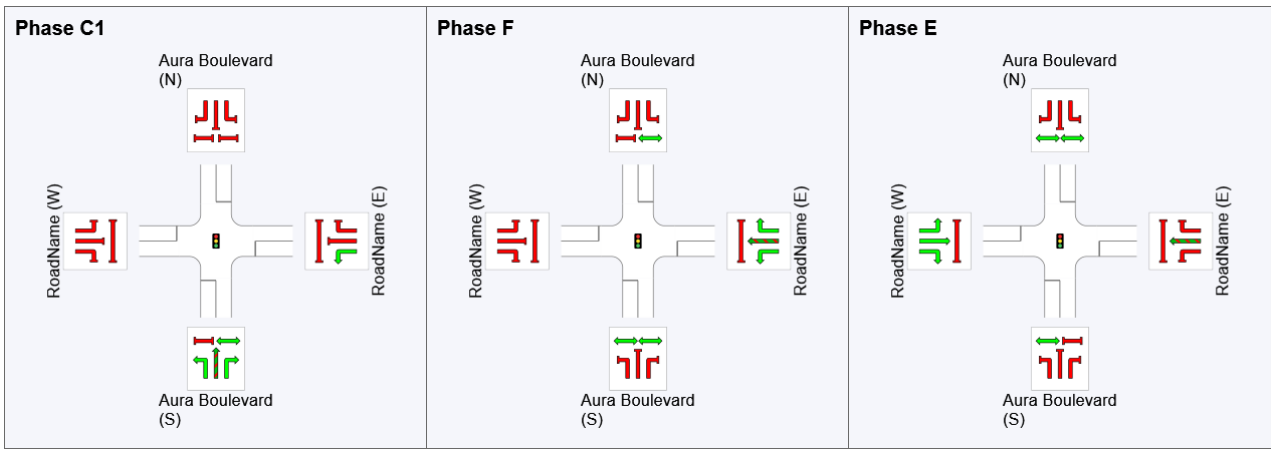
Phase	A	B	C	C1	F	E
Phase Change Time (sec)	79.6	0.0	12.0	27.3	39.3	57.3
Green Time (sec)	30.2	6.0	9.3	6.0	12.0	16.3
Phase Time (sec)	36.2	12.0	15.3	12.0	18.0	22.3
Phase Split	31%	10%	13%	10%	16%	19%
Phase Frequency (%)	100.0	100.0	99.8 [2]	100.0	100.0	100.0

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

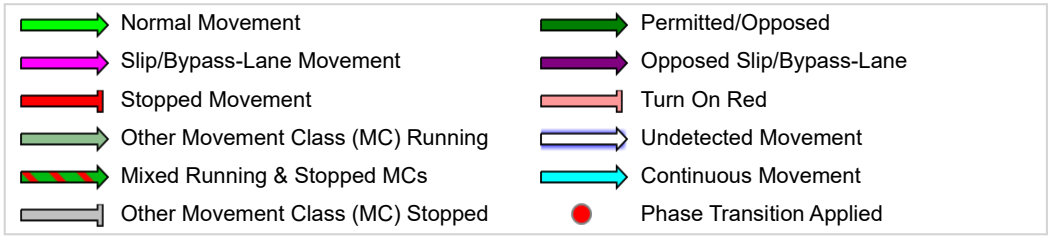
2 Phase Frequency is implied by a Phase Time specified by the user that is less than the Required Movement Time.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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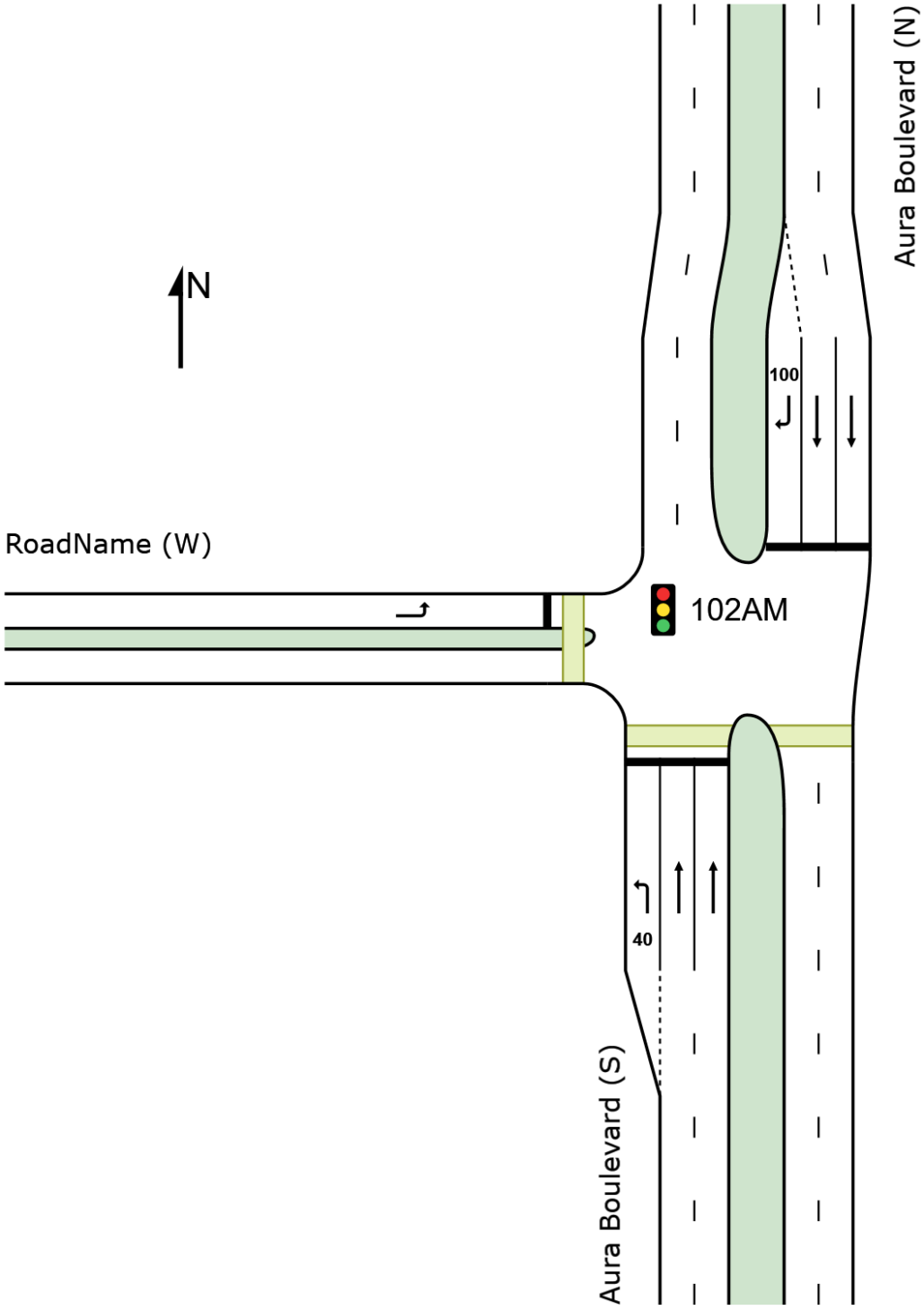
Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba\IR Response\P0053364_Aura Transport Masterplan_2041 Intersection Analysis_260430.sipx

SITE LAYOUT

Site: [102AM] AM Peak (Intersection 102 - 2041)

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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MOVEMENT SUMMARY

Site: [102AM] AM Peak (Intersection 102 - 2041)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 84.0 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Aura Boulevard (S)															
1	L2	All MCs	53	0.0	53	0.0	*0.397	48.7	LOS D	2.2	15.5	0.99	0.74	0.99	24.5
2	T1	All MCs	964	5.0	964	5.0	0.358	4.9	LOS A	7.7	55.4	0.41	0.37	0.41	54.0
Approach			1017	4.8	1017	4.8	0.397	7.2	LOS A	7.7	55.4	0.44	0.39	0.44	51.3
North: Aura Boulevard (N)															
8	T1	All MCs	1034	5.0	1034	5.0	*0.480	11.4	LOS B	12.8	91.9	0.64	0.56	0.64	47.6
9	R2	All MCs	126	0.0	126	0.0	*0.473	42.7	LOS D	5.0	34.7	0.96	0.79	0.96	25.5
Approach			1160	4.4	1160	4.4	0.480	14.8	LOS B	12.8	91.9	0.67	0.59	0.67	44.4
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	0.197	40.8	LOS D	2.0	13.7	0.92	0.74	0.92	25.9
Approach			53	0.0	53	0.0	0.197	40.8	LOS D	2.0	13.7	0.92	0.74	0.92	25.9
All Vehicles			2229	4.5	2229	4.5	0.480	12.0	LOS B	12.8	91.9	0.57	0.50	0.57	46.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Aura Boulevard (S)												
P11	Stage 1	50	53	36.3	LOS D	0.1	0.1	0.93	0.93	190.1	200.0	1.05
P12	Stage 2	50	53	36.3	LOS D	0.1	0.1	0.93	0.93	190.1	200.0	1.05
West: RoadName (W)												
P4	Full	150	158	36.5	LOS D	0.4	0.4	0.93	0.93	190.3	200.0	1.05
All Pedestrians		250	263	36.4	LOS D	0.4	0.4	0.93	0.93	190.2	200.0	1.05

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [102AM] AM Peak (Intersection 102 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 84.0 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

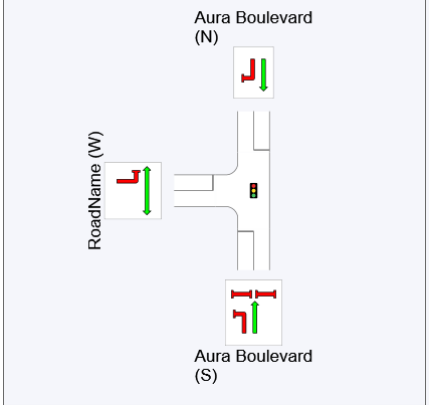
Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	30.1	0.0	12.0
Green Time (sec)	47.9	6.0	12.1
Phase Time (sec)	53.9	12.0	18.1
Phase Split	64%	14%	22%
Phase Frequency (%)	100.0	100.0	100.0

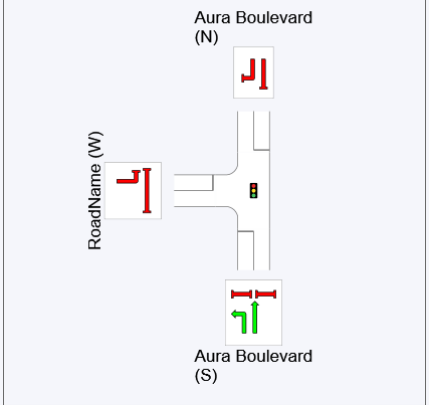
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence

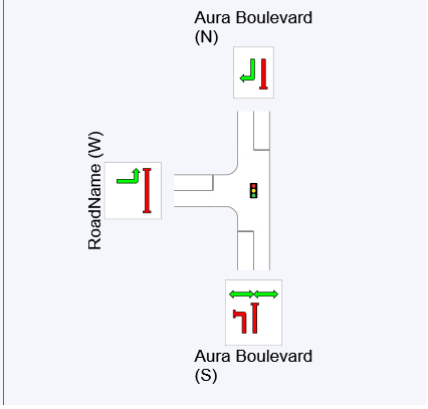
Phase A



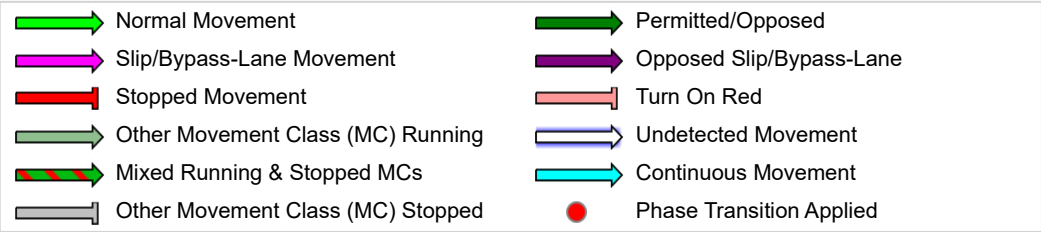
Phase B **REF**



Phase C



REF: Reference Phase
VAR: Variable Phase



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MOVEMENT SUMMARY

Site: [102PM] PM Peak (Intersection 102 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 96.0 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Aura Boulevard (S)															
1	L2	All MCs	53	0.0	53	0.0	*0.354	53.2	LOS D	2.5	17.3	0.98	0.74	0.98	23.3
2	T1	All MCs	1014	5.0	1014	5.0	0.358	4.4	LOS A	8.2	59.0	0.37	0.33	0.37	54.6
Approach			1066	4.7	1066	4.7	0.358	6.8	LOS A	8.2	59.0	0.40	0.35	0.40	51.8
North: Aura Boulevard (N)															
8	T1	All MCs	812	5.1	812	5.1	*0.354	10.0	LOS B	9.7	69.4	0.54	0.47	0.54	48.8
9	R2	All MCs	53	0.0	53	0.0	*0.225	47.6	LOS D	2.3	16.0	0.94	0.74	0.94	24.0
Approach			864	4.8	864	4.8	0.354	12.3	LOS B	9.7	69.4	0.56	0.49	0.56	46.6
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	0.225	47.5	LOS D	2.3	16.0	0.94	0.74	0.94	23.8
Approach			53	0.0	53	0.0	0.225	47.5	LOS D	2.3	16.0	0.94	0.74	0.94	23.8
All Vehicles			1983	4.6	1983	4.6	0.358	10.3	LOS B	9.7	69.4	0.48	0.42	0.48	48.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Aura Boulevard (S)												
P11	Stage 1	50	53	42.3	LOS E	0.1	0.1	0.94	0.94	196.1	200.0	1.02
P12	Stage 2	50	53	42.3	LOS E	0.1	0.1	0.94	0.94	196.1	200.0	1.02
West: RoadName (W)												
P4	Full	150	158	42.5	LOS E	0.4	0.4	0.94	0.94	196.3	200.0	1.02
All Pedestrians		250	263	42.4	LOS E	0.4	0.4	0.94	0.94	196.2	200.0	1.02

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba \IR Response\P0053364_Aura Transport Masterplan_2041 Intersection Analysis_260430.sipx

PHASING SUMMARY

Site: [102PM] PM Peak (Intersection 102 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 96.0 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

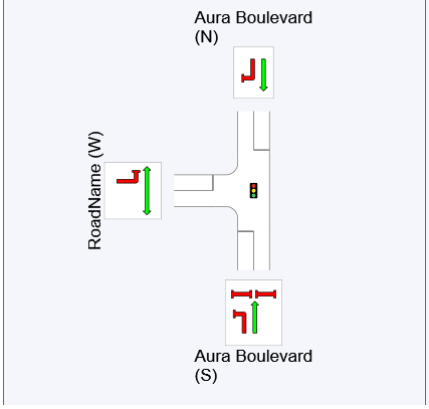
Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	31.8	0.0	13.7
Green Time (sec)	58.2	7.7	12.1
Phase Time (sec)	64.2	13.7	18.1
Phase Split	67%	14%	19%
Phase Frequency (%)	100.0	100.0	100.0

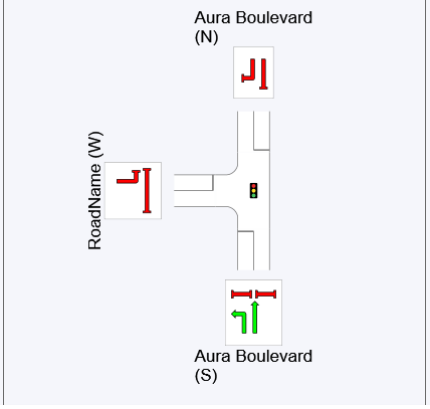
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence

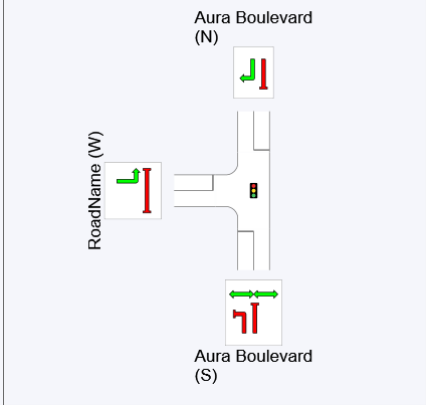
Phase A



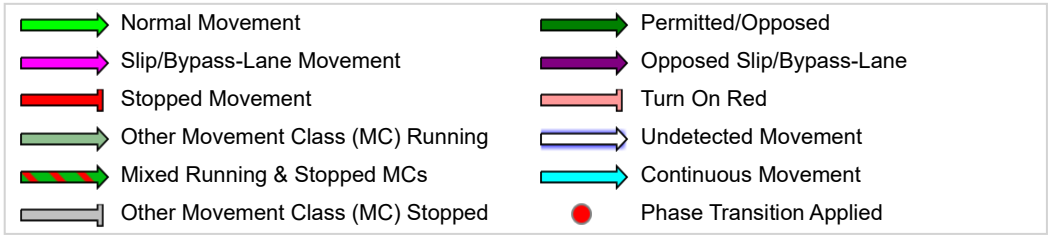
Phase B **REF**



Phase C



REF: Reference Phase
VAR: Variable Phase



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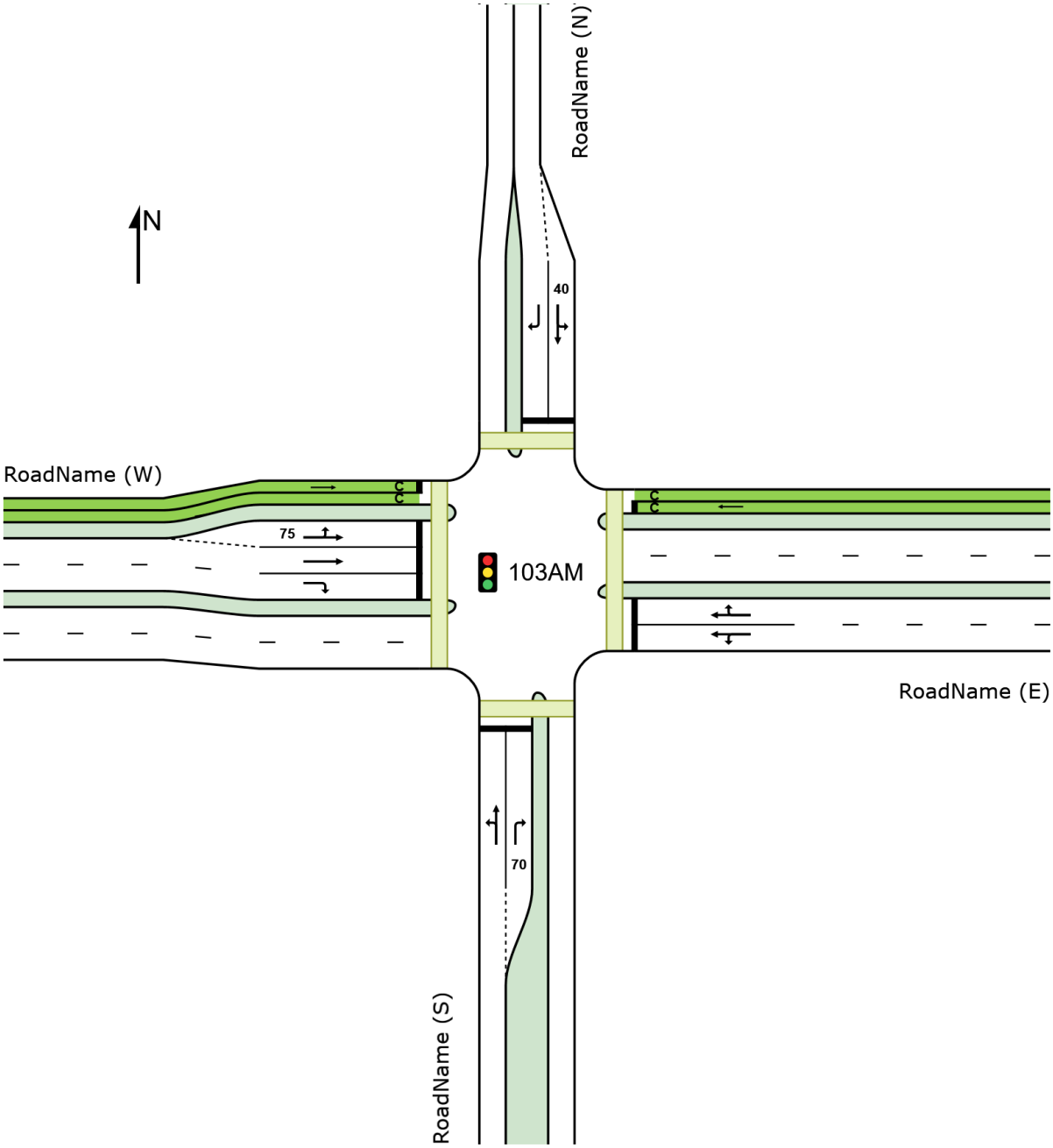
Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba\IR Response\P0053364_Aura Transport Masterplan_2041 Intersection Analysis_260430.sipx

SITE LAYOUT

Site: [103AM] AM Peak (Intersection 103 - 2041)

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

Site: [103AM] AM Peak (Intersection 103 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Phase Times)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	*0.256	50.5	LOS D	5.1	36.0	0.87	0.73	0.87	21.0
2	T1	All MCs	53	0.0	53	0.0	0.256	39.5	LOS D	5.1	36.0	0.87	0.73	0.87	20.8
3	R2	All MCs	138	0.0	138	0.0	*0.817	70.3	LOS E	8.7	61.2	1.00	0.93	1.24	15.7
Approach			243	0.0	243	0.0	0.817	59.4	LOS E	8.7	61.2	0.94	0.84	1.08	17.5
East: RoadName (E)															
4	L2	All MCs	205	0.0	205	0.0	0.878	73.4	LOS E	16.4	122.4	1.00	1.00	1.27	15.8
5	T1	All MCs	448	4.5	448	4.5	0.878	52.6	LOS D	25.8	180.4	0.99	0.98	1.17	16.4
6	R2	All MCs	53	0.0	53	0.0	*0.878	85.2	LOS F	25.8	180.4	1.00	1.03	1.19	15.5
Approach			706	2.8	706	2.8	0.878	61.1	LOS E	25.8	180.4	0.99	0.99	1.20	16.1
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.256	50.5	LOS D	5.1	36.0	0.87	0.73	0.87	18.6
8	T1	All MCs	53	0.0	53	0.0	0.256	39.5	LOS D	5.1	36.0	0.87	0.73	0.87	20.8
9	R2	All MCs	53	0.0	53	0.0	0.312	62.7	LOS E	3.0	21.0	0.97	0.75	0.97	14.8
Approach			158	0.0	158	0.0	0.312	50.9	LOS D	5.1	36.0	0.91	0.74	0.91	17.8
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	*0.348	43.3	LOS D	4.4	33.0	0.89	1.03	0.89	20.5
11	T1	All MCs	309	4.1	309	4.1	*0.348	24.2	LOS C	5.4	37.8	0.88	0.95	0.88	21.8
12	R2	All MCs	53	0.0	53	0.0	0.218	57.0	LOS E	2.8	19.7	0.93	0.74	0.93	18.1
Approach			415	3.0	415	3.0	0.348	30.8	LOS C	5.4	37.8	0.89	0.93	0.89	21.0
All Vehicles			1522	2.1	1522	2.1	0.878	51.5	LOS D	25.8	180.4	0.95	0.92	1.06	17.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: RoadName (S)												

P1	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
East: RoadName (E)												
P2	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: RoadName (N)												
P3	Full	100	105	26.0	LOS C	0.2	0.2	0.90	0.90	179.8	200.0	1.11
West: RoadName (W)												
P4	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians		350	368	46.3	LOS E	0.3	0.3	0.94	0.94	200.1	200.0	1.00

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [103AM] AM Peak (Intersection 103 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Phase Times)
Site Scenario: 1 | Local Volumes

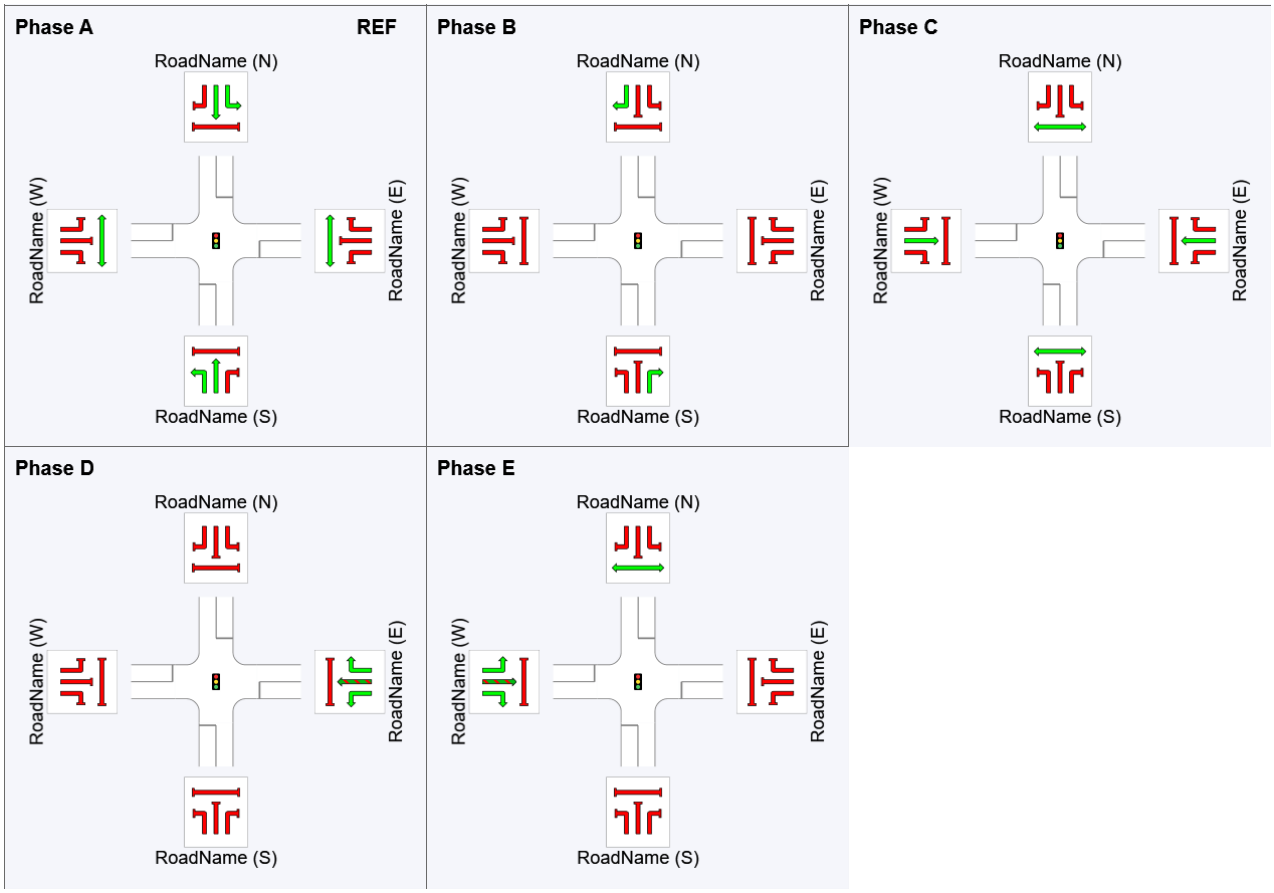
Timings based on settings in the Site Phasing & Timing dialog
Phase Times specified by the user
Phase Sequence: 2 Contraflow Phases - Import (2) - Copy
Input Phase Sequence: A, B, C, D, E
Output Phase Sequence: A, B, C, D, E
Reference Phase: Phase A

Phase Timing Summary

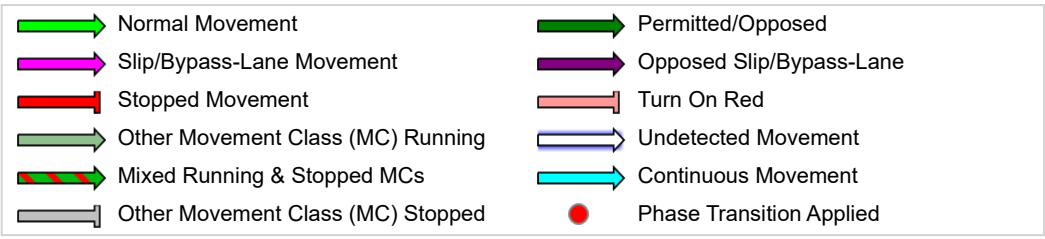
Phase	A	B	C	D	E
Phase Change Time (sec)	0.0	36.2	53.1	73.7	98.4
Green Time (sec)	30.2	10.9	14.6	18.7	15.6
Phase Time (sec)	36.2	16.9	20.6	24.7	21.6
Phase Split	30%	14%	17%	21%	18%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase



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MOVEMENT SUMMARY

Site: [103PM] PM Peak (Intersection 103 - 2041)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Phase Times)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	*0.256	50.5	LOS D	5.1	36.0	0.87	0.73	0.87	21.0
2	T1	All MCs	53	0.0	53	0.0	0.256	39.5	LOS D	5.1	36.0	0.87	0.73	0.87	20.8
3	R2	All MCs	115	0.0	115	0.0	*0.872	75.6	LOS E	7.6	53.0	1.00	0.97	1.37	14.9
Approach			220	0.0	220	0.0	0.872	61.0	LOS E	7.6	53.0	0.94	0.86	1.13	17.2
East: RoadName (E)															
4	L2	All MCs	255	0.0	255	0.0	*0.883	70.2	LOS E	17.0	120.6	1.00	0.98	1.27	15.6
5	T1	All MCs	134	3.1	134	3.1	0.883	42.6	LOS D	17.0	120.6	0.92	0.73	0.93	16.8
6	R2	All MCs	53	0.0	53	0.0	0.372	65.6	LOS E	6.7	47.2	0.92	0.76	0.92	17.5
Approach			441	1.0	441	1.0	0.883	61.3	LOS E	17.0	120.6	0.97	0.88	1.13	16.1
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.256	50.5	LOS D	5.1	36.0	0.87	0.73	0.87	18.6
8	T1	All MCs	53	0.0	53	0.0	0.256	39.5	LOS D	5.1	36.0	0.87	0.73	0.87	20.8
9	R2	All MCs	53	0.0	53	0.0	0.400	66.0	LOS E	3.1	21.7	0.99	0.75	0.99	14.2
Approach			158	0.0	158	0.0	0.400	52.0	LOS D	5.1	36.0	0.91	0.74	0.91	17.5
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	*0.224	34.8	LOS C	2.7	20.0	0.85	1.05	0.85	20.4
11	T1	All MCs	208	3.5	208	3.5	*0.224	25.5	LOS C	3.4	24.1	0.85	0.92	0.85	21.3
12	R2	All MCs	53	0.0	53	0.0	0.193	54.7	LOS D	2.7	19.2	0.92	0.74	0.92	18.6
Approach			314	2.3	314	2.3	0.224	32.0	LOS C	3.4	24.1	0.86	0.91	0.86	20.6
All Vehicles			1133	1.0	1133	1.0	0.883	51.8	LOS D	17.0	120.6	0.93	0.86	1.03	17.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: RoadName (S)												

P1	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
East: RoadName (E)												
P2	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: RoadName (N)												
P3	Full	100	105	25.5	LOS C	0.2	0.2	0.90	0.90	179.3	200.0	1.12
West: RoadName (W)												
P4	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians		350	368	46.1	LOS E	0.3	0.3	0.94	0.94	200.0	200.0	1.00

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba \IR Response\P0053364_Aura Transport Masterplan_2041 Intersection Analysis_260430.sipx

PHASING SUMMARY

Site: [103PM] PM Peak (Intersection 103 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Phase Times)
Site Scenario: 1 | Local Volumes

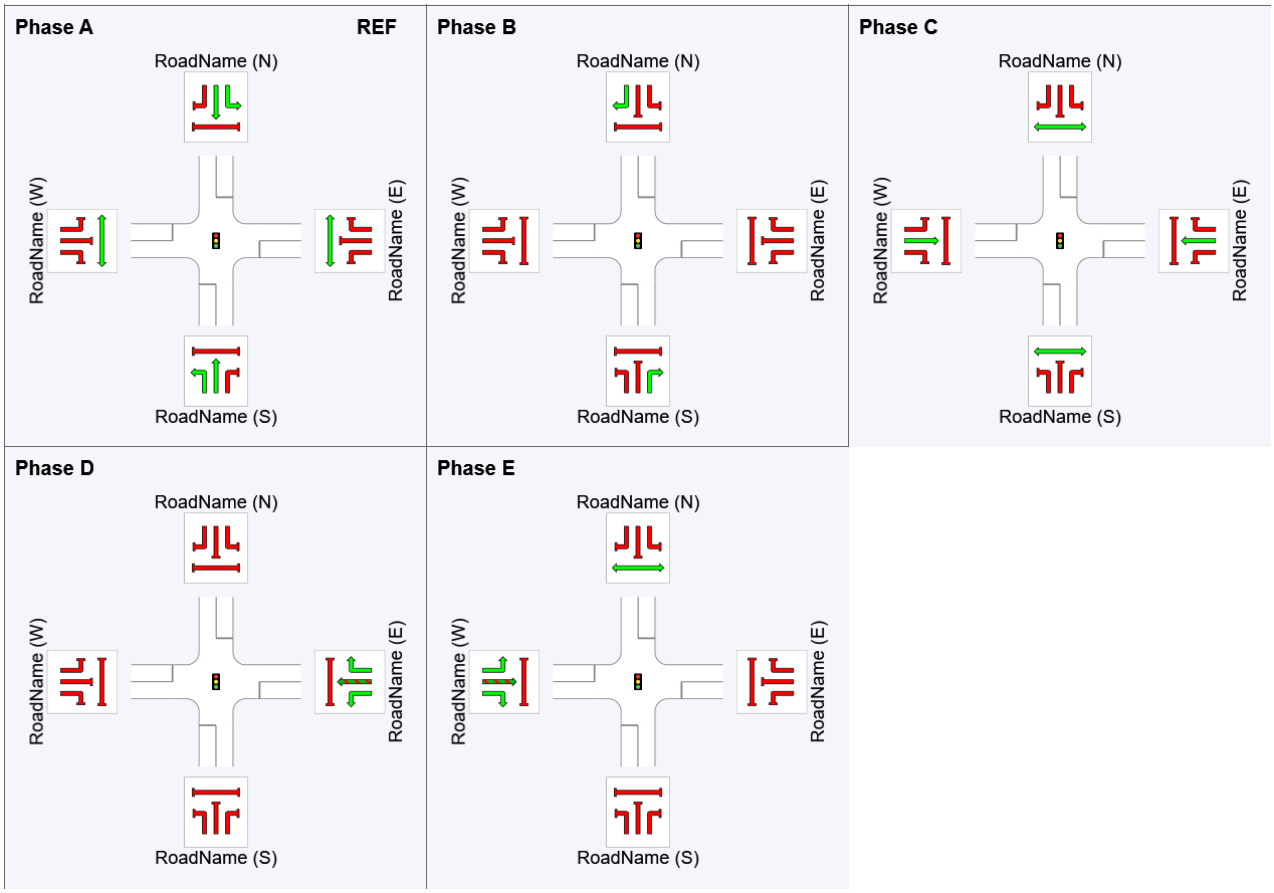
Timings based on settings in the Site Phasing & Timing dialog
Phase Times specified by the user
Phase Sequence: 2 Contraflow Phases - Import (2) - Copy
Input Phase Sequence: A, B, C, D, E
Output Phase Sequence: A, B, C, D, E
Reference Phase: Phase A

Phase Timing Summary

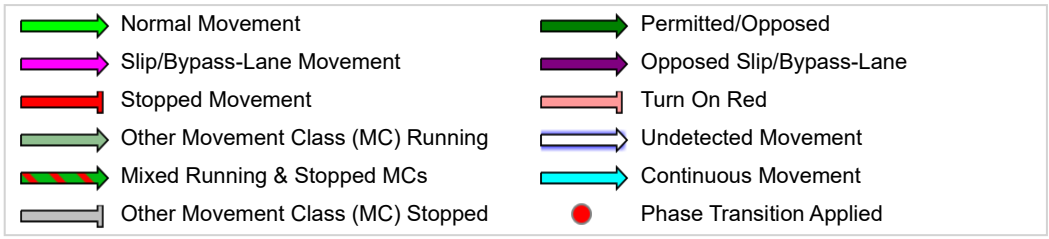
Phase	A	B	C	D	E
Phase Change Time (sec)	0.0	36.2	50.7	71.3	96.4
Green Time (sec)	30.2	8.5	14.6	19.1	17.6
Phase Time (sec)	36.2	14.5	20.6	25.1	23.6
Phase Split	30%	12%	17%	21%	20%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase



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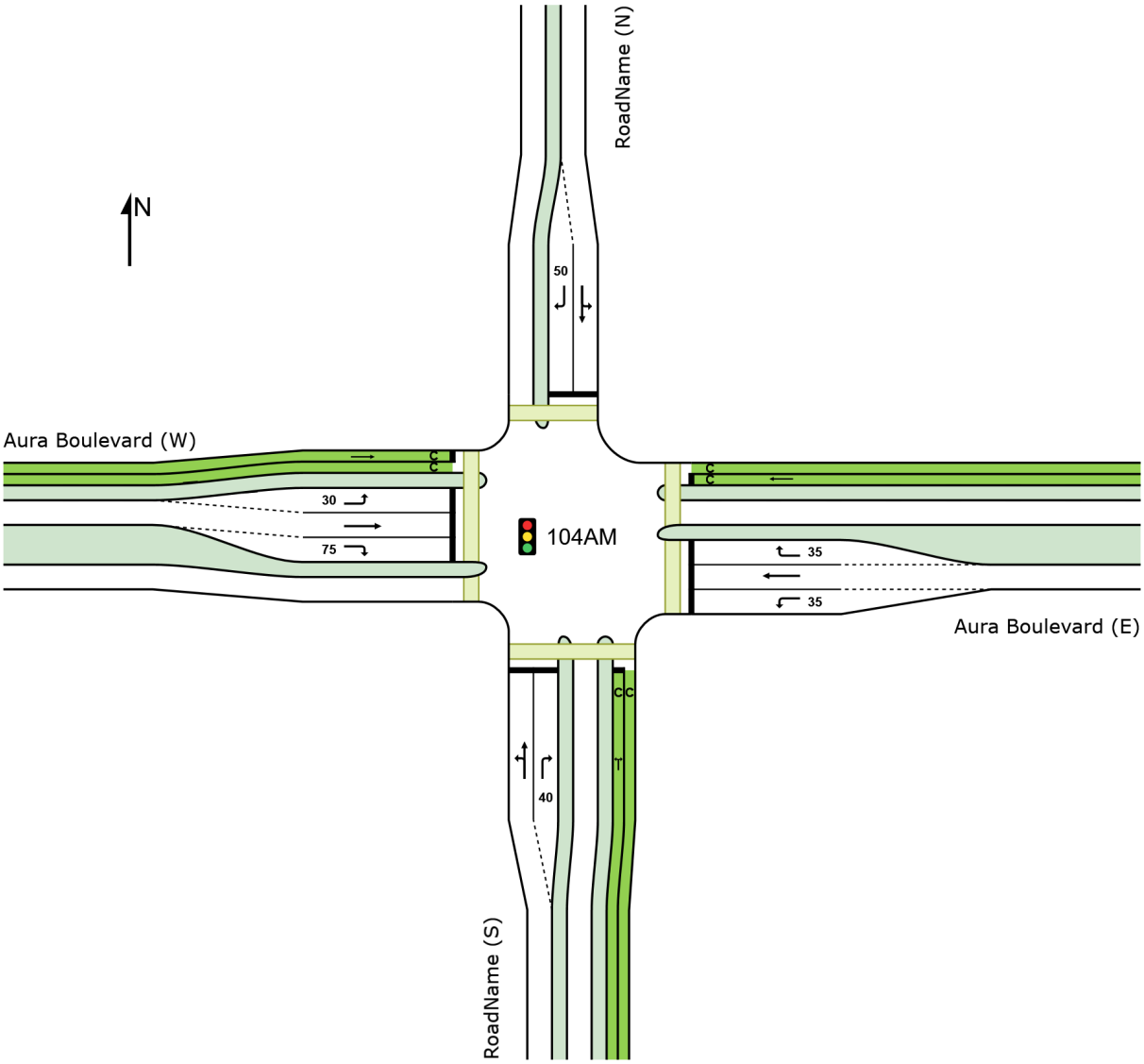
SITE LAYOUT

Site: [104AM] 104 - AM Peak (Intersection 104 - 2041)

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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MOVEMENT SUMMARY

Site: [104AM] 104 - AM Peak (Intersection 104 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	86	0.0	86	0.0	*0.530	62.0	LOS E	6.4	45.1	0.97	0.76	0.97	26.4
2	T1	All MCs	53	0.0	53	0.0	0.530	52.6	LOS D	6.4	45.1	0.99	0.79	0.99	30.6
3	R2	All MCs	79	0.0	79	0.0	0.190	52.9	LOS D	2.7	19.2	0.92	0.72	0.92	26.8
Approach			218	0.0	218	0.0	0.530	56.4	LOS E	6.4	45.1	0.96	0.75	0.96	27.5
East: Aura Boulevard (E)															
4	L2	All MCs	53	0.0	53	0.0	*0.086	34.9	LOS C	2.1	14.6	0.72	0.72	0.72	37.1
5	T1	All MCs	249	3.8	249	3.8	0.273	29.7	LOS C	7.9	57.4	0.75	0.61	0.75	35.4
6	R2	All MCs	53	0.0	53	0.0	0.416	66.5	LOS E	3.1	21.8	1.00	0.75	1.00	28.2
Approach			355	2.7	355	2.7	0.416	35.9	LOS D	7.9	57.4	0.78	0.65	0.78	34.3
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	*0.334	56.8	LOS E	5.5	38.7	0.93	0.76	0.93	31.9
8	T1	All MCs	53	0.0	53	0.0	0.334	45.4	LOS D	5.5	38.7	0.93	0.76	0.93	32.7
9	R2	All MCs	53	0.0	53	0.0	0.141	48.1	LOS D	2.5	17.8	0.86	0.73	0.86	33.0
Approach			158	0.0	158	0.0	0.334	50.1	LOS D	5.5	38.7	0.90	0.75	0.90	32.5
West: Aura Boulevard (W)															
10	L2	All MCs	53	0.0	53	0.0	0.243	74.9	LOS E	2.9	20.1	0.95	0.75	0.95	29.9
11	T1	All MCs	416	4.3	416	4.3	0.546	46.2	LOS D	16.6	120.8	0.83	0.71	0.83	36.4
12	R2	All MCs	53	0.0	53	0.0	*0.416	66.5	LOS E	3.1	21.8	1.00	0.75	1.00	28.3
Approach			521	3.4	521	3.4	0.546	51.1	LOS D	16.6	120.8	0.86	0.72	0.86	30.9
All Vehicles			1252	2.2	1252	2.2	0.546	47.6	LOS D	16.6	120.8	0.86	0.71	0.86	31.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: RoadName (S)											
P1 Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
East: Aura Boulevard (E)											
P21 Stage 1	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P22 Stage 2	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
North: RoadName (N)											
P3 Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
West: Aura Boulevard (W)											
P41 Stage 1	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P42 Stage 2	50	53	24.6	LOS C	0.1	0.1	0.90	0.90	178.5	200.0	1.12
All Pedestrians	400	421	50.6	LOS E	0.3	0.3	0.95	0.95	204.5	200.0	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [104AM] 104 - AM Peak (Intersection 104 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Site Scenario: 1 | Local Volumes

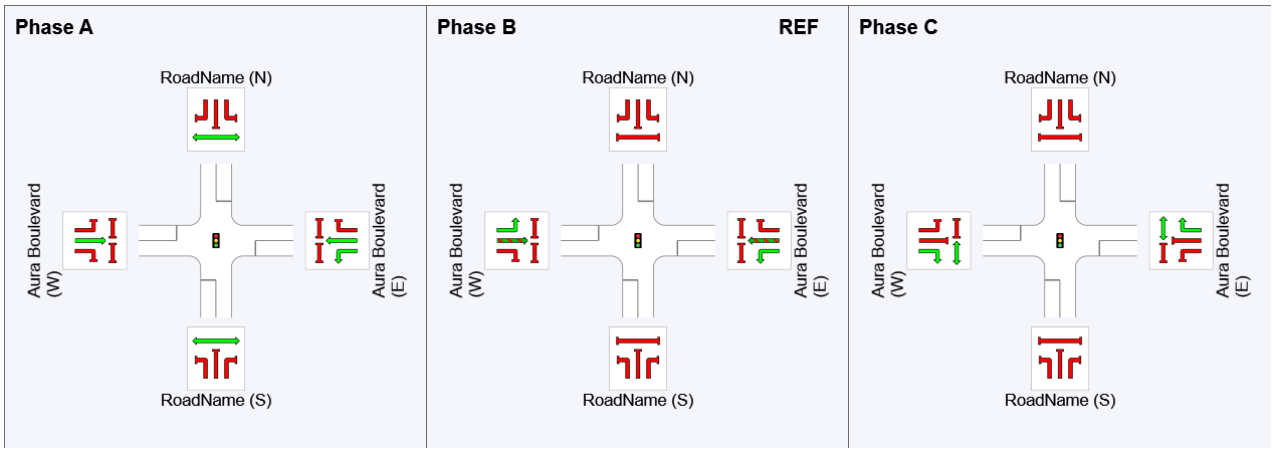
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: 104 - Sequence
Input Phase Sequence: A, B, C, C1*, E, F
Output Phase Sequence: A, B, C, E, F
Reference Phase: Phase B
(* Variable Phase)

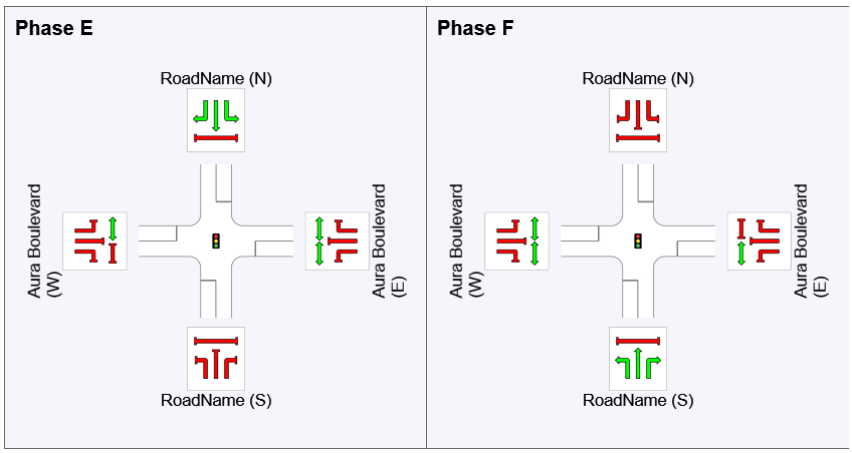
Phase Timing Summary

Phase	A	B	C	E	F
Phase Change Time (sec)	88.2	0.0	20.0	34.2	64.3
Green Time (sec)	25.8	14.0	8.2	24.2	17.9
Phase Time (sec)	31.8	20.0	14.2	30.2	23.9
Phase Split	26%	17%	12%	25%	20%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0

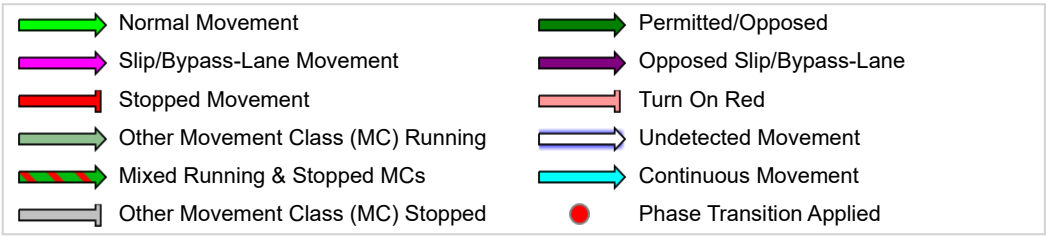
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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MOVEMENT SUMMARY

Site: [104PM] 104 - PM Peak (Intersection 104 - 2041)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	79	0.0	79	0.0	*0.522	62.6	LOS E	6.0	42.3	0.98	0.75	0.98	26.0
2	T1	All MCs	53	0.0	53	0.0	0.522	53.5	LOS D	6.0	42.3	0.99	0.78	0.99	30.4
3	R2	All MCs	79	0.0	79	0.0	0.200	53.8	LOS D	2.8	19.4	0.93	0.73	0.93	26.7
Approach			211	0.0	211	0.0	0.522	57.0	LOS E	6.0	42.3	0.96	0.75	0.96	27.3
East: Aura Boulevard (E)															
4	L2	All MCs	53	0.0	53	0.0	*0.074	24.3	LOS C	1.3	9.4	0.66	1.19	0.66	34.0
5	T1	All MCs	456	4.4	456	4.4	*0.504	22.1	LOS C	11.5	83.7	0.79	0.96	0.79	33.6
6	R2	All MCs	53	0.0	53	0.0	0.108	45.9	LOS D	2.3	16.3	0.79	0.73	0.79	34.9
Approach			561	3.6	561	3.6	0.504	24.5	LOS C	11.5	83.7	0.78	0.96	0.78	32.5
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.522	50.0	LOS D	6.0	42.3	0.99	0.78	0.99	29.8
8	T1	All MCs	53	0.0	53	0.0	*0.522	68.7	LOS E	6.0	42.3	0.99	0.78	0.99	30.5
9	R2	All MCs	53	0.0	53	0.0	0.314	62.8	LOS E	3.0	21.0	0.97	0.75	0.97	29.1
Approach			158	0.0	158	0.0	0.522	60.5	LOS E	6.0	42.3	0.99	0.77	0.99	29.8
West: Aura Boulevard (W)															
10	L2	All MCs	53	0.0	53	0.0	0.283	76.2	LOS E	3.0	20.7	0.96	0.75	0.96	29.3
11	T1	All MCs	323	4.2	323	4.2	0.509	50.7	LOS D	13.0	95.3	0.88	0.73	0.88	33.6
12	R2	All MCs	53	0.0	53	0.0	*0.339	63.8	LOS E	3.0	21.2	0.98	0.75	0.98	28.9
Approach			428	3.2	428	3.2	0.509	55.5	LOS E	13.0	95.3	0.90	0.73	0.90	29.4
All Vehicles			1358	2.5	1358	2.5	0.522	43.5	LOS D	13.0	95.3	0.87	0.83	0.87	30.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: RoadName (S)											
P1 Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
East: Aura Boulevard (E)											
P21 Stage 1	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P22 Stage 2	50	53	28.3	LOS C	0.1	0.1	0.90	0.90	182.2	200.0	1.10
North: RoadName (N)											
P3 Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
West: Aura Boulevard (W)											
P41 Stage 1	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P42 Stage 2	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians	400	421	47.3	LOS E	0.3	0.3	0.94	0.94	201.2	200.0	0.99

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [104PM] 104 - PM Peak (Intersection 104 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Site Scenario: 1 | Local Volumes

Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: 104 - Sequence
Input Phase Sequence: A, B, C, C1*, E, F
Output Phase Sequence: A, B, C, C1*, E, F
Reference Phase: Phase B
(* Variable Phase)

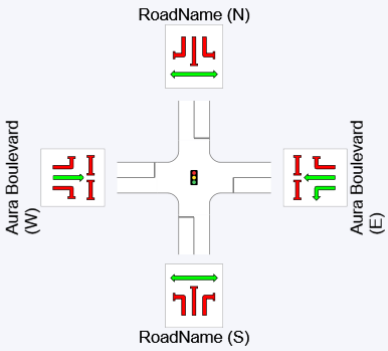
Phase Timing Summary

Phase	A	B	C	C1	E	F
Phase Change Time (sec)	95.2	0.0	18.0	34.0	55.4	72.2
Green Time (sec)	18.8	12.0	10.0	15.4	10.8	17.0
Phase Time (sec)	24.8	18.0	16.0	21.4	16.8	23.0
Phase Split	21%	15%	13%	18%	14%	19%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0	100.0

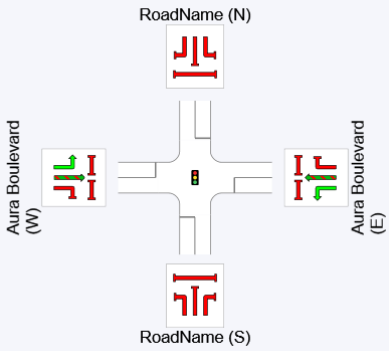
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence

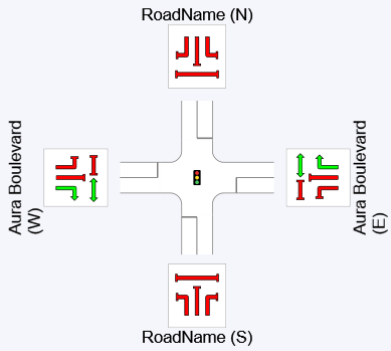
Phase A

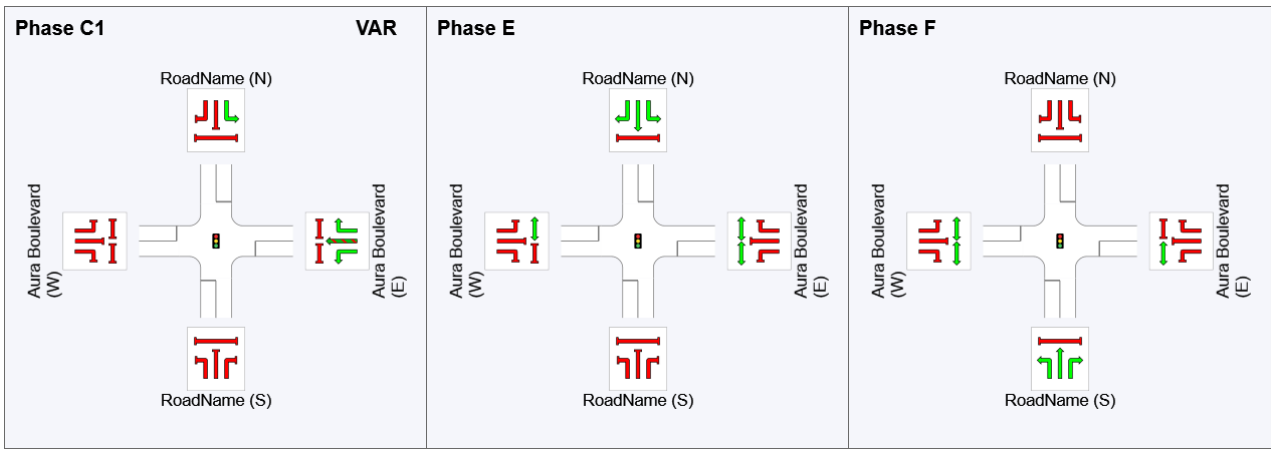


Phase B **REF**

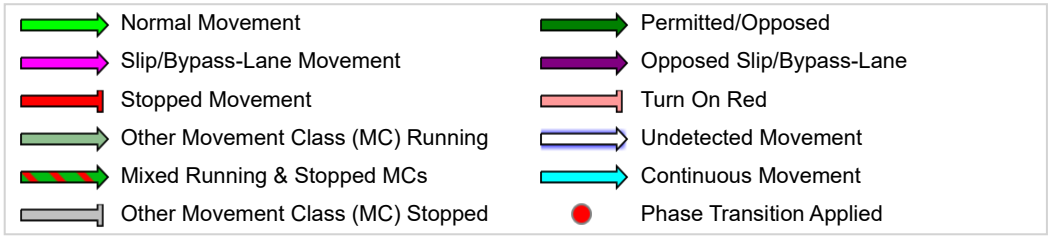


Phase C





REF: Reference Phase
VAR: Variable Phase



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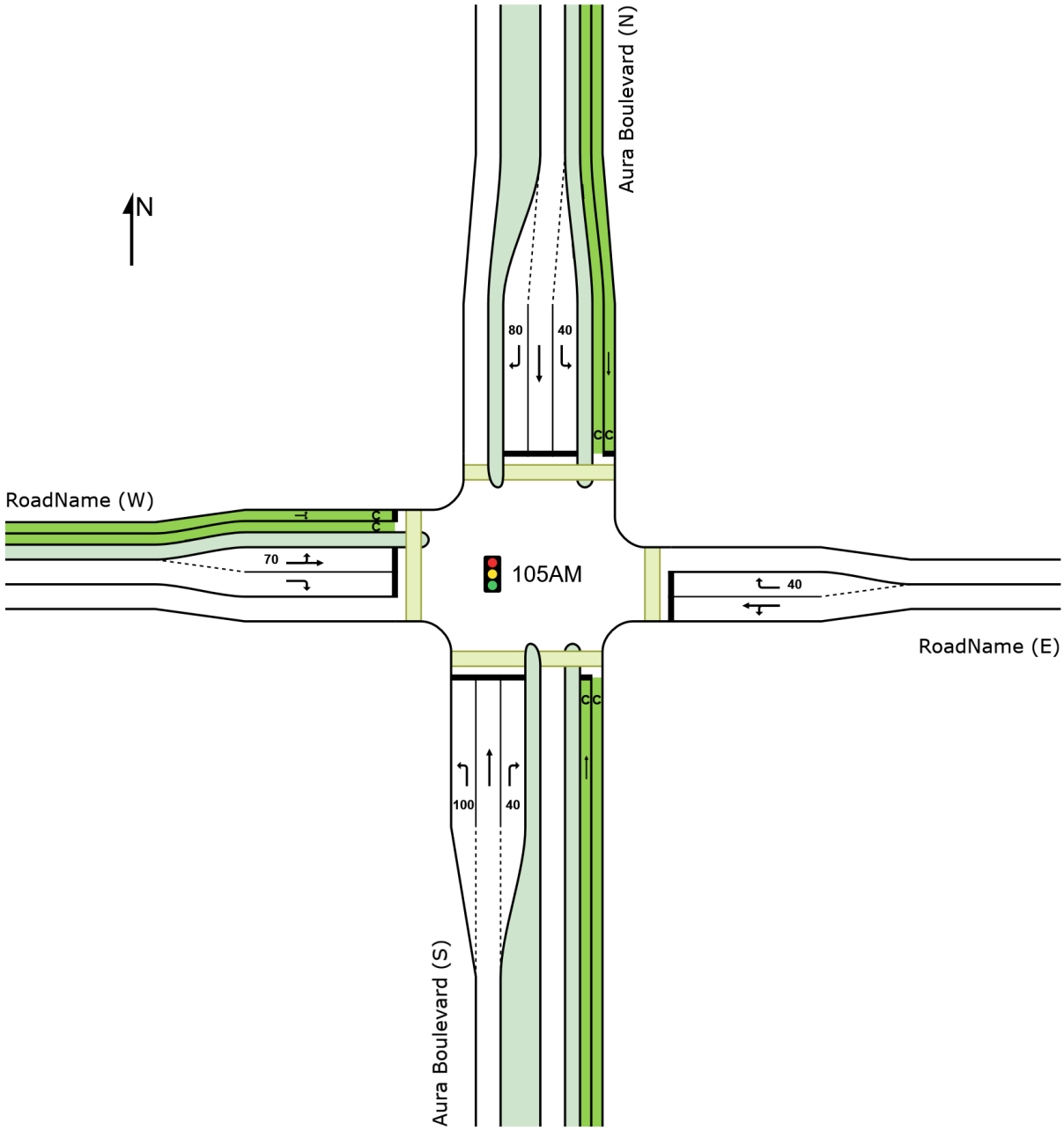
SITE LAYOUT

Site: [105AM] 105 - AM Peak (Intersection 105 - 2041)

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

Site: [105AM] 105 - AM Peak (Intersection 105 - 2041)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Aura Boulevard (S)															
1	L2	All MCs	144	0.0	144	0.0	*0.367	49.4	LOS D	7.3	50.9	0.90	0.79	0.90	32.4
2	T1	All MCs	159	3.3	159	3.3	0.192	38.2	LOS D	4.6	33.9	0.83	0.64	0.83	30.7
3	R2	All MCs	53	0.0	53	0.0	0.425	66.8	LOS E	3.1	21.9	1.00	0.75	1.00	28.1
Approach			356	1.5	356	1.5	0.425	47.0	LOS D	7.3	50.9	0.88	0.72	0.88	30.9
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	*0.457	63.1	LOS E	5.9	41.3	0.98	0.78	0.98	30.4
5	T1	All MCs	53	0.0	53	0.0	0.457	51.3	LOS D	5.9	41.3	0.98	0.78	0.98	31.0
6	R2	All MCs	53	0.0	53	0.0	0.180	53.4	LOS D	2.7	18.9	0.90	0.74	0.90	31.5
Approach			158	0.0	158	0.0	0.457	55.9	LOS E	5.9	41.3	0.95	0.76	0.95	30.9
North: Aura Boulevard (N)															
7	L2	All MCs	53	0.0	53	0.0	0.283	61.2	LOS E	3.0	20.7	0.96	0.75	0.96	29.3
8	T1	All MCs	167	3.1	167	3.1	0.207	38.1	LOS D	5.0	36.6	0.83	0.64	0.83	31.0
9	R2	All MCs	53	0.0	53	0.0	*0.425	66.8	LOS E	3.1	21.9	1.00	0.75	1.00	28.2
Approach			273	1.9	273	1.9	0.425	48.1	LOS D	5.0	36.6	0.89	0.68	0.89	30.1
West: RoadName (W)															
10	L2	All MCs	79	0.0	79	0.0	0.247	48.9	LOS D	5.1	35.6	0.85	0.70	0.85	29.1
11	T1	All MCs	53	0.0	53	0.0	0.247	37.2	LOS D	5.1	35.6	0.86	0.73	0.86	34.9
12	R2	All MCs	267	0.0	267	0.0	*0.457	43.0	LOS D	11.6	81.4	0.87	0.79	0.87	32.6
Approach			399	0.0	399	0.0	0.457	43.4	LOS D	11.6	81.4	0.86	0.77	0.86	32.1
All Vehicles			1185	0.9	1185	0.9	0.457	47.2	LOS D	11.6	81.4	0.89	0.73	0.89	31.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: Aura Boulevard (S)											
P11 Stage 1	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P12 Stage 2	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
East: RoadName (E)											
P2 Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: Aura Boulevard (N)											
P31 Stage 1	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P32 Stage 2	50	53	24.6	LOS C	0.1	0.1	0.90	0.90	178.4	200.0	1.12
West: RoadName (W)											
P4 Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians	400	421	50.6	LOS E	0.3	0.3	0.95	0.95	204.5	200.0	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [105AM] 105 - AM Peak (Intersection 105 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Site Scenario: 1 | Local Volumes

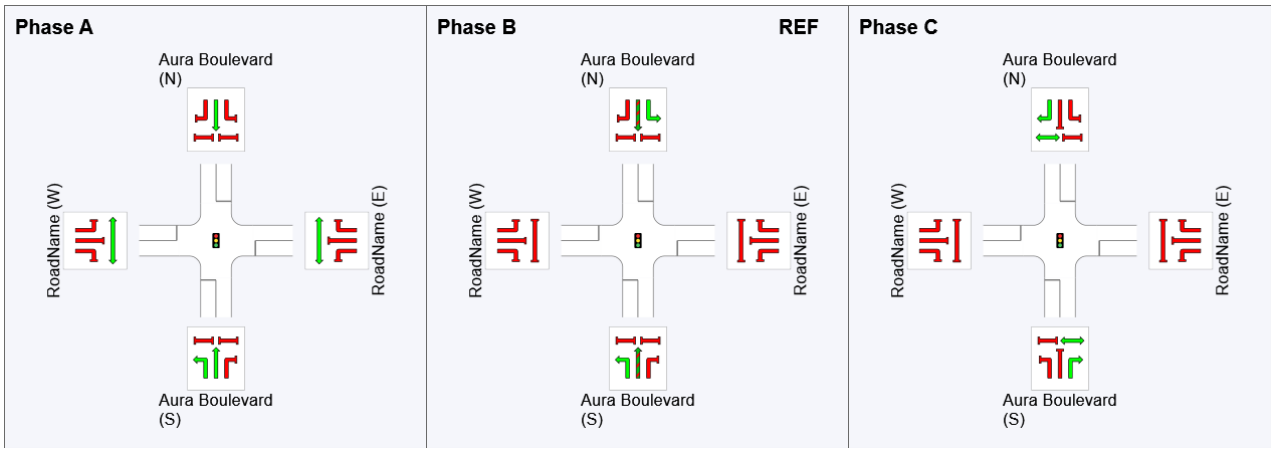
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: 105 - Sequence
Input Phase Sequence: A, B, C, C1*, E, F
Output Phase Sequence: A, B, C, E, F
Reference Phase: Phase B
(* Variable Phase)

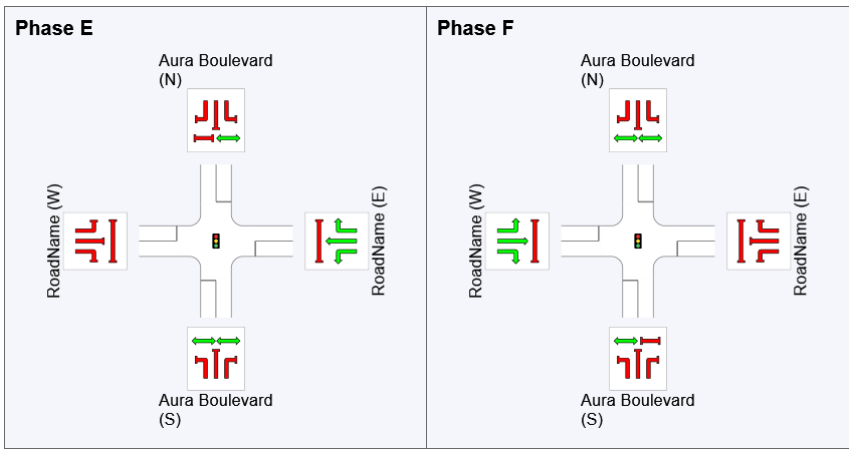
Phase Timing Summary

Phase	A	B	C	E	F
Phase Change Time (sec)	96.9	0.0	18.0	32.0	56.8
Green Time (sec)	17.1	12.0	8.0	18.8	34.1
Phase Time (sec)	23.1	18.0	14.0	24.8	40.1
Phase Split	19%	15%	12%	21%	33%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0

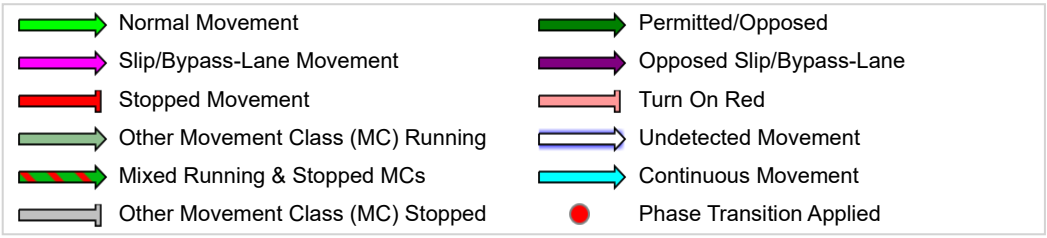
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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Organisation: URBIS | Licence: NETWORK / 1PC | Processed: Tuesday, 12 May 2026 11:24:43 AM
Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba\IR Response\P0053364_Aura Transport Masterplan_2041 Intersection Analysis_260430.sipx

MOVEMENT SUMMARY

Site: [105PM] 105 - PM Peak (Intersection 105 - 2041)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Aura Boulevard (S)															
1	L2	All MCs	320	0.0	320	0.0	*0.521	40.4	LOS D	15.1	105.9	0.86	0.82	0.86	35.2
2	T1	All MCs	147	2.9	147	2.9	0.122	31.2	LOS C	3.4	24.6	0.74	0.57	0.74	32.1
3	R2	All MCs	53	0.0	53	0.0	0.425	66.8	LOS E	3.1	21.9	1.00	0.75	1.00	28.1
Approach			520	0.8	520	0.8	0.521	40.5	LOS D	15.1	105.9	0.84	0.74	0.84	33.4
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	*0.557	66.5	LOS E	6.1	42.8	1.00	0.78	1.00	29.5
5	T1	All MCs	53	0.0	53	0.0	0.557	54.5	LOS D	6.1	42.8	1.00	0.78	1.00	30.2
6	R2	All MCs	53	0.0	53	0.0	0.210	56.3	LOS E	2.8	19.6	0.93	0.74	0.93	30.7
Approach			158	0.0	158	0.0	0.557	59.1	LOS E	6.1	42.8	0.97	0.77	0.97	30.1
North: Aura Boulevard (N)															
7	L2	All MCs	53	0.0	53	0.0	0.134	46.9	LOS D	2.5	17.5	0.85	0.74	0.85	33.1
8	T1	All MCs	163	3.2	163	3.2	0.142	30.6	LOS C	4.0	29.0	0.73	0.57	0.73	32.9
9	R2	All MCs	53	0.0	53	0.0	*0.425	66.8	LOS E	3.1	21.9	1.00	0.75	1.00	28.2
Approach			268	2.0	268	2.0	0.425	40.9	LOS D	4.0	29.0	0.81	0.64	0.81	31.9
West: RoadName (W)															
10	L2	All MCs	79	0.0	79	0.0	*0.436	61.2	LOS E	5.9	41.0	0.95	0.75	0.95	26.6
11	T1	All MCs	53	0.0	53	0.0	0.436	48.8	LOS D	5.9	41.0	0.97	0.77	0.97	31.3
12	R2	All MCs	217	0.0	217	0.0	0.549	53.1	LOS D	10.3	71.9	0.95	0.80	0.95	29.6
Approach			348	0.0	348	0.0	0.549	54.3	LOS D	10.3	71.9	0.96	0.78	0.96	29.1
All Vehicles			1295	0.7	1295	0.7	0.557	46.5	LOS D	15.1	105.9	0.88	0.73	0.88	31.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: Aura Boulevard (S)											
P11 Stage 1	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P12 Stage 2	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
East: RoadName (E)											
P2 Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: Aura Boulevard (N)											
P31 Stage 1	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P32 Stage 2	50	53	25.1	LOS C	0.1	0.1	0.90	0.90	178.9	200.0	1.12
West: RoadName (W)											
P4 Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians	400	421	50.7	LOS E	0.3	0.3	0.95	0.95	204.5	200.0	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [105PM] 105 - PM Peak (Intersection 105 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Cycle Time)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Site Scenario: 1 | Local Volumes

Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: 105 - Sequence
Input Phase Sequence: A, B, C, C1*, E, F
Output Phase Sequence: A, B, C, E, F
Reference Phase: Phase B
(* Variable Phase)

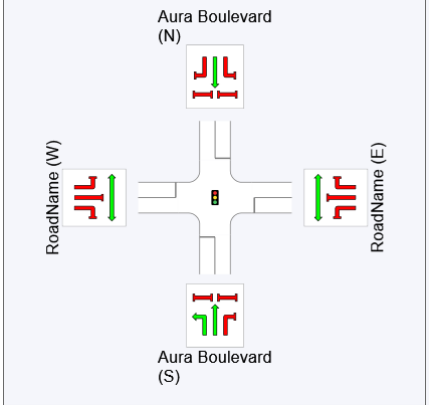
Phase Timing Summary

Phase	A	B	C	E	F
Phase Change Time (sec)	96.1	0.0	31.4	45.4	67.6
Green Time (sec)	17.9	25.4	8.0	16.2	22.4
Phase Time (sec)	23.9	31.4	14.0	22.2	28.4
Phase Split	20%	26%	12%	19%	24%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0

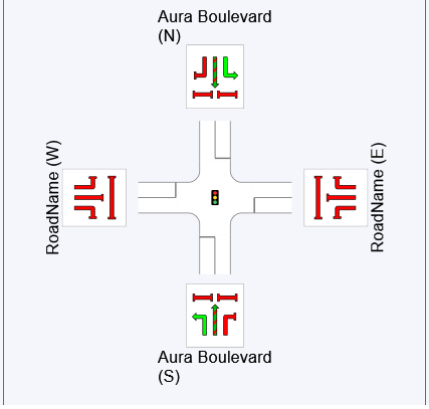
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence

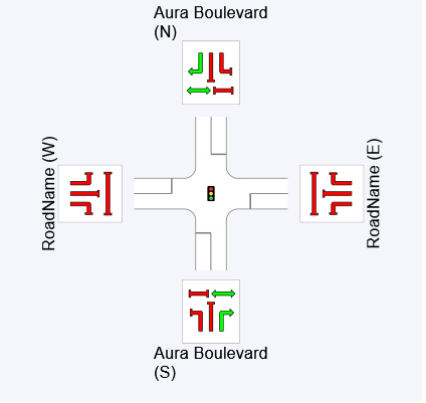
Phase A

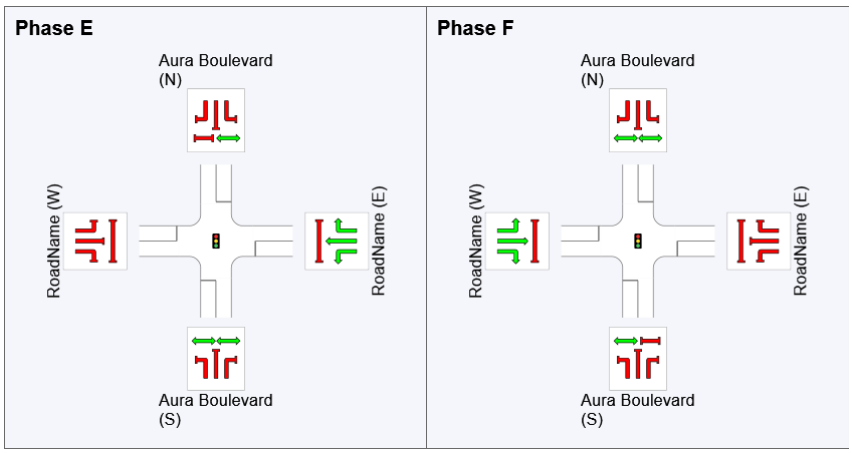


Phase B **REF**

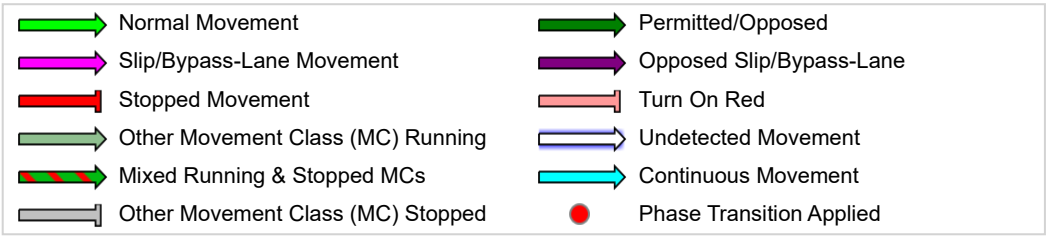


Phase C





REF: Reference Phase
VAR: Variable Phase



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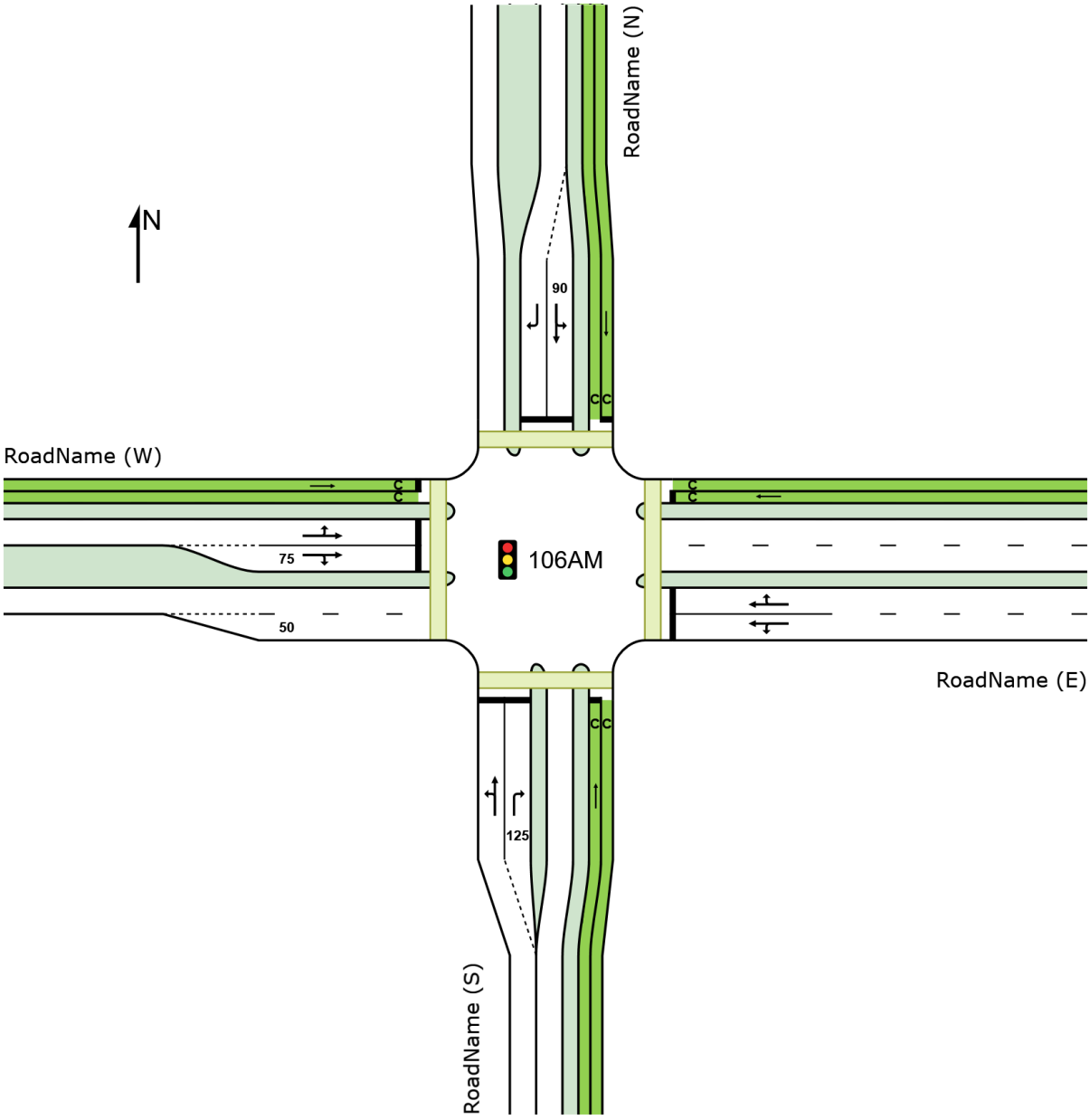
Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba\IR Response\P0053364_Aura Transport Masterplan_2041 Intersection Analysis_260430.sipx

SITE LAYOUT

Site: [106AM] AM Peak (Intersection 106 - 2041)

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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MOVEMENT SUMMARY

Site: [106AM] AM Peak (Intersection 106 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Phase Times)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	*0.747	86.8	LOS F	6.5	45.8	1.00	0.87	1.17	19.9
2	T1	All MCs	105	0.0	105	0.0	0.747	44.8	LOS D	6.5	45.8	0.93	0.75	1.01	16.1
3	R2	All MCs	56	0.0	56	0.0	*0.515	68.6	LOS E	3.4	23.7	1.00	0.76	1.00	15.9
Approach			214	0.0	214	0.0	0.747	61.3	LOS E	6.5	45.8	0.97	0.78	1.05	17.1
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	*0.196	29.5	LOS C	1.9	14.9	0.84	1.08	0.84	22.2
5	T1	All MCs	236	4.0	236	4.0	*0.415	21.7	LOS C	7.3	50.9	0.87	0.94	0.87	25.4
6	R2	All MCs	53	0.0	53	0.0	0.415	46.1	LOS D	7.3	50.9	0.86	1.02	0.86	22.7
Approach			341	2.8	341	2.8	0.415	26.7	LOS C	7.3	50.9	0.86	0.97	0.86	24.6
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.747	86.3	LOS F	6.5	45.8	1.00	0.87	1.17	14.3
8	T1	All MCs	105	0.0	105	0.0	0.747	44.8	LOS D	6.5	45.8	0.93	0.75	1.01	16.1
9	R2	All MCs	53	0.0	53	0.0	0.486	68.4	LOS E	3.2	22.3	1.00	0.75	1.00	18.2
Approach			211	0.0	211	0.0	0.747	61.1	LOS E	6.5	45.8	0.96	0.78	1.05	16.2
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	*0.832	98.8	LOS F	12.4	91.0	1.00	0.97	1.22	18.9
11	T1	All MCs	291	4.0	291	4.0	0.832	47.7	LOS D	14.3	99.8	0.98	0.91	1.15	19.5
12	R2	All MCs	134	0.0	134	0.0	0.832	77.9	LOS E	14.3	99.8	1.00	0.97	1.19	20.7
Approach			477	2.4	477	2.4	0.832	61.8	LOS E	14.3	99.8	0.99	0.93	1.17	19.8
All Vehicles			1242	1.7	1242	1.7	0.832	51.9	LOS D	14.3	99.8	0.95	0.89	1.04	19.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: RoadName (S)												

P1	Full	100	105	26.8	LOS C	0.2	0.2	0.90	0.90	180.7	200.0	1.11
East: RoadName (E)												
P2	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: RoadName (N)												
P3	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
West: RoadName (W)												
P4	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians		400	421	47.5	LOS E	0.3	0.3	0.94	0.94	201.3	200.0	0.99

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba \IR Response\P0053364_Aura Transport Masterplan_2041 Intersection Analysis_260430.sipx

PHASING SUMMARY

Site: [106AM] AM Peak (Intersection 106 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Phase Times)
Site Scenario: 1 | Local Volumes

Timings based on settings in the Site Phasing & Timing dialog
Phase Times specified by the user
Phase Sequence: Four-Phase Split Phasing
Input Phase Sequence: A, B, C, D, E, F
Output Phase Sequence: A, B, C, D, E, F
Reference Phase: Phase A

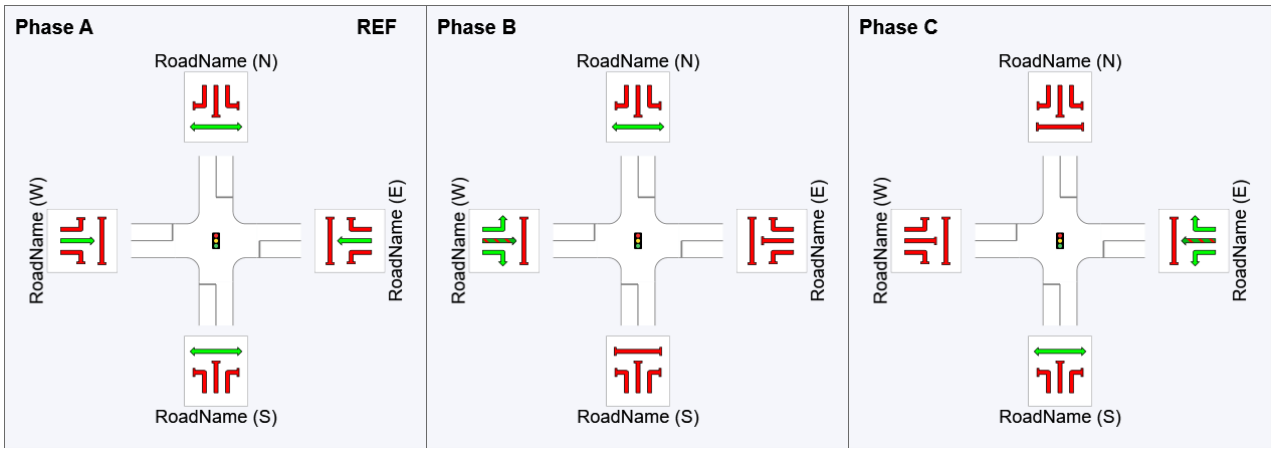
Phase Timing Summary

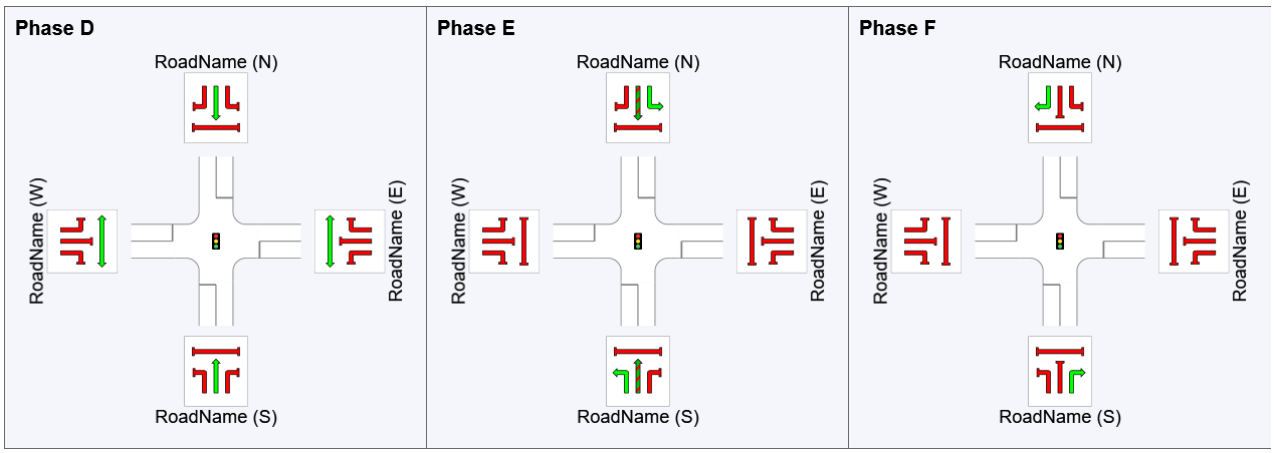
Phase	A	B	C	D	E	F
Phase Change Time (sec)	0.0	24.8	46.8	67.7	94.0	107.0
Green Time (sec)	18.8	16.0	14.9	21.5	7.0	7.0
Phase Time (sec)	24.8	22.0	19.7	27.5	13.0	13.0
Phase Split	21%	18%	16%	23%	11%	11%
Phase Frequency (%)	100.0	100.0	79.6[2]	100.0	100.0	100.0

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

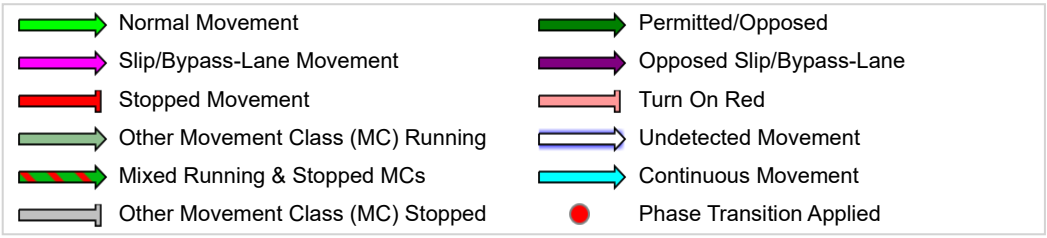
2 Phase Frequency is implied by a Phase Time specified by the user that is less than the Required Movement Time.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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MOVEMENT SUMMARY

Site: [106PM] PM Peak (Intersection 106 - 2041)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Phase Times)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	*0.747	86.9	LOS F	6.5	45.8	1.00	0.87	1.17	19.9
2	T1	All MCs	105	0.0	105	0.0	0.747	44.8	LOS D	6.5	45.8	0.93	0.75	1.01	16.1
3	R2	All MCs	53	0.0	53	0.0	0.479	68.3	LOS E	3.2	22.2	1.00	0.75	1.00	16.0
Approach			211	0.0	211	0.0	0.747	61.2	LOS E	6.5	45.8	0.96	0.78	1.05	17.1
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	*0.203	30.1	LOS C	2.0	15.8	0.84	1.08	0.84	22.3
5	T1	All MCs	279	4.2	279	4.2	*0.490	21.5	LOS C	8.8	61.8	0.88	0.95	0.88	25.8
6	R2	All MCs	53	0.0	53	0.0	0.490	49.0	LOS D	8.8	61.8	0.89	1.01	0.89	22.5
Approach			384	3.0	384	3.0	0.490	26.5	LOS C	8.8	61.8	0.88	0.97	0.88	24.9
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.747	86.3	LOS F	6.5	45.8	1.00	0.87	1.17	14.3
8	T1	All MCs	105	0.0	105	0.0	0.747	44.8	LOS D	6.5	45.8	0.93	0.75	1.01	16.1
9	R2	All MCs	53	0.0	53	0.0	*0.479	68.3	LOS E	3.2	22.2	1.00	0.75	1.00	18.2
Approach			211	0.0	211	0.0	0.747	61.0	LOS E	6.5	45.8	0.96	0.78	1.05	16.2
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	*0.506	76.6	LOS E	4.9	36.8	0.99	0.77	0.99	19.2
11	T1	All MCs	191	3.9	191	3.9	0.506	41.1	LOS D	8.7	60.7	0.94	0.74	0.94	20.7
12	R2	All MCs	53	0.0	53	0.0	0.506	75.4	LOS E	8.7	60.7	0.96	0.79	0.96	23.4
Approach			296	2.5	296	2.5	0.506	53.5	LOS D	8.7	60.7	0.96	0.76	0.96	20.9
All Vehicles			1101	1.7	1101	1.7	0.747	47.0	LOS D	8.8	61.8	0.93	0.84	0.96	20.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: RoadName (S)												

P1	Full	100	105	26.9	LOS C	0.2	0.2	0.90	0.90	180.7	200.0	1.11
East: RoadName (E)												
P2	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: RoadName (N)												
P3	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
West: RoadName (W)												
P4	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians		400	421	47.5	LOS E	0.3	0.3	0.94	0.94	201.4	200.0	0.99

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Organisation: URBIS | Licence: NETWORK / 1PC | Processed: Wednesday, 13 May 2026 11:24:46 AM
Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba \IR Response\P0053364_Aura Transport Masterplan_2041 Intersection Analysis_260430.sipx

PHASING SUMMARY

Site: [106PM] PM Peak (Intersection 106 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Phase Times)
Site Scenario: 1 | Local Volumes

Timings based on settings in the Site Phasing & Timing dialog
Phase Times specified by the user
Phase Sequence: Four-Phase Split Phasing
Input Phase Sequence: A, B, C, D, E, F
Output Phase Sequence: A, B, C, D, E, F
Reference Phase: Phase A

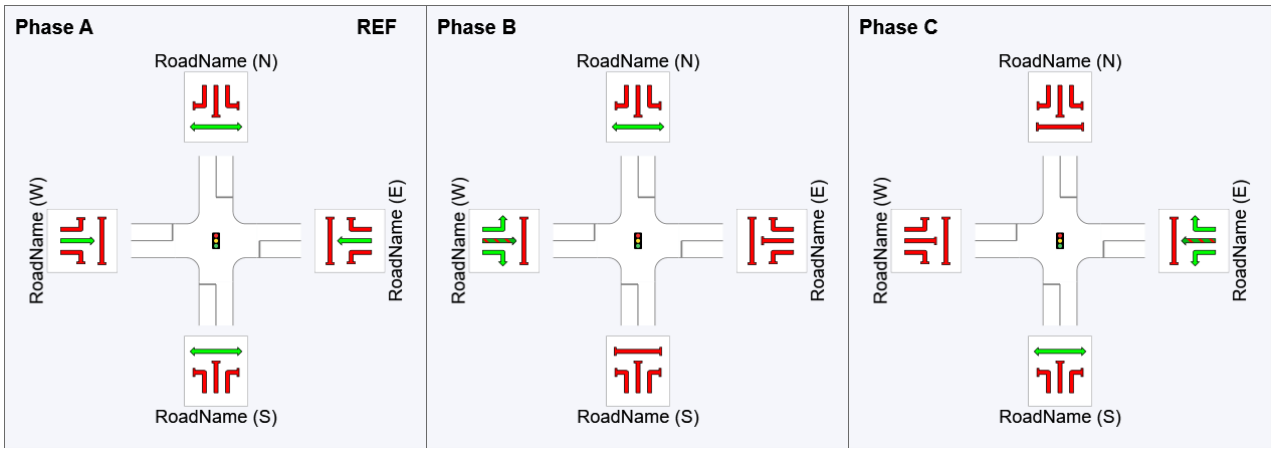
Phase Timing Summary

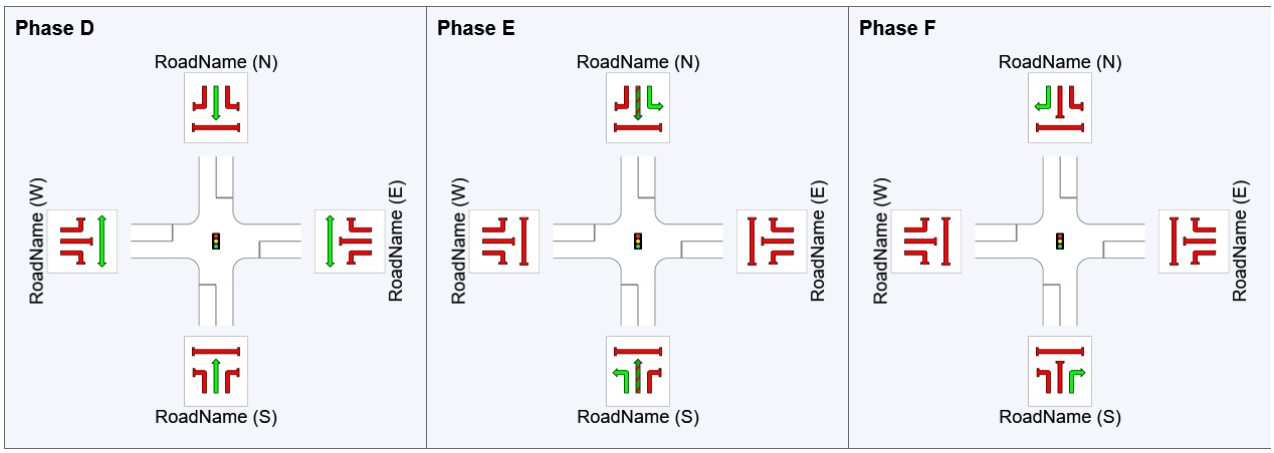
Phase	A	B	C	D	E	F
Phase Change Time (sec)	0.0	24.8	46.7	67.6	93.9	106.9
Green Time (sec)	18.8	15.9	14.9	21.5	7.0	7.1
Phase Time (sec)	24.8	21.9	19.7	27.5	13.0	13.1
Phase Split	21%	18%	16%	23%	11%	11%
Phase Frequency (%)	100.0	100.0	79.6 [2]	100.0	100.0	100.0

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

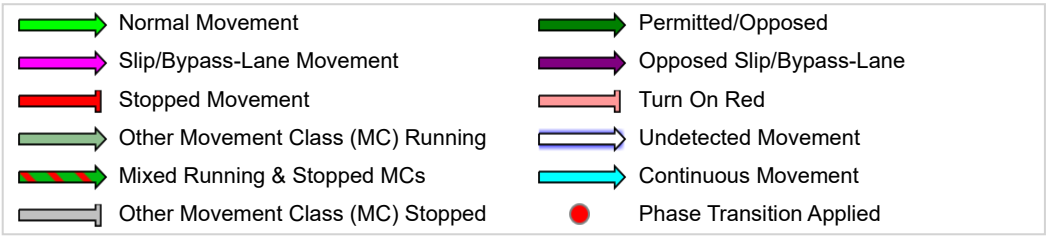
2 Phase Frequency is implied by a Phase Time specified by the user that is less than the Required Movement Time.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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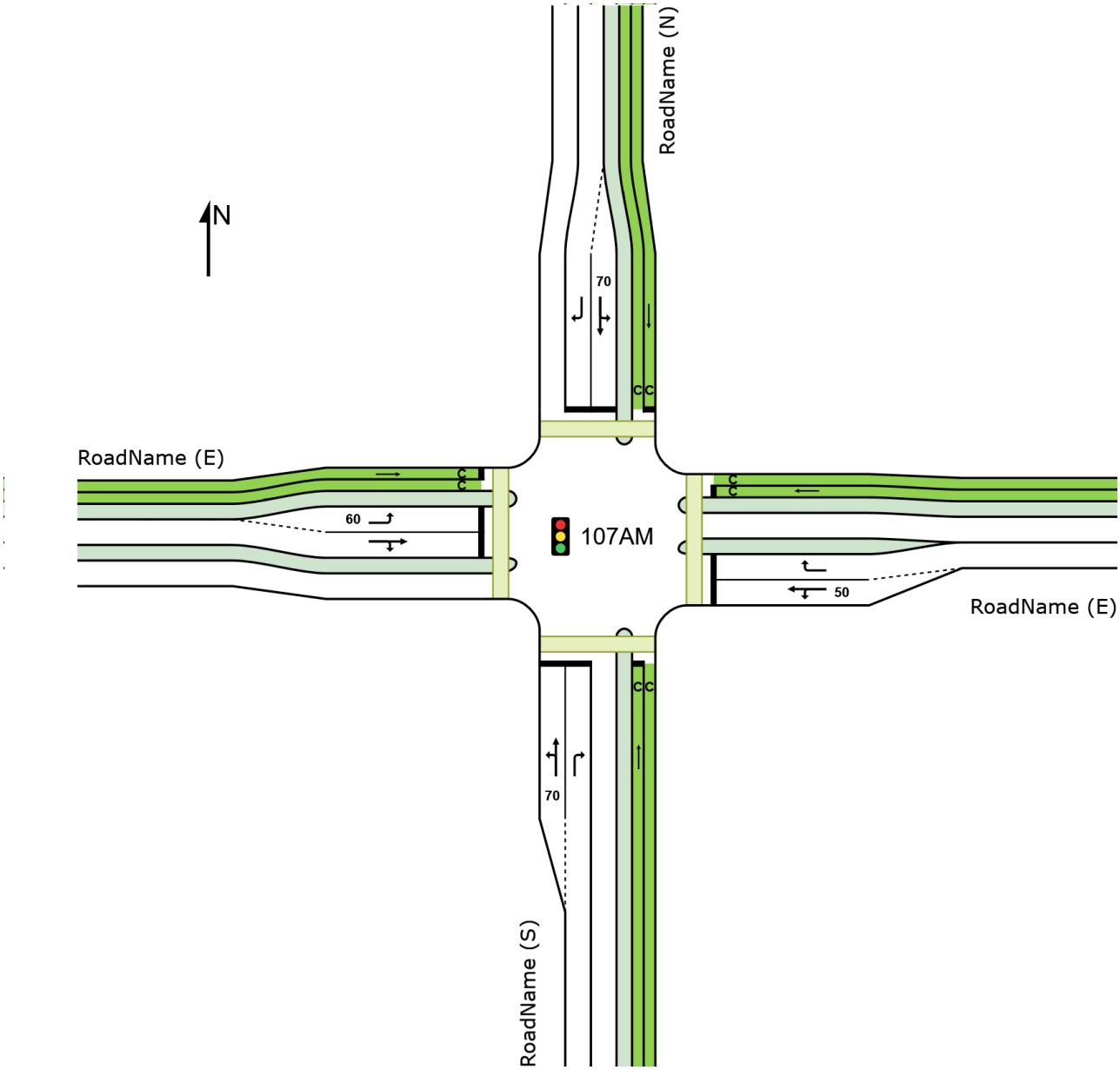
SITE LAYOUT

Site: [107AM] AM Peak (Intersection 107 - 2041)

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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MOVEMENT SUMMARY

Site: [107AM] AM Peak (Intersection 107 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 102.0 seconds (Site Optimum Cycle Time - Minimum Delay)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	0.186	29.8	LOS C	4.2	30.3	0.73	0.66	0.73	40.6
2	T1	All MCs	124	2.5	124	2.5	0.186	29.1	LOS C	4.2	30.3	0.78	0.64	0.78	31.2
3	R2	All MCs	53	0.0	53	0.0	0.482	59.5	LOS E	2.7	19.1	1.00	0.75	1.00	29.8
Approach			229	1.4	229	1.4	0.482	36.2	LOS D	4.2	30.3	0.82	0.67	0.82	32.6
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	*0.234	36.6	LOS D	3.3	23.1	0.85	1.04	0.85	30.9
5	T1	All MCs	105	0.0	105	0.0	*0.234	25.4	LOS C	3.3	23.1	0.86	0.84	0.86	26.6
6	R2	All MCs	53	0.0	53	0.0	0.439	58.5	LOS E	2.7	18.9	1.00	0.74	1.00	30.1
Approach			211	0.0	211	0.0	0.439	36.5	LOS D	3.3	23.1	0.89	0.87	0.89	28.4
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	*0.855	84.5	LOS F	17.5	127.1	1.00	1.01	1.22	31.9
8	T1	All MCs	322	4.2	322	4.2	0.855	43.5	LOS D	17.5	127.1	0.98	0.95	1.16	30.6
9	R2	All MCs	53	0.0	53	0.0	*0.482	59.5	LOS E	2.7	19.1	1.00	0.75	1.00	29.9
Approach			427	3.2	427	3.2	0.855	50.5	LOS D	17.5	127.1	0.98	0.93	1.15	30.6
West: RoadName (E)															
10	L2	All MCs	53	0.0	53	0.0	0.482	59.4	LOS E	2.7	19.1	1.00	0.75	1.00	29.7
11	T1	All MCs	105	0.0	105	0.0	0.715	38.6	LOS D	5.6	38.9	0.94	0.74	1.01	26.4
12	R2	All MCs	53	0.0	53	0.0	*0.715	73.8	LOS E	5.6	38.9	1.00	0.86	1.15	30.5
Approach			211	0.0	211	0.0	0.715	52.6	LOS D	5.6	38.9	0.97	0.77	1.04	28.2
All Vehicles			1078	1.6	1078	1.6	0.855	45.1	LOS D	17.5	127.1	0.93	0.83	1.01	30.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: RoadName (S)												
P1	Full	150	158	45.5	LOS E	0.4	0.4	0.95	0.95	199.3	200.0	1.00
East: RoadName (E)												
P2	Full	150	158	45.5	LOS E	0.4	0.4	0.95	0.95	199.3	200.0	1.00
North: RoadName (N)												
P3	Full	150	158	45.5	LOS E	0.4	0.4	0.95	0.95	199.3	200.0	1.00
West: RoadName (E)												
P4	Full	150	158	45.5	LOS E	0.4	0.4	0.95	0.95	199.3	200.0	1.00
All Pedestrians		600	632	45.5	LOS E	0.4	0.4	0.95	0.95	199.3	200.0	1.00

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [107AM] AM Peak (Intersection 107 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 102.0 seconds (Site Optimum Cycle Time - Minimum Delay)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Site Scenario: 1 | Local Volumes

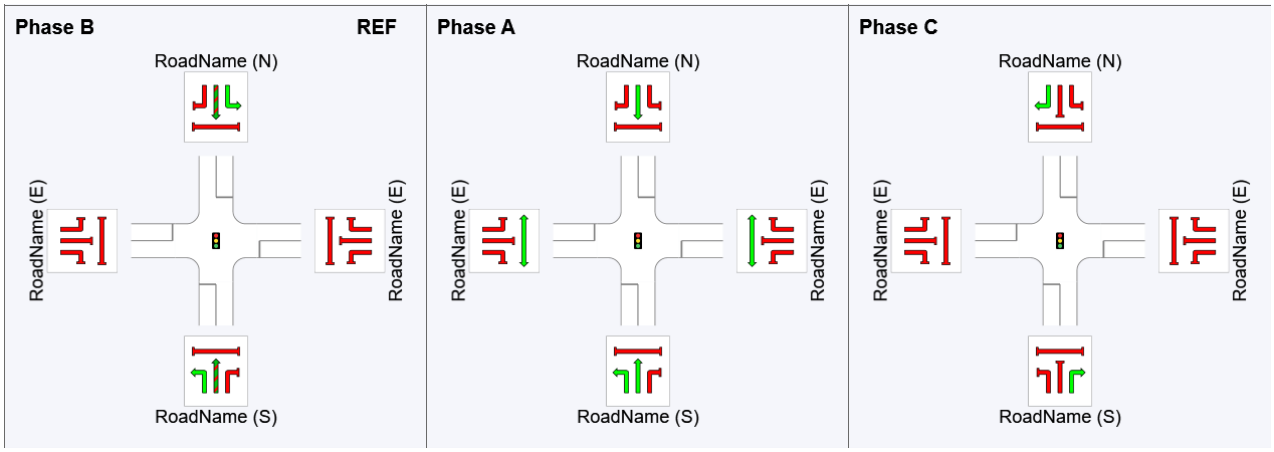
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Two-Approach Contraflow with Staged Crossings - Import
Input Phase Sequence: B, A, C, C1*, D, E, F
Output Phase Sequence: B, A, C, D, E, F
Reference Phase: Phase B
(* Variable Phase)

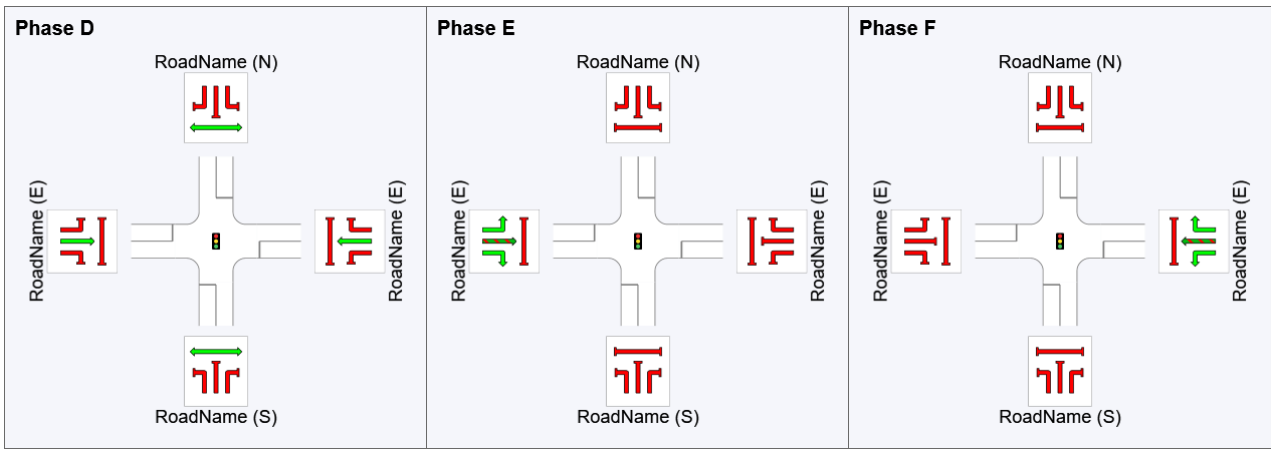
Phase Timing Summary

Phase	B	A	C	D	E	F
Phase Change Time (sec)	0.0	17.6	42.3	54.3	77.4	89.4
Green Time (sec)	11.6	18.8	6.0	17.1	6.0	6.6
Phase Time (sec)	17.6	24.8	12.0	23.1	12.0	12.6
Phase Split	17%	24%	12%	23%	12%	12%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0	100.0

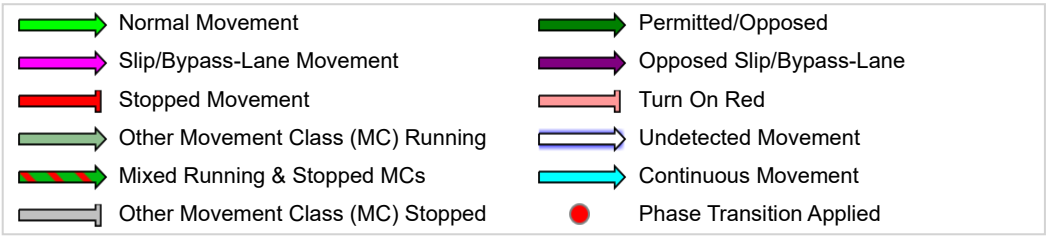
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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MOVEMENT SUMMARY

Site: [107PM] PM Peak (Intersection 107 - 2041)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 95.8 seconds (Site Optimum Cycle Time - Minimum Delay)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	0.323	32.2	LOS C	6.9	50.0	0.80	0.70	0.80	39.9
2	T1	All MCs	195	3.8	195	3.8	0.323	28.2	LOS C	6.9	50.0	0.81	0.67	0.81	34.3
3	R2	All MCs	53	0.0	53	0.0	0.453	55.8	LOS E	2.6	17.9	1.00	0.74	1.00	30.8
Approach			300	2.5	300	2.5	0.453	33.8	LOS C	6.9	50.0	0.84	0.69	0.84	34.4
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	*0.226	33.7	LOS C	3.0	21.0	0.84	1.05	0.84	31.5
5	T1	All MCs	105	0.0	105	0.0	*0.226	22.9	LOS C	3.0	21.0	0.85	0.83	0.85	27.1
6	R2	All MCs	53	0.0	53	0.0	0.453	55.8	LOS E	2.6	17.9	1.00	0.74	1.00	30.8
Approach			211	0.0	211	0.0	0.453	33.8	LOS C	3.0	21.0	0.89	0.86	0.89	29.0
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	*0.678	70.8	LOS E	5.2	36.9	1.00	0.84	1.12	31.5
8	T1	All MCs	105	2.0	105	2.0	0.678	33.7	LOS C	5.2	36.9	0.92	0.73	0.98	27.3
9	R2	All MCs	53	0.0	53	0.0	*0.453	55.8	LOS E	2.6	17.9	1.00	0.74	1.00	30.8
Approach			211	1.0	211	1.0	0.678	48.5	LOS D	5.2	36.9	0.96	0.76	1.02	29.1
West: RoadName (E)															
10	L2	All MCs	53	0.0	53	0.0	0.453	55.8	LOS E	2.6	17.9	1.00	0.74	1.00	30.6
11	T1	All MCs	105	0.0	105	0.0	0.672	34.9	LOS C	5.2	36.2	0.93	0.73	0.99	27.2
12	R2	All MCs	53	0.0	53	0.0	*0.672	69.6	LOS E	5.2	36.2	1.00	0.84	1.11	31.6
Approach			211	0.0	211	0.0	0.672	48.8	LOS D	5.2	36.2	0.97	0.76	1.02	29.0
All Vehicles			932	1.0	932	1.0	0.678	40.5	LOS D	6.9	50.0	0.91	0.76	0.93	30.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: RoadName (S)												
P1	Full	150	158	42.4	LOS E	0.4	0.4	0.94	0.94	196.2	200.0	1.02
East: RoadName (E)												
P2	Full	150	158	42.4	LOS E	0.4	0.4	0.94	0.94	196.2	200.0	1.02
North: RoadName (N)												
P3	Full	150	158	42.4	LOS E	0.4	0.4	0.94	0.94	196.2	200.0	1.02
West: RoadName (E)												
P4	Full	150	158	42.4	LOS E	0.4	0.4	0.94	0.94	196.2	200.0	1.02
All Pedestrians		600	632	42.4	LOS E	0.4	0.4	0.94	0.94	196.2	200.0	1.02

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [107PM] PM Peak (Intersection 107 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 95.8 seconds (Site Optimum Cycle Time - Minimum Delay)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Site Scenario: 1 | Local Volumes

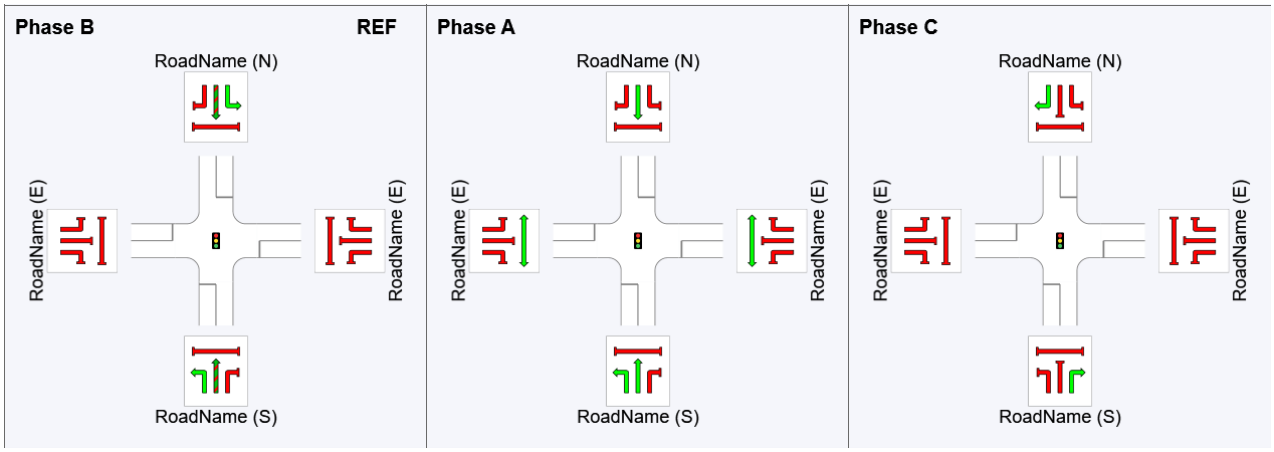
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Two-Approach Contraflow with Staged Crossings - Import
Input Phase Sequence: B, A, C, C1*, D, E, F
Output Phase Sequence: B, A, C, D, E, F
Reference Phase: Phase B
(* Variable Phase)

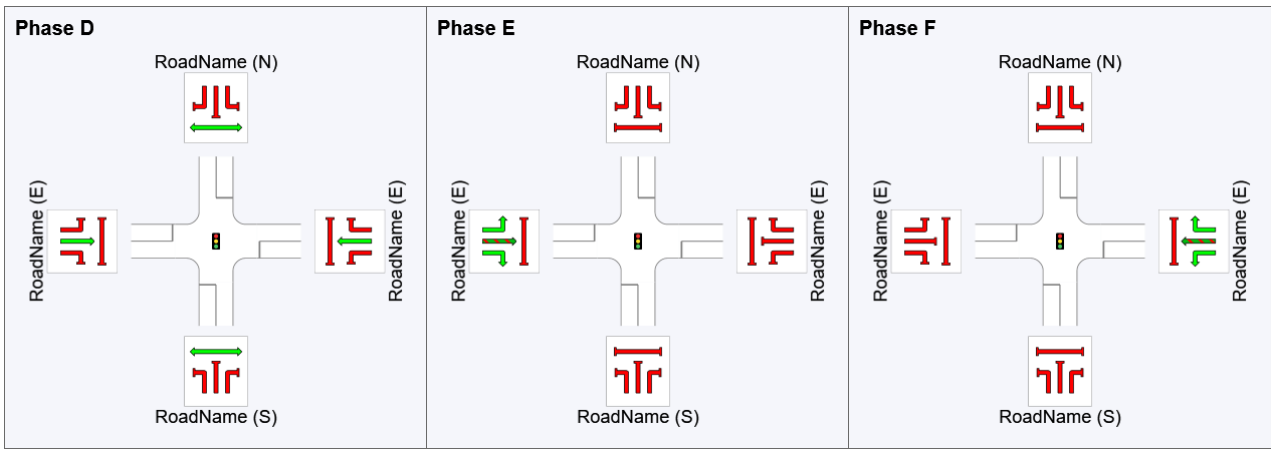
Phase Timing Summary

Phase	B	A	C	D	E	F
Phase Change Time (sec)	0.0	12.0	36.8	48.8	71.8	83.8
Green Time (sec)	6.0	18.8	6.0	17.1	6.0	6.0
Phase Time (sec)	12.0	24.8	12.0	23.1	12.0	12.0
Phase Split	13%	26%	13%	24%	13%	13%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0	100.0

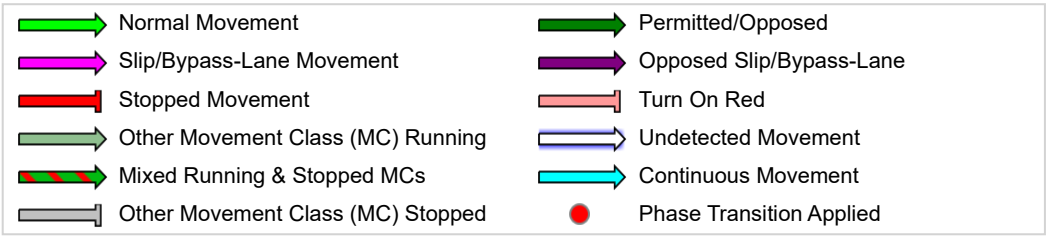
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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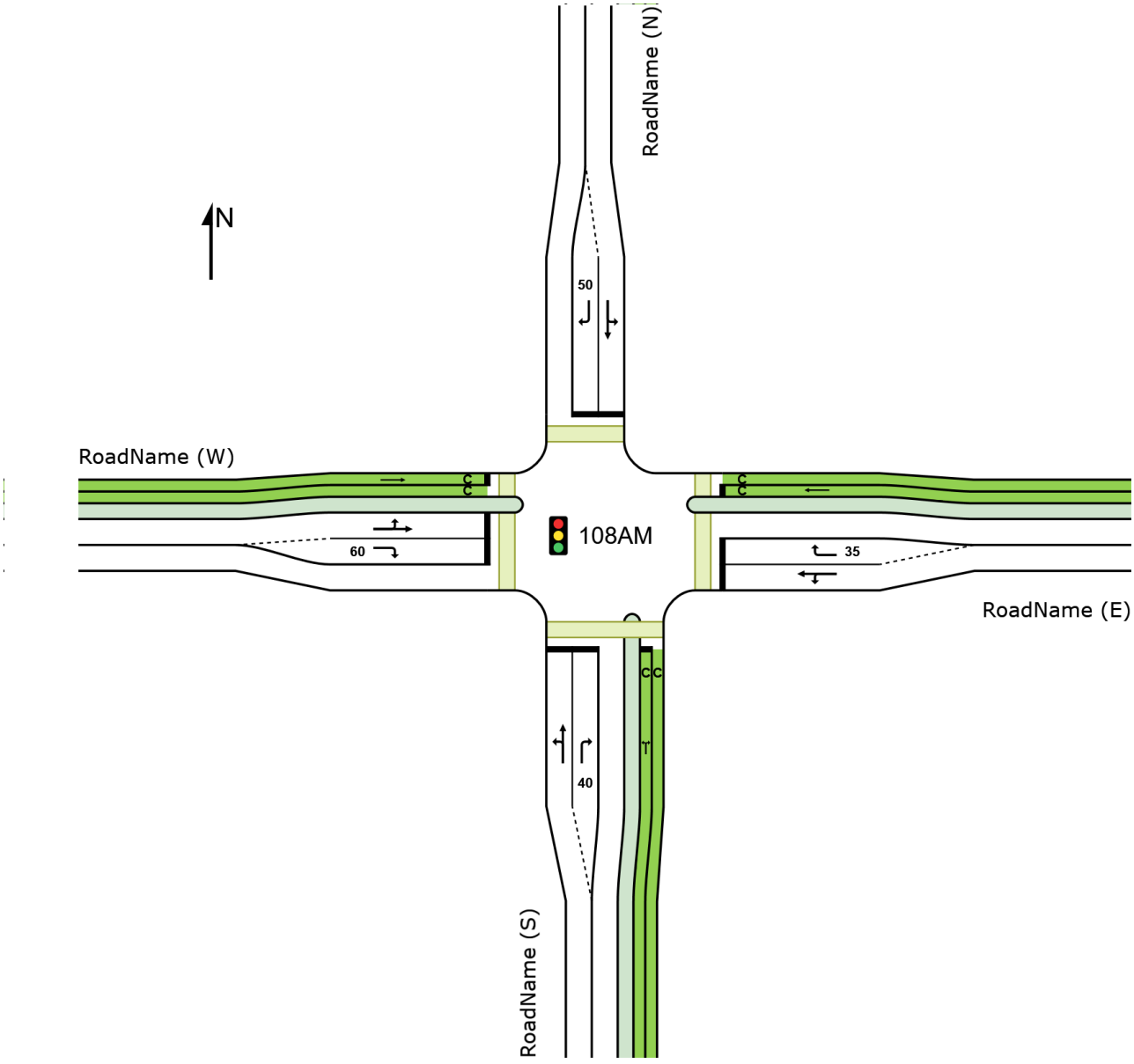
SITE LAYOUT

Site: [108AM] AM Peak (Intersection 108 - 2041)

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Organisation: URBIS | Licence: NETWORK / 1PC | Created: Friday, 15 May 2026 10:18:47 AM
Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba \IR Response\P0053364_Aura Transport Masterplan_2041 Intersection Analysis_260430.sipx

MOVEMENT SUMMARY

Site: [108AM] AM Peak (Intersection 108 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 98.1 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	89	0.0	89	0.0	*0.610	54.4	LOS D	5.6	39.4	0.99	0.77	1.01	28.1
2	T1	All MCs	53	0.0	53	0.0	0.610	44.7	LOS D	5.6	39.4	1.00	0.81	1.04	32.6
3	R2	All MCs	79	0.0	79	0.0	0.194	44.9	LOS D	2.3	15.9	0.93	0.73	0.93	28.4
Approach			221	0.0	221	0.0	0.610	48.7	LOS D	5.6	39.4	0.97	0.76	0.99	29.1
East: RoadName (E)															
4	L2	All MCs	63	0.0	63	0.0	*0.443	41.3	LOS D	10.1	73.4	0.83	0.73	0.83	39.5
5	T1	All MCs	259	4.1	259	4.1	0.443	31.4	LOS C	10.1	73.4	0.84	0.71	0.84	35.3
6	R2	All MCs	53	0.0	53	0.0	0.219	52.0	LOS D	2.3	16.3	0.93	0.74	0.93	32.8
Approach			375	2.8	375	2.8	0.443	36.0	LOS D	10.1	73.4	0.85	0.72	0.85	34.4
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	*0.706	60.9	LOS E	5.4	37.5	1.00	0.85	1.15	30.9
8	T1	All MCs	53	0.0	53	0.0	0.706	48.5	LOS D	5.4	37.5	1.00	0.85	1.15	31.7
9	R2	All MCs	53	0.0	53	0.0	0.232	48.8	LOS D	2.4	16.5	0.94	0.74	0.94	32.6
Approach			158	0.0	158	0.0	0.706	52.7	LOS D	5.4	37.5	0.98	0.82	1.08	31.7
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	0.799	75.5	LOS E	15.5	112.4	1.00	0.94	1.14	33.6
11	T1	All MCs	314	4.0	314	4.0	0.799	38.5	LOS D	15.5	112.4	0.98	0.89	1.09	31.9
12	R2	All MCs	211	0.0	211	0.0	*0.876	61.0	LOS E	11.5	80.5	1.00	1.00	1.35	29.4
Approach			577	2.2	577	2.2	0.876	50.1	LOS D	15.5	112.4	0.99	0.93	1.19	31.1
All Vehicles			1331	1.7	1331	1.7	0.876	46.2	LOS D	15.5	112.4	0.94	0.83	1.05	31.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: RoadName (S)											
P1 Full	100	105	43.4	LOS E	0.3	0.3	0.94	0.94	197.3	200.0	1.01
East: RoadName (E)											
P21 Stage 1	50	53	43.3	LOS E	0.1	0.1	0.94	0.94	197.2	200.0	1.01
P22 Stage 2	50	53	43.3	LOS E	0.1	0.1	0.94	0.94	197.2	200.0	1.01
North: RoadName (N)											
P3 Full	100	105	43.4	LOS E	0.3	0.3	0.94	0.94	197.3	200.0	1.01
West: RoadName (W)											
P41 Stage 1	50	53	43.3	LOS E	0.1	0.1	0.94	0.94	197.2	200.0	1.01
P42 Stage 2	50	53	20.1	LOS C	0.1	0.1	0.88	0.88	174.0	200.0	1.15
All Pedestrians	400	421	40.5	LOS E	0.3	0.3	0.93	0.93	194.3	200.0	1.03

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [108AM] AM Peak (Intersection 108 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 98.1 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

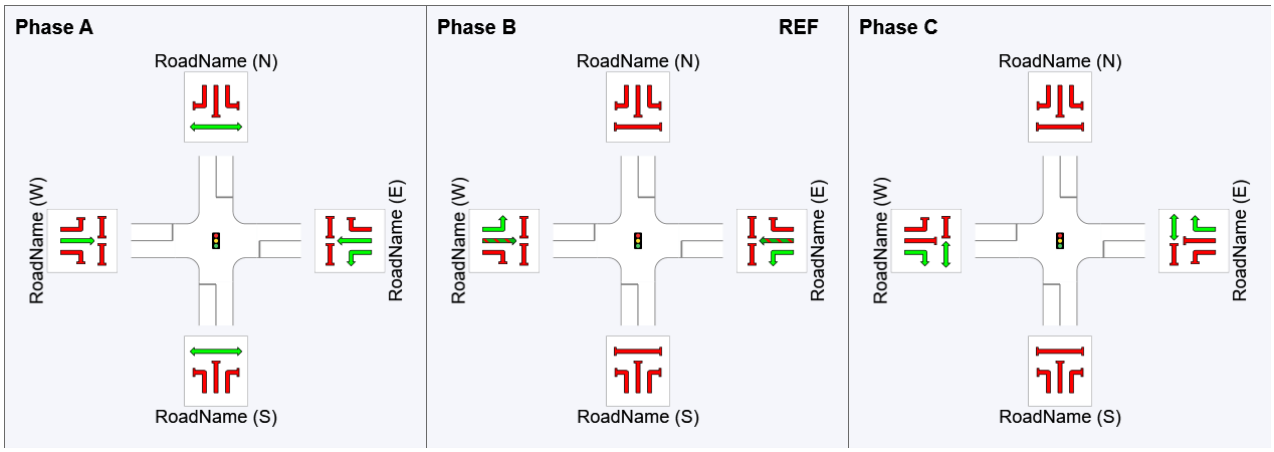
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: 104 - Sequence
Input Phase Sequence: A, B, C, E, F
Output Phase Sequence: A, B, C, E, F
Reference Phase: Phase B

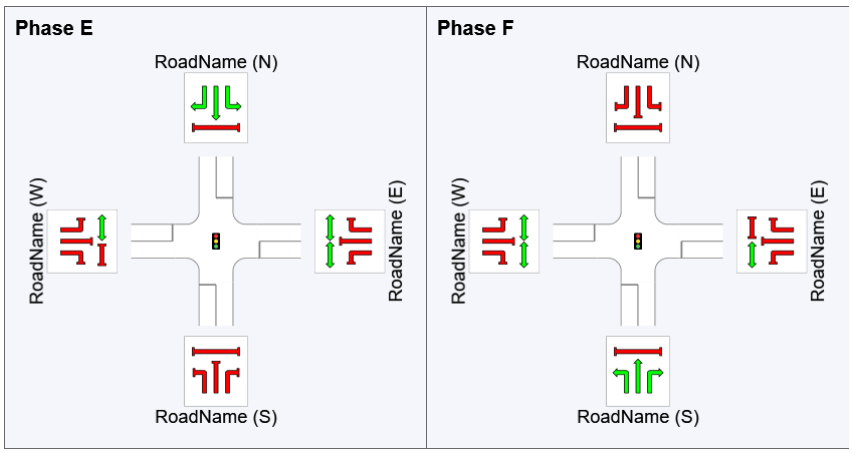
Phase Timing Summary

Phase	A	B	C	E	F
Phase Change Time (sec)	75.0	0.0	18.0	36.7	54.7
Green Time (sec)	17.1	12.0	12.7	12.0	14.4
Phase Time (sec)	23.1	18.0	18.7	18.0	20.4
Phase Split	24%	18%	19%	18%	21%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0

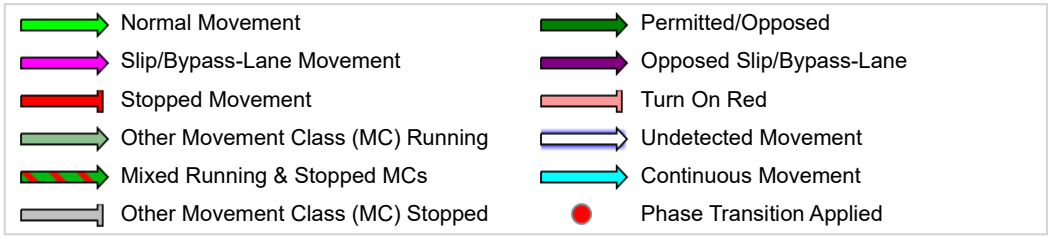
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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MOVEMENT SUMMARY

Site: [108PM] PM Peak (Intersection 108 - 2041)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 98.1 seconds (Site Optimum Cycle Time - Minimum Delay)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	107	0.0	107	0.0	*0.703	55.5	LOS E	6.7	46.7	0.99	0.82	1.08	28.3
2	T1	All MCs	53	0.0	53	0.0	0.703	45.7	LOS D	6.7	46.7	1.00	0.86	1.12	32.1
3	R2	All MCs	79	0.0	79	0.0	0.189	44.5	LOS D	2.3	15.8	0.92	0.72	0.92	28.5
Approach			239	0.0	239	0.0	0.703	49.7	LOS D	6.7	46.7	0.97	0.80	1.03	29.1
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	*0.706	53.1	LOS D	19.2	139.6	0.91	0.81	0.91	39.6
5	T1	All MCs	469	4.5	469	4.5	0.706	41.1	LOS D	19.2	139.6	0.91	0.79	0.91	37.6
6	R2	All MCs	53	0.0	53	0.0	0.298	66.4	LOS E	2.5	17.2	0.97	0.74	0.97	31.6
Approach			575	3.7	575	3.7	0.706	44.5	LOS D	19.2	139.6	0.91	0.78	0.91	32.8
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	*0.705	60.8	LOS E	5.3	37.4	1.00	0.85	1.15	31.0
8	T1	All MCs	53	0.0	53	0.0	0.705	48.5	LOS D	5.3	37.4	1.00	0.85	1.15	31.7
9	R2	All MCs	53	0.0	53	0.0	0.232	48.8	LOS D	2.4	16.5	0.94	0.74	0.94	32.6
Approach			158	0.0	158	0.0	0.705	52.7	LOS D	5.3	37.4	0.98	0.82	1.08	31.7
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	0.592	65.8	LOS E	10.8	77.9	0.95	0.80	0.95	35.7
11	T1	All MCs	246	3.8	246	3.8	0.592	32.3	LOS C	10.8	77.9	0.93	0.76	0.93	32.7
12	R2	All MCs	63	0.0	63	0.0	*0.358	52.6	LOS D	3.0	20.8	0.98	0.75	0.98	31.6
Approach			362	2.6	362	2.6	0.592	40.7	LOS D	10.8	77.9	0.94	0.77	0.94	32.9
All Vehicles			1334	2.3	1334	2.3	0.706	45.4	LOS D	19.2	139.6	0.94	0.79	0.96	32.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: RoadName (S)											
P1 Full	100	105	43.4	LOS E	0.3	0.3	0.94	0.94	197.3	200.0	1.01
East: RoadName (E)											
P21 Stage 1	50	53	43.3	LOS E	0.1	0.1	0.94	0.94	197.2	200.0	1.01
P22 Stage 2	50	53	43.3	LOS E	0.1	0.1	0.94	0.94	197.2	200.0	1.01
North: RoadName (N)											
P3 Full	100	105	43.4	LOS E	0.3	0.3	0.94	0.94	197.3	200.0	1.01
West: RoadName (W)											
P41 Stage 1	50	53	43.3	LOS E	0.1	0.1	0.94	0.94	197.2	200.0	1.01
P42 Stage 2	50	53	20.0	LOS C	0.1	0.1	0.88	0.88	173.9	200.0	1.15
All Pedestrians	400	421	40.5	LOS E	0.3	0.3	0.93	0.93	194.3	200.0	1.03

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [108PM] PM Peak (Intersection 108 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 98.1 seconds (Site Optimum Cycle Time - Minimum Delay)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Site Scenario: 1 | Local Volumes

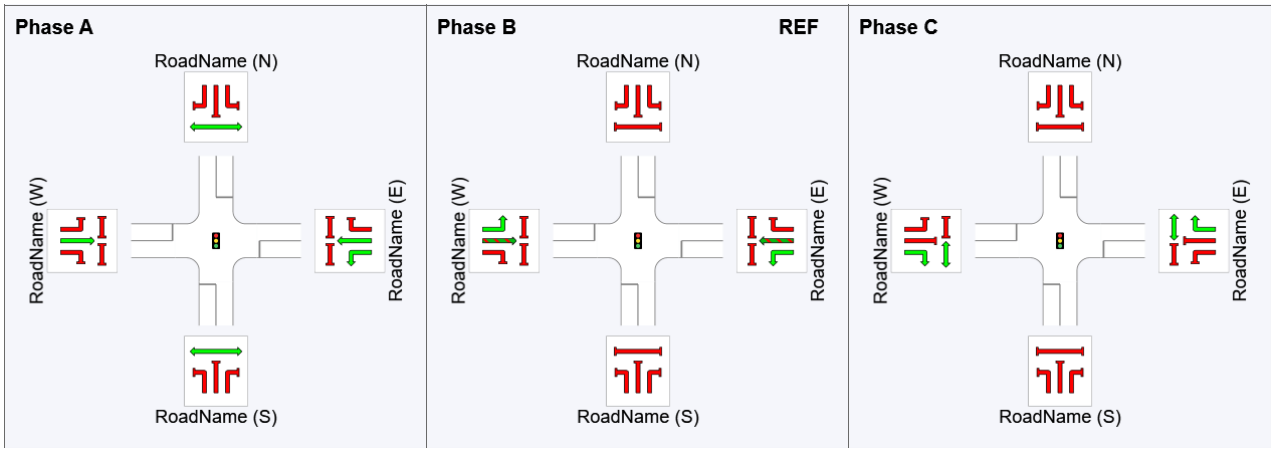
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: 104 - Sequence
Input Phase Sequence: A, B, C, C1*, E, F
Output Phase Sequence: A, B, C, E, F
Reference Phase: Phase B
(* Variable Phase)

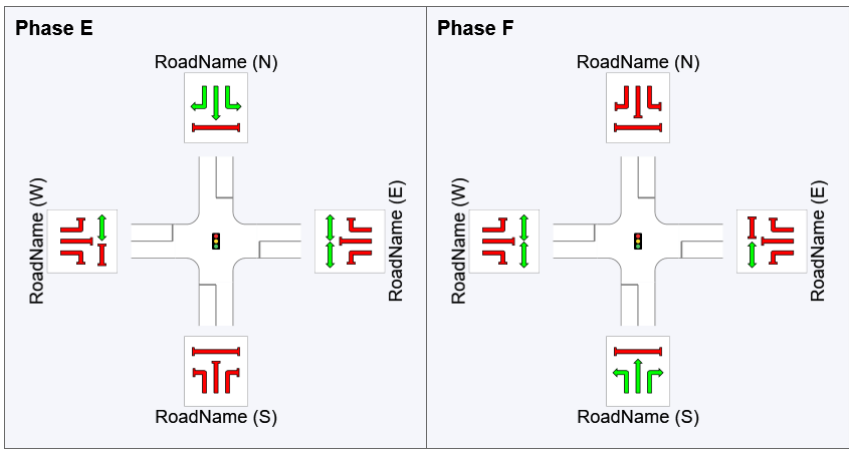
Phase Timing Summary

Phase	A	B	C	E	F
Phase Change Time (sec)	75.0	0.0	21.0	36.4	54.4
Green Time (sec)	17.1	15.0	9.3	12.0	14.7
Phase Time (sec)	23.1	21.0	15.3	18.0	20.7
Phase Split	24%	21%	16%	18%	21%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0

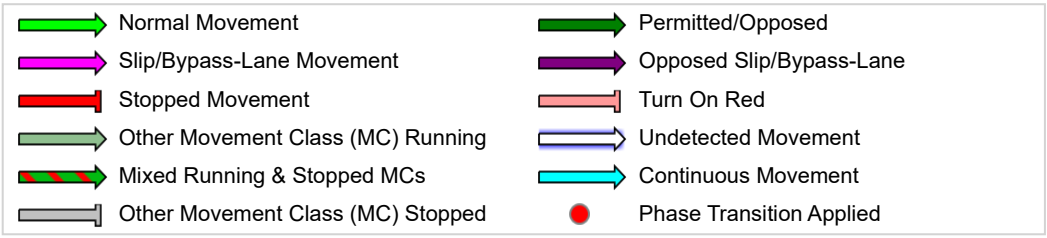
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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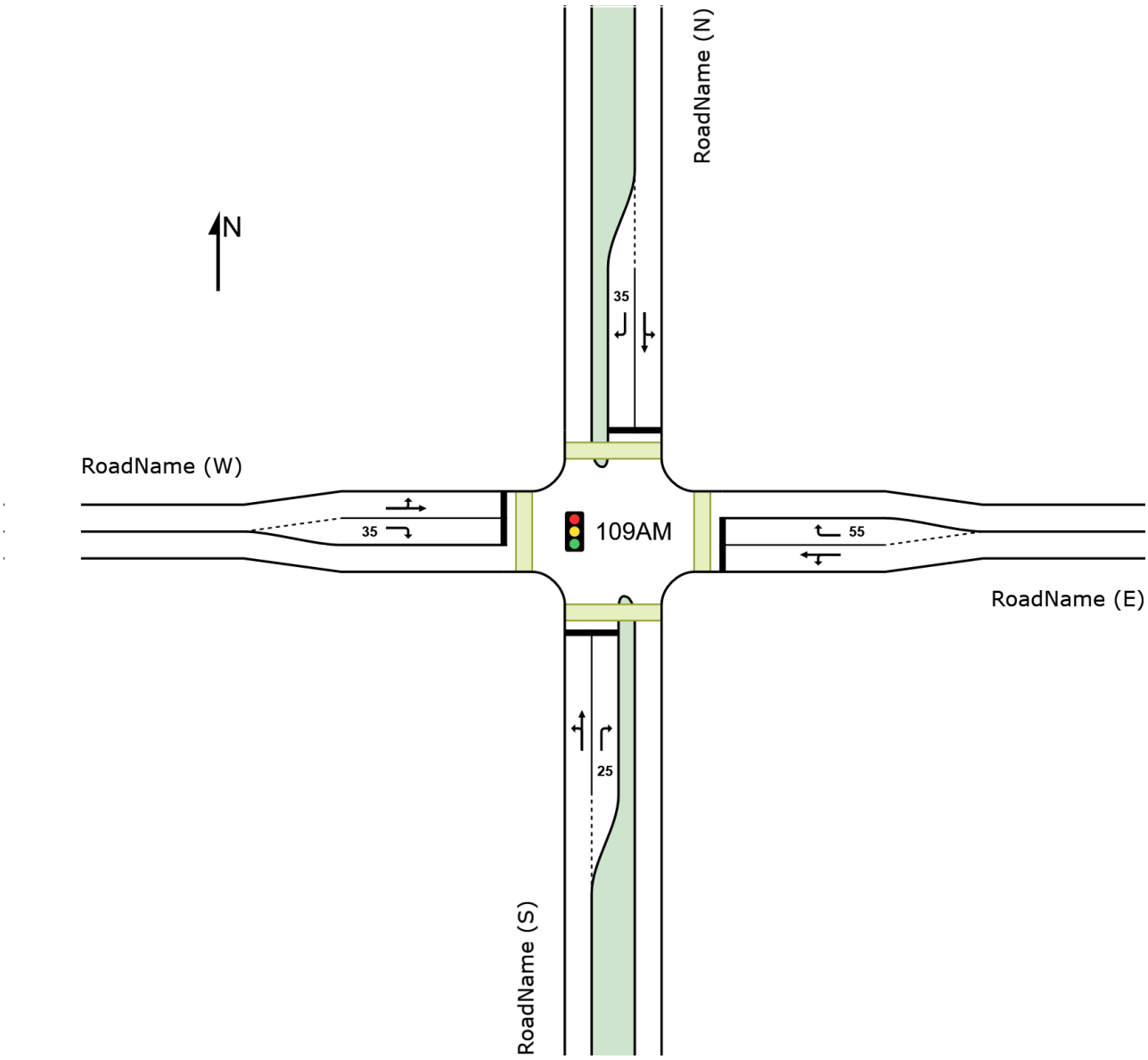
SITE LAYOUT

Site: [109AM] AM Peak (Intersection 109 - 2041)

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Organisation: URBIS | Licence: NETWORK / 1PC | Created: Friday, 15 May 2026 10:19:38 AM
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MOVEMENT SUMMARY

Site: [109AM] AM Peak (Intersection 109 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 89.2 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	109	0.0	109	0.0	*0.644	21.4	LOS C	4.7	32.6	1.00	1.02	1.04	28.6
2	T1	All MCs	53	0.0	53	0.0	*0.644	35.5	LOS D	4.7	32.6	1.00	1.02	1.04	27.0
3	R2	All MCs	53	0.0	53	0.0	0.421	50.6	LOS D	2.4	16.6	1.00	0.74	1.00	10.6
Approach			215	0.0	215	0.0	0.644	32.0	LOS C	4.7	32.6	1.00	0.95	1.03	23.9
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	*0.310	18.2	LOS B	3.6	26.2	0.82	1.03	0.82	15.5
5	T1	All MCs	121	5.2	121	5.2	*0.310	12.3	LOS B	3.6	26.2	0.82	1.03	0.82	32.4
6	R2	All MCs	53	0.0	53	0.0	0.421	51.8	LOS D	2.4	16.6	1.00	0.74	1.00	21.4
Approach			226	2.8	226	2.8	0.421	22.9	LOS C	3.6	26.2	0.86	0.97	0.86	26.4
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.359	24.6	LOS C	2.8	19.9	0.94	1.02	0.94	22.7
8	T1	All MCs	53	0.0	53	0.0	0.359	22.8	LOS C	2.8	19.9	0.94	1.02	0.94	21.8
9	R2	All MCs	71	0.0	71	0.0	*0.564	52.7	LOS D	3.2	22.6	1.00	0.78	1.05	28.8
Approach			176	0.0	176	0.0	0.564	35.3	LOS D	3.2	22.6	0.96	0.92	0.98	25.4
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	0.527	20.4	LOS C	4.0	28.5	0.95	1.01	0.95	30.1
11	T1	All MCs	132	4.8	132	4.8	0.527	19.5	LOS B	4.0	28.5	0.95	1.01	0.95	25.5
12	R2	All MCs	53	0.0	53	0.0	0.421	51.8	LOS D	2.4	16.6	1.00	0.74	1.00	22.4
Approach			237	2.7	237	2.7	0.527	26.9	LOS C	4.0	28.5	0.96	0.95	0.96	26.0
All Vehicles			854	1.5	854	1.5	0.644	28.8	LOS C	4.7	32.6	0.94	0.95	0.96	25.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: RoadName (S)												
P1	Full	150	158	16.8	LOS B	0.2	0.2	0.87	0.87	170.7	200.0	1.17
East: RoadName (E)												
P2	Full	150	158	39.0	LOS D	0.4	0.4	0.94	0.94	192.9	200.0	1.04
North: RoadName (N)												
P3	Full	150	158	39.0	LOS D	0.4	0.4	0.94	0.94	192.9	200.0	1.04
West: RoadName (W)												
P4	Full	150	158	39.0	LOS D	0.4	0.4	0.94	0.94	192.9	200.0	1.04
All Pedestrians		600	632	33.5	LOS D	0.4	0.4	0.92	0.92	187.3	200.0	1.07

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba\IR Response\P0053364_Aura Transport Masterplan_2041 Intersection Analysis_260430.sipx

PHASING SUMMARY

Site: [109AM] AM Peak (Intersection 109 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 89.2 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

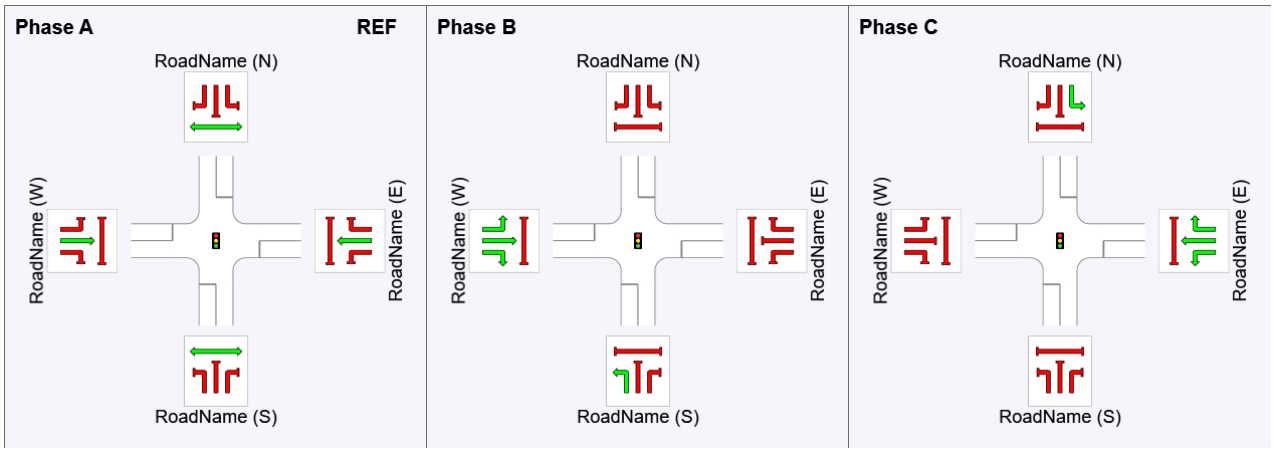
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Alternate Phasing
Input Phase Sequence: A, B, C, D, E, F
Output Phase Sequence: A, B, C, D, E, F
Reference Phase: Phase A

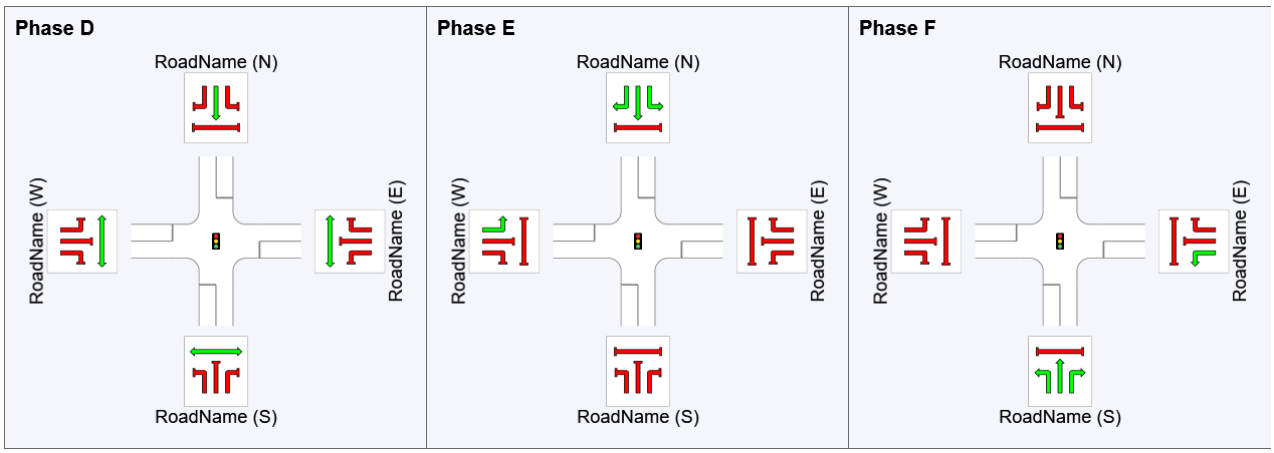
Phase Timing Summary

Phase	A	B	C	D	E	F
Phase Change Time (sec)	0.0	20.6	32.6	44.6	65.2	77.2
Green Time (sec)	14.6	6.0	6.0	14.6	6.0	6.0
Phase Time (sec)	20.6	12.0	12.0	20.6	12.0	12.0
Phase Split	23%	13%	13%	23%	13%	13%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0	100.0

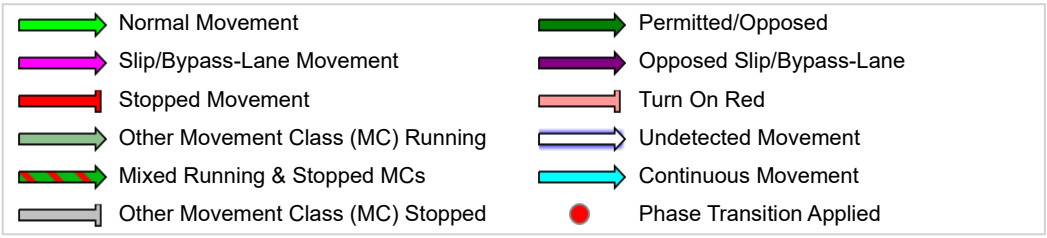
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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MOVEMENT SUMMARY

Site: [109PM] PM Peak (Intersection 109 - 2041)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 89.2 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	65	0.0	65	0.0	0.467	18.9	LOS B	3.2	22.6	0.97	1.01	0.97	29.5
2	T1	All MCs	53	0.0	53	0.0	*0.467	30.9	LOS C	3.2	22.6	0.97	1.01	0.97	28.0
3	R2	All MCs	53	0.0	53	0.0	0.421	50.6	LOS D	2.4	16.6	1.00	0.74	1.00	10.6
Approach			171	0.0	171	0.0	0.467	32.4	LOS C	3.2	22.6	0.98	0.93	0.98	23.1
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	*0.239	17.9	LOS B	2.7	19.6	0.80	1.05	0.80	15.3
5	T1	All MCs	81	5.2	81	5.2	*0.239	11.9	LOS B	2.7	19.6	0.80	1.05	0.80	32.2
6	R2	All MCs	53	0.0	53	0.0	0.421	51.8	LOS D	2.4	16.6	1.00	0.74	1.00	21.4
Approach			186	2.3	186	2.3	0.421	24.9	LOS C	2.7	19.6	0.85	0.96	0.85	25.0
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.359	24.6	LOS C	2.8	19.9	0.94	1.02	0.94	22.7
8	T1	All MCs	53	0.0	53	0.0	0.359	22.8	LOS C	2.8	19.9	0.94	1.02	0.94	21.8
9	R2	All MCs	66	0.0	66	0.0	*0.531	52.4	LOS D	3.0	21.1	1.00	0.77	1.02	28.9
Approach			172	0.0	172	0.0	0.531	34.8	LOS C	3.0	21.1	0.96	0.92	0.97	25.4
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	0.458	20.8	LOS C	3.1	22.6	0.94	1.01	0.94	29.7
11	T1	All MCs	96	5.5	96	5.5	0.458	20.1	LOS C	3.1	22.6	0.94	1.01	0.94	25.1
12	R2	All MCs	83	0.0	83	0.0	*0.665	53.7	LOS D	3.9	27.2	1.00	0.83	1.14	21.9
Approach			232	2.3	232	2.3	0.665	32.3	LOS C	3.9	27.2	0.96	0.95	1.01	25.2
All Vehicles			760	1.2	760	1.2	0.665	31.1	LOS C	3.9	27.2	0.94	0.94	0.96	24.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: RoadName (S)												
P1	Full	150	158	16.8	LOS B	0.2	0.2	0.87	0.87	170.7	200.0	1.17
East: RoadName (E)												
P2	Full	150	158	39.0	LOS D	0.4	0.4	0.94	0.94	192.9	200.0	1.04
North: RoadName (N)												
P3	Full	150	158	39.0	LOS D	0.4	0.4	0.94	0.94	192.9	200.0	1.04
West: RoadName (W)												
P4	Full	150	158	39.0	LOS D	0.4	0.4	0.94	0.94	192.9	200.0	1.04
All Pedestrians		600	632	33.5	LOS D	0.4	0.4	0.92	0.92	187.3	200.0	1.07

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [109PM] PM Peak (Intersection 109 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 89.2 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

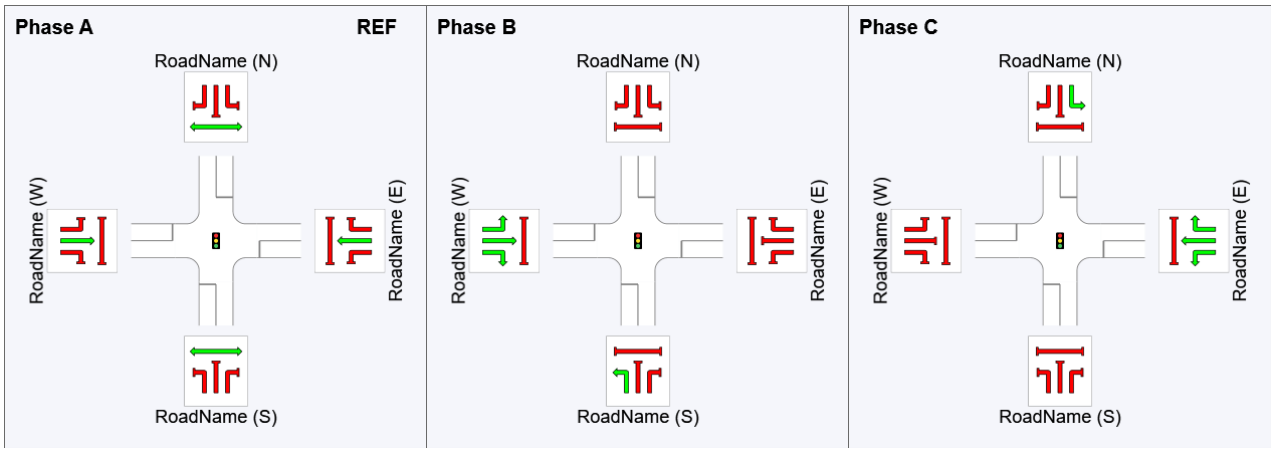
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Alternate Phasing - Import
Input Phase Sequence: A, B, C, D, E, F
Output Phase Sequence: A, B, C, D, E, F
Reference Phase: Phase A

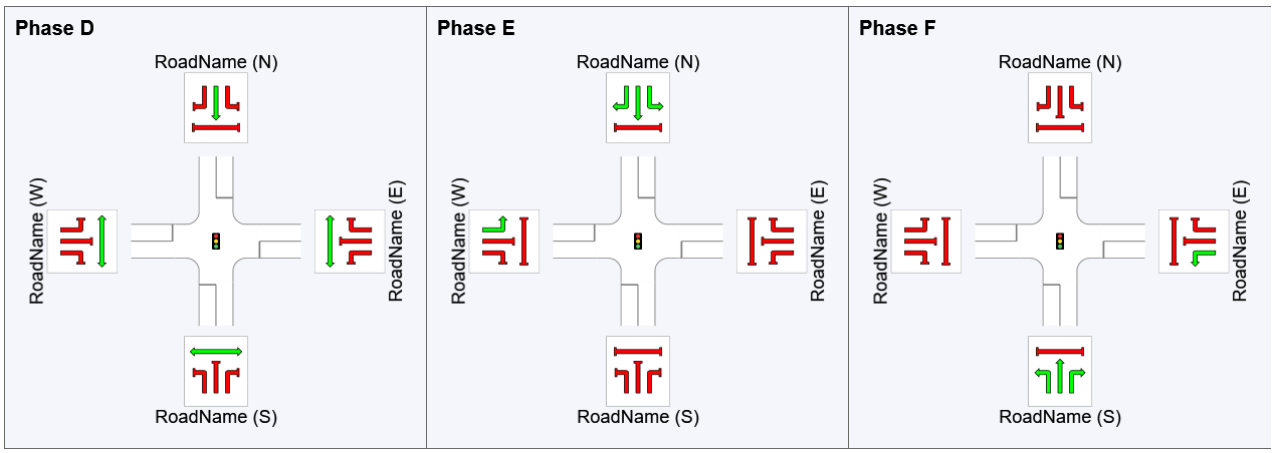
Phase Timing Summary

Phase	A	B	C	D	E	F
Phase Change Time (sec)	0.0	20.6	32.6	44.6	65.2	77.2
Green Time (sec)	14.6	6.0	6.0	14.6	6.0	6.0
Phase Time (sec)	20.6	12.0	12.0	20.6	12.0	12.0
Phase Split	23%	13%	13%	23%	13%	13%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0	100.0

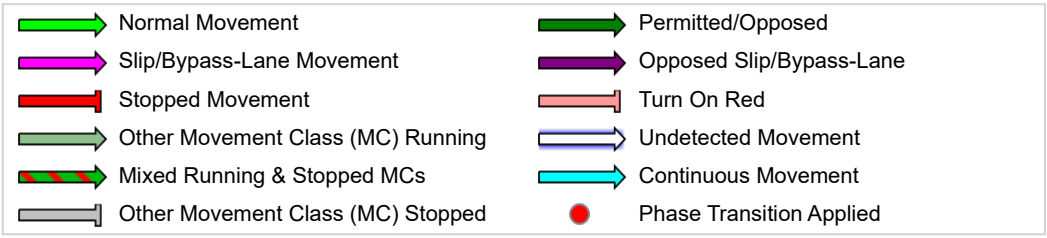
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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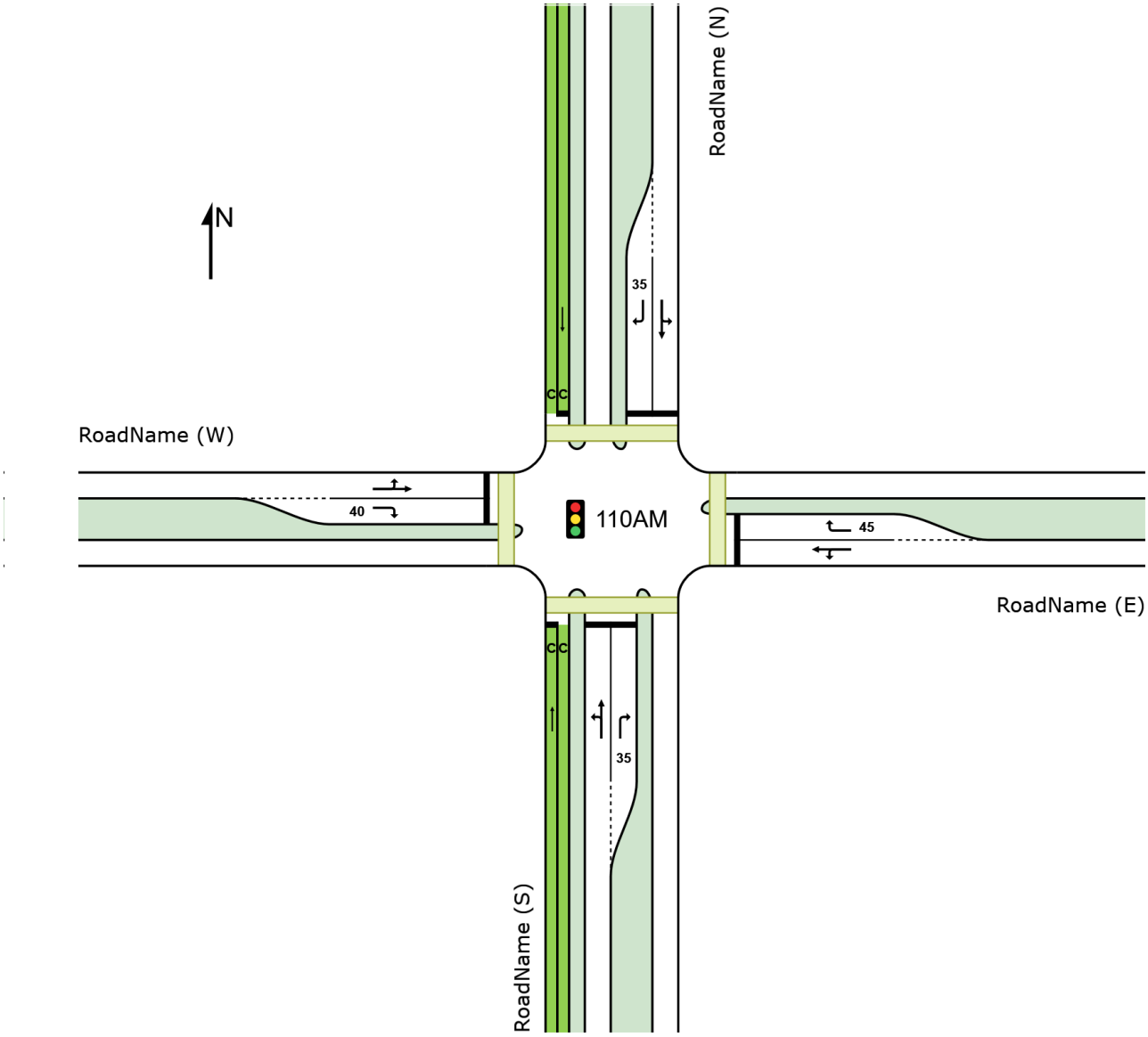
SITE LAYOUT

Site: [110AM] AM Peak (Intersection 110 - 2041)

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba\IR Response\P0053364_Aura Transport Masterplan_2041 Intersection Analysis_260430.sipx

MOVEMENT SUMMARY

Site: [110AM] AM Peak (Intersection 110 - 2041)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90.0 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	0.172	35.3	LOS D	3.3	23.5	0.75	0.67	0.75	39.0
2	T1	All MCs	105	2.0	105	2.0	*0.172	25.2	LOS C	3.3	23.5	0.81	0.65	0.81	27.9
3	R2	All MCs	53	0.0	53	0.0	0.425	52.3	LOS D	2.4	16.7	1.00	0.74	1.00	23.0
Approach			211	1.0	211	1.0	0.425	34.5	LOS C	3.3	23.5	0.84	0.68	0.84	29.2
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	*0.244	39.3	LOS D	3.8	26.8	0.86	0.72	0.86	29.0
5	T1	All MCs	53	0.0	53	0.0	0.244	28.4	LOS C	3.8	26.8	0.86	0.72	0.86	33.1
6	R2	All MCs	53	0.0	53	0.0	0.425	52.3	LOS D	2.4	16.7	1.00	0.74	1.00	23.0
Approach			158	0.0	158	0.0	0.425	40.0	LOS D	3.8	26.8	0.91	0.73	0.91	28.1
North: RoadName (N)															
7	L2	All MCs	88	0.0	88	0.0	*0.691	59.2	LOS E	6.4	45.6	1.00	0.86	1.11	23.9
8	T1	All MCs	105	2.0	105	2.0	0.691	31.9	LOS C	6.4	45.6	0.94	0.74	0.99	25.1
9	R2	All MCs	53	0.0	53	0.0	*0.425	52.3	LOS D	2.4	16.7	1.00	0.74	1.00	29.7
Approach			246	0.9	246	0.9	0.691	46.1	LOS D	6.4	45.6	0.97	0.78	1.04	25.8
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	0.244	39.3	LOS D	3.8	26.8	0.86	0.72	0.86	35.7
11	T1	All MCs	53	0.0	53	0.0	0.244	28.4	LOS C	3.8	26.8	0.86	0.72	0.86	33.1
12	R2	All MCs	53	0.0	53	0.0	*0.425	52.4	LOS D	2.4	16.7	1.00	0.74	1.00	29.7
Approach			158	0.0	158	0.0	0.425	40.0	LOS D	3.8	26.8	0.91	0.73	0.91	32.6
All Vehicles			773	0.5	773	0.5	0.691	40.5	LOS D	6.4	45.6	0.91	0.73	0.93	28.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: RoadName (S)												
P1	Full	100	105	39.4	LOS D	0.3	0.3	0.94	0.94	193.2	200.0	1.04
East: RoadName (E)												
P2	Full	100	105	39.4	LOS D	0.3	0.3	0.94	0.94	193.2	200.0	1.04
North: RoadName (N)												
P3	Full	100	105	39.4	LOS D	0.3	0.3	0.94	0.94	193.2	200.0	1.04
West: RoadName (W)												
P4	Full	100	105	39.4	LOS D	0.3	0.3	0.94	0.94	193.2	200.0	1.04
All Pedestrians		400	421	39.4	LOS D	0.3	0.3	0.94	0.94	193.2	200.0	1.04

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [110AM] AM Peak (Intersection 110 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90.0 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

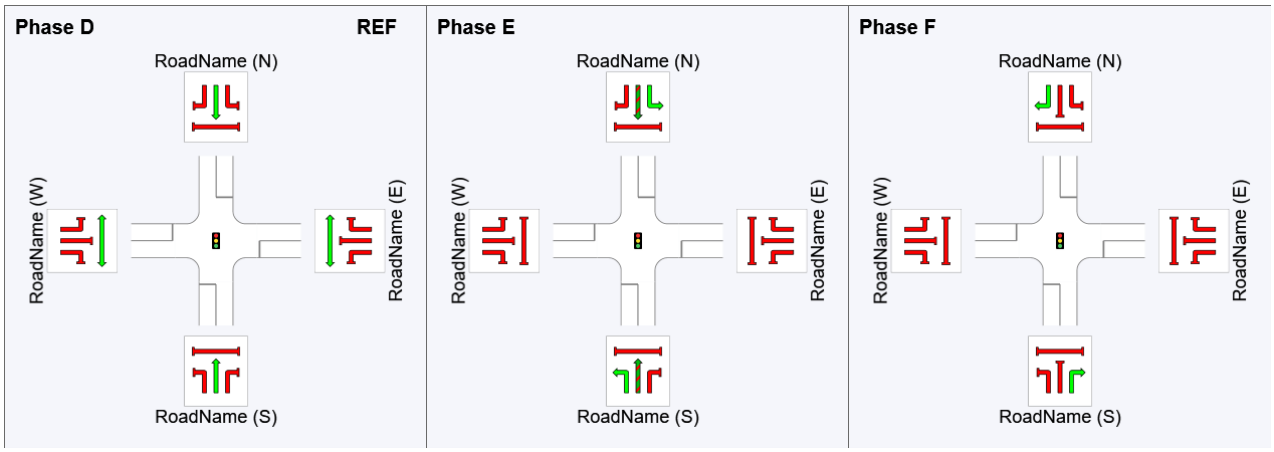
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns - Import
Input Phase Sequence: D, E, F, A, C
Output Phase Sequence: D, E, F, A, C
Reference Phase: Phase D

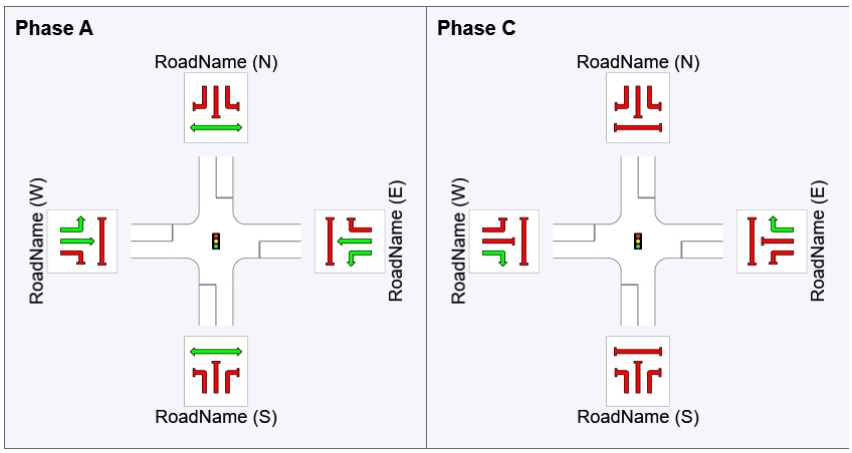
Phase Timing Summary

Phase	D	E	F	A	C
Phase Change Time (sec)	0.0	20.6	35.3	47.3	78.0
Green Time (sec)	14.6	8.7	6.0	24.7	6.0
Phase Time (sec)	20.6	14.7	12.0	30.7	12.0
Phase Split	23%	16%	13%	34%	13%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0

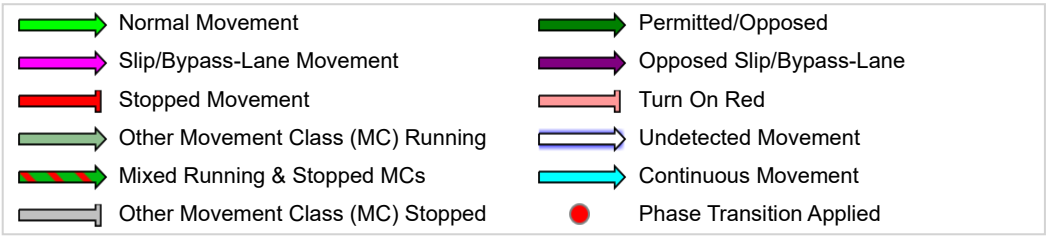
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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MOVEMENT SUMMARY

Site: [110PM] PM Peak (Intersection 110 - 2041)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 87.3 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	0.184	36.4	LOS D	3.3	23.6	0.77	0.68	0.77	38.6
2	T1	All MCs	105	2.0	105	2.0	*0.184	24.8	LOS C	3.3	23.6	0.82	0.66	0.82	28.0
3	R2	All MCs	53	0.0	53	0.0	0.413	50.8	LOS D	2.3	16.2	1.00	0.74	1.00	23.5
Approach			211	1.0	211	1.0	0.413	34.2	LOS C	3.3	23.6	0.85	0.69	0.85	29.3
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	*0.236	37.9	LOS D	3.7	25.8	0.85	0.72	0.85	29.6
5	T1	All MCs	53	0.0	53	0.0	0.236	26.9	LOS C	3.7	25.8	0.85	0.72	0.85	33.7
6	R2	All MCs	53	0.0	53	0.0	0.413	50.8	LOS D	2.3	16.2	1.00	0.74	1.00	23.5
Approach			158	0.0	158	0.0	0.413	38.5	LOS D	3.7	25.8	0.90	0.73	0.90	28.6
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	*0.684	65.3	LOS E	5.7	41.2	1.00	0.85	1.12	24.4
8	T1	All MCs	128	3.3	128	3.3	0.684	33.1	LOS C	5.7	41.2	0.95	0.76	1.02	26.1
9	R2	All MCs	53	0.0	53	0.0	*0.413	50.8	LOS D	2.3	16.2	1.00	0.74	1.00	30.1
Approach			234	1.8	234	1.8	0.684	44.3	LOS D	5.7	41.2	0.97	0.78	1.03	26.8
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	0.195	31.2	LOS C	3.4	24.0	0.80	0.69	0.80	38.0
11	T1	All MCs	53	0.0	53	0.0	0.195	25.7	LOS C	3.4	24.0	0.80	0.69	0.80	35.6
12	R2	All MCs	53	0.0	53	0.0	*0.413	50.8	LOS D	2.3	16.2	1.00	0.74	1.00	30.2
Approach			158	0.0	158	0.0	0.413	35.9	LOS D	3.4	24.0	0.86	0.71	0.86	34.2
All Vehicles			760	0.8	760	0.8	0.684	38.6	LOS D	5.7	41.2	0.90	0.73	0.92	29.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: RoadName (S)												
P1	Full	100	105	38.0	LOS D	0.2	0.2	0.94	0.94	191.9	200.0	1.04
East: RoadName (E)												
P2	Full	100	105	38.0	LOS D	0.2	0.2	0.94	0.94	191.9	200.0	1.04
North: RoadName (N)												
P3	Full	100	105	38.0	LOS D	0.2	0.2	0.94	0.94	191.9	200.0	1.04
West: RoadName (W)												
P4	Full	100	105	38.0	LOS D	0.2	0.2	0.94	0.94	191.9	200.0	1.04
All Pedestrians		400	421	38.0	LOS D	0.2	0.2	0.94	0.94	191.9	200.0	1.04

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [110PM] PM Peak (Intersection 110 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 87.3 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

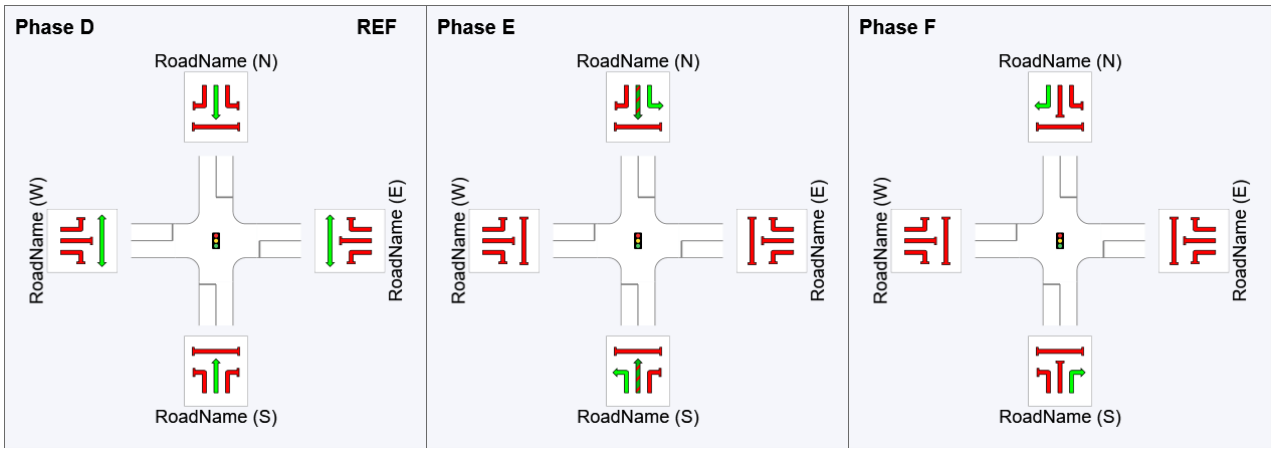
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns - Import
Input Phase Sequence: D, E, F, A, C
Output Phase Sequence: D, E, F, A, C
Reference Phase: Phase D

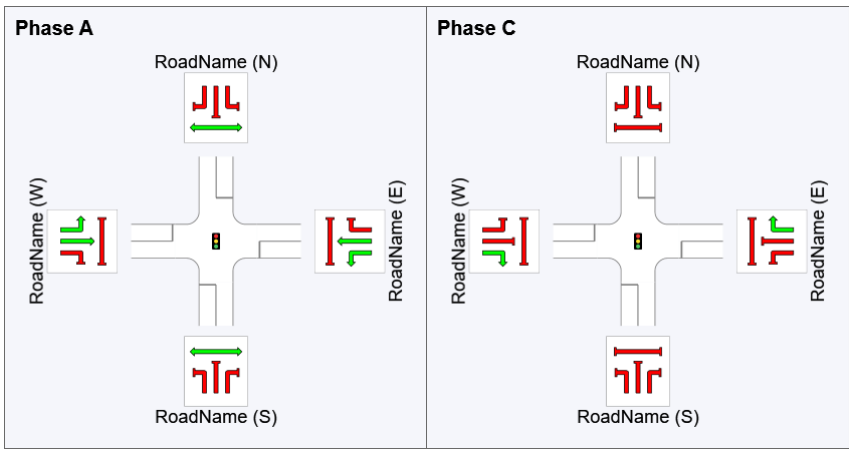
Phase Timing Summary

Phase	D	E	F	A	C
Phase Change Time (sec)	0.0	20.6	32.6	44.6	75.3
Green Time (sec)	14.6	6.0	6.0	24.7	6.0
Phase Time (sec)	20.6	12.0	12.0	30.7	12.0
Phase Split	24%	14%	14%	35%	14%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0

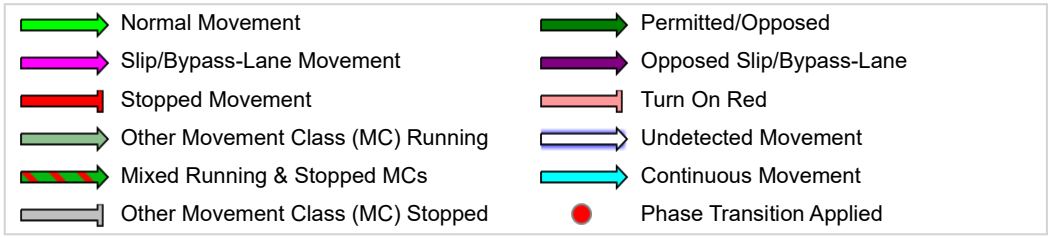
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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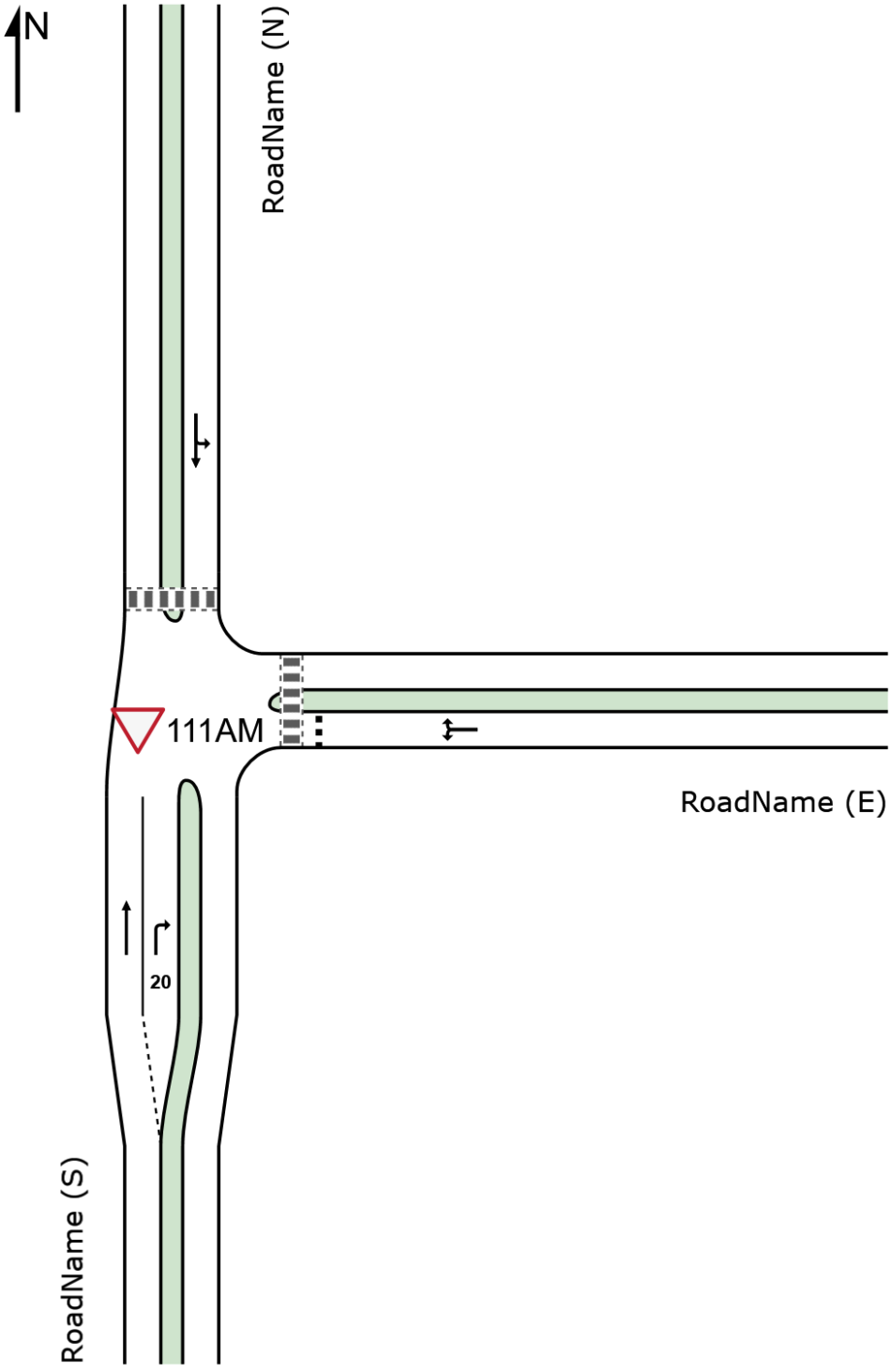
SITE LAYOUT

Site: [111AM] AM Peak (Intersection 111 - 2041)

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Organisation: URBIS | Licence: NETWORK / 1PC | Created: Friday, 15 May 2026 10:21:03 AM
Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba\IR Response\P0053364_Aura Transport Masterplan_2041 Intersection Analysis_260430.sipx

MOVEMENT SUMMARY

Site: [111AM] AM Peak (Intersection 111 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
2	T1	All MCs	92	4.6	92	4.6	0.048	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
3	R2	All MCs	53	0.0	53	0.0	0.036	6.2	LOS A	0.2	1.1	0.32	0.56	0.32	51.9
Approach			144	2.9	144	2.9	0.048	2.3	NA	0.2	1.1	0.12	0.21	0.12	56.7
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	0.102	6.1	LOS A	0.4	2.9	0.36	0.60	0.36	51.8
6	R2	All MCs	53	0.0	53	0.0	0.102	7.7	LOS A	0.4	2.9	0.36	0.60	0.36	51.7
Approach			105	0.0	105	0.0	0.102	6.9	LOS A	0.4	2.9	0.36	0.60	0.36	51.8
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.115	5.6	LOS A	0.0	0.0	0.00	0.15	0.00	56.2
8	T1	All MCs	163	5.2	163	5.2	0.115	0.0	LOS A	0.0	0.0	0.00	0.15	0.00	58.6
Approach			216	3.9	216	3.9	0.115	1.4	NA	0.0	0.0	0.00	0.15	0.00	58.0
All Vehicles			465	2.7	465	2.7	0.115	2.9	NA	0.4	2.9	0.12	0.27	0.12	56.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: [111PM] PM Peak (Intersection 111 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
2	T1	All MCs	59	5.4	59	5.4	0.031	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
3	R2	All MCs	53	0.0	53	0.0	0.035	6.1	LOS A	0.2	1.1	0.31	0.56	0.31	51.9
Approach			112	2.8	112	2.8	0.035	2.9	NA	0.2	1.1	0.14	0.26	0.14	55.9
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	0.098	6.0	LOS A	0.4	2.8	0.33	0.59	0.33	51.9
6	R2	All MCs	53	0.0	53	0.0	0.098	7.3	LOS A	0.4	2.8	0.33	0.59	0.33	51.8
Approach			105	0.0	105	0.0	0.098	6.7	LOS A	0.4	2.8	0.33	0.59	0.33	51.9
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.108	5.6	LOS A	0.0	0.0	0.00	0.15	0.00	56.1
8	T1	All MCs	151	4.9	151	4.9	0.108	0.0	LOS A	0.0	0.0	0.00	0.15	0.00	58.5
Approach			203	3.6	203	3.6	0.108	1.5	NA	0.0	0.0	0.00	0.15	0.00	57.9
All Vehicles			420	2.5	420	2.5	0.108	3.1	NA	0.4	2.8	0.12	0.29	0.12	55.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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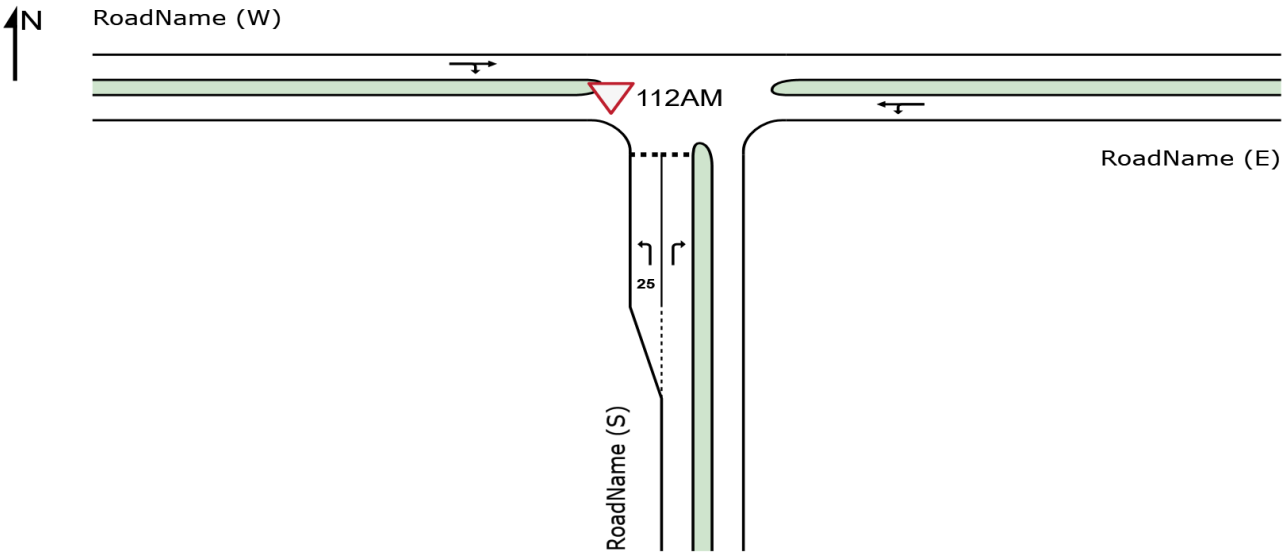
SITE LAYOUT

Site: [112AM] AM Peak (Intersection 112 - 2041)

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Organisation: URBIS | Licence: NETWORK / 1PC | Created: Friday, 15 May 2026 10:21:08 AM
Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba\IR Response\P0053364_Aura Transport Masterplan_2041 Intersection Analysis_260430.sipx

MOVEMENT SUMMARY

Site: [112AM] AM Peak (Intersection 112 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	120	5.3	120	5.3	0.080	5.8	LOS A	0.3	2.4	0.15	0.54	0.15	52.2
3	R2	All MCs	82	5.1	82	5.1	0.108	8.1	LOS A	0.4	2.6	0.46	0.73	0.46	50.8
Approach			202	5.2	202	5.2	0.108	6.7	LOS A	0.4	2.6	0.28	0.62	0.28	51.6
East: RoadName (E)															
4	L2	All MCs	57	5.6	57	5.6	0.065	5.6	LOS A	0.0	0.0	0.00	0.28	0.00	55.0
5	T1	All MCs	63	5.0	63	5.0	0.065	0.0	LOS A	0.0	0.0	0.00	0.28	0.00	57.5
Approach			120	5.3	120	5.3	0.065	2.7	NA	0.0	0.0	0.00	0.28	0.00	56.3
West: RoadName (W)															
11	T1	All MCs	216	4.9	216	4.9	0.230	0.3	LOS A	1.1	7.9	0.22	0.30	0.22	56.8
12	R2	All MCs	178	4.7	178	4.7	0.230	6.1	LOS A	1.1	7.9	0.22	0.30	0.22	54.3
Approach			394	4.8	394	4.8	0.230	2.9	NA	1.1	7.9	0.22	0.30	0.22	55.6
All Vehicles			716	5.0	716	5.0	0.230	4.0	NA	1.1	7.9	0.20	0.39	0.20	54.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: [112PM] PM Peak (Intersection 112 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	69	4.5	69	4.5	0.046	5.8	LOS A	0.2	1.3	0.14	0.54	0.14	52.3
3	R2	All MCs	53	4.0	53	4.0	0.050	6.3	LOS A	0.2	1.2	0.27	0.59	0.27	51.8
Approach			122	4.3	122	4.3	0.050	6.0	LOS A	0.2	1.3	0.20	0.56	0.20	52.1
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	0.059	5.6	LOS A	0.0	0.0	0.00	0.28	0.00	55.2
5	T1	All MCs	60	0.0	60	0.0	0.059	0.0	LOS A	0.0	0.0	0.00	0.28	0.00	57.5
Approach			113	0.0	113	0.0	0.059	2.6	NA	0.0	0.0	0.00	0.28	0.00	56.4
West: RoadName (W)															
11	T1	All MCs	53	4.0	53	4.0	0.071	0.3	LOS A	0.3	2.3	0.21	0.34	0.21	56.3
12	R2	All MCs	67	4.7	67	4.7	0.071	6.0	LOS A	0.3	2.3	0.21	0.34	0.21	53.9
Approach			120	4.4	120	4.4	0.071	3.5	NA	0.3	2.3	0.21	0.34	0.21	55.0
All Vehicles			355	3.0	355	3.0	0.071	4.1	NA	0.3	2.3	0.14	0.40	0.14	54.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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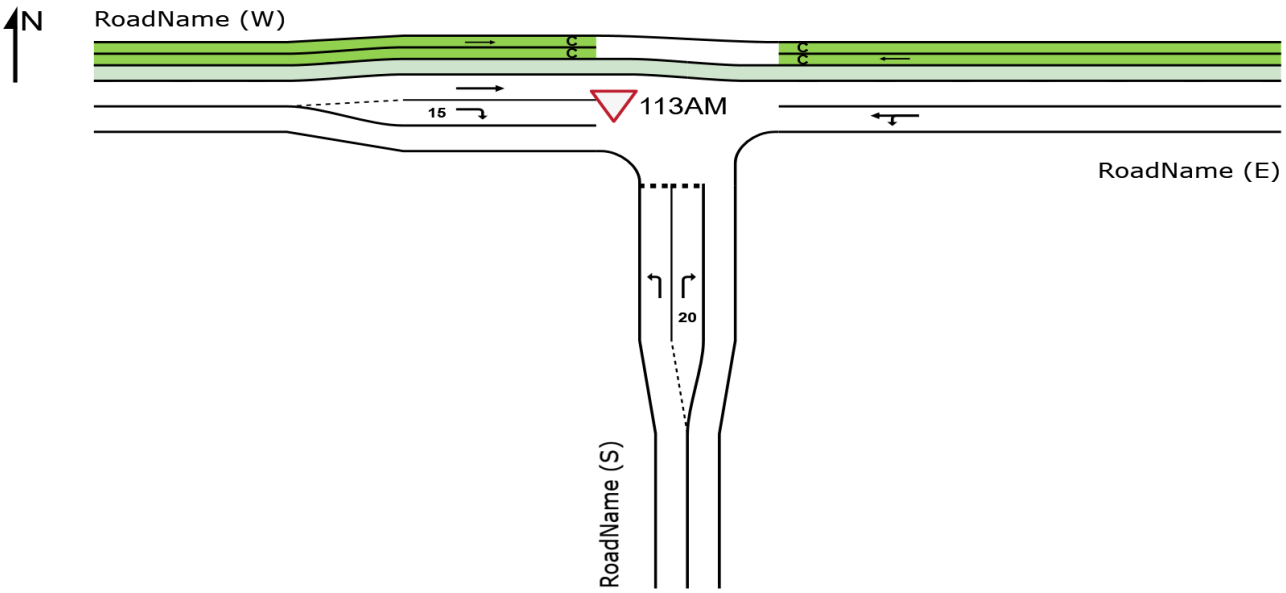
SITE LAYOUT

Site: [113AM] AM Peak (Intersection 113 - 2041)

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba\IR Response\P0053364_Aura Transport Masterplan_2041 Intersection Analysis_260430.sipx

MOVEMENT SUMMARY

Site: [113AM] AM Peak (Intersection 113 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	0.050	6.5	LOS A	0.2	1.2	0.32	0.59	0.32	51.9
3	R2	All MCs	53	0.0	53	0.0	0.155	14.4	LOS B	0.5	3.7	0.68	0.87	0.68	46.8
Approach			105	0.0	105	0.0	0.155	10.5	LOS B	0.5	3.7	0.50	0.73	0.50	49.2
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	0.154	5.6	LOS A	0.0	0.0	0.00	0.11	0.00	56.6
5	T1	All MCs	298	0.0	298	0.0	0.154	0.0	LOS A	0.0	0.0	0.00	0.09	0.00	50.4
Approach			351	0.0	351	0.0	0.154	0.9	NA	0.0	0.0	0.00	0.09	0.00	51.2
West: RoadName (W)															
11	T1	All MCs	364	4.3	364	4.3	0.165	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	52.4
12	R2	All MCs	53	0.0	53	0.0	0.051	6.9	LOS A	0.2	1.4	0.39	0.61	0.39	51.7
Approach			417	3.8	417	3.8	0.165	0.9	NA	0.2	1.4	0.05	0.08	0.05	52.3
All Vehicles			873	1.8	873	1.8	0.165	2.0	NA	0.5	3.7	0.08	0.16	0.08	51.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: [113PM] PM Peak (Intersection 113 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	0.065	7.8	LOS A	0.2	1.6	0.46	0.69	0.46	51.2
3	R2	All MCs	53	0.0	53	0.0	0.207	19.1	LOS C	0.7	5.0	0.77	0.92	0.82	44.1
Approach			105	0.0	105	0.0	0.207	13.5	LOS B	0.7	5.0	0.62	0.80	0.64	47.4
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	0.267	5.6	LOS A	0.0	0.0	0.00	0.06	0.00	56.9
5	T1	All MCs	518	0.0	518	0.0	0.267	0.1	LOS A	0.0	0.0	0.00	0.05	0.00	54.0
Approach			571	0.0	571	0.0	0.267	0.6	NA	0.0	0.0	0.00	0.06	0.00	54.2
West: RoadName (W)															
11	T1	All MCs	293	0.0	293	0.0	0.123	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.8
12	R2	All MCs	53	0.0	53	0.0	0.067	8.4	LOS A	0.2	1.7	0.52	0.72	0.52	50.8
Approach			345	0.0	345	0.0	0.123	1.3	NA	0.2	1.7	0.08	0.11	0.08	50.8
All Vehicles			1021	0.0	1021	0.0	0.267	2.2	NA	0.7	5.0	0.09	0.15	0.09	52.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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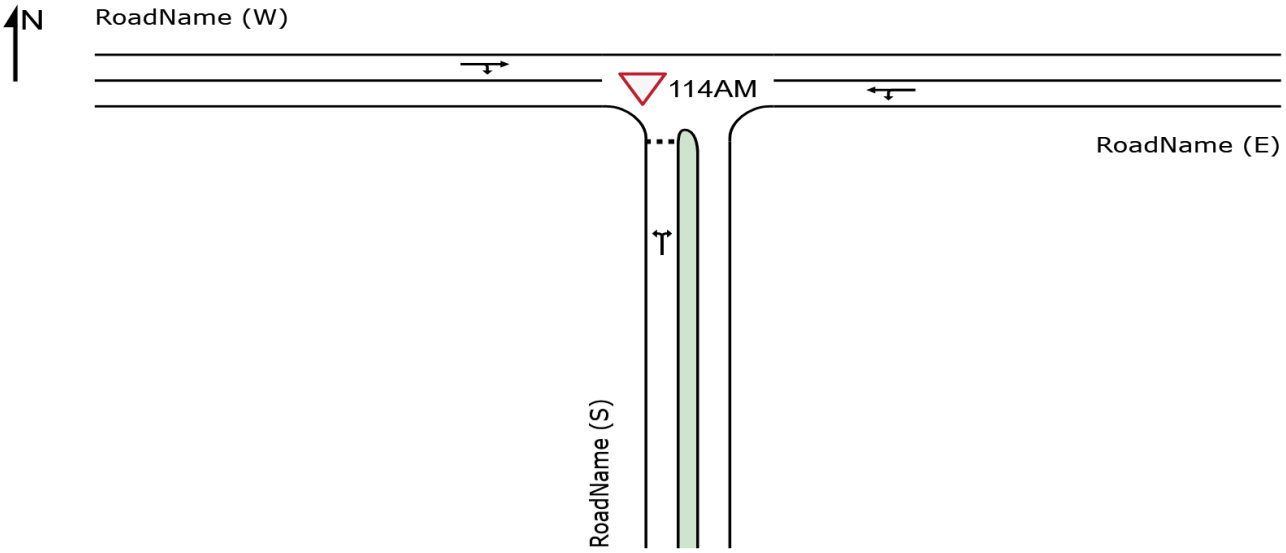
SITE LAYOUT

Site: [114AM] AM Peak (Intersection 114 - 2041)

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Organisation: URBIS | Licence: NETWORK / 1PC | Created: Friday, 15 May 2026 10:21:21 AM
Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba\IR Response\P0053364_Aura Transport Masterplan_2041 Intersection Analysis_260430.sipx

MOVEMENT SUMMARY

Site: [114AM] AM Peak (Intersection 114 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	4.0	53	4.0	0.086	5.8	LOS A	0.3	2.3	0.18	0.55	0.18	52.2
3	R2	All MCs	53	4.0	53	4.0	0.086	6.4	LOS A	0.3	2.3	0.18	0.55	0.18	52.0
Approach			105	4.0	105	4.0	0.086	6.1	LOS A	0.3	2.3	0.18	0.55	0.18	52.1
East: RoadName (E)															
4	L2	All MCs	73	4.3	73	4.3	0.068	5.6	LOS A	0.0	0.0	0.00	0.34	0.00	54.5
5	T1	All MCs	53	4.0	53	4.0	0.068	0.0	LOS A	0.0	0.0	0.00	0.34	0.00	57.0
Approach			125	4.2	125	4.2	0.068	3.3	NA	0.0	0.0	0.00	0.34	0.00	55.5
West: RoadName (W)															
11	T1	All MCs	53	4.0	53	4.0	0.082	0.4	LOS A	0.4	2.8	0.23	0.38	0.23	56.1
12	R2	All MCs	83	5.1	83	5.1	0.082	6.0	LOS A	0.4	2.8	0.23	0.38	0.23	53.5
Approach			136	4.7	136	4.7	0.082	3.8	NA	0.4	2.8	0.23	0.38	0.23	54.4
All Vehicles			366	4.3	366	4.3	0.086	4.3	NA	0.4	2.8	0.14	0.42	0.14	54.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: [114PM] PM Peak (Intersection 114 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	4.0	53	4.0	0.088	5.8	LOS A	0.3	2.4	0.18	0.56	0.18	52.2
3	R2	All MCs	58	3.6	58	3.6	0.088	6.3	LOS A	0.3	2.4	0.18	0.56	0.18	52.0
Approach			111	3.8	111	3.8	0.088	6.0	LOS A	0.3	2.4	0.18	0.56	0.18	52.1
East: RoadName (E)															
4	L2	All MCs	53	4.0	53	4.0	0.057	5.6	LOS A	0.0	0.0	0.00	0.29	0.00	54.9
5	T1	All MCs	53	4.0	53	4.0	0.057	0.0	LOS A	0.0	0.0	0.00	0.29	0.00	57.4
Approach			105	4.0	105	4.0	0.057	2.8	NA	0.0	0.0	0.00	0.29	0.00	56.1
West: RoadName (W)															
11	T1	All MCs	53	4.0	53	4.0	0.061	0.2	LOS A	0.3	1.9	0.19	0.31	0.19	56.7
12	R2	All MCs	53	4.0	53	4.0	0.061	5.9	LOS A	0.3	1.9	0.19	0.31	0.19	54.1
Approach			105	4.0	105	4.0	0.061	3.1	NA	0.3	1.9	0.19	0.31	0.19	55.4
All Vehicles			321	3.9	321	3.9	0.088	4.0	NA	0.3	2.4	0.12	0.39	0.12	54.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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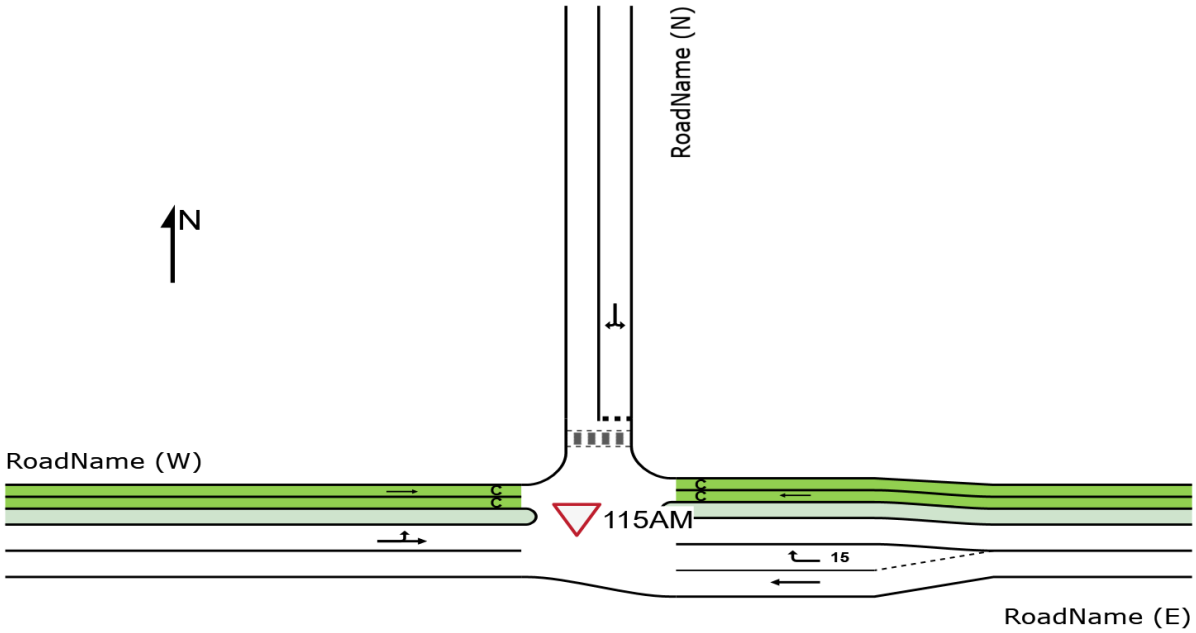
SITE LAYOUT

Site: [115AM] AM Peak (Intersection 115 - 2041)

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Organisation: URBIS | Licence: NETWORK / 1PC | Created: Friday, 15 May 2026 10:21:28 AM
Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba\IR Response\P0053364_Aura Transport Masterplan_2041 Intersection Analysis_260430.sipx

MOVEMENT SUMMARY

Site: [115AM] AM Peak (Intersection 115 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
East: RoadName (E)															
5	T1	All MCs	248	3.4	248	3.4	0.103	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.5
6	R2	All MCs	53	0.0	53	0.0	0.063	8.1	LOS A	0.2	1.7	0.50	0.70	0.50	50.9
Approach			301	2.8	301	2.8	0.103	1.4	NA	0.2	1.7	0.09	0.12	0.09	49.7
North: RoadName (N)															
7	L2	All MCs	60	0.0	60	0.0	0.356	5.7	LOS A	1.6	11.5	0.46	0.51	0.46	46.7
9	R2	All MCs	92	0.0	92	0.0	0.356	20.7	LOS C	1.6	11.5	0.46	0.51	0.46	46.6
Approach			152	0.0	152	0.0	0.356	14.8	LOS B	1.6	11.5	0.46	0.51	0.46	46.6
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	0.249	5.6	LOS A	0.0	0.0	0.00	0.07	0.00	56.8
11	T1	All MCs	468	4.5	468	4.5	0.249	0.1	LOS A	0.0	0.0	0.00	0.06	0.00	53.4
Approach			521	4.0	521	4.0	0.249	0.6	NA	0.0	0.0	0.00	0.06	0.00	53.7
All Vehicles			974	3.0	974	3.0	0.356	3.1	NA	1.6	11.5	0.10	0.15	0.10	51.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: [115PM] PM Peak (Intersection 115 - 2041)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
East: RoadName (E)															
5	T1	All MCs	341	4.3	341	4.3	0.153	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	51.9
6	R2	All MCs	53	0.0	53	0.0	0.049	6.7	LOS A	0.2	1.3	0.37	0.61	0.37	51.7
Approach			394	3.7	394	3.7	0.153	0.9	NA	0.2	1.3	0.05	0.08	0.05	51.9
North: RoadName (N)															
7	L2	All MCs	23	0.0	23	0.0	0.589	11.0	LOS B	5.7	40.2	0.78	0.85	1.36	42.8
9	R2	All MCs	218	0.0	218	0.0	0.589	23.0	LOS C	5.7	40.2	0.78	0.85	1.36	42.7
Approach			241	0.0	241	0.0	0.589	21.8	LOS C	5.7	40.2	0.78	0.85	1.36	42.7
West: RoadName (W)															
10	L2	All MCs	76	0.0	76	0.0	0.138	5.6	LOS A	0.0	0.0	0.00	0.17	0.00	56.0
11	T1	All MCs	237	4.0	237	4.0	0.138	0.0	LOS A	0.0	0.0	0.00	0.13	0.00	48.2
Approach			313	3.0	313	3.0	0.138	1.4	NA	0.0	0.0	0.00	0.14	0.00	49.9
All Vehicles			947	2.6	947	2.6	0.589	6.4	NA	5.7	40.2	0.22	0.30	0.37	48.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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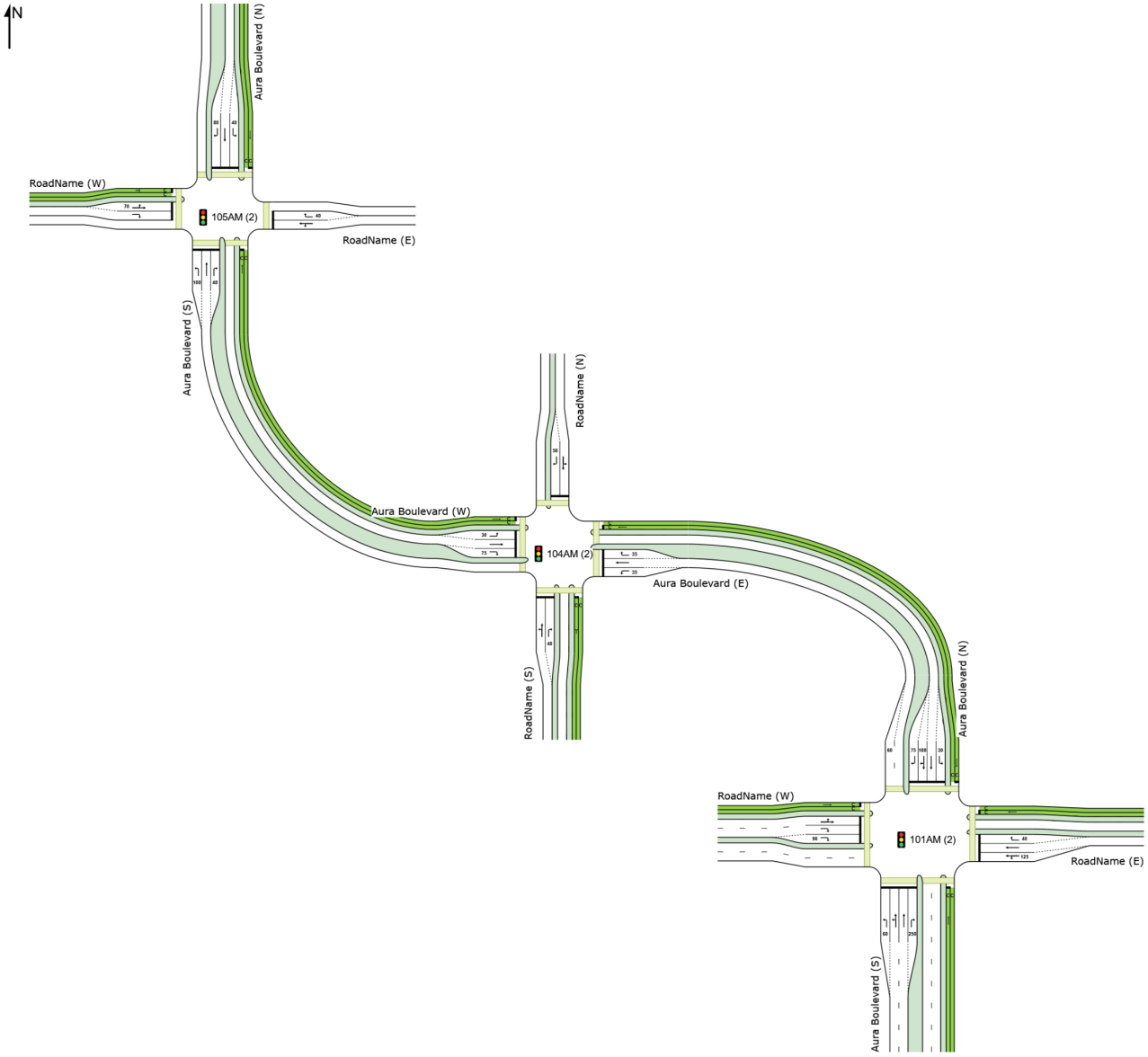
NETWORK LAYOUT

Network: [1] AM Peak (Aura Boulevard)

New Network
Network Category: (None)
Network Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
101AM (2)	NA	101 - AM Peak - Network
104AM (2)	NA	104 - AM Peak - Network
105AM (2)	NA	105 - AM Peak - Network

MOVEMENT SUMMARY

Site: [101AM (2)] 101 - AM Peak - Network (Network 1 - Aura Boulevard)

Network: [1] AM Peak (Aura Boulevard)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120.0 seconds (Network User-Given Cycle Time)
Network Scenario: 1 | Local Volumes **Site Scenario: 1 | Local Volumes**

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Aura Boulevard (S)															
1	L2	All MCs	635	0.0	635	0.0	* 0.826	38.2	LOS D	20.9	146.2	0.94	1.06	1.01	19.5
2	T1	All MCs	269	3.9	269	3.9	0.349	19.9	LOS B	6.3	46.2	0.73	0.90	0.73	21.0
3	R2	All MCs	113	0.0	113	0.0	0.339	52.6	LOS D	5.8	40.9	0.92	0.78	0.92	28.6
Approach			1017	1.0	1017	1.0	0.826	35.0	LOS C	20.9	146.2	0.88	0.99	0.93	20.4
East: RoadName (E)															
4	L2	All MCs	257	0.0	257	0.0	0.810	62.0	LOS E	16.0	113.6	1.00	0.91	1.14	26.0
5	T1	All MCs	105	5.0	105	5.0	* 0.810	49.6	LOS D	16.0	113.6	0.92	0.69	0.93	21.7
6	R2	All MCs	53	0.0	53	0.0	0.224	57.4	LOS E	2.8	19.8	0.94	0.74	0.94	20.4
Approach			415	1.3	415	1.3	0.810	58.2	LOS E	16.0	113.6	0.97	0.83	1.06	24.3
North: Aura Boulevard (N)															
7	L2	All MCs	28	0.0	28	0.0	0.306	84.7	LOS F	1.8	12.3	1.00	0.73	1.00	26.7
8	T1	All MCs	564	0.0	564	0.0	0.382	46.5	LOS D	13.5	94.4	0.95	0.75	0.95	32.1
9	R2	All MCs	53	0.0	53	0.0	* 0.364	65.8	LOS E	3.1	21.7	1.00	0.75	1.00	22.6
Approach			645	0.0	645	0.0	0.382	49.7	LOS D	13.5	94.4	0.96	0.75	0.96	29.2
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	* 0.803	78.1	LOS E	7.0	50.3	1.00	0.91	1.24	8.1
11	T1	All MCs	111	2.9	111	2.9	0.803	53.7	LOS D	7.0	50.3	0.95	0.79	1.08	20.2
12	R2	All MCs	365	0.0	365	0.0	0.691	60.7	LOS E	10.6	74.2	1.00	0.85	1.05	20.1
Approach			528	0.6	528	0.6	0.803	61.0	LOS E	10.6	74.2	0.99	0.84	1.08	19.1
All Vehicles			2605	0.7	2605	0.7	0.826	47.6	LOS D	20.9	146.2	0.94	0.87	0.98	23.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Qued	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: Aura Boulevard (S)										
P11 Stage 1	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
P12 Stage 2	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
East: RoadName (E)										
P2 Full	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
North: Aura Boulevard (N)										
P31 Stage 1	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
P32 Stage 2	158	24.6	LOS C	0.3	0.3	0.91	0.91	178.4	200.0	1.12
West: RoadName (W)										
P4 Full	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
All Pedestrians	947	49.5	LOS E	0.5	0.5	0.95	0.95	203.4	200.0	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: [104AM (2)] 104 - AM Peak - Network (Network 1 - Aura Boulevard)

Network: [1] AM Peak (Aura Boulevard)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120.0 seconds (Network User-Given Cycle Time)
Network Scenario: 1 | Local Volumes **Site Scenario: 1 | Local Volumes**

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	86	0.0	86	0.0	0.454	56.1	LOS E	6.3	43.8	0.95	0.75	0.95	19.7
2	T1	All MCs	53	0.0	53	0.0	* 0.454	53.3	LOS D	6.3	43.8	0.97	0.78	0.97	31.3
3	R2	All MCs	79	0.0	79	0.0	0.217	54.4	LOS D	2.8	19.7	0.93	0.72	0.93	19.6
Approach			218	0.0	218	0.0	0.454	54.8	LOS D	6.3	43.8	0.95	0.75	0.95	22.9
East: Aura Boulevard (E)															
4	L2	All MCs	53	0.0	53	0.0	0.067	25.6	LOS C	1.7	11.7	0.58	0.69	0.58	41.0
5	T1	All MCs	249	3.8	249	3.8	0.247	26.6	LOS C	6.7	48.9	0.71	0.57	0.71	29.1
6	R2	All MCs	53	0.0	53	0.0	0.437	65.3	LOS E	3.1	21.6	0.98	0.74	0.98	28.5
Approach			355	2.7	355	2.7	0.437	32.2	LOS C	6.7	48.9	0.73	0.62	0.73	31.0
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.302	51.6	LOS D	5.4	37.7	0.91	0.75	0.91	23.4
8	T1	All MCs	53	0.0	53	0.0	* 0.302	46.1	LOS D	5.4	37.7	0.91	0.75	0.91	33.4
9	R2	All MCs	53	0.0	53	0.0	0.154	50.2	LOS D	2.6	18.2	0.88	0.74	0.88	23.1
Approach			158	0.0	158	0.0	0.302	49.3	LOS D	5.4	37.7	0.90	0.74	0.90	27.4
West: Aura Boulevard (W)															
10	L2	All MCs	53	0.0	53	0.0	* 0.215	40.8	LOS D	1.7	12.2	0.58	0.68	0.58	37.3
11	T1	All MCs	416	4.3	416	4.3	0.480	25.6	LOS C	11.0	80.3	0.61	0.52	0.61	34.0
12	R2	All MCs	53	0.0	53	0.0	* 0.437	69.8	LOS E	3.2	22.5	1.00	0.77	1.00	27.6
Approach			521	3.4	521	3.4	0.480	31.6	LOS C	11.0	80.3	0.65	0.56	0.65	30.9
All Vehicles			1252	2.2	1252	2.2	0.480	38.0	LOS D	11.0	80.3	0.75	0.63	0.75	28.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Qued	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: RoadName (S)										
P1 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
East: Aura Boulevard (E)										
P21 Stage 1	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P22 Stage 2	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
North: RoadName (N)										
P3 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
West: Aura Boulevard (W)										
P41 Stage 1	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P42 Stage 2	53	25.2	LOS C	0.1	0.1	0.90	0.90	179.1	200.0	1.12
All Pedestrians	421	50.7	LOS E	0.3	0.3	0.95	0.95	204.5	200.0	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: [105AM (2)] 105 - AM Peak - Network (Network 1 - Aura Boulevard)

Network: [1] AM Peak (Aura Boulevard)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120.0 seconds (Network User-Given Cycle Time)
Network Scenario: 1 | Local Volumes **Site Scenario: 1 | Local Volumes**

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Aura Boulevard (S)															
1	L2	All MCs	144	0.0	144	0.0	* 0.249	28.8	LOS C	5.2	36.3	0.86	1.08	0.86	29.7
2	T1	All MCs	159	3.3	159	3.3	0.143	18.5	LOS B	2.1	13.5	0.53	0.56	0.53	33.4
3	R2	All MCs	53	0.0	53	0.0	0.131	56.6	LOS E	3.0	21.2	1.00	0.79	1.00	30.5
Approach			356	1.5	356	1.5	0.249	28.3	LOS C	5.2	36.3	0.74	0.81	0.74	31.4
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	0.603	57.9	LOS E	6.2	43.5	1.00	0.80	1.02	20.1
5	T1	All MCs	53	0.0	53	0.0	* 0.603	65.8	LOS E	6.2	43.5	1.00	0.80	1.02	29.9
6	R2	All MCs	53	0.0	53	0.0	0.372	65.1	LOS E	3.1	21.5	0.99	0.75	0.99	28.6
Approach			158	0.0	158	0.0	0.603	62.9	LOS E	6.2	43.5	1.00	0.78	1.01	26.8
North: Aura Boulevard (N)															
7	L2	All MCs	53	0.0	53	0.0	0.283	61.2	LOS E	3.0	20.7	0.96	0.75	0.96	29.3
8	T1	All MCs	167	3.1	167	3.1	0.207	38.1	LOS D	5.0	36.6	0.83	0.64	0.83	23.7
9	R2	All MCs	53	0.0	53	0.0	* 0.425	66.8	LOS E	3.1	21.9	1.00	0.75	1.00	28.2
Approach			273	1.9	273	1.9	0.425	48.1	LOS D	5.0	36.6	0.89	0.68	0.89	26.2
West: RoadName (W)															
10	L2	All MCs	79	0.0	79	0.0	* 0.272	34.0	LOS C	3.7	25.7	0.89	0.92	0.89	27.0
11	T1	All MCs	53	0.0	53	0.0	0.272	31.5	LOS C	3.7	25.7	0.89	1.03	0.89	31.6
12	R2	All MCs	267	0.0	267	0.0	* 0.604	51.1	LOS D	12.9	90.2	0.95	0.81	0.95	21.9
Approach			399	0.0	399	0.0	0.604	45.1	LOS D	12.9	90.2	0.93	0.86	0.93	24.8
All Vehicles			1185	0.9	1185	0.9	0.604	43.1	LOS D	12.9	90.2	0.87	0.79	0.87	27.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Qued	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: Aura Boulevard (S)										
P11 Stage 1	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P12 Stage 2	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
East: RoadName (E)										
P2 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: Aura Boulevard (N)										
P31 Stage 1	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P32 Stage 2	53	24.6	LOS C	0.1	0.1	0.90	0.90	178.4	200.0	1.12
West: RoadName (W)										
P4 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians	421	50.6	LOS E	0.3	0.3	0.95	0.95	204.5	200.0	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: [101PM (2)] 101 - PM Peak - Network (Network 1 - Aura Boulevard)

Network: [2] PM Peak (Aura Boulevard)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120.0 seconds (Network User-Given Cycle Time)
Network Scenario: 1 | Local Volumes **Site Scenario: 1 | Local Volumes**

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Aura Boulevard (S)															
1	L2	All MCs	333	0.0	333	0.0	* 0.540	27.7	LOS C	11.3	79.3	0.87	1.07	0.87	20.9
2	T1	All MCs	591	4.6	591	4.6	0.540	18.9	LOS B	13.2	92.3	0.81	0.97	0.81	20.8
3	R2	All MCs	181	0.0	181	0.0	0.548	54.9	LOS D	9.8	68.8	0.96	0.81	0.96	28.0
Approach			1104	2.5	1104	2.5	0.548	27.5	LOS C	13.2	92.3	0.85	0.97	0.85	22.5
East: RoadName (E)															
4	L2	All MCs	176	0.0	176	0.0	* 0.616	57.5	LOS E	10.0	70.4	0.98	0.81	0.98	27.0
5	T1	All MCs	105	2.0	105	2.0	0.616	49.3	LOS D	10.0	70.4	0.92	0.68	0.92	21.7
6	R2	All MCs	53	0.0	53	0.0	0.264	60.1	LOS E	2.9	20.4	0.96	0.75	0.96	19.8
Approach			334	0.6	334	0.6	0.616	55.4	LOS E	10.0	70.4	0.96	0.76	0.96	24.3
North: Aura Boulevard (N)															
7	L2	All MCs	24	0.0	24	0.0	0.261	68.6	LOS E	1.4	9.7	0.95	0.70	0.95	28.0
8	T1	All MCs	457	4.4	457	4.4	0.295	28.6	LOS C	7.8	59.7	0.75	0.66	0.75	33.0
9	R2	All MCs	53	0.0	53	0.0	* 0.295	57.4	LOS E	7.8	54.7	0.89	0.71	0.89	24.7
Approach			534	3.7	534	3.7	0.295	33.2	LOS C	7.8	59.7	0.78	0.67	0.78	31.4
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	* 0.606	71.5	LOS E	6.2	44.3	1.00	0.80	1.03	8.8
11	T1	All MCs	105	2.0	105	2.0	0.606	48.8	LOS D	6.2	44.3	0.94	0.72	0.95	20.9
12	R2	All MCs	259	0.0	259	0.0	0.429	55.2	LOS E	7.0	48.7	0.95	0.79	0.95	21.3
Approach			417	0.5	417	0.5	0.606	55.7	LOS E	7.0	48.7	0.95	0.77	0.96	20.0
All Vehicles			2388	2.2	2388	2.2	0.616	37.6	LOS D	13.2	92.3	0.87	0.84	0.87	24.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Qued	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: Aura Boulevard (S)										
P11 Stage 1	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
P12 Stage 2	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
East: RoadName (E)										
P2 Full	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
North: Aura Boulevard (N)										
P31 Stage 1	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
P32 Stage 2	158	24.6	LOS C	0.3	0.3	0.91	0.91	178.4	200.0	1.12
West: RoadName (W)										
P4 Full	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
All Pedestrians	947	49.5	LOS E	0.5	0.5	0.95	0.95	203.4	200.0	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: [104PM (2)] 104 - PM Peak - Network (Network 1 - Aura Boulevard)

Network: [2] PM Peak (Aura Boulevard)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120.0 seconds (Network User-Given Cycle Time)
Network Scenario: 1 | Local Volumes **Site Scenario: 1 | Local Volumes**

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	79	0.0	79	0.0	0.490	58.1	LOS E	6.0	41.8	0.97	0.75	0.97	19.2
2	T1	All MCs	53	0.0	53	0.0	* 0.490	55.6	LOS E	6.0	41.8	0.98	0.78	0.98	30.7
3	R2	All MCs	79	0.0	79	0.0	0.251	56.7	LOS E	2.9	20.2	0.94	0.73	0.94	19.1
Approach			211	0.0	211	0.0	0.490	57.0	LOS E	6.0	41.8	0.96	0.75	0.96	22.5
East: Aura Boulevard (E)															
4	L2	All MCs	53	0.0	53	0.0	0.066	18.6	LOS B	1.0	6.8	0.34	0.64	0.34	45.5
5	T1	All MCs	456	4.4	456	4.4	0.504	18.9	LOS B	11.1	81.1	0.57	0.48	0.57	36.0
6	R2	All MCs	53	0.0	53	0.0	0.422	68.4	LOS E	3.1	21.9	1.00	0.75	1.00	28.2
Approach			561	3.6	561	3.6	0.504	23.5	LOS C	11.1	81.1	0.58	0.52	0.58	34.7
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.294	51.1	LOS D	5.3	37.4	0.90	0.75	0.90	23.6
8	T1	All MCs	53	0.0	53	0.0	* 0.294	45.5	LOS D	5.3	37.4	0.90	0.75	0.90	33.5
9	R2	All MCs	53	0.0	53	0.0	0.151	49.7	LOS D	2.6	18.1	0.87	0.74	0.87	23.3
Approach			158	0.0	158	0.0	0.294	48.7	LOS D	5.3	37.4	0.89	0.74	0.89	27.5
West: Aura Boulevard (W)															
10	L2	All MCs	53	0.0	53	0.0	* 0.212	51.7	LOS D	2.6	18.2	0.86	0.73	0.86	31.7
11	T1	All MCs	323	4.2	323	4.2	0.332	12.2	LOS B	3.2	23.4	0.35	0.28	0.35	38.7
12	R2	All MCs	53	0.0	53	0.0	* 0.422	69.7	LOS E	3.2	22.5	1.00	0.77	1.00	27.6
Approach			428	3.2	428	3.2	0.422	24.1	LOS C	3.2	23.4	0.49	0.39	0.49	34.5
All Vehicles			1358	2.5	1358	2.5	0.504	31.8	LOS C	11.1	81.1	0.65	0.54	0.65	31.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Qued	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: RoadName (S)										
P1 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
East: Aura Boulevard (E)										
P21 Stage 1	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P22 Stage 2	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
North: RoadName (N)										
P3 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
West: Aura Boulevard (W)										
P41 Stage 1	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P42 Stage 2	53	25.5	LOS C	0.1	0.1	0.90	0.90	179.4	200.0	1.11
All Pedestrians	421	50.7	LOS E	0.3	0.3	0.95	0.95	204.6	200.0	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: [105PM (2)] 105 - PM Peak - Network (Network 1 - Aura Boulevard)

Network: [2] PM Peak (Aura Boulevard)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120.0 seconds (Network User-Given Cycle Time)
Network Scenario: 1 | Local Volumes **Site Scenario: 1 | Local Volumes**

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Aura Boulevard (S)															
1	L2	All MCs	320	0.0	320	0.0	* 0.521	39.9	LOS D	15.0	105.0	0.86	0.82	0.86	35.3
2	T1	All MCs	147	2.9	147	2.9	0.122	32.9	LOS C	3.2	23.4	0.76	0.58	0.76	31.7
3	R2	All MCs	53	0.0	53	0.0	0.425	55.9	LOS E	2.8	19.5	0.89	0.73	0.89	30.6
Approach			520	0.8	520	0.8	0.521	39.6	LOS D	15.0	105.0	0.83	0.74	0.83	33.7
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	* 0.557	66.5	LOS E	6.1	42.8	1.00	0.78	1.00	20.4
5	T1	All MCs	53	0.0	53	0.0	0.557	54.5	LOS D	6.1	42.8	1.00	0.78	1.00	30.2
6	R2	All MCs	53	0.0	53	0.0	0.210	56.3	LOS E	2.8	19.6	0.93	0.74	0.93	30.7
Approach			158	0.0	158	0.0	0.557	59.1	LOS E	6.1	42.8	0.97	0.77	0.97	27.7
North: Aura Boulevard (N)															
7	L2	All MCs	53	0.0	53	0.0	0.134	46.9	LOS D	2.5	17.5	0.85	0.74	0.85	33.1
8	T1	All MCs	163	3.2	163	3.2	0.142	30.6	LOS C	4.0	29.0	0.73	0.57	0.73	26.0
9	R2	All MCs	53	0.0	53	0.0	* 0.425	66.8	LOS E	3.1	21.9	1.00	0.75	1.00	28.2
Approach			268	2.0	268	2.0	0.425	40.9	LOS D	4.0	29.0	0.81	0.64	0.81	28.3
West: RoadName (W)															
10	L2	All MCs	79	0.0	79	0.0	* 0.436	61.2	LOS E	5.9	41.0	0.95	0.75	0.95	26.6
11	T1	All MCs	53	0.0	53	0.0	0.436	48.8	LOS D	5.9	41.0	0.97	0.77	0.97	31.3
12	R2	All MCs	217	0.0	217	0.0	0.549	53.1	LOS D	10.3	71.9	0.95	0.80	0.95	21.2
Approach			348	0.0	348	0.0	0.549	54.3	LOS D	10.3	71.9	0.96	0.78	0.96	24.5
All Vehicles			1295	0.7	1295	0.7	0.557	46.2	LOS D	15.0	105.0	0.88	0.74	0.88	29.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Qued	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: Aura Boulevard (S)										
P11 Stage 1	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P12 Stage 2	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
East: RoadName (E)										
P2 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: Aura Boulevard (N)										
P31 Stage 1	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P32 Stage 2	53	25.1	LOS C	0.1	0.1	0.90	0.90	178.9	200.0	1.12
West: RoadName (W)										
P4 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians	421	50.7	LOS E	0.3	0.3	0.95	0.95	204.5	200.0	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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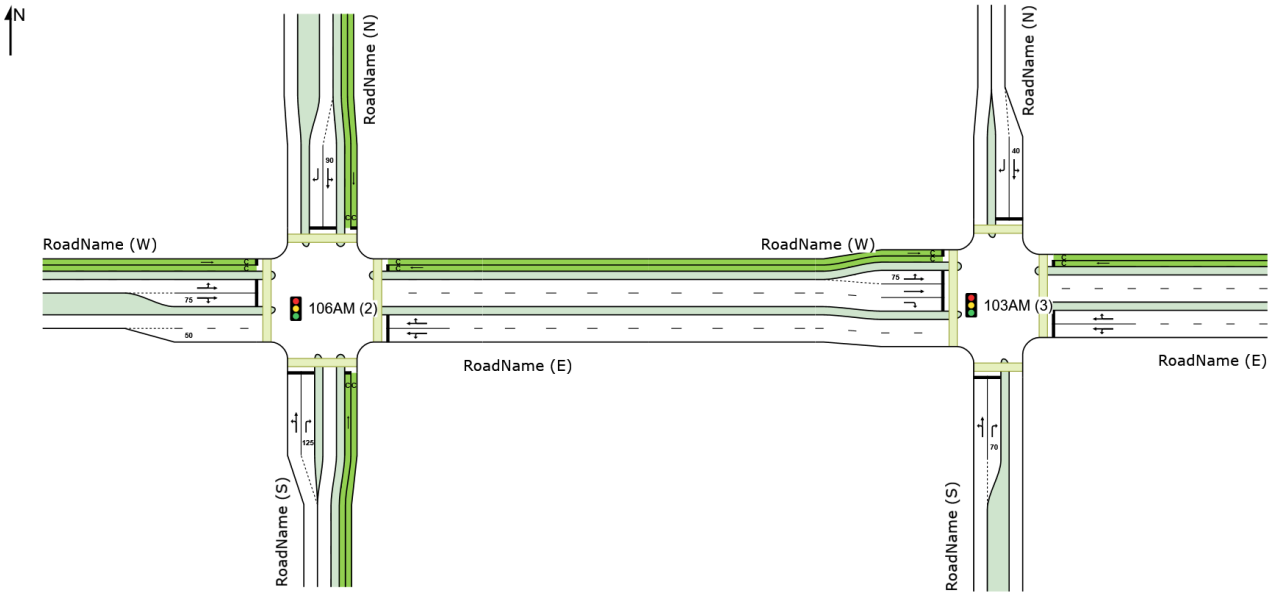
NETWORK LAYOUT

Network: [3] AM Peak (East-West Link)

New Network
Network Category: (None)
Network Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
103AM (3)	NA	103 - AM Peak
106AM (2)	NA	106 - AM Peak

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Organisation: URBIS | Licence: NETWORK / 1PC | Created: Friday, 15 May 2026 10:52:42 AM
Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba \IR Response\P0053364_Aura Transport Masterplan_2041 Intersection Analysis_260430.sipx

MOVEMENT SUMMARY

Site: [103AM (3)] 103 - AM Peak (Network 2 - East-West Link)
Network: [3] AM Peak (East-West Link)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120.0 seconds (Network Site User-Given Phase Times)
Network Scenario: 1 | Local Volumes **Site Scenario: 1 | Local Volumes**

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	*0.256	50.5	LOS D	5.1	36.0	0.87	0.73	0.87	14.9
2	T1	All MCs	53	0.0	53	0.0	0.256	39.5	LOS D	5.1	36.0	0.87	0.73	0.87	20.8
3	R2	All MCs	138	0.0	138	0.0	*0.817	70.3	LOS E	8.7	61.2	1.00	0.93	1.24	15.7
Approach			243	0.0	243	0.0	0.817	59.4	LOS E	8.7	61.2	0.94	0.84	1.08	16.5
East: RoadName (E)															
4	L2	All MCs	205	0.0	205	0.0	0.878	73.4	LOS E	16.4	122.4	1.00	1.00	1.27	15.8
5	T1	All MCs	448	4.5	448	4.5	0.878	52.6	LOS D	25.8	180.4	0.99	0.98	1.17	10.1
6	R2	All MCs	53	0.0	53	0.0	*0.878	85.2	LOS F	25.8	180.4	1.00	1.03	1.19	15.5
Approach			706	2.8	706	2.8	0.878	61.1	LOS E	25.8	180.4	0.99	0.99	1.20	12.5
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.220	43.8	LOS D	4.9	34.1	0.83	0.72	0.83	19.8
8	T1	All MCs	53	0.0	53	0.0	0.220	38.2	LOS D	4.9	34.1	0.83	0.72	0.83	22.1
9	R2	All MCs	53	0.0	53	0.0	0.312	62.7	LOS E	3.0	21.0	0.97	0.75	0.97	8.6
Approach			158	0.0	158	0.0	0.312	48.2	LOS D	4.9	34.1	0.88	0.73	0.88	16.5
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	*0.348	45.6	LOS D	4.6	34.4	0.93	1.02	0.93	19.8
11	T1	All MCs	309	4.1	309	4.1	*0.348	26.4	LOS C	5.7	40.0	0.93	0.96	0.93	20.9
12	R2	All MCs	53	0.0	53	0.0	0.218	63.4	LOS E	3.1	21.7	1.00	0.78	1.00	16.8
Approach			415	3.0	415	3.0	0.348	33.5	LOS C	5.7	40.0	0.94	0.94	0.94	20.1
All Vehicles			1522	2.1	1522	2.1	0.878	52.0	LOS D	25.8	180.4	0.96	0.93	1.08	15.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Qued	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: RoadName (S)										
P1 Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
East: RoadName (E)										
P2 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: RoadName (N)										
P3 Full	105	26.0	LOS C	0.2	0.2	0.90	0.90	179.8	200.0	1.11
West: RoadName (W)										
P4 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians	368	46.3	LOS E	0.3	0.3	0.94	0.94	200.1	200.0	1.00

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Organisation: URBIS | Licence: NETWORK / 1PC | Processed: Wednesday, 13 May 2026 11:13:41 AM
Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba\IR Response\P0053364_Aura Transport Masterplan_2041 Intersection Analysis_260430.sipx

MOVEMENT SUMMARY

Site: [106AM (2)] 106 - AM Peak (Network 2 - East-West Link)
Network: [3] AM Peak (East-West Link)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120.0 seconds (Network Site User-Given Phase Times)
Network Scenario: 1 | Local Volumes **Site Scenario: 1 | Local Volumes**

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	*0.747	86.8	LOS F	6.5	45.8	1.00	0.87	1.17	19.9
2	T1	All MCs	105	0.0	105	0.0	0.747	44.8	LOS D	6.5	45.8	0.93	0.75	1.01	16.1
3	R2	All MCs	56	0.0	56	0.0	*0.515	68.6	LOS E	3.4	23.7	1.00	0.76	1.00	10.7
Approach			214	0.0	214	0.0	0.747	61.3	LOS E	6.5	45.8	0.97	0.78	1.05	15.9
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	*0.196	30.2	LOS C	1.9	15.3	0.86	1.07	0.86	22.0
5	T1	All MCs	236	4.0	236	4.0	*0.415	26.5	LOS C	8.5	59.7	0.99	0.94	0.99	23.2
6	R2	All MCs	53	0.0	53	0.0	0.415	57.7	LOS E	8.5	59.7	1.00	1.00	1.00	20.1
Approach			341	2.8	341	2.8	0.415	31.9	LOS C	8.5	59.7	0.97	0.97	0.97	22.6
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.747	86.3	LOS F	6.5	45.8	1.00	0.87	1.17	8.4
8	T1	All MCs	105	0.0	105	0.0	0.747	44.8	LOS D	6.5	45.8	0.93	0.75	1.01	16.1
9	R2	All MCs	53	0.0	53	0.0	0.486	68.4	LOS E	3.2	22.3	1.00	0.75	1.00	18.2
Approach			211	0.0	211	0.0	0.747	61.1	LOS E	6.5	45.8	0.96	0.78	1.05	15.0
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	*0.832	98.8	LOS F	12.4	91.0	1.00	0.97	1.22	18.9
11	T1	All MCs	291	4.0	291	4.0	0.832	47.7	LOS D	14.3	99.8	0.98	0.91	1.15	14.8
12	R2	All MCs	134	0.0	134	0.0	0.832	77.9	LOS E	14.3	99.8	1.00	0.97	1.19	20.7
Approach			477	2.4	477	2.4	0.832	61.8	LOS E	14.3	99.8	0.99	0.93	1.17	17.1
All Vehicles			1242	1.7	1242	1.7	0.832	53.4	LOS D	14.3	99.8	0.98	0.89	1.07	17.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Qued	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: RoadName (S)										
P1 Full	105	26.8	LOS C	0.2	0.2	0.90	0.90	180.7	200.0	1.11
East: RoadName (E)										
P2 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: RoadName (N)										
P3 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
West: RoadName (W)										
P4 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians	421	47.5	LOS E	0.3	0.3	0.94	0.94	201.3	200.0	0.99

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: [103PM (3)] 103 - PM Peak (Network 2 - East-West Link)
Network: [4] PM Peak (East-West Link)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120.0 seconds (Network Site User-Given Phase Times)
Network Scenario: 1 | Local Volumes **Site Scenario: 1 | Local Volumes**

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	*0.256	50.5	LOS D	5.1	36.0	0.87	0.73	0.87	14.9
2	T1	All MCs	53	0.0	53	0.0	0.256	39.5	LOS D	5.1	36.0	0.87	0.73	0.87	20.8
3	R2	All MCs	115	0.0	115	0.0	*0.872	75.6	LOS E	7.6	53.0	1.00	0.97	1.37	14.9
Approach			220	0.0	220	0.0	0.872	61.0	LOS E	7.6	53.0	0.94	0.86	1.13	16.0
East: RoadName (E)															
4	L2	All MCs	255	0.0	255	0.0	*0.883	70.2	LOS E	17.0	120.6	1.00	0.98	1.27	15.6
5	T1	All MCs	134	3.1	134	3.1	0.883	42.6	LOS D	17.0	120.6	0.92	0.73	0.93	10.9
6	R2	All MCs	53	0.0	53	0.0	0.372	65.6	LOS E	6.7	47.2	0.92	0.76	0.92	17.5
Approach			441	1.0	441	1.0	0.883	61.3	LOS E	17.0	120.6	0.97	0.88	1.13	14.7
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.256	50.5	LOS D	5.1	36.0	0.87	0.73	0.87	18.6
8	T1	All MCs	53	0.0	53	0.0	0.256	39.5	LOS D	5.1	36.0	0.87	0.73	0.87	20.8
9	R2	All MCs	53	0.0	53	0.0	0.400	66.0	LOS E	3.1	21.7	0.99	0.75	0.99	8.2
Approach			158	0.0	158	0.0	0.400	52.0	LOS D	5.1	36.0	0.91	0.74	0.91	15.6
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	*0.224	33.2	LOS C	2.6	19.1	0.82	1.06	0.82	21.0
11	T1	All MCs	208	3.5	208	3.5	*0.224	26.4	LOS C	3.3	23.4	0.85	0.94	0.85	21.1
12	R2	All MCs	53	0.0	53	0.0	0.193	62.0	LOS E	3.1	21.5	1.00	0.78	1.00	17.1
Approach			314	2.3	314	2.3	0.224	33.5	LOS C	3.3	23.4	0.87	0.94	0.87	20.2
All Vehicles			1133	1.0	1133	1.0	0.883	52.3	LOS D	17.0	120.6	0.93	0.87	1.03	16.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Qued	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: RoadName (S)										
P1 Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
East: RoadName (E)										
P2 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: RoadName (N)										
P3 Full	105	25.5	LOS C	0.2	0.2	0.90	0.90	179.3	200.0	1.12
West: RoadName (W)										
P4 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians	368	46.1	LOS E	0.3	0.3	0.94	0.94	200.0	200.0	1.00

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: [106PM (2)] 106 - PM Peak (Network 2 - East-West Link)
Network: [4] PM Peak (East-West Link)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120.0 seconds (Network Site User-Given Phase Times)
Network Scenario: 1 | Local Volumes **Site Scenario: 1 | Local Volumes**

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	*0.747	86.9	LOS F	6.5	45.8	1.00	0.87	1.17	19.9
2	T1	All MCs	105	0.0	105	0.0	0.747	44.8	LOS D	6.5	45.8	0.93	0.75	1.01	16.1
3	R2	All MCs	53	0.0	53	0.0	0.486	68.4	LOS E	3.2	22.3	1.00	0.75	1.00	10.7
Approach			211	0.0	211	0.0	0.747	61.2	LOS E	6.5	45.8	0.96	0.78	1.05	15.9
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	*0.203	30.5	LOS C	2.0	16.1	0.85	1.07	0.85	22.1
5	T1	All MCs	279	4.2	279	4.2	*0.490	22.9	LOS C	8.8	61.8	0.91	0.96	0.91	25.3
6	R2	All MCs	53	0.0	53	0.0	0.490	49.2	LOS D	8.8	61.8	0.89	1.01	0.89	22.4
Approach			384	3.0	384	3.0	0.490	27.6	LOS C	8.8	61.8	0.90	0.98	0.90	24.5
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.747	86.3	LOS F	6.5	45.8	1.00	0.87	1.17	8.4
8	T1	All MCs	105	0.0	105	0.0	0.747	44.8	LOS D	6.5	45.8	0.93	0.75	1.01	16.1
9	R2	All MCs	53	0.0	53	0.0	*0.486	68.4	LOS E	3.2	22.3	1.00	0.75	1.00	18.2
Approach			211	0.0	211	0.0	0.747	61.1	LOS E	6.5	45.8	0.96	0.78	1.05	15.0
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	*0.503	76.5	LOS E	4.9	36.8	0.99	0.77	0.99	19.2
11	T1	All MCs	191	3.9	191	3.9	0.503	41.0	LOS D	8.6	60.5	0.94	0.74	0.94	16.1
12	R2	All MCs	53	0.0	53	0.0	0.503	75.2	LOS E	8.6	60.5	0.96	0.79	0.96	23.4
Approach			296	2.5	296	2.5	0.503	53.4	LOS D	8.6	60.5	0.96	0.76	0.96	18.1
All Vehicles			1101	1.7	1101	1.7	0.747	47.3	LOS D	8.8	61.8	0.94	0.85	0.97	19.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Qued	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: RoadName (S)										
P1 Full	105	26.8	LOS C	0.2	0.2	0.90	0.90	180.7	200.0	1.11
East: RoadName (E)										
P2 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: RoadName (N)										
P3 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
West: RoadName (W)										
P4 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians	421	47.5	LOS E	0.3	0.3	0.94	0.94	201.3	200.0	0.99

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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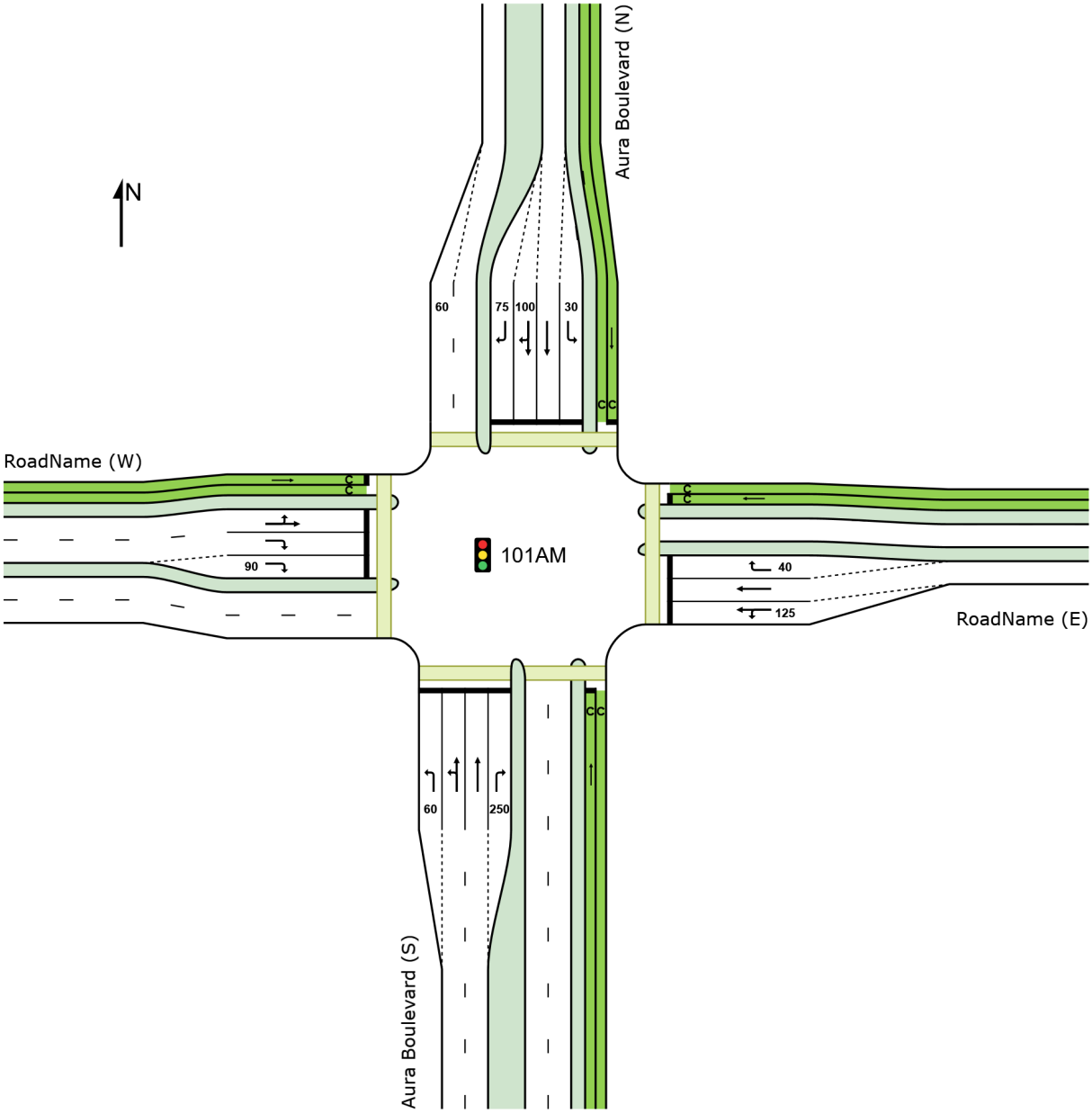
SITE LAYOUT

Site: [101AM] 101 - AM Peak (Intersection 101 - 2031)

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Organisation: URBIS | Licence: NETWORK / 1PC | Created: Friday, 15 May 2026 10:49:34 AM
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MOVEMENT SUMMARY

Site: [101AM] 101 - AM Peak (Intersection 101 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Aura Boulevard (S)															
1	L2	All MCs	153	0.0	153	0.0	*0.209	24.5	LOS C	3.9	27.2	0.78	1.12	0.78	22.5
2	T1	All MCs	200	3.7	200	3.7	0.177	21.7	LOS C	3.6	25.3	0.72	0.84	0.72	30.6
3	R2	All MCs	122	0.0	122	0.0	0.360	52.4	LOS D	6.3	44.4	0.92	0.78	0.92	28.7
Approach			475	1.6	475	1.6	0.360	30.5	LOS C	6.3	44.4	0.79	0.92	0.79	27.8
East: RoadName (E)															
4	L2	All MCs	291	0.0	291	0.0	*0.862	65.6	LOS E	18.6	131.3	1.00	0.96	1.21	25.1
5	T1	All MCs	105	2.0	105	2.0	0.862	49.5	LOS D	18.6	131.3	0.92	0.68	0.92	21.7
6	R2	All MCs	53	0.0	53	0.0	0.219	57.0	LOS E	2.8	19.7	0.93	0.74	0.93	30.1
Approach			448	0.5	448	0.5	0.862	60.8	LOS E	18.6	131.3	0.97	0.87	1.11	25.0
North: Aura Boulevard (N)															
7	L2	All MCs	53	0.0	53	0.0	0.283	61.2	LOS E	3.0	20.7	0.96	0.75	0.96	28.8
8	T1	All MCs	314	0.0	314	0.0	0.189	25.4	LOS C	5.2	36.4	0.72	0.63	0.72	32.8
9	R2	All MCs	53	0.0	53	0.0	*0.189	51.5	LOS D	5.1	35.8	0.82	0.69	0.82	26.1
Approach			419	0.0	419	0.0	0.283	33.1	LOS C	5.2	36.4	0.76	0.65	0.76	31.4
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	*0.852	80.8	LOS F	6.9	48.9	1.00	0.95	1.34	21.2
11	T1	All MCs	105	2.0	105	2.0	0.852	55.1	LOS E	6.9	48.9	0.95	0.80	1.12	19.8
12	R2	All MCs	193	0.0	193	0.0	0.381	57.7	LOS E	5.3	36.9	0.95	0.77	0.95	20.7
Approach			351	0.6	351	0.6	0.852	60.4	LOS E	6.9	48.9	0.96	0.81	1.06	20.5
All Vehicles			1693	0.7	1693	0.7	0.862	45.4	LOS D	18.6	131.3	0.87	0.82	0.92	26.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: Aura Boulevard (S)											
P11 Stage 1	150	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
P12 Stage 2	150	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
East: RoadName (E)											
P2 Full	150	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
North: Aura Boulevard (N)											
P31 Stage 1	150	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
P32 Stage 2	150	158	24.6	LOS C	0.3	0.3	0.91	0.91	178.4	200.0	1.12
West: RoadName (W)											
P4 Full	150	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
All Pedestrians	900	947	49.5	LOS E	0.5	0.5	0.95	0.95	203.4	200.0	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [101AM] 101 - AM Peak (Intersection 101 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Two-Approach Contraflow with Staged Crossings
Input Phase Sequence: A, B, C, C1, F, E
Output Phase Sequence: A, B, C, C1, F, E
Reference Phase: Phase B

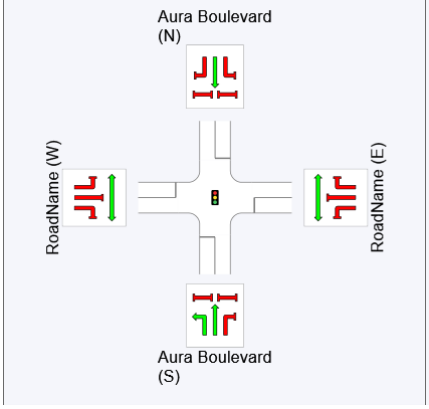
Phase Timing Summary

Phase	A	B	C	C1	F	E
Phase Change Time (sec)	89.8	0.0	18.0	33.3	45.9	67.4
Green Time (sec)	24.2	12.0	9.3	6.6	15.5	16.3
Phase Time (sec)	30.2	18.0	15.3	12.6	21.5	22.3
Phase Split	25%	15%	13%	10%	18%	19%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0	100.0

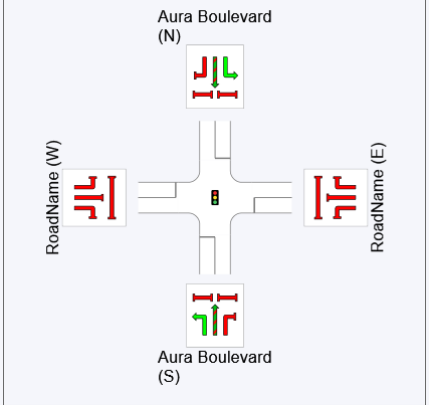
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence

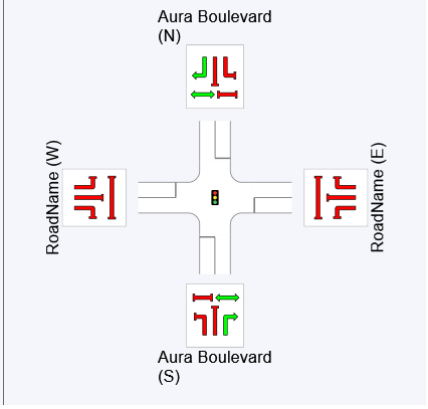
Phase A

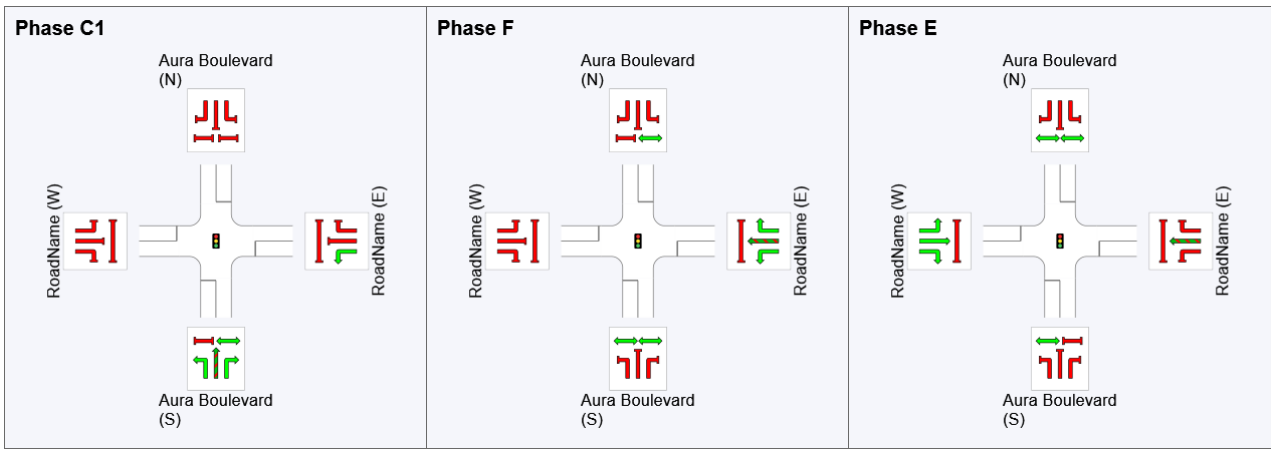


Phase B **REF**

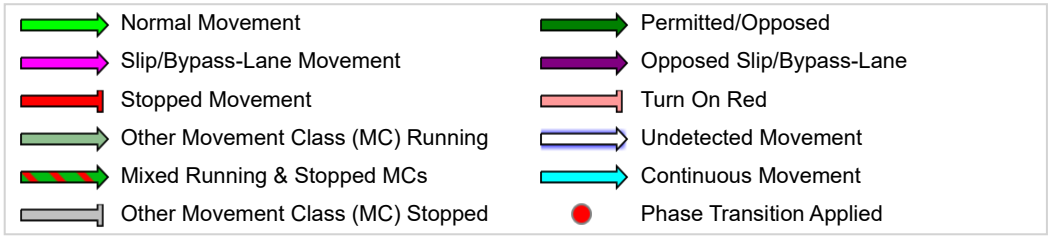


Phase C





REF: Reference Phase
VAR: Variable Phase



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MOVEMENT SUMMARY

Site: [101PM] 101 - PM Peak (Intersection 101 - 2031)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 116.0 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Aura Boulevard (S)															
1	L2	All MCs	181	0.0	181	0.0	*0.268	23.8	LOS C	4.9	34.4	0.78	1.12	0.78	22.6
2	T1	All MCs	300	4.2	300	4.2	0.268	18.6	LOS B	5.5	38.3	0.73	0.91	0.73	32.0
3	R2	All MCs	233	0.0	233	0.0	0.681	54.6	LOS D	12.6	88.4	0.99	0.84	1.01	28.1
Approach			714	1.8	714	1.8	0.681	31.6	LOS C	12.6	88.4	0.83	0.94	0.84	28.6
East: RoadName (E)															
4	L2	All MCs	154	0.0	154	0.0	*0.548	55.5	LOS E	8.4	59.1	0.97	0.80	0.97	27.5
5	T1	All MCs	107	2.0	107	2.0	0.548	49.3	LOS D	8.4	59.1	0.93	0.69	0.93	21.8
6	R2	All MCs	53	0.0	53	0.0	0.274	59.0	LOS E	2.8	19.9	0.96	0.75	0.96	29.6
Approach			314	0.7	314	0.7	0.548	54.0	LOS D	8.4	59.1	0.96	0.75	0.96	26.0
North: Aura Boulevard (N)															
7	L2	All MCs	53	0.0	53	0.0	0.274	58.9	LOS E	2.8	19.9	0.96	0.75	0.96	29.3
8	T1	All MCs	298	3.9	298	3.9	0.191	25.2	LOS C	5.0	35.2	0.73	0.64	0.73	32.4
9	R2	All MCs	53	0.0	53	0.0	*0.191	50.1	LOS D	5.0	35.2	0.82	0.69	0.82	26.5
Approach			403	2.9	403	2.9	0.274	32.8	LOS C	5.0	35.2	0.77	0.66	0.77	31.2
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	*0.815	76.7	LOS E	6.7	47.4	1.00	0.92	1.28	22.0
11	T1	All MCs	107	2.0	107	2.0	0.815	52.1	LOS D	6.7	47.4	0.95	0.79	1.09	20.4
12	R2	All MCs	104	0.0	104	0.0	0.198	53.8	LOS D	2.7	18.6	0.92	0.74	0.92	21.7
Approach			264	0.8	264	0.8	0.815	57.7	LOS E	6.7	47.4	0.95	0.80	1.06	21.2
All Vehicles			1695	1.7	1695	1.7	0.815	40.1	LOS D	12.6	88.4	0.86	0.82	0.88	27.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: Aura Boulevard (S)											
P11 Stage 1	150	158	52.5	LOS E	0.5	0.5	0.95	0.95	206.3	200.0	0.97
P12 Stage 2	150	158	52.5	LOS E	0.5	0.5	0.95	0.95	206.3	200.0	0.97
East: RoadName (E)											
P2 Full	150	158	52.5	LOS E	0.5	0.5	0.95	0.95	206.3	200.0	0.97
North: Aura Boulevard (N)											
P31 Stage 1	150	158	52.5	LOS E	0.5	0.5	0.95	0.95	206.3	200.0	0.97
P32 Stage 2	150	158	23.7	LOS C	0.3	0.3	0.90	0.90	177.6	200.0	1.13
West: RoadName (W)											
P4 Full	150	158	52.5	LOS E	0.5	0.5	0.95	0.95	206.3	200.0	0.97
All Pedestrians	900	947	47.7	LOS E	0.5	0.5	0.95	0.95	201.6	200.0	0.99

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [101PM] 101 - PM Peak (Intersection 101 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 116.0 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Two-Approach Contraflow with Staged Crossings
Input Phase Sequence: A, B, C, C1, F, E
Output Phase Sequence: A, B, C, C1, F, E
Reference Phase: Phase B

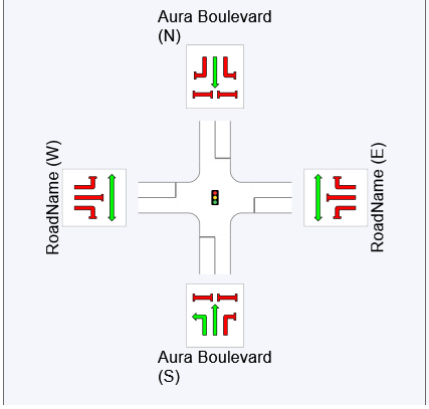
Phase Timing Summary

Phase	A	B	C	C1	F	E
Phase Change Time (sec)	85.8	0.0	18.0	33.3	45.3	63.3
Green Time (sec)	24.2	12.0	9.3	6.0	12.0	16.4
Phase Time (sec)	30.2	18.0	15.3	12.0	18.0	22.4
Phase Split	26%	16%	13%	10%	16%	19%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0	100.0

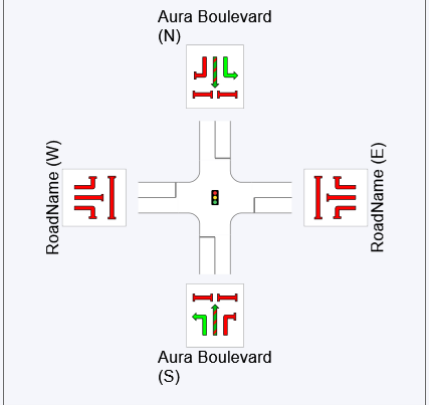
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence

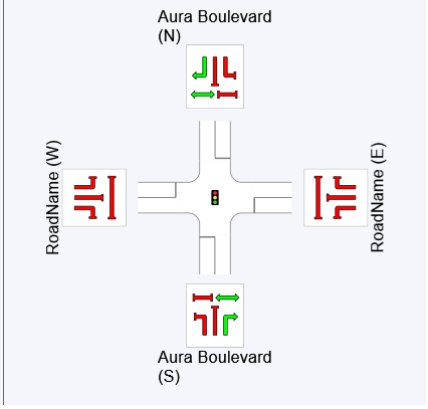
Phase A

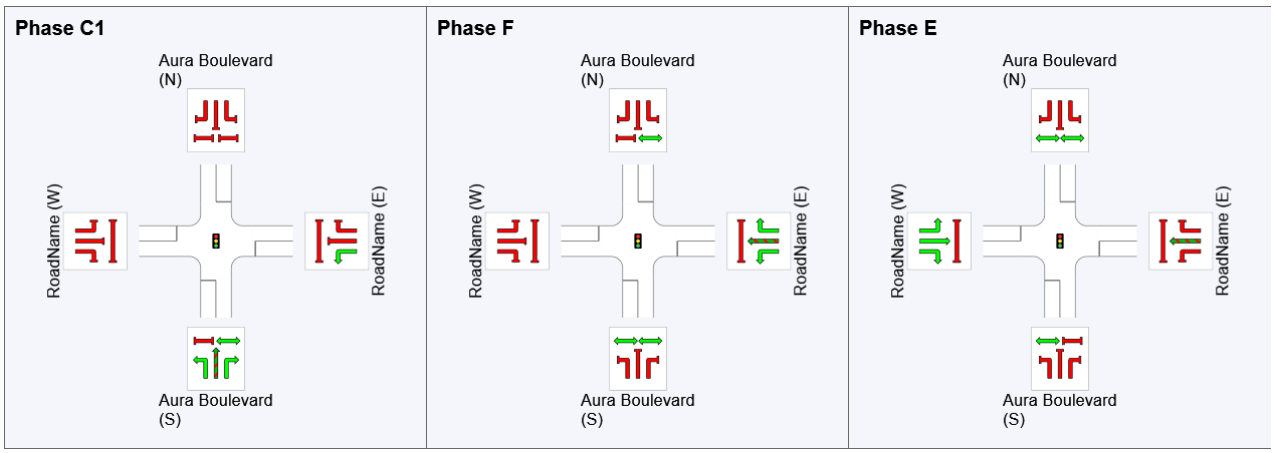


Phase B **REF**

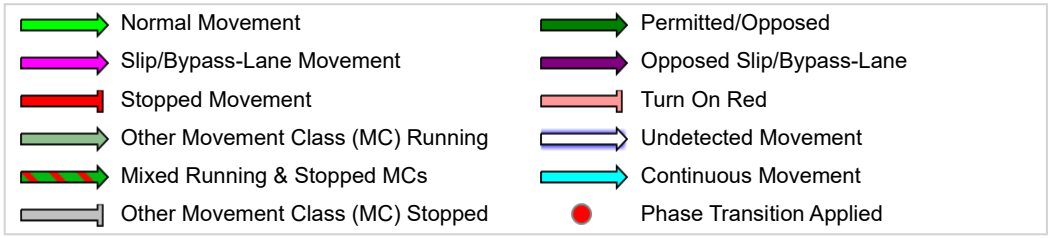


Phase C





REF: Reference Phase
VAR: Variable Phase



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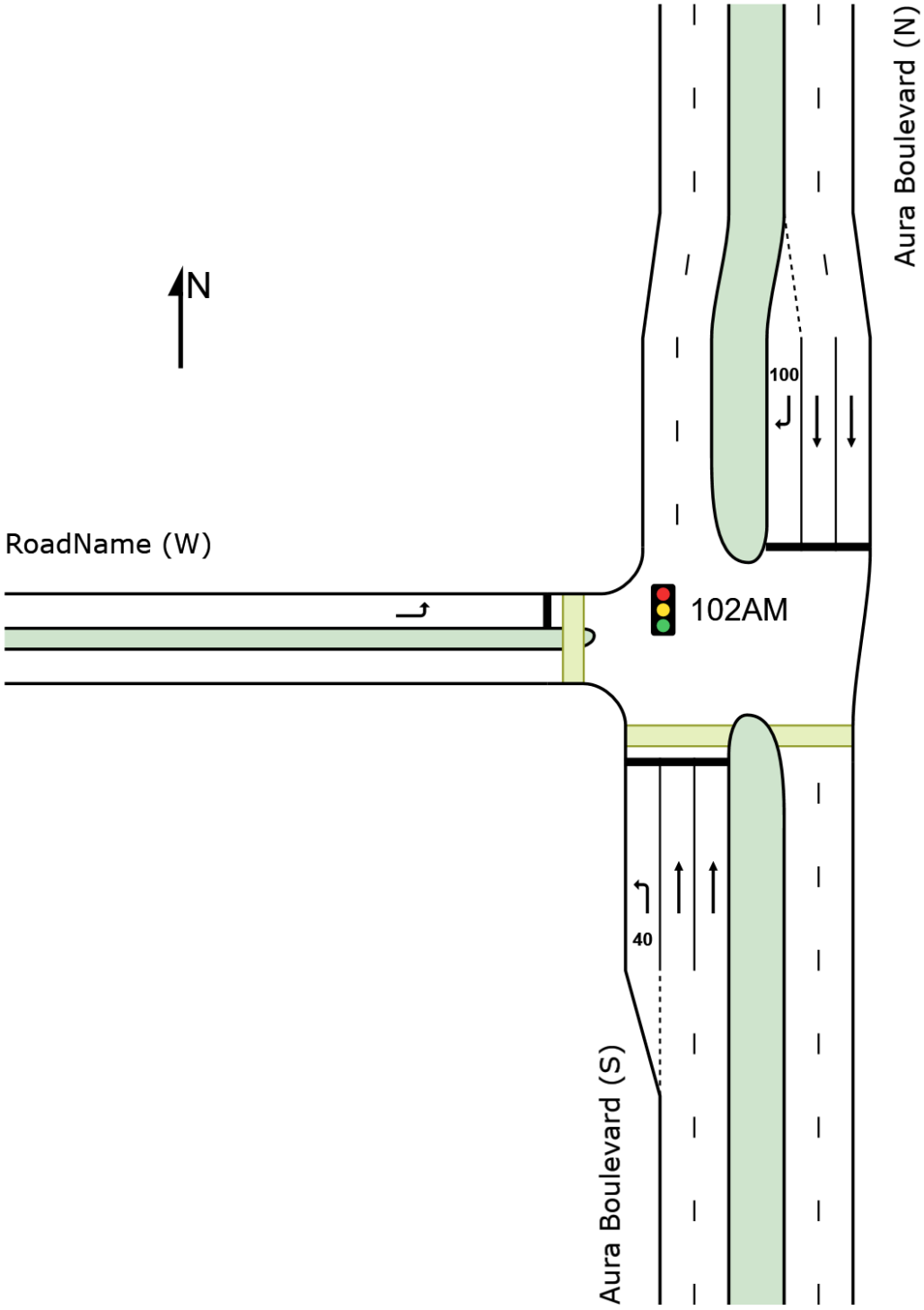
SITE LAYOUT

Site: [102AM] AM Peak (Intersection 102 - 2031)

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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MOVEMENT SUMMARY

Site: [102AM] AM Peak (Intersection 102 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 78.0 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Aura Boulevard (S)															
1	L2	All MCs	53	0.0	53	0.0	*0.363	45.0	LOS D	2.0	14.3	0.99	0.74	0.99	25.6
2	T1	All MCs	421	5.0	421	5.0	0.161	4.4	LOS A	2.8	20.2	0.37	0.31	0.37	54.5
Approach			474	4.4	474	4.4	0.363	8.9	LOS A	2.8	20.2	0.44	0.36	0.44	49.4
North: Aura Boulevard (N)															
8	T1	All MCs	735	5.0	735	5.0	*0.363	11.2	LOS B	8.3	59.2	0.62	0.53	0.62	47.8
9	R2	All MCs	53	0.0	53	0.0	*0.183	37.5	LOS D	1.8	12.6	0.91	0.74	0.91	27.3
Approach			787	4.7	787	4.7	0.363	12.9	LOS B	8.3	59.2	0.63	0.55	0.63	46.0
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	0.183	37.4	LOS D	1.8	12.6	0.91	0.74	0.91	27.1
Approach			53	0.0	53	0.0	0.183	37.4	LOS D	1.8	12.6	0.91	0.74	0.91	27.1
All Vehicles			1314	4.4	1314	4.4	0.363	12.5	LOS B	8.3	59.2	0.57	0.49	0.57	46.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Aura Boulevard (S)												
P11	Stage 1	50	53	33.3	LOS D	0.1	0.1	0.93	0.93	187.1	200.0	1.07
P12	Stage 2	50	53	33.3	LOS D	0.1	0.1	0.93	0.93	187.1	200.0	1.07
West: RoadName (W)												
P4	Full	150	158	33.5	LOS D	0.3	0.3	0.93	0.93	187.3	200.0	1.07
All Pedestrians		250	263	33.4	LOS D	0.3	0.3	0.93	0.93	187.2	200.0	1.07

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [102AM] AM Peak (Intersection 102 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 78.0 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

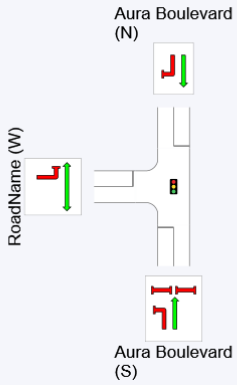
Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	30.2	0.0	12.1
Green Time (sec)	41.8	6.1	12.1
Phase Time (sec)	47.8	12.1	18.1
Phase Split	61%	16%	23%
Phase Frequency (%)	100.0	100.0	100.0

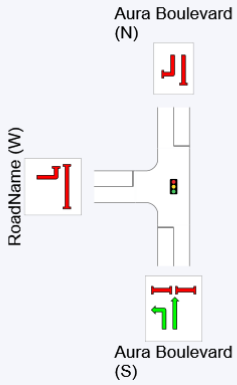
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence

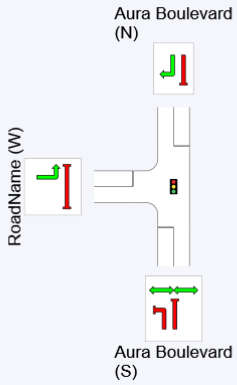
Phase A



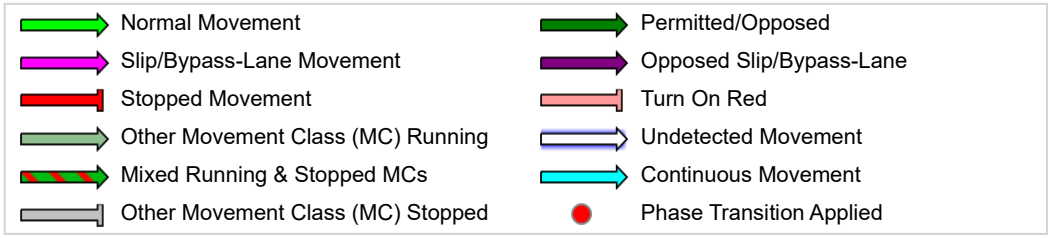
Phase B **REF**



Phase C



REF: Reference Phase
VAR: Variable Phase



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MOVEMENT SUMMARY

Site: [102PM] PM Peak (Intersection 102 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 76.0 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Aura Boulevard (S)															
1	L2	All MCs	53	0.0	53	0.0	*0.287	41.8	LOS D	1.9	13.4	0.96	0.74	0.96	26.6
2	T1	All MCs	658	5.0	658	5.0	0.255	4.9	LOS A	4.8	34.1	0.41	0.36	0.41	54.0
Approach			711	4.6	711	4.6	0.287	7.7	LOS A	4.8	34.1	0.45	0.38	0.45	50.8
North: Aura Boulevard (N)															
8	T1	All MCs	539	7.6	539	7.6	*0.287	11.7	LOS B	6.0	43.7	0.62	0.52	0.62	47.4
9	R2	All MCs	53	0.0	53	0.0	*0.178	36.3	LOS D	1.7	12.2	0.90	0.73	0.90	27.7
Approach			592	6.9	592	6.9	0.287	13.9	LOS B	6.0	43.7	0.64	0.54	0.64	45.2
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	0.178	36.3	LOS D	1.7	12.2	0.90	0.74	0.90	27.5
Approach			53	0.0	53	0.0	0.178	36.3	LOS D	1.7	12.2	0.90	0.74	0.90	27.5
All Vehicles			1355	5.4	1355	5.4	0.287	11.5	LOS B	6.0	43.7	0.55	0.47	0.55	47.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Aura Boulevard (S)												
P11	Stage 1	50	53	32.3	LOS D	0.1	0.1	0.92	0.92	186.2	200.0	1.07
P12	Stage 2	50	53	32.3	LOS D	0.1	0.1	0.92	0.92	186.2	200.0	1.07
West: RoadName (W)												
P4	Full	150	158	32.5	LOS D	0.3	0.3	0.93	0.93	186.3	200.0	1.07
All Pedestrians		250	263	32.4	LOS D	0.3	0.3	0.93	0.93	186.2	200.0	1.07

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [102PM] PM Peak (Intersection 102 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 76.0 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

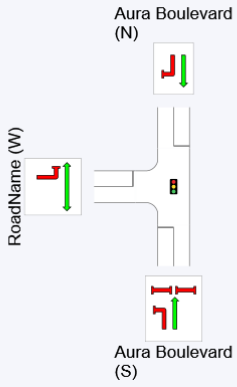
Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	31.6	0.0	13.5
Green Time (sec)	38.4	7.5	12.1
Phase Time (sec)	44.4	13.5	18.1
Phase Split	58%	18%	24%
Phase Frequency (%)	100.0	100.0	100.0

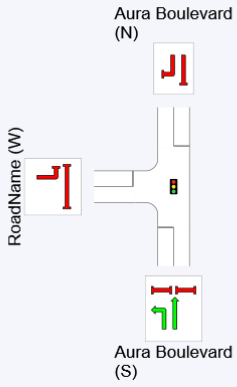
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence

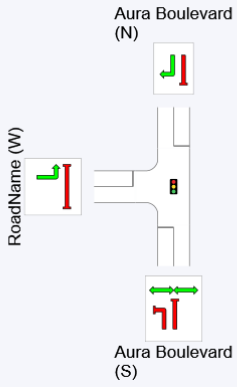
Phase A



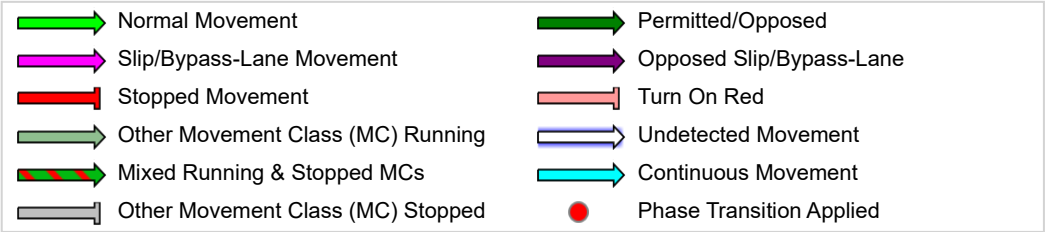
Phase B **REF**



Phase C



REF: Reference Phase
VAR: Variable Phase



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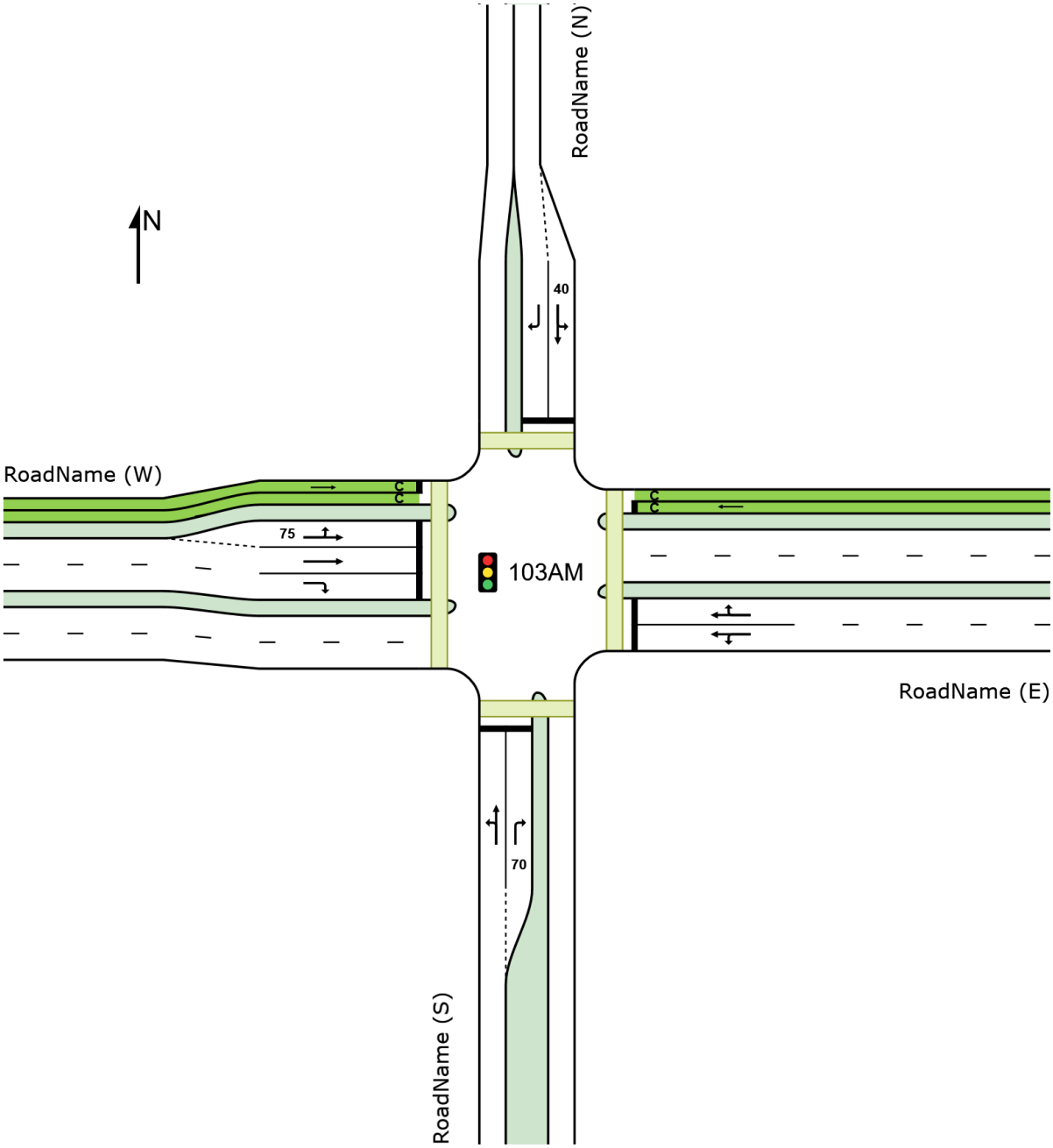
SITE LAYOUT

Site: [103AM] AM Peak (Intersection 103 - 2031)

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

Site: [103AM] AM Peak (Intersection 103 - 2031)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 112.0 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	*0.239	46.1	LOS D	4.7	32.9	0.86	0.72	0.86	22.3
2	T1	All MCs	53	0.0	53	0.0	0.239	35.2	LOS D	4.7	32.9	0.86	0.72	0.86	22.2
3	R2	All MCs	87	0.0	87	0.0	*0.745	67.0	LOS E	5.2	36.1	1.00	0.87	1.20	16.2
Approach			193	0.0	193	0.0	0.745	52.6	LOS D	5.2	36.1	0.92	0.79	1.01	19.0
East: RoadName (E)															
4	L2	All MCs	115	0.0	115	0.0	*0.745	64.8	LOS E	6.8	48.1	1.00	0.87	1.17	16.6
5	T1	All MCs	105	2.0	105	2.0	0.745	43.2	LOS D	6.8	48.1	0.95	0.72	0.96	16.1
6	R2	All MCs	53	0.0	53	0.0	0.536	70.9	LOS E	5.6	39.1	0.99	0.78	0.99	15.9
Approach			273	0.8	273	0.8	0.745	57.6	LOS E	6.8	48.1	0.98	0.80	1.05	16.3
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.239	46.1	LOS D	4.7	32.9	0.86	0.72	0.86	19.9
8	T1	All MCs	53	0.0	53	0.0	0.239	35.2	LOS D	4.7	32.9	0.86	0.72	0.86	22.2
9	R2	All MCs	53	0.0	53	0.0	0.449	63.6	LOS E	3.0	20.7	1.00	0.75	1.00	14.6
Approach			158	0.0	158	0.0	0.449	48.3	LOS D	4.7	32.9	0.90	0.73	0.90	18.4
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	*0.163	28.9	LOS C	2.1	15.9	0.80	1.08	0.80	21.2
11	T1	All MCs	175	3.6	175	3.6	*0.163	24.7	LOS C	2.8	19.7	0.81	0.91	0.81	21.9
12	R2	All MCs	53	0.0	53	0.0	0.154	47.3	LOS D	2.4	17.1	0.88	0.74	0.88	20.4
Approach			280	2.3	280	2.3	0.163	29.8	LOS C	2.8	19.7	0.82	0.91	0.82	21.4
All Vehicles			903	0.9	903	0.9	0.745	46.3	LOS D	6.8	48.1	0.91	0.82	0.95	18.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: RoadName (S)												
P1	Full	50	53	50.3	LOS E	0.2	0.2	0.95	0.95	204.1	200.0	0.98
East: RoadName (E)												
P2	Full	100	105	50.4	LOS E	0.3	0.3	0.95	0.95	204.2	200.0	0.98
North: RoadName (N)												
P3	Full	100	105	24.2	LOS C	0.2	0.2	0.90	0.90	178.0	200.0	1.12
West: RoadName (W)												
P4	Full	100	105	50.4	LOS E	0.3	0.3	0.95	0.95	204.2	200.0	0.98
All Pedestrians		350	368	42.9	LOS E	0.3	0.3	0.93	0.93	196.7	200.0	1.02

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [103AM] AM Peak (Intersection 103 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 112.0 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

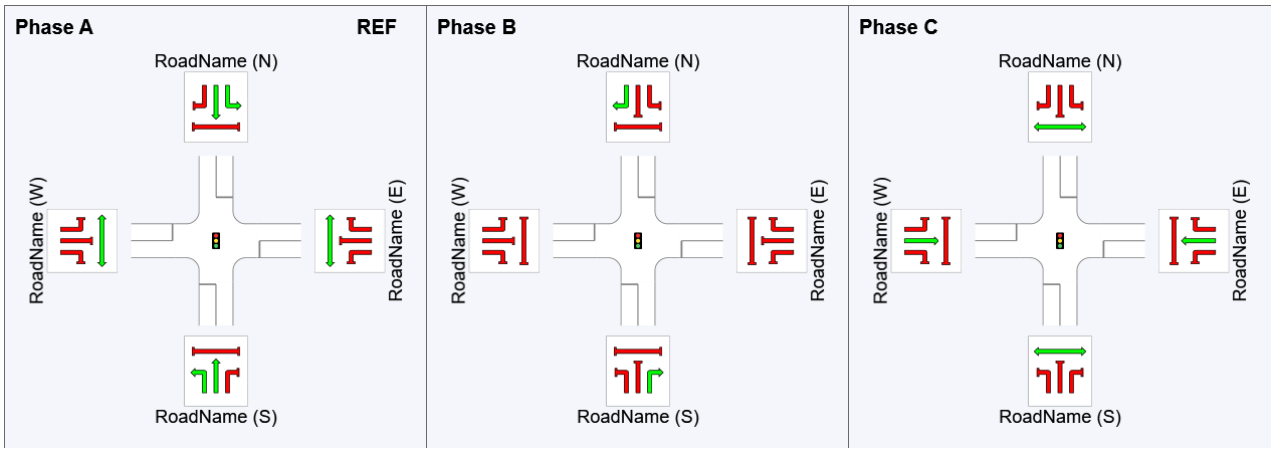
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: 2 Contraflow Phases - Import (2) - Copy
Input Phase Sequence: A, B, C, D, E
Output Phase Sequence: A, B, C, D, E
Reference Phase: Phase A

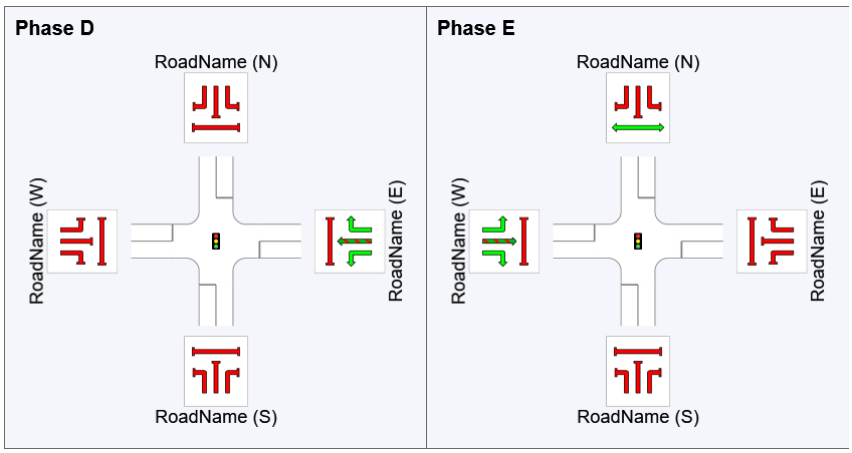
Phase Timing Summary

Phase	A	B	C	D	E
Phase Change Time (sec)	0.0	36.2	49.3	69.9	85.4
Green Time (sec)	30.2	7.1	14.6	9.5	20.6
Phase Time (sec)	36.2	13.1	20.6	15.5	26.6
Phase Split	32%	12%	18%	14%	24%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0

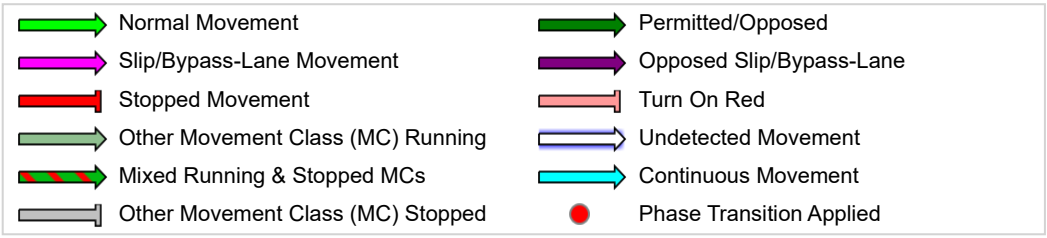
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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MOVEMENT SUMMARY

Site: [103PM] PM Peak (Intersection 103 - 2031)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110.0 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	*0.235	45.0	LOS D	4.6	32.1	0.85	0.72	0.85	22.7
2	T1	All MCs	53	0.0	53	0.0	0.235	34.1	LOS C	4.6	32.1	0.85	0.72	0.85	22.6
3	R2	All MCs	53	0.0	53	0.0	0.520	64.3	LOS E	3.0	20.7	1.00	0.76	1.01	16.7
Approach			158	0.0	158	0.0	0.520	47.8	LOS D	4.6	32.1	0.90	0.73	0.90	20.2
East: RoadName (E)															
4	L2	All MCs	61	0.0	61	0.0	0.652	71.4	LOS E	6.1	44.7	1.00	0.83	1.07	17.7
5	T1	All MCs	177	3.6	177	3.6	0.652	43.3	LOS D	6.9	48.6	0.97	0.78	1.02	16.6
6	R2	All MCs	53	0.0	53	0.0	*0.652	74.2	LOS E	6.9	48.6	1.00	0.83	1.06	15.9
Approach			291	2.2	291	2.2	0.652	54.8	LOS D	6.9	48.6	0.98	0.80	1.03	16.7
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.235	45.0	LOS D	4.6	32.1	0.85	0.72	0.85	20.2
8	T1	All MCs	53	0.0	53	0.0	0.235	34.1	LOS C	4.6	32.1	0.85	0.72	0.85	22.6
9	R2	All MCs	53	0.0	53	0.0	*0.520	64.3	LOS E	3.0	20.7	1.00	0.76	1.01	14.5
Approach			158	0.0	158	0.0	0.520	47.8	LOS D	4.6	32.1	0.90	0.73	0.90	18.6
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	*0.140	25.0	LOS C	1.6	11.4	0.80	1.11	0.80	20.6
11	T1	All MCs	108	2.9	108	2.9	*0.140	29.6	LOS C	2.4	11.4	0.82	0.84	0.82	20.0
12	R2	All MCs	53	0.0	53	0.0	0.151	46.2	LOS D	2.4	16.7	0.87	0.74	0.87	20.7
Approach			214	1.5	214	1.5	0.151	32.6	LOS C	2.4	16.7	0.83	0.88	0.83	20.4
All Vehicles			820	1.2	820	1.2	0.652	46.3	LOS D	6.9	48.6	0.91	0.79	0.93	18.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: RoadName (S)												
P1	Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	203.1	200.0	0.98
East: RoadName (E)												
P2	Full	100	105	49.4	LOS E	0.3	0.3	0.95	0.95	203.2	200.0	0.98
North: RoadName (N)												
P3	Full	100	105	23.7	LOS C	0.2	0.2	0.89	0.89	177.5	200.0	1.13
West: RoadName (W)												
P4	Full	100	105	49.4	LOS E	0.3	0.3	0.95	0.95	203.2	200.0	0.98
All Pedestrians		350	368	42.0	LOS E	0.3	0.3	0.93	0.93	195.9	200.0	1.02

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [103PM] PM Peak (Intersection 103 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110.0 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

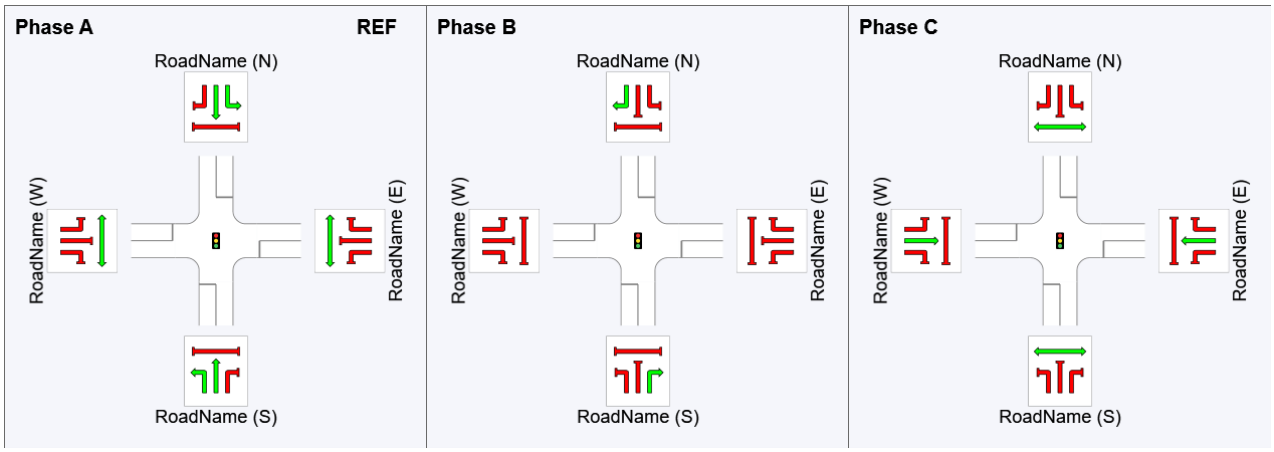
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: 2 Contraflow Phases - Import (2) - Copy
Input Phase Sequence: A, B, C, D, E
Output Phase Sequence: A, B, C, D, E
Reference Phase: Phase A

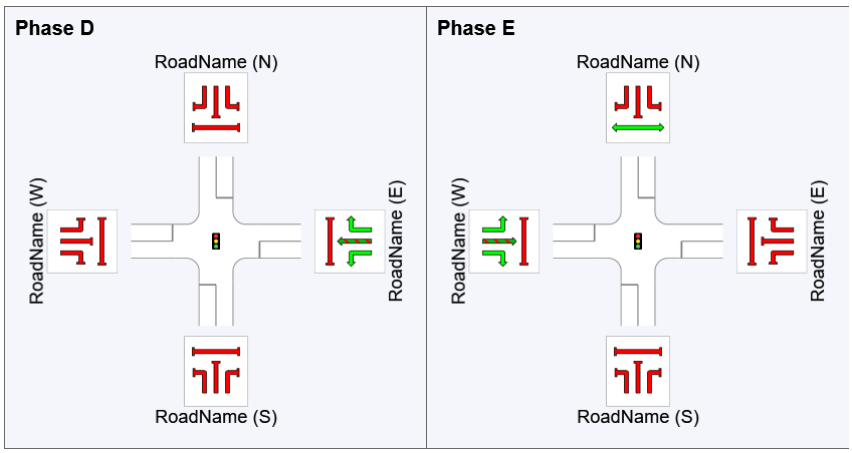
Phase Timing Summary

Phase	A	B	C	D	E
Phase Change Time (sec)	0.0	36.2	48.2	68.8	83.4
Green Time (sec)	30.2	6.0	14.6	8.6	20.6
Phase Time (sec)	36.2	12.0	20.6	14.6	26.6
Phase Split	33%	11%	19%	13%	24%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0

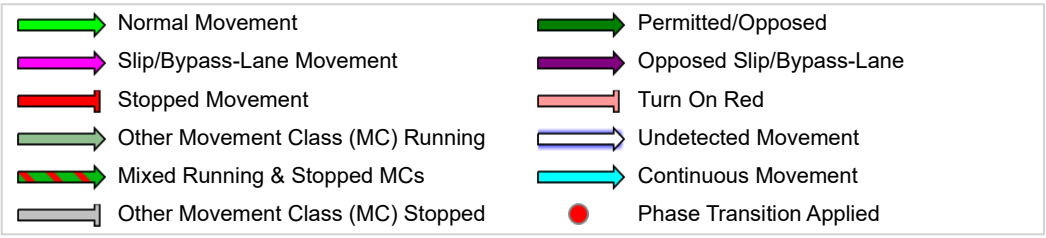
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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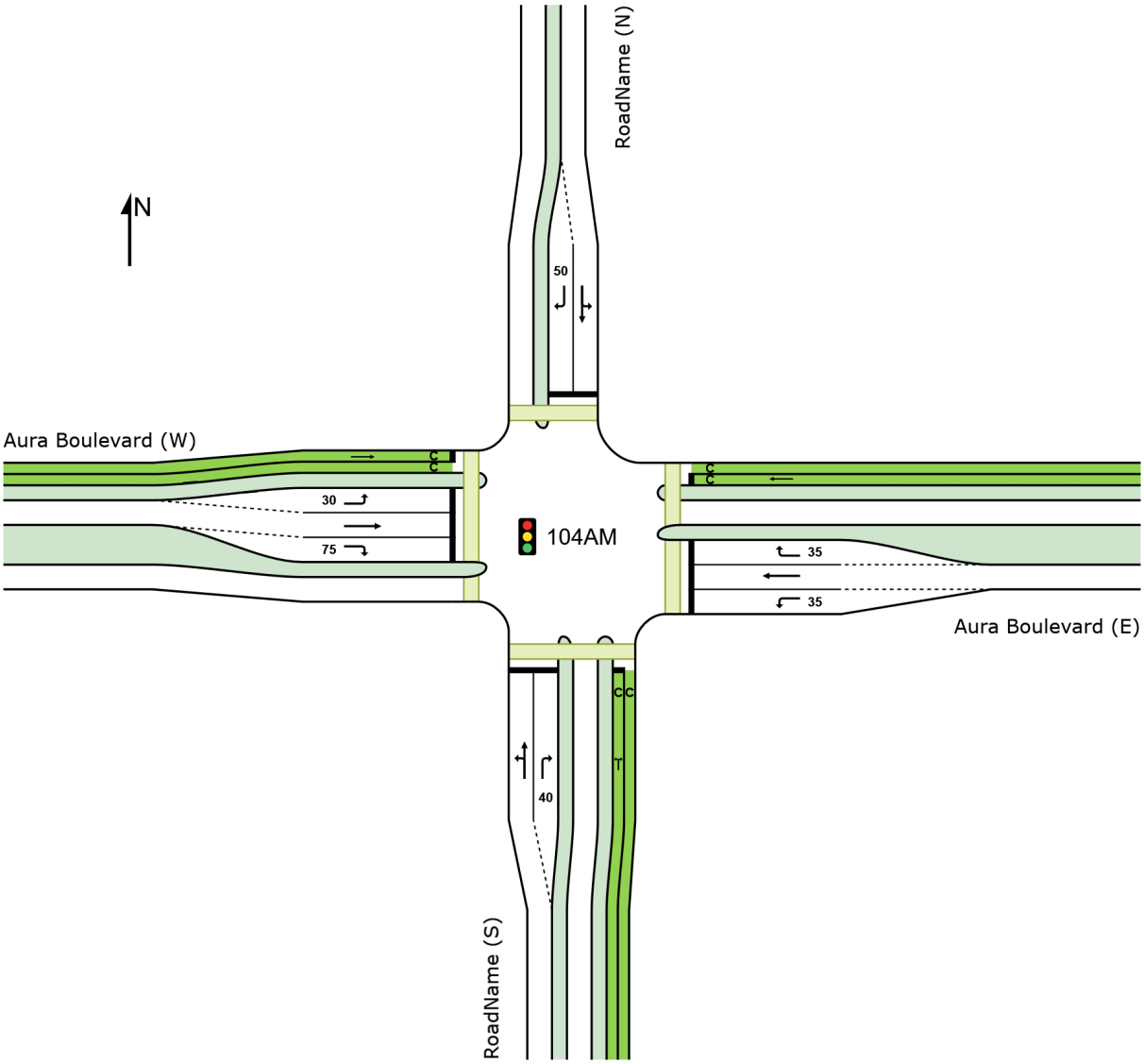
SITE LAYOUT

Site: [104AM] 104 - AM Peak (Intersection 104 - 2031)

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Organisation: URBIS | Licence: NETWORK / 1PC | Created: Friday, 15 May 2026 10:45:28 AM
Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba \IR Response\P0053364_Aura Transport Masterplan_2031 Intersection Analysis_260430.sipx

MOVEMENT SUMMARY

Site: [104AM] 104 - AM Peak (Intersection 104 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 93.7 seconds (Site Optimum Cycle Time - Minimum Delay)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	79	0.0	79	0.0	*0.628	53.5	LOS D	5.2	36.4	0.99	0.78	1.03	27.9
2	T1	All MCs	58	0.0	58	0.0	0.628	44.0	LOS D	5.2	36.4	1.00	0.82	1.06	33.1
3	R2	All MCs	79	0.0	79	0.0	0.207	44.0	LOS D	2.2	15.4	0.94	0.72	0.94	28.7
Approach			216	0.0	216	0.0	0.628	47.5	LOS D	5.2	36.4	0.97	0.77	1.01	29.4
East: Aura Boulevard (E)															
4	L2	All MCs	53	0.0	53	0.0	*0.086	28.8	LOS C	1.7	11.6	0.72	0.71	0.72	39.6
5	T1	All MCs	167	3.1	167	3.1	0.154	23.4	LOS C	3.4	24.5	0.73	0.57	0.73	35.4
6	R2	All MCs	53	0.0	53	0.0	0.377	52.8	LOS D	2.4	17.1	0.99	0.74	0.99	31.5
Approach			273	1.9	273	1.9	0.377	30.1	LOS C	3.4	24.5	0.78	0.63	0.78	35.3
North: RoadName (N)															
7	L2	All MCs	58	0.0	58	0.0	*0.633	56.1	LOS E	5.2	36.5	1.00	0.82	1.07	32.2
8	T1	All MCs	53	0.0	53	0.0	0.633	43.8	LOS D	5.2	36.5	1.00	0.82	1.07	33.0
9	R2	All MCs	53	0.0	53	0.0	0.204	45.2	LOS D	2.2	15.4	0.92	0.74	0.92	33.9
Approach			163	0.0	163	0.0	0.633	48.6	LOS D	5.2	36.5	0.98	0.79	1.02	33.0
West: Aura Boulevard (W)															
10	L2	All MCs	53	0.0	53	0.0	0.221	46.3	LOS D	2.2	15.6	0.93	0.74	0.93	33.3
11	T1	All MCs	254	4.1	254	4.1	0.272	23.0	LOS C	6.2	45.6	0.75	0.60	0.75	37.9
12	R2	All MCs	53	0.0	53	0.0	*0.377	52.9	LOS D	2.4	17.1	0.99	0.74	0.99	31.6
Approach			359	2.9	359	2.9	0.377	30.8	LOS C	6.2	45.6	0.81	0.64	0.81	36.1
All Vehicles			1011	1.6	1011	1.6	0.633	37.1	LOS D	6.2	45.6	0.86	0.69	0.88	33.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: RoadName (S)											
P1 Full	100	105	41.2	LOS E	0.3	0.3	0.94	0.94	195.0	200.0	1.03
East: Aura Boulevard (E)											
P21 Stage 1	50	53	41.1	LOS E	0.1	0.1	0.94	0.94	195.0	200.0	1.03
P22 Stage 2	50	53	41.1	LOS E	0.1	0.1	0.94	0.94	195.0	200.0	1.03
North: RoadName (N)											
P3 Full	100	105	41.2	LOS E	0.3	0.3	0.94	0.94	195.0	200.0	1.03
West: Aura Boulevard (W)											
P41 Stage 1	50	53	41.1	LOS E	0.1	0.1	0.94	0.94	195.0	200.0	1.03
P42 Stage 2	50	53	18.7	LOS B	0.1	0.1	0.87	0.87	172.5	200.0	1.16
All Pedestrians	400	421	38.4	LOS D	0.3	0.3	0.93	0.93	192.2	200.0	1.04

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [104AM] 104 - AM Peak (Intersection 104 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 93.7 seconds (Site Optimum Cycle Time - Minimum Delay)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Site Scenario: 1 | Local Volumes

Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: 104 - Sequence
Input Phase Sequence: A, B, C, C1*, E, F
Output Phase Sequence: A, B, C, E, F
Reference Phase: Phase B
(* Variable Phase)

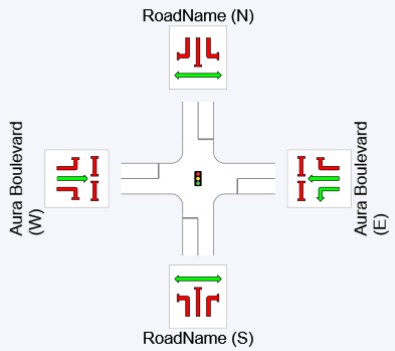
Phase Timing Summary

Phase	A	B	C	E	F
Phase Change Time (sec)	68.9	0.0	18.0	31.0	50.1
Green Time (sec)	18.8	12.0	7.0	13.0	12.8
Phase Time (sec)	24.8	18.0	13.0	19.0	18.8
Phase Split	26%	19%	14%	20%	20%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0

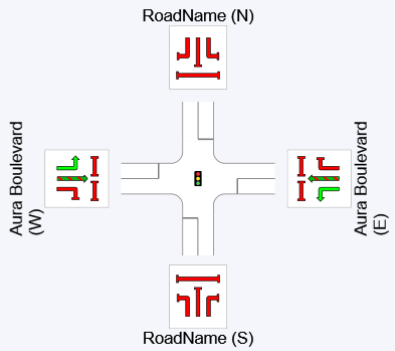
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence

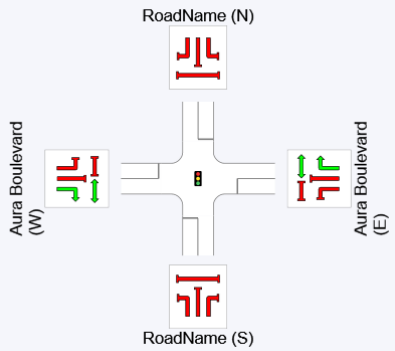
Phase A

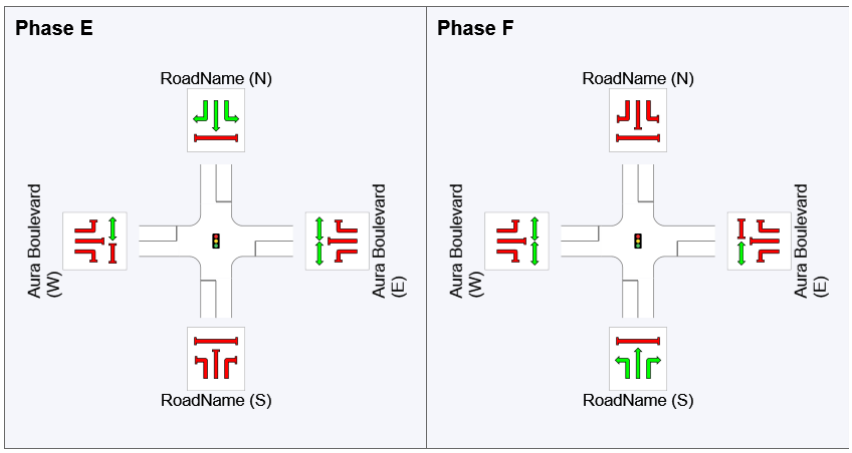


Phase B **REF**

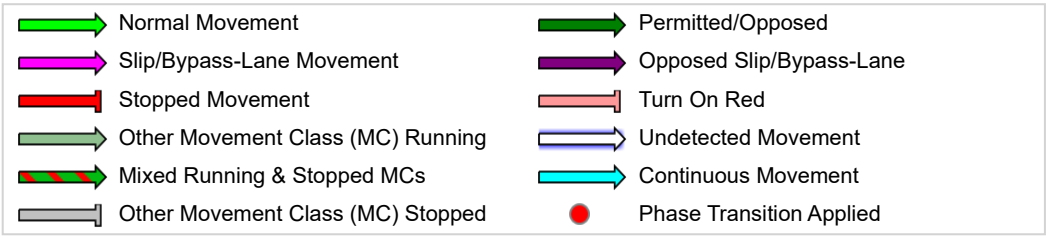


Phase C





REF: Reference Phase
VAR: Variable Phase



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MOVEMENT SUMMARY

Site: [104PM] 104 - PM Peak (Intersection 104 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 93.7 seconds (Site Optimum Cycle Time - Minimum Delay)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	79	0.0	79	0.0	*0.599	53.1	LOS D	4.9	34.5	0.99	0.77	1.01	28.0
2	T1	All MCs	53	0.0	53	0.0	0.599	43.5	LOS D	4.9	34.5	1.00	0.80	1.04	33.1
3	R2	All MCs	79	0.0	79	0.0	0.205	43.9	LOS D	2.2	15.4	0.94	0.72	0.94	28.7
Approach			211	0.0	211	0.0	0.599	47.2	LOS D	4.9	34.5	0.97	0.76	0.99	29.4
East: Aura Boulevard (E)															
4	L2	All MCs	61	0.0	61	0.0	*0.100	28.9	LOS C	1.9	13.5	0.73	0.72	0.73	39.5
5	T1	All MCs	226	3.7	226	3.7	0.234	23.0	LOS C	5.3	38.6	0.74	0.59	0.74	37.3
6	R2	All MCs	53	0.0	53	0.0	0.377	52.8	LOS D	2.4	17.1	0.99	0.74	0.99	31.5
Approach			340	2.5	340	2.5	0.377	28.7	LOS C	5.3	38.6	0.77	0.64	0.77	36.6
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	*0.603	55.9	LOS E	4.9	34.5	1.00	0.80	1.04	32.3
8	T1	All MCs	53	0.0	53	0.0	0.603	43.6	LOS D	4.9	34.5	1.00	0.80	1.04	33.1
9	R2	All MCs	53	0.0	53	0.0	0.206	45.3	LOS D	2.2	15.4	0.92	0.74	0.92	33.8
Approach			158	0.0	158	0.0	0.603	48.3	LOS D	4.9	34.5	0.97	0.78	1.00	33.1
West: Aura Boulevard (W)															
10	L2	All MCs	53	0.0	53	0.0	0.221	46.3	LOS D	2.2	15.6	0.93	0.74	0.93	33.3
11	T1	All MCs	221	3.8	221	3.8	0.227	23.0	LOS C	5.1	37.3	0.74	0.59	0.74	37.2
12	R2	All MCs	53	0.0	53	0.0	*0.377	52.9	LOS D	2.4	17.1	0.99	0.74	0.99	31.6
Approach			326	2.6	326	2.6	0.377	31.6	LOS C	5.1	37.3	0.81	0.64	0.81	35.5
All Vehicles			1035	1.6	1035	1.6	0.603	36.4	LOS D	5.3	38.6	0.86	0.68	0.86	34.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: RoadName (S)											
P1 Full	100	105	41.2	LOS E	0.3	0.3	0.94	0.94	195.0	200.0	1.03
East: Aura Boulevard (E)											
P21 Stage 1	50	53	41.1	LOS E	0.1	0.1	0.94	0.94	195.0	200.0	1.03
P22 Stage 2	50	53	41.1	LOS E	0.1	0.1	0.94	0.94	195.0	200.0	1.03
North: RoadName (N)											
P3 Full	100	105	41.2	LOS E	0.3	0.3	0.94	0.94	195.0	200.0	1.03
West: Aura Boulevard (W)											
P41 Stage 1	50	53	41.1	LOS E	0.1	0.1	0.94	0.94	195.0	200.0	1.03
P42 Stage 2	50	53	18.7	LOS B	0.1	0.1	0.87	0.87	172.5	200.0	1.16
All Pedestrians	400	421	38.4	LOS D	0.3	0.3	0.93	0.93	192.2	200.0	1.04

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [104PM] 104 - PM Peak (Intersection 104 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 93.7 seconds (Site Optimum Cycle Time - Minimum Delay)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Site Scenario: 1 | Local Volumes

Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: 104 - Sequence - Import
Input Phase Sequence: A, B, C, C1*, E, F
Output Phase Sequence: A, B, C, E, F
Reference Phase: Phase B
(* Variable Phase)

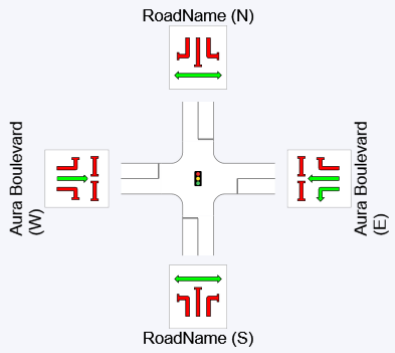
Phase Timing Summary

Phase	A	B	C	E	F
Phase Change Time (sec)	68.9	0.0	18.0	31.0	49.9
Green Time (sec)	18.8	12.0	7.0	12.9	13.0
Phase Time (sec)	24.8	18.0	13.0	18.9	19.0
Phase Split	26%	19%	14%	20%	20%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0

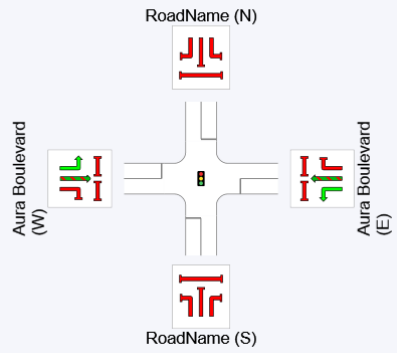
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence

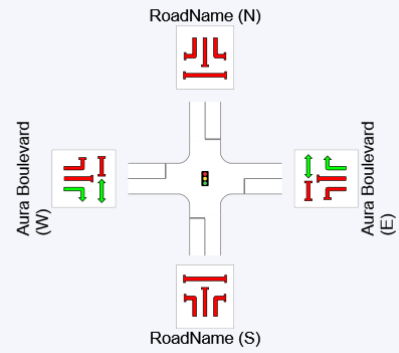
Phase A

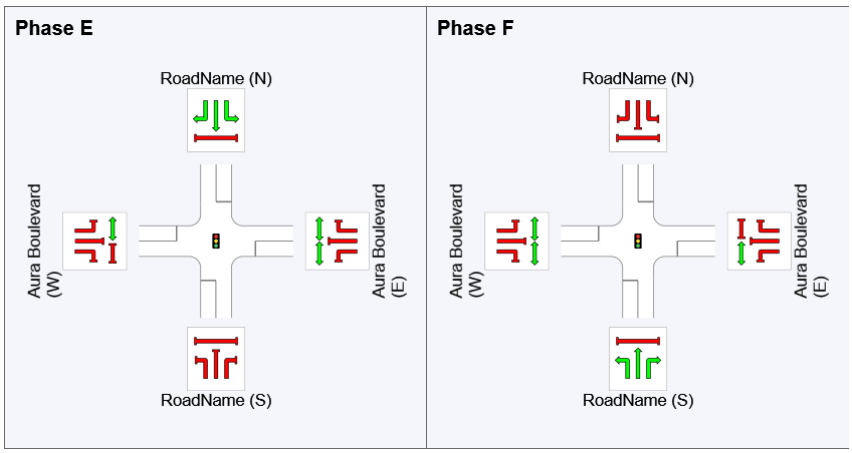


Phase B **REF**

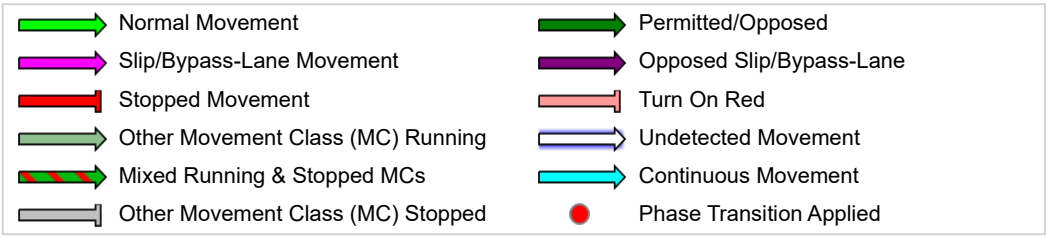


Phase C





REF: Reference Phase
VAR: Variable Phase



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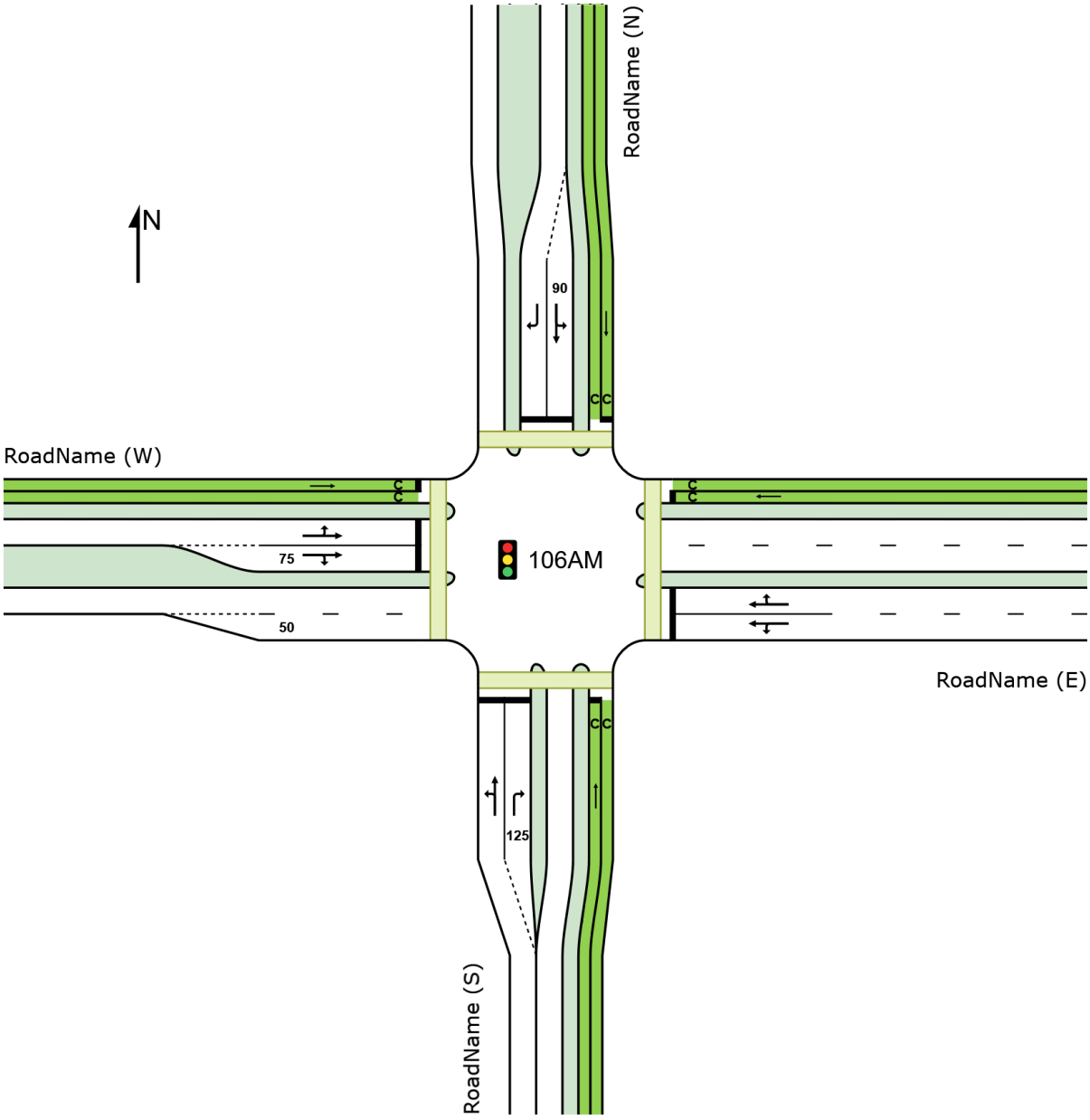
SITE LAYOUT

Site: [106AM] AM Peak (Intersection 106 - 2031)

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Organisation: URBIS | Licence: NETWORK / 1PC | Created: Friday, 15 May 2026 10:46:31 AM
Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba \IR Response\P0053364_Aura Transport Masterplan_2031 Intersection Analysis_260430.sipx

MOVEMENT SUMMARY

Site: [106AM] AM Peak (Intersection 106 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Phase Times)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	*0.747	86.5	LOS F	6.5	45.8	1.00	0.87	1.17	19.9
2	T1	All MCs	105	0.0	105	0.0	0.747	44.8	LOS D	6.5	45.8	0.93	0.75	1.01	16.1
3	R2	All MCs	58	0.0	58	0.0	*0.534	68.7	LOS E	3.5	24.6	1.00	0.76	1.01	15.9
Approach			216	0.0	216	0.0	0.747	61.4	LOS E	6.5	45.8	0.97	0.78	1.05	17.0
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	*0.170	27.6	LOS C	1.7	11.9	0.84	1.09	0.84	21.9
5	T1	All MCs	105	2.0	105	2.0	*0.190	27.8	LOS C	3.1	21.6	0.84	0.85	0.84	21.9
6	R2	All MCs	53	0.0	53	0.0	0.190	33.9	LOS C	3.1	21.6	0.80	1.06	0.80	22.5
Approach			211	1.0	211	1.0	0.190	29.3	LOS C	3.1	21.6	0.83	0.96	0.83	22.0
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.747	86.3	LOS F	6.5	45.8	1.00	0.87	1.17	14.3
8	T1	All MCs	105	0.0	105	0.0	0.747	44.8	LOS D	6.5	45.8	0.93	0.75	1.01	16.1
9	R2	All MCs	53	0.0	53	0.0	0.486	68.4	LOS E	3.2	22.3	1.00	0.75	1.00	18.2
Approach			211	0.0	211	0.0	0.747	61.1	LOS E	6.5	45.8	0.96	0.78	1.05	16.2
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	*0.398	68.6	LOS E	3.6	26.4	0.99	0.76	0.99	18.9
11	T1	All MCs	125	2.5	125	2.5	0.398	40.4	LOS D	6.2	43.6	0.92	0.71	0.92	20.0
12	R2	All MCs	53	0.0	53	0.0	0.398	71.0	LOS E	6.2	43.6	0.95	0.77	0.95	23.2
Approach			231	1.4	231	1.4	0.398	53.8	LOS D	6.2	43.6	0.94	0.74	0.94	20.4
All Vehicles			867	0.6	867	0.6	0.747	51.5	LOS D	6.5	45.8	0.93	0.81	0.97	18.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: RoadName (S)												

P1	Full	100	105	26.8	LOS C	0.2	0.2	0.90	0.90	180.7	200.0	1.11
East: RoadName (E)												
P2	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: RoadName (N)												
P3	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
West: RoadName (W)												
P4	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians		400	421	47.5	LOS E	0.3	0.3	0.94	0.94	201.3	200.0	0.99

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Organisation: URBIS | Licence: NETWORK / 1PC | Processed: Thursday, 14 May 2026 9:32:03 AM
Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba \IR Response\P0053364_Aura Transport Masterplan_2031 Intersection Analysis_260430.sipx

PHASING SUMMARY

Site: [106AM] AM Peak (Intersection 106 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Phase Times)
Site Scenario: 1 | Local Volumes

Timings based on settings in the Site Phasing & Timing dialog
Phase Times specified by the user
Phase Sequence: Four-Phase Split Phasing
Input Phase Sequence: A, B, C, D, E, F
Output Phase Sequence: A, B, C, D, E, F
Reference Phase: Phase A

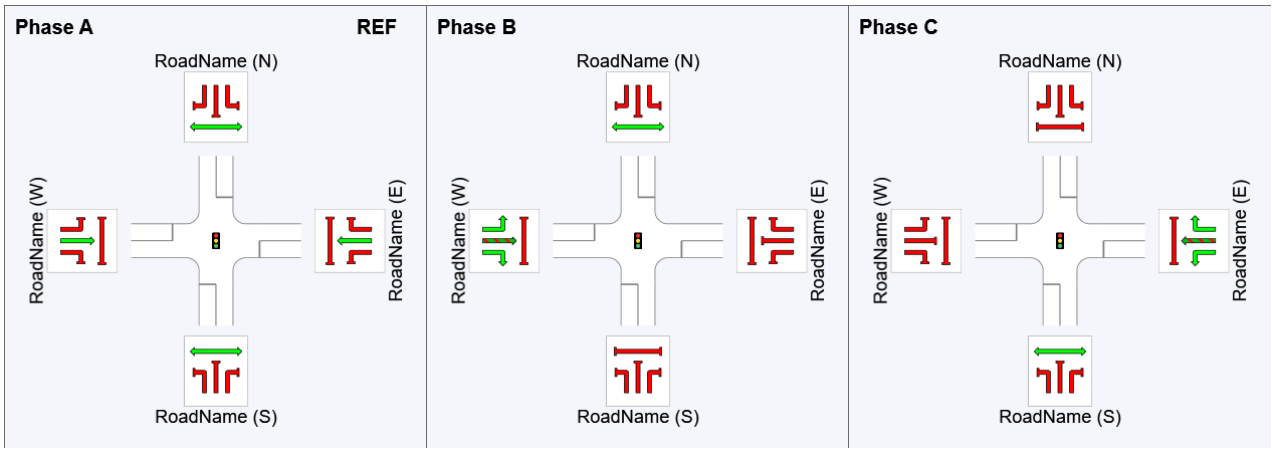
Phase Timing Summary

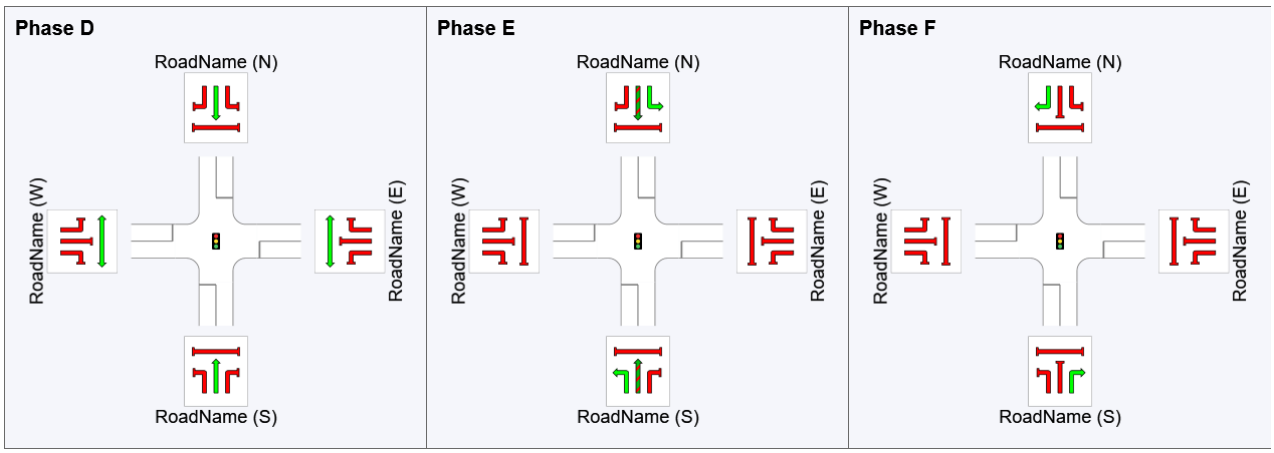
Phase	A	B	C	D	E	F
Phase Change Time (sec)	0.0	24.8	46.8	67.7	94.0	107.0
Green Time (sec)	18.8	16.0	14.9	21.5	7.0	7.0
Phase Time (sec)	24.8	22.0	19.7	27.5	13.0	13.0
Phase Split	21%	18%	16%	23%	11%	11%
Phase Frequency (%)	100.0	100.0	79.6[2]	100.0	100.0	100.0

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

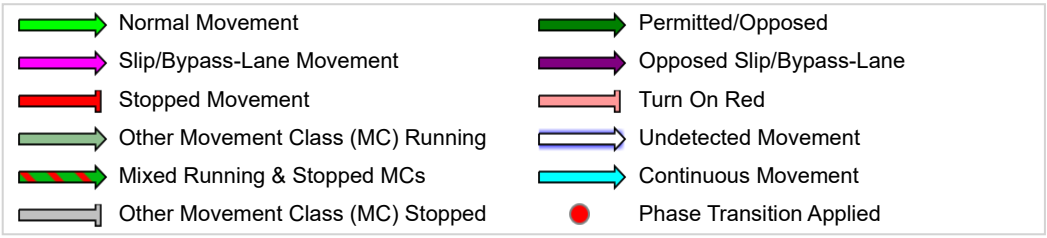
2 Phase Frequency is implied by a Phase Time specified by the user that is less than the Required Movement Time.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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MOVEMENT SUMMARY

Site: [106PM] PM Peak (Intersection 106 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Phase Times)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	*0.747	86.6	LOS F	6.5	45.8	1.00	0.87	1.17	19.9
2	T1	All MCs	105	0.0	105	0.0	0.747	44.8	LOS D	6.5	45.8	0.93	0.75	1.01	16.1
3	R2	All MCs	53	0.0	53	0.0	0.486	68.4	LOS E	3.2	22.3	1.00	0.75	1.00	15.9
Approach			211	0.0	211	0.0	0.747	61.1	LOS E	6.5	45.8	0.96	0.78	1.05	17.1
East: RoadName (E)															
4	L2	All MCs	55	0.0	55	0.0	*0.209	30.0	LOS C	2.0	16.3	0.84	1.08	0.84	22.3
5	T1	All MCs	135	8.6	135	8.6	*0.227	24.4	LOS C	3.7	26.0	0.84	0.89	0.84	23.1
6	R2	All MCs	53	0.0	53	0.0	0.227	36.5	LOS D	3.7	26.0	0.81	1.05	0.81	22.7
Approach			242	4.8	242	4.8	0.227	28.3	LOS C	3.7	26.0	0.83	0.97	0.83	22.8
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.747	86.3	LOS F	6.5	45.8	1.00	0.87	1.17	14.3
8	T1	All MCs	105	0.0	105	0.0	0.747	44.8	LOS D	6.5	45.8	0.93	0.75	1.01	16.1
9	R2	All MCs	53	0.0	53	0.0	*0.486	68.4	LOS E	3.2	22.3	1.00	0.75	1.00	18.2
Approach			211	0.0	211	0.0	0.747	61.1	LOS E	6.5	45.8	0.96	0.78	1.05	16.2
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	*0.363	65.4	LOS E	3.2	23.2	0.98	0.75	0.98	18.8
11	T1	All MCs	105	2.0	105	2.0	0.363	40.7	LOS D	5.5	38.5	0.91	0.70	0.91	19.7
12	R2	All MCs	53	0.0	53	0.0	0.363	69.1	LOS E	5.5	38.5	0.94	0.76	0.94	23.1
Approach			211	1.0	211	1.0	0.363	54.0	LOS D	5.5	38.5	0.94	0.73	0.94	20.3
All Vehicles			874	1.6	874	1.6	0.747	50.3	LOS D	6.5	45.8	0.92	0.82	0.96	19.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: RoadName (S)												

P1	Full	100	105	26.8	LOS C	0.2	0.2	0.90	0.90	180.7	200.0	1.11
East: RoadName (E)												
P2	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: RoadName (N)												
P3	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
West: RoadName (W)												
P4	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians		400	421	47.5	LOS E	0.3	0.3	0.94	0.94	201.3	200.0	0.99

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [106PM] PM Peak (Intersection 106 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Phase Times)
Site Scenario: 1 | Local Volumes

Timings based on settings in the Site Phasing & Timing dialog
Phase Times specified by the user
Phase Sequence: Four-Phase Split Phasing
Input Phase Sequence: A, B, C, D, E, F
Output Phase Sequence: A, B, C, D, E, F
Reference Phase: Phase A

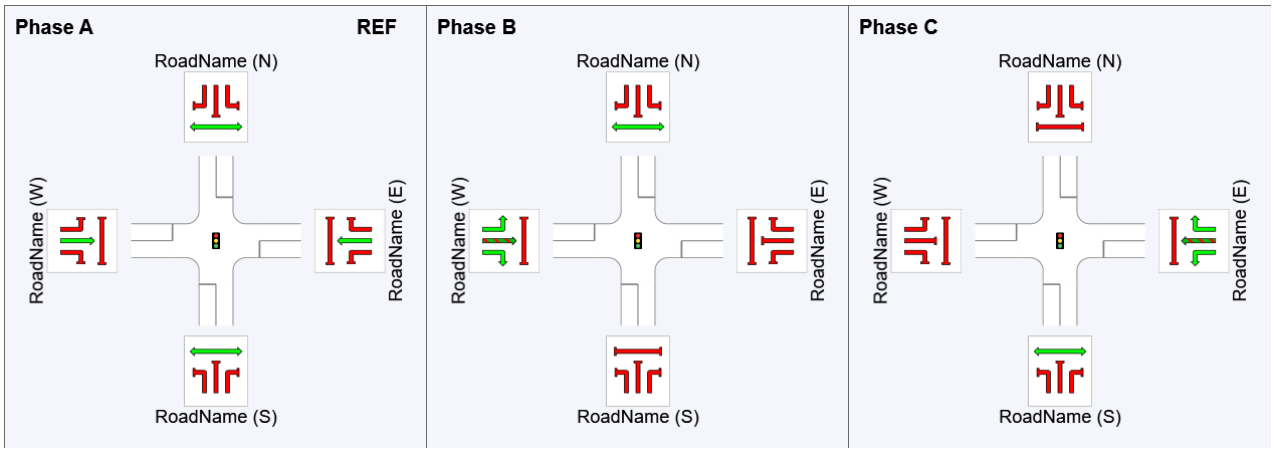
Phase Timing Summary

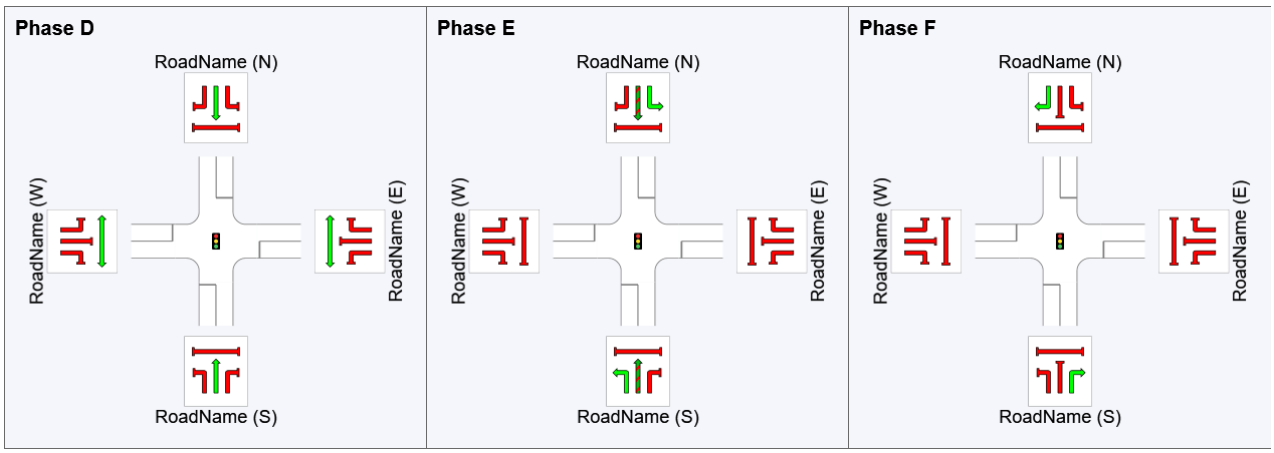
Phase	A	B	C	D	E	F
Phase Change Time (sec)	0.0	24.8	46.8	67.7	94.0	107.0
Green Time (sec)	18.8	16.0	14.9	21.5	7.0	7.0
Phase Time (sec)	24.8	22.0	19.7	27.5	13.0	13.0
Phase Split	21%	18%	16%	23%	11%	11%
Phase Frequency (%)	100.0	100.0	79.6[2]	100.0	100.0	100.0

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

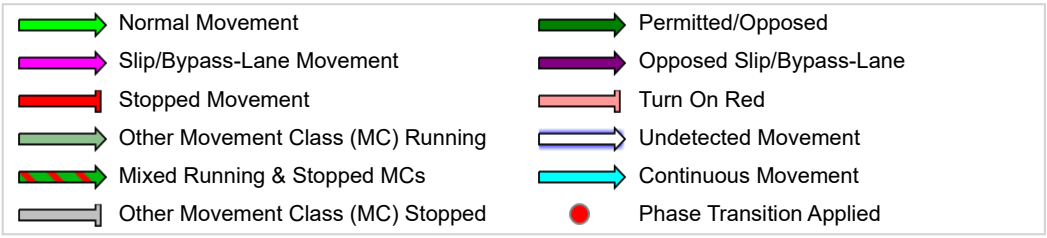
2 Phase Frequency is implied by a Phase Time specified by the user that is less than the Required Movement Time.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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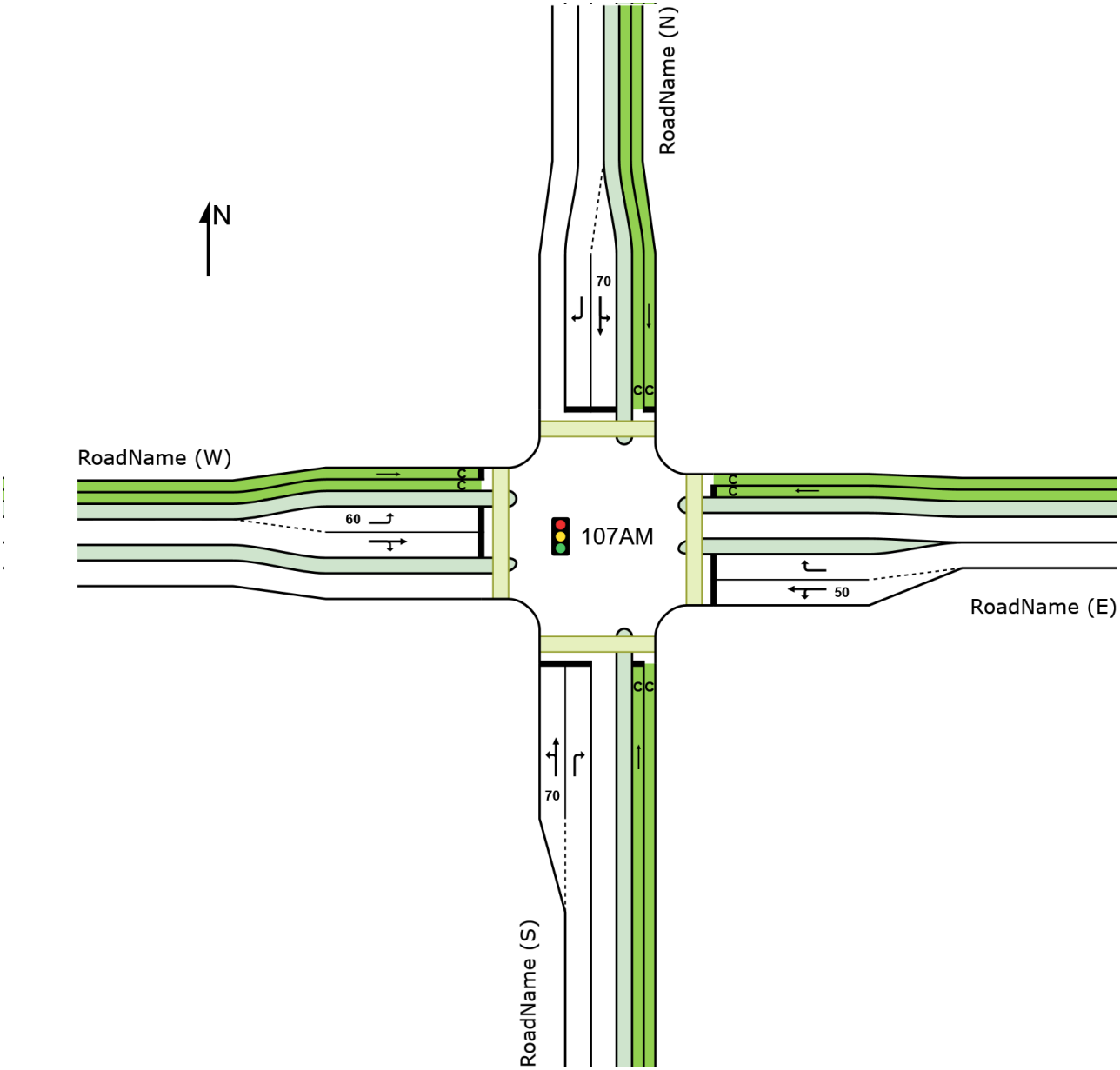
SITE LAYOUT

Site: [107AM] AM Peak (Intersection 107 - 2031)

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Organisation: URBIS | Licence: NETWORK / 1PC | Created: Friday, 15 May 2026 10:46:46 AM
Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba\IR Response\P0053364_Aura Transport Masterplan_2031 Intersection Analysis_260430.sipx

MOVEMENT SUMMARY

Site: [107AM] AM Peak (Intersection 107 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 95.8 seconds (Site Optimum Cycle Time - Minimum Delay)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	0.175	30.7	LOS C	3.5	25.2	0.76	0.68	0.76	40.0
2	T1	All MCs	105	2.0	105	2.0	0.175	28.9	LOS C	3.5	25.2	0.80	0.64	0.80	30.1
3	R2	All MCs	53	0.0	53	0.0	0.453	55.8	LOS E	2.6	17.9	1.00	0.74	1.00	30.8
Approach			211	1.0	211	1.0	0.453	36.1	LOS D	3.5	25.2	0.84	0.68	0.84	32.2
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	*0.226	33.7	LOS C	3.0	21.0	0.84	1.05	0.84	31.5
5	T1	All MCs	105	0.0	105	0.0	*0.226	22.9	LOS C	3.0	21.0	0.85	0.83	0.85	27.1
6	R2	All MCs	53	0.0	53	0.0	0.453	55.8	LOS E	2.6	17.9	1.00	0.74	1.00	30.8
Approach			211	0.0	211	0.0	0.453	33.8	LOS C	3.0	21.0	0.89	0.86	0.89	29.0
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	*0.678	70.8	LOS E	5.2	36.9	1.00	0.84	1.12	31.5
8	T1	All MCs	105	2.0	105	2.0	0.678	33.7	LOS C	5.2	36.9	0.92	0.73	0.98	27.3
9	R2	All MCs	53	0.0	53	0.0	*0.453	55.8	LOS E	2.6	17.9	1.00	0.74	1.00	30.8
Approach			211	1.0	211	1.0	0.678	48.5	LOS D	5.2	36.9	0.96	0.76	1.02	29.1
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	0.453	55.8	LOS E	2.6	17.9	1.00	0.74	1.00	30.6
11	T1	All MCs	105	0.0	105	0.0	0.672	34.9	LOS C	5.2	36.2	0.93	0.73	0.99	27.2
12	R2	All MCs	53	0.0	53	0.0	*0.672	69.6	LOS E	5.2	36.2	1.00	0.84	1.11	31.6
Approach			211	0.0	211	0.0	0.672	48.8	LOS D	5.2	36.2	0.97	0.76	1.02	29.0
All Vehicles			842	0.5	842	0.5	0.678	41.8	LOS D	5.2	36.9	0.91	0.77	0.94	29.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: RoadName (S)												
P1	Full	150	158	42.4	LOS E	0.4	0.4	0.94	0.94	196.2	200.0	1.02
East: RoadName (E)												
P2	Full	150	158	42.4	LOS E	0.4	0.4	0.94	0.94	196.2	200.0	1.02
North: RoadName (N)												
P3	Full	150	158	42.4	LOS E	0.4	0.4	0.94	0.94	196.2	200.0	1.02
West: RoadName (W)												
P4	Full	150	158	42.4	LOS E	0.4	0.4	0.94	0.94	196.2	200.0	1.02
All Pedestrians		600	632	42.4	LOS E	0.4	0.4	0.94	0.94	196.2	200.0	1.02

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [107AM] AM Peak (Intersection 107 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 95.8 seconds (Site Optimum Cycle Time - Minimum Delay)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Site Scenario: 1 | Local Volumes

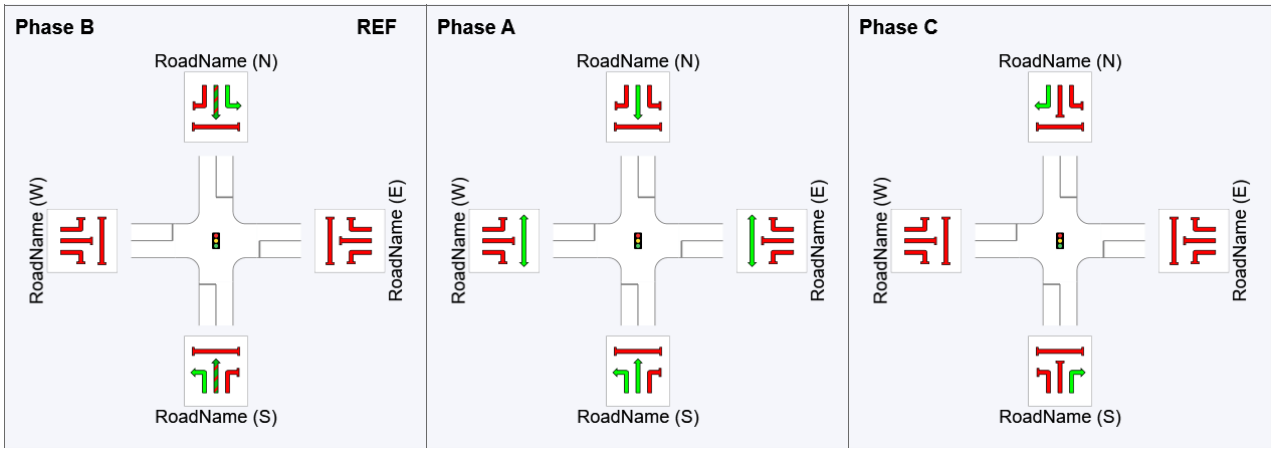
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Two-Approach Contraflow with Staged Crossings - Import
Input Phase Sequence: B, A, C, C1*, D, E, F
Output Phase Sequence: B, A, C, D, E, F
Reference Phase: Phase B
(* Variable Phase)

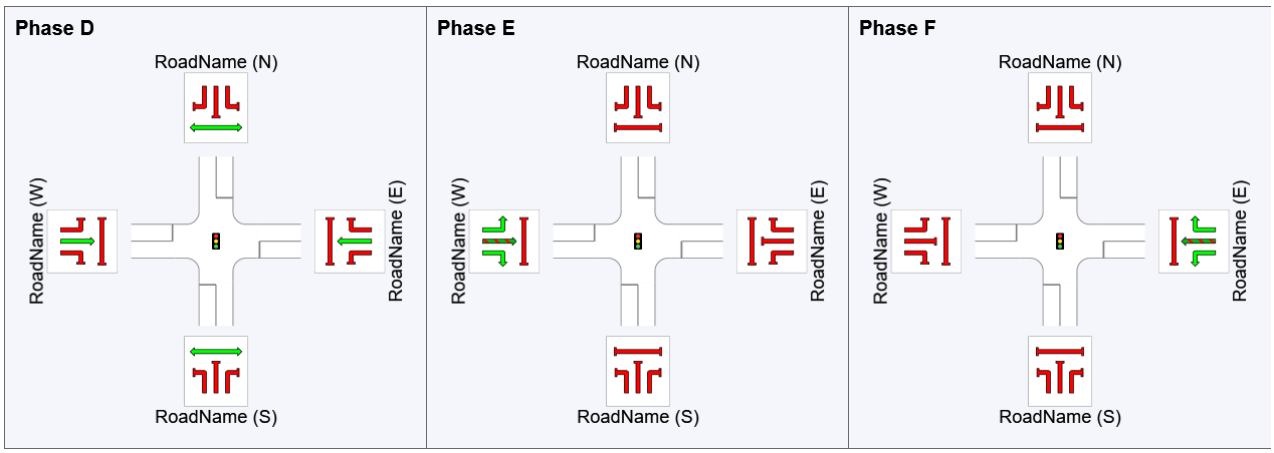
Phase Timing Summary

Phase	B	A	C	D	E	F
Phase Change Time (sec)	0.0	12.0	36.8	48.8	71.8	83.8
Green Time (sec)	6.0	18.8	6.0	17.1	6.0	6.0
Phase Time (sec)	12.0	24.8	12.0	23.1	12.0	12.0
Phase Split	13%	26%	13%	24%	13%	13%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0	100.0

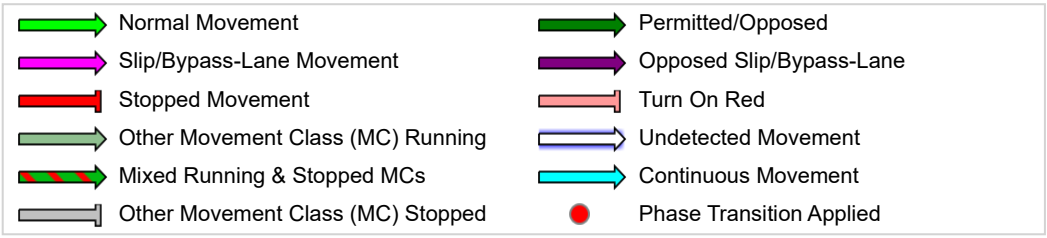
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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MOVEMENT SUMMARY

Site: [107PM] PM Peak (Intersection 107 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 95.8 seconds (Site Optimum Cycle Time - Minimum Delay)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	0.175	30.7	LOS C	3.5	25.2	0.76	0.68	0.76	40.0
2	T1	All MCs	105	2.0	105	2.0	0.175	28.9	LOS C	3.5	25.2	0.80	0.64	0.80	30.1
3	R2	All MCs	53	0.0	53	0.0	0.453	55.8	LOS E	2.6	17.9	1.00	0.74	1.00	30.8
Approach			211	1.0	211	1.0	0.453	36.1	LOS D	3.5	25.2	0.84	0.68	0.84	32.2
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	*0.226	33.7	LOS C	3.0	21.0	0.84	1.05	0.84	31.5
5	T1	All MCs	105	0.0	105	0.0	*0.226	22.9	LOS C	3.0	21.0	0.85	0.83	0.85	27.1
6	R2	All MCs	53	0.0	53	0.0	0.453	55.8	LOS E	2.6	17.9	1.00	0.74	1.00	30.8
Approach			211	0.0	211	0.0	0.453	33.8	LOS C	3.0	21.0	0.89	0.86	0.89	29.0
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	*0.678	70.8	LOS E	5.2	36.9	1.00	0.84	1.12	31.5
8	T1	All MCs	105	2.0	105	2.0	0.678	33.7	LOS C	5.2	36.9	0.92	0.73	0.98	27.3
9	R2	All MCs	53	0.0	53	0.0	*0.453	55.8	LOS E	2.6	17.9	1.00	0.74	1.00	30.8
Approach			211	1.0	211	1.0	0.678	48.5	LOS D	5.2	36.9	0.96	0.76	1.02	29.1
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	0.453	55.8	LOS E	2.6	17.9	1.00	0.74	1.00	30.6
11	T1	All MCs	105	0.0	105	0.0	0.672	34.9	LOS C	5.2	36.2	0.93	0.73	0.99	27.2
12	R2	All MCs	53	0.0	53	0.0	*0.672	69.6	LOS E	5.2	36.2	1.00	0.84	1.11	31.6
Approach			211	0.0	211	0.0	0.672	48.8	LOS D	5.2	36.2	0.97	0.76	1.02	29.0
All Vehicles			842	0.5	842	0.5	0.678	41.8	LOS D	5.2	36.9	0.91	0.77	0.94	29.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: RoadName (S)												
P1	Full	150	158	42.4	LOS E	0.4	0.4	0.94	0.94	196.2	200.0	1.02
East: RoadName (E)												
P2	Full	150	158	42.4	LOS E	0.4	0.4	0.94	0.94	196.2	200.0	1.02
North: RoadName (N)												
P3	Full	150	158	42.4	LOS E	0.4	0.4	0.94	0.94	196.2	200.0	1.02
West: RoadName (W)												
P4	Full	150	158	42.4	LOS E	0.4	0.4	0.94	0.94	196.2	200.0	1.02
All Pedestrians		600	632	42.4	LOS E	0.4	0.4	0.94	0.94	196.2	200.0	1.02

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba\IR Response\P0053364_Aura Transport Masterplan_2031 Intersection Analysis_260430.sipx

PHASING SUMMARY

Site: [107PM] PM Peak (Intersection 107 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 95.8 seconds (Site Optimum Cycle Time - Minimum Delay)
Variable Sequence Analysis applied. The results are given for the selected output sequence.
Site Scenario: 1 | Local Volumes

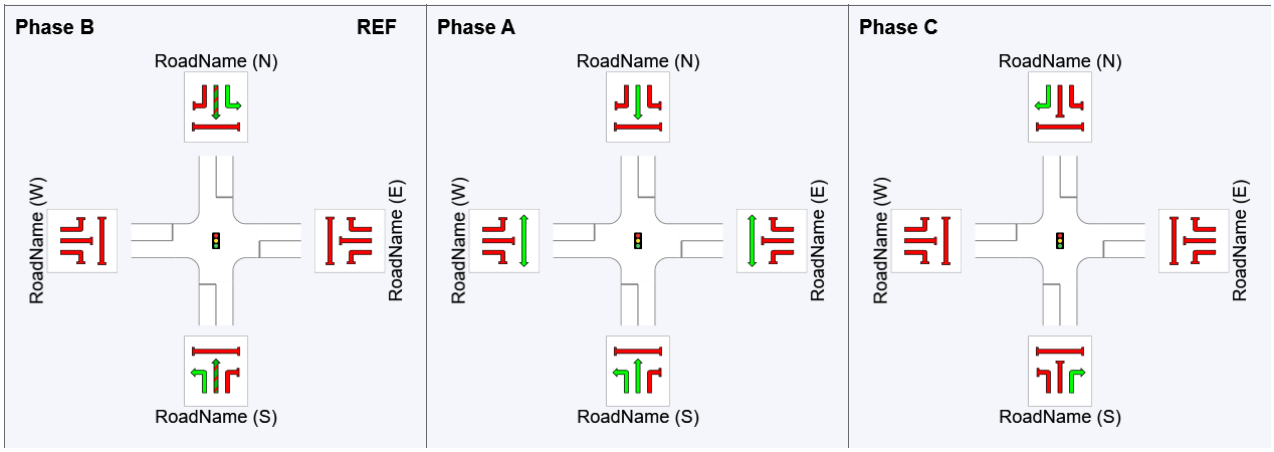
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Two-Approach Contraflow with Staged Crossings - Import
Input Phase Sequence: B, A, C, C1*, D, E, F
Output Phase Sequence: B, A, C, D, E, F
Reference Phase: Phase B
(* Variable Phase)

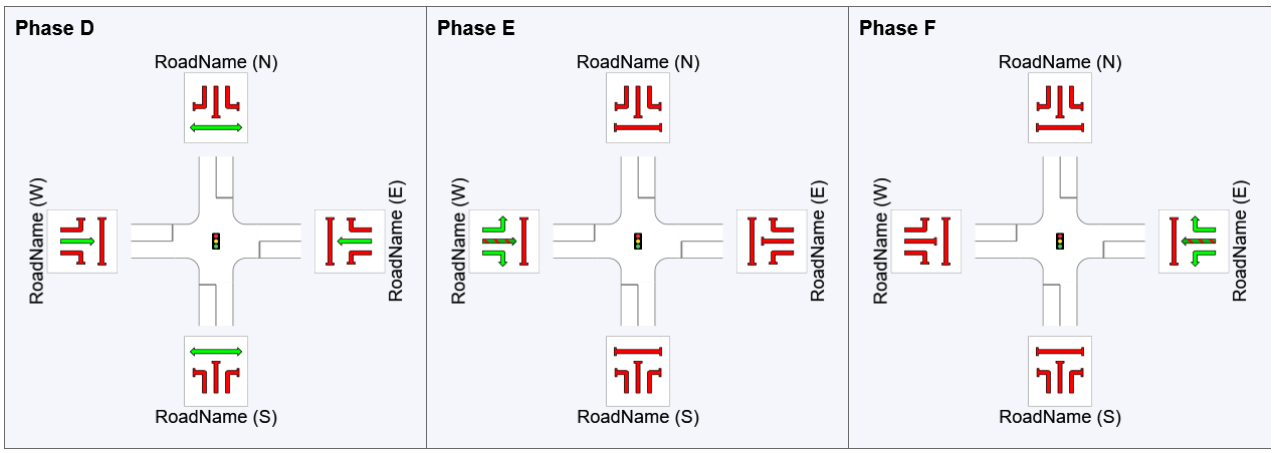
Phase Timing Summary

Phase	B	A	C	D	E	F
Phase Change Time (sec)	0.0	12.0	36.8	48.8	71.8	83.8
Green Time (sec)	6.0	18.8	6.0	17.1	6.0	6.0
Phase Time (sec)	12.0	24.8	12.0	23.1	12.0	12.0
Phase Split	13%	26%	13%	24%	13%	13%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0	100.0

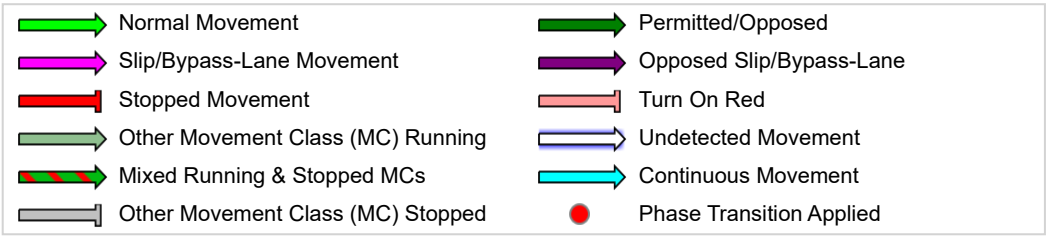
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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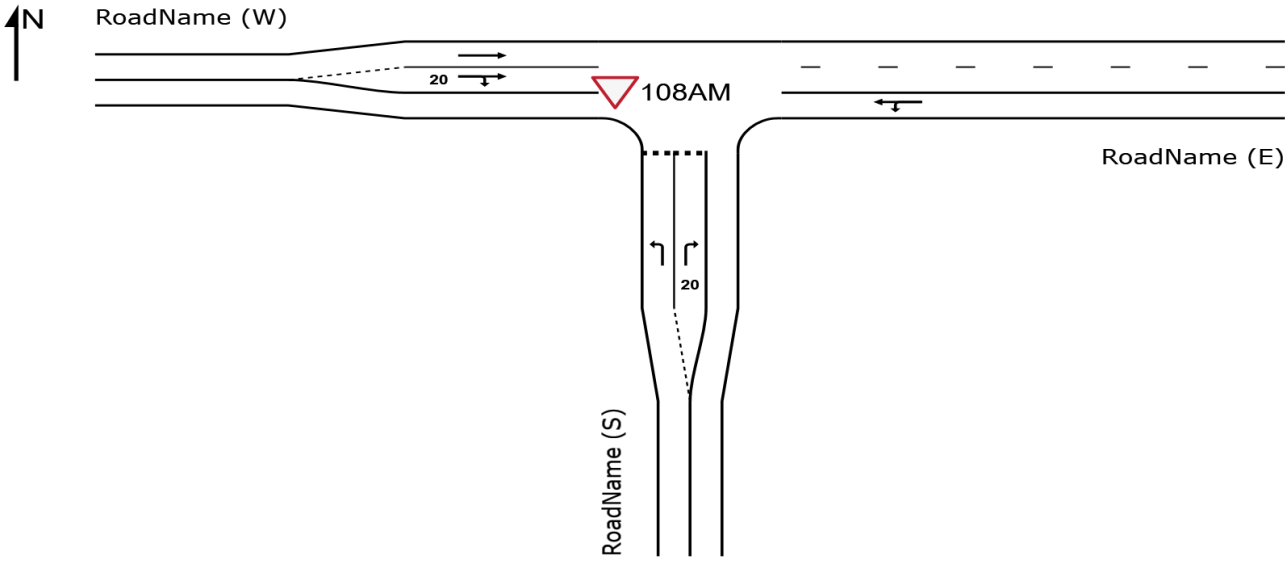
SITE LAYOUT

Site: [108AM] AM Peak (Intersection 108 - 2031)

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Organisation: URBIS | Licence: NETWORK / 1PC | Created: Friday, 15 May 2026 10:47:06 AM
Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba\IR Response\P0053364_Aura Transport Masterplan_2031 Intersection Analysis_260430.sipx

MOVEMENT SUMMARY

Site: [108AM] AM Peak (Intersection 108 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	84	0.0	84	0.0	0.058	6.0	LOS A	0.2	1.6	0.24	0.55	0.24	52.2
3	R2	All MCs	53	0.0	53	0.0	0.071	8.1	LOS A	0.3	1.9	0.47	0.69	0.47	50.7
Approach			137	0.0	137	0.0	0.071	6.8	LOS A	0.3	1.9	0.33	0.61	0.33	51.6
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	0.102	5.6	LOS A	0.0	0.0	0.00	0.16	0.00	56.1
5	T1	All MCs	138	5.3	138	5.3	0.102	0.0	LOS A	0.0	0.0	0.00	0.16	0.00	58.4
Approach			191	3.9	191	3.9	0.102	1.6	NA	0.0	0.0	0.00	0.16	0.00	57.8
West: RoadName (W)															
11	T1	All MCs	192	4.9	192	4.9	0.068	0.2	LOS A	0.3	2.0	0.09	0.11	0.09	58.8
12	R2	All MCs	53	0.0	53	0.0	0.068	6.1	LOS A	0.3	2.0	0.25	0.32	0.25	54.3
Approach			244	3.9	244	3.9	0.068	1.4	NA	0.3	2.0	0.12	0.15	0.12	57.8
All Vehicles			572	2.9	572	2.9	0.102	2.8	NA	0.3	2.0	0.13	0.27	0.13	56.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: [108PM] PM Peak (Intersection 108 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	0.038	6.1	LOS A	0.1	1.0	0.27	0.56	0.27	52.1
3	R2	All MCs	53	0.0	53	0.0	0.072	8.2	LOS A	0.3	1.9	0.48	0.70	0.48	50.7
Approach			105	0.0	105	0.0	0.072	7.1	LOS A	0.3	1.9	0.38	0.63	0.38	51.4
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	0.124	5.6	LOS A	0.0	0.0	0.00	0.13	0.00	56.3
5	T1	All MCs	180	5.3	180	5.3	0.124	0.0	LOS A	0.0	0.0	0.00	0.13	0.00	58.7
Approach			233	4.1	233	4.1	0.124	1.3	NA	0.0	0.0	0.00	0.13	0.00	58.1
West: RoadName (W)															
11	T1	All MCs	160	5.3	160	5.3	0.061	0.2	LOS A	0.3	1.9	0.09	0.11	0.09	58.8
12	R2	All MCs	53	0.0	53	0.0	0.061	6.3	LOS A	0.3	1.9	0.31	0.38	0.31	53.8
Approach			213	4.0	213	4.0	0.061	1.7	NA	0.3	1.9	0.14	0.18	0.14	57.5
All Vehicles			551	3.3	551	3.3	0.124	2.6	NA	0.3	1.9	0.13	0.25	0.13	56.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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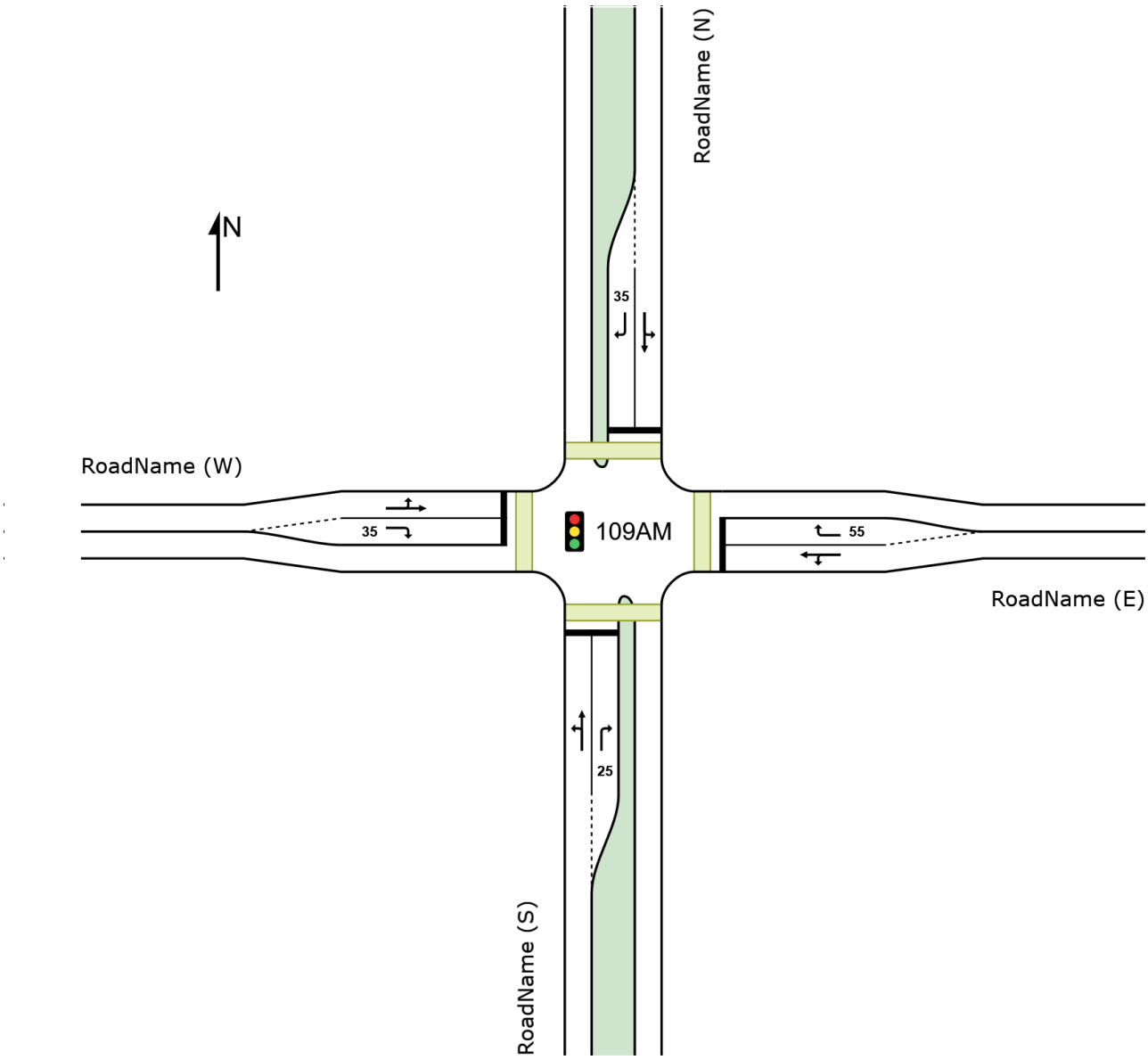
SITE LAYOUT

Site: [109AM] AM Peak (Intersection 109 - 2031)

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Organisation: URBIS | Licence: NETWORK / 1PC | Created: Friday, 15 May 2026 10:47:47 AM
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MOVEMENT SUMMARY

Site: [109AM] AM Peak (Intersection 109 - 2031)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 98.0 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	139	0.0	139	0.0	0.566	21.7	LOS C	5.7	40.2	0.96	1.02	0.96	28.6
2	T1	All MCs	53	0.0	53	0.0	* 0.566	36.1	LOS D	5.7	40.2	0.96	1.02	0.96	27.0
3	R2	All MCs	53	0.0	53	0.0	0.237	47.9	LOS D	2.4	16.5	0.94	0.74	0.94	11.0
Approach			244	0.0	244	0.0	0.566	30.5	LOS C	5.7	40.2	0.96	0.96	0.96	24.6
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	0.167	16.6	LOS B	2.3	15.8	0.75	1.07	0.75	15.1
5	T1	All MCs	53	0.0	53	0.0	* 0.167	13.3	LOS B	2.3	15.8	0.75	1.07	0.75	31.9
6	R2	All MCs	53	0.0	53	0.0	* 0.463	57.1	LOS E	2.6	18.3	1.00	0.75	1.00	20.2
Approach			158	0.0	158	0.0	0.463	29.0	LOS C	2.6	18.3	0.83	0.97	0.83	23.0
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.321	26.0	LOS C	3.1	21.9	0.92	1.02	0.92	22.6
8	T1	All MCs	53	0.0	53	0.0	0.321	24.6	LOS C	3.1	21.9	0.92	1.02	0.92	21.7
9	R2	All MCs	147	0.0	147	0.0	* 0.852	61.2	LOS E	7.9	55.5	1.00	0.96	1.35	26.7
Approach			253	0.0	253	0.0	0.852	46.2	LOS D	7.9	55.5	0.97	0.99	1.17	25.2
West: RoadName (W)															
10	L2	All MCs	62	0.0	62	0.0	0.358	21.8	LOS C	2.6	18.2	0.93	1.02	0.93	29.0
11	T1	All MCs	53	0.0	53	0.0	0.358	24.1	LOS C	2.6	18.2	0.93	1.02	0.93	24.3
12	R2	All MCs	65	0.0	65	0.0	* 0.574	57.8	LOS E	3.3	23.1	1.00	0.78	1.05	21.0
Approach			180	0.0	180	0.0	0.574	35.5	LOS D	3.3	23.1	0.95	0.94	0.97	24.9
All Vehicles			835	0.0	835	0.0	0.852	36.1	LOS D	7.9	55.5	0.94	0.96	1.00	24.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: RoadName (S)												
P1	Full	150	158	19.2	LOS B	0.2	0.2	0.88	0.88	173.0	200.0	1.16
East: RoadName (E)												
P2	Full	150	158	43.5	LOS E	0.4	0.4	0.94	0.94	197.3	200.0	1.01
North: RoadName (N)												
P3	Full	150	158	43.5	LOS E	0.4	0.4	0.94	0.94	197.3	200.0	1.01
West: RoadName (W)												
P4	Full	150	158	43.5	LOS E	0.4	0.4	0.94	0.94	197.3	200.0	1.01
All Pedestrians		600	632	37.4	LOS D	0.4	0.4	0.93	0.93	191.2	200.0	1.05

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [109AM] AM Peak (Intersection 109 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 98.0 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

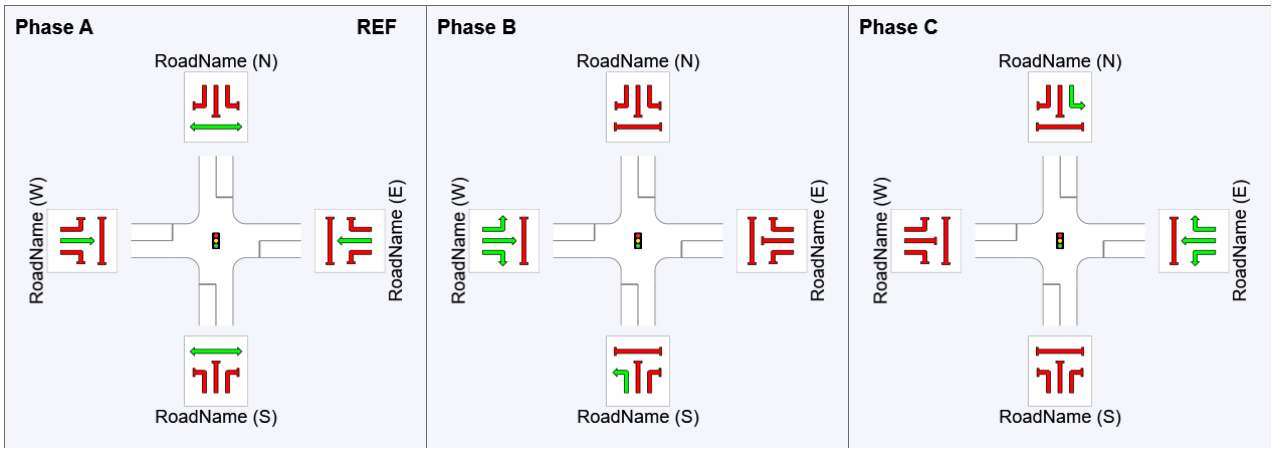
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Alternate Phasing
Input Phase Sequence: A, B, C, D, E, F
Output Phase Sequence: A, B, C, D, E, F
Reference Phase: Phase A

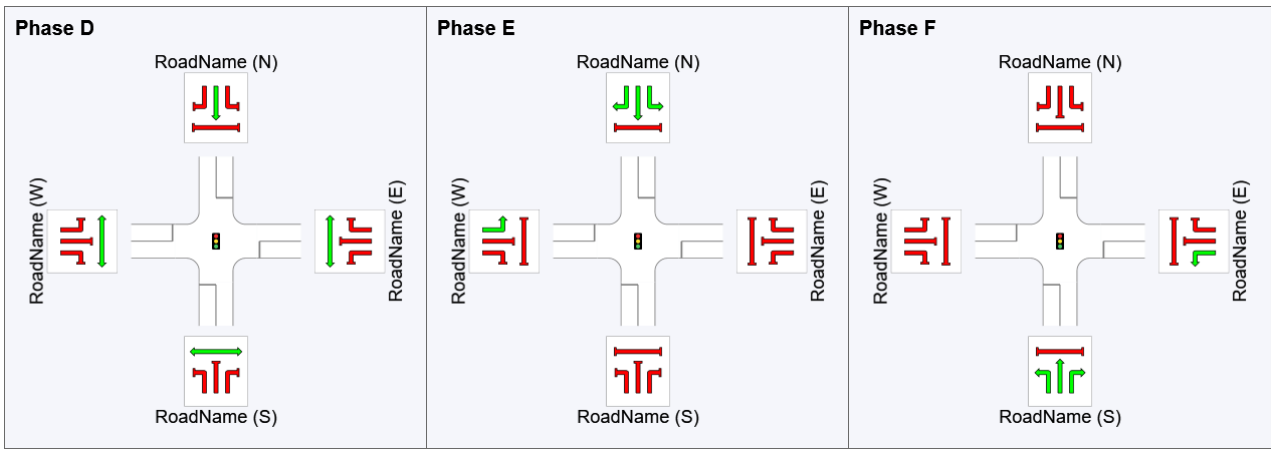
Phase Timing Summary

Phase	A	B	C	D	E	F
Phase Change Time (sec)	0.0	20.6	32.6	44.6	65.2	80.3
Green Time (sec)	14.6	6.0	6.0	14.6	9.1	11.7
Phase Time (sec)	20.6	12.0	12.0	20.6	15.1	17.7
Phase Split	21%	12%	12%	21%	15%	18%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0	100.0

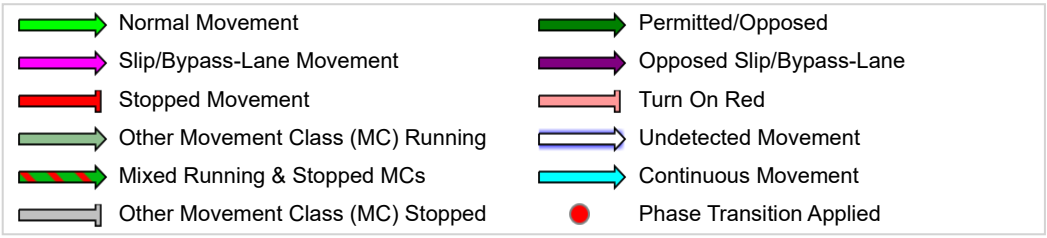
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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MOVEMENT SUMMARY

Site: [109PM] PM Peak (Intersection 109 - 2031)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 89.2 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	80	0.0	80	0.0	0.526	19.6	LOS B	3.7	25.7	0.98	1.01	0.98	29.2
2	T1	All MCs	53	0.0	53	0.0	* 0.526	32.4	LOS C	3.7	25.7	0.98	1.01	0.98	27.7
3	R2	All MCs	53	0.0	53	0.0	0.421	50.6	LOS D	2.4	16.6	1.00	0.74	1.00	10.6
Approach			185	0.0	185	0.0	0.526	32.1	LOS C	3.7	25.7	0.98	0.93	0.98	23.5
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	0.184	17.6	LOS B	2.1	14.7	0.78	1.06	0.78	15.1
5	T1	All MCs	53	0.0	53	0.0	0.184	11.7	LOS B	2.1	14.7	0.78	1.06	0.78	31.9
6	R2	All MCs	53	0.0	53	0.0	* 0.421	51.8	LOS D	2.4	16.6	1.00	0.74	1.00	21.4
Approach			158	0.0	158	0.0	0.421	27.0	LOS C	2.4	16.6	0.85	0.96	0.85	23.5
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.359	24.6	LOS C	2.8	19.9	0.94	1.02	0.94	22.7
8	T1	All MCs	53	0.0	53	0.0	0.359	22.8	LOS C	2.8	19.9	0.94	1.02	0.94	21.8
9	R2	All MCs	86	0.0	86	0.0	* 0.691	54.0	LOS D	4.1	28.4	1.00	0.84	1.17	28.5
Approach			192	0.0	192	0.0	0.691	37.4	LOS D	4.1	28.4	0.97	0.94	1.04	25.6
West: RoadName (W)															
10	L2	All MCs	80	0.0	80	0.0	0.530	22.4	LOS C	3.3	22.9	0.97	1.01	0.97	28.8
11	T1	All MCs	74	0.0	74	0.0	* 0.530	22.2	LOS C	3.3	22.9	0.97	1.01	0.97	24.2
12	R2	All MCs	111	0.0	111	0.0	0.884	60.6	LOS E	5.6	39.4	1.00	1.00	1.52	20.4
Approach			264	0.0	264	0.0	0.884	38.3	LOS D	5.6	39.4	0.98	1.00	1.20	24.1
All Vehicles			799	0.0	799	0.0	0.884	34.4	LOS C	5.6	39.4	0.95	0.96	1.04	24.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: RoadName (S)												
P1	Full	150	158	16.8	LOS B	0.2	0.2	0.87	0.87	170.7	200.0	1.17
East: RoadName (E)												
P2	Full	150	158	39.0	LOS D	0.4	0.4	0.94	0.94	192.9	200.0	1.04
North: RoadName (N)												
P3	Full	150	158	39.0	LOS D	0.4	0.4	0.94	0.94	192.9	200.0	1.04
West: RoadName (W)												
P4	Full	150	158	39.0	LOS D	0.4	0.4	0.94	0.94	192.9	200.0	1.04
All Pedestrians		600	632	33.5	LOS D	0.4	0.4	0.92	0.92	187.3	200.0	1.07

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [109PM] PM Peak (Intersection 109 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 89.2 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

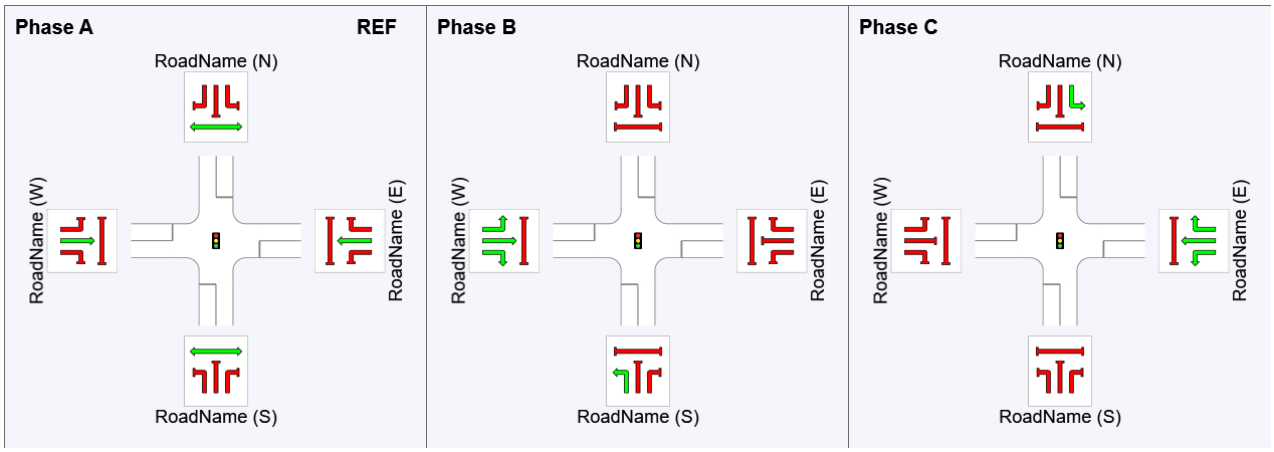
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Alternate Phasing - Import
Input Phase Sequence: A, B, C, D, E, F
Output Phase Sequence: A, B, C, D, E, F
Reference Phase: Phase A

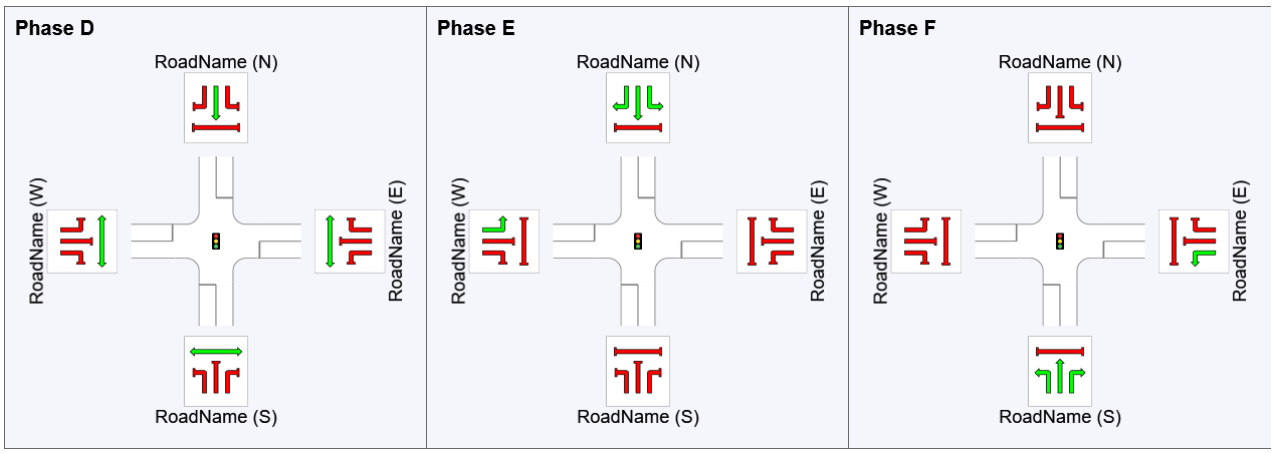
Phase Timing Summary

Phase	A	B	C	D	E	F
Phase Change Time (sec)	0.0	20.6	32.6	44.6	65.2	77.2
Green Time (sec)	14.6	6.0	6.0	14.6	6.0	6.0
Phase Time (sec)	20.6	12.0	12.0	20.6	12.0	12.0
Phase Split	23%	13%	13%	23%	13%	13%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0	100.0

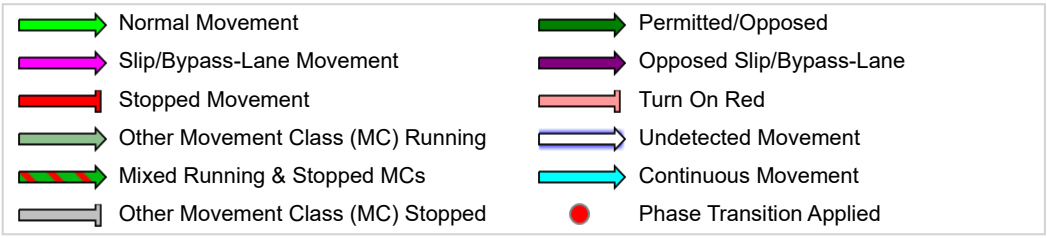
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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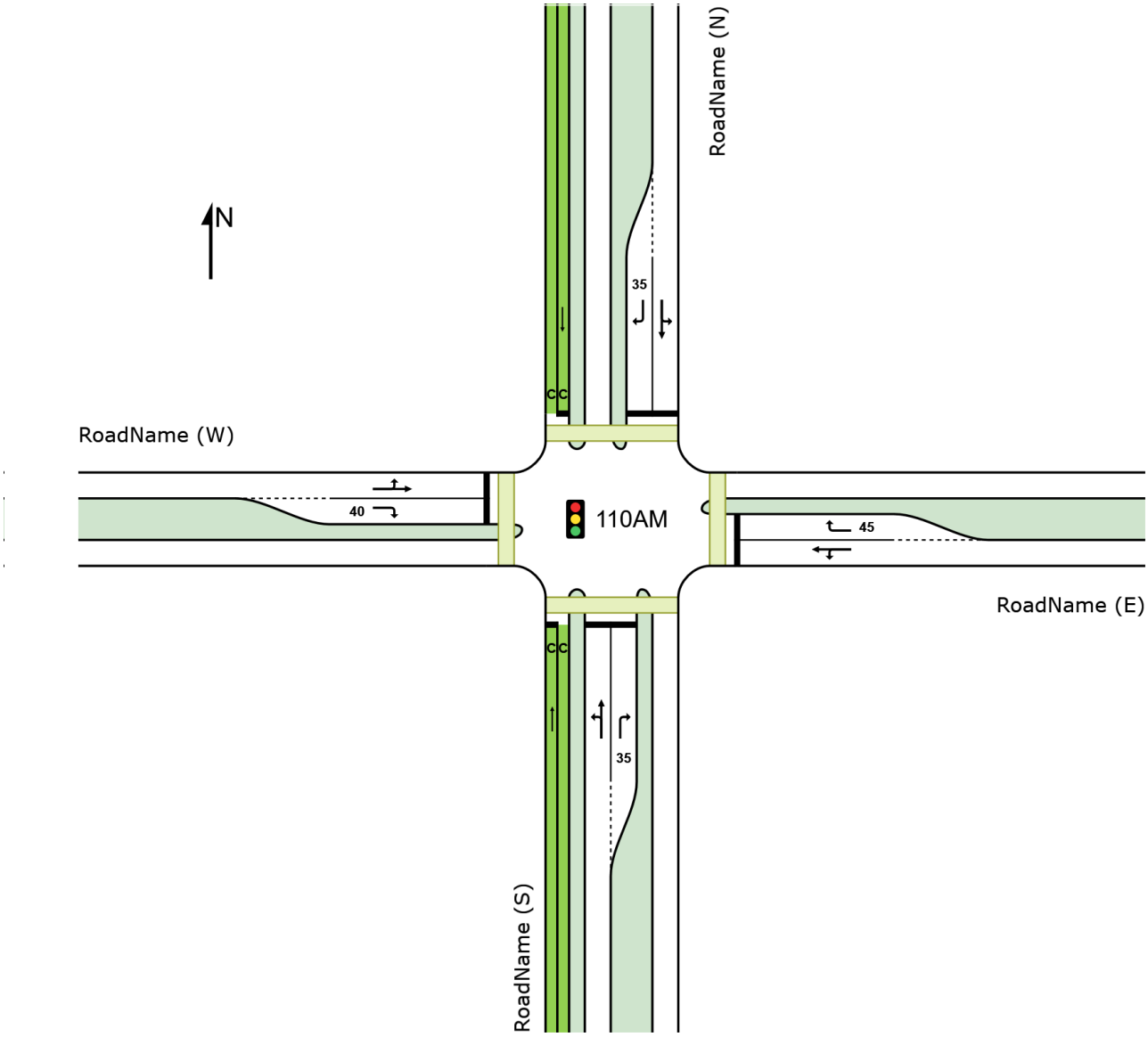
SITE LAYOUT

Site: [110AM] AM Peak (Intersection 110 - 2031)

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Organisation: URBIS | Licence: NETWORK / 1PC | Created: Friday, 15 May 2026 10:48:38 AM
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MOVEMENT SUMMARY

Site: [110AM] AM Peak (Intersection 110 - 2031)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 87.3 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	*0.184	36.4	LOS D	3.3	23.6	0.77	0.68	0.77	38.6
2	T1	All MCs	105	2.0	105	2.0	*0.184	24.8	LOS C	3.3	23.6	0.82	0.66	0.82	28.0
3	R2	All MCs	64	0.0	64	0.0	*0.503	51.2	LOS D	2.9	20.0	1.00	0.76	1.00	23.4
Approach			222	0.9	222	0.9	0.503	35.2	LOS D	3.3	23.6	0.86	0.69	0.86	29.0
East: RoadName (E)															
4	L2	All MCs	149	0.0	149	0.0	*0.483	39.6	LOS D	7.7	53.7	0.92	0.79	0.92	27.8
5	T1	All MCs	53	0.0	53	0.0	0.483	28.4	LOS C	7.7	53.7	0.92	0.79	0.92	31.9
6	R2	All MCs	53	0.0	53	0.0	0.413	50.8	LOS D	2.3	16.2	1.00	0.74	1.00	23.5
Approach			255	0.0	255	0.0	0.483	39.6	LOS D	7.7	53.7	0.94	0.78	0.94	27.7
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.184	36.4	LOS D	3.3	23.6	0.77	0.68	0.77	32.0
8	T1	All MCs	105	2.0	105	2.0	0.184	24.8	LOS C	3.3	23.6	0.82	0.66	0.82	28.0
9	R2	All MCs	53	0.0	53	0.0	0.413	50.8	LOS D	2.3	16.2	1.00	0.74	1.00	30.1
Approach			211	1.0	211	1.0	0.413	34.2	LOS C	3.3	23.6	0.85	0.69	0.85	29.3
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	0.236	37.9	LOS D	3.7	25.8	0.85	0.72	0.85	36.3
11	T1	All MCs	53	0.0	53	0.0	0.236	26.9	LOS C	3.7	25.8	0.85	0.72	0.85	33.7
12	R2	All MCs	53	0.0	53	0.0	*0.413	50.8	LOS D	2.3	16.2	1.00	0.74	1.00	30.2
Approach			158	0.0	158	0.0	0.413	38.5	LOS D	3.7	25.8	0.90	0.73	0.90	33.2
All Vehicles			845	0.5	845	0.5	0.503	36.9	LOS D	7.7	53.7	0.89	0.72	0.89	29.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: RoadName (S)												
P1	Full	100	105	38.0	LOS D	0.2	0.2	0.94	0.94	191.9	200.0	1.04
East: RoadName (E)												
P2	Full	100	105	38.0	LOS D	0.2	0.2	0.94	0.94	191.9	200.0	1.04
North: RoadName (N)												
P3	Full	100	105	38.0	LOS D	0.2	0.2	0.94	0.94	191.9	200.0	1.04
West: RoadName (W)												
P4	Full	100	105	38.0	LOS D	0.2	0.2	0.94	0.94	191.9	200.0	1.04
All Pedestrians		400	421	38.0	LOS D	0.2	0.2	0.94	0.94	191.9	200.0	1.04

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [110AM] AM Peak (Intersection 110 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 87.3 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

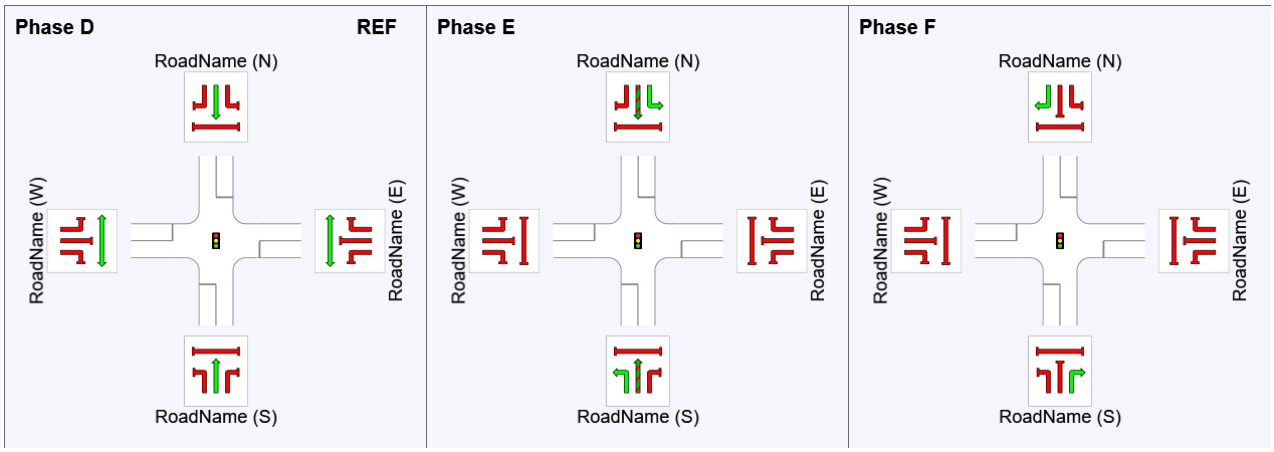
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns - Import
Input Phase Sequence: D, E, F, A, C
Output Phase Sequence: D, E, F, A, C
Reference Phase: Phase D

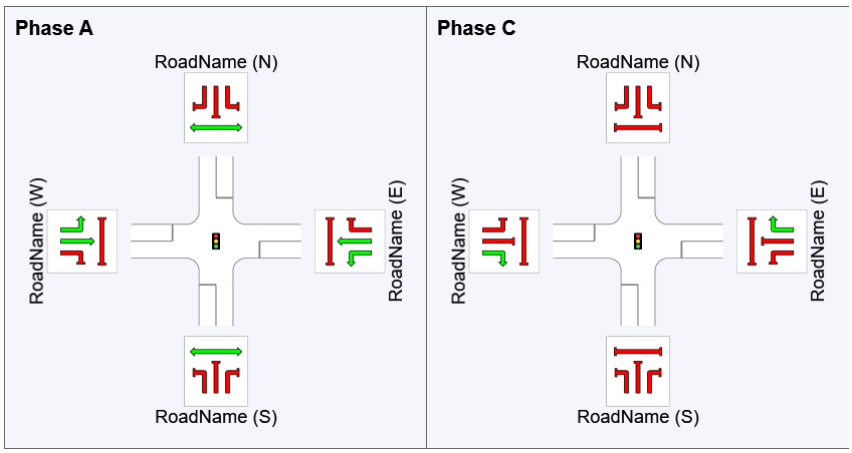
Phase Timing Summary

Phase	D	E	F	A	C
Phase Change Time (sec)	0.0	20.6	32.6	44.6	75.3
Green Time (sec)	14.6	6.0	6.0	24.7	6.0
Phase Time (sec)	20.6	12.0	12.0	30.7	12.0
Phase Split	24%	14%	14%	35%	14%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0

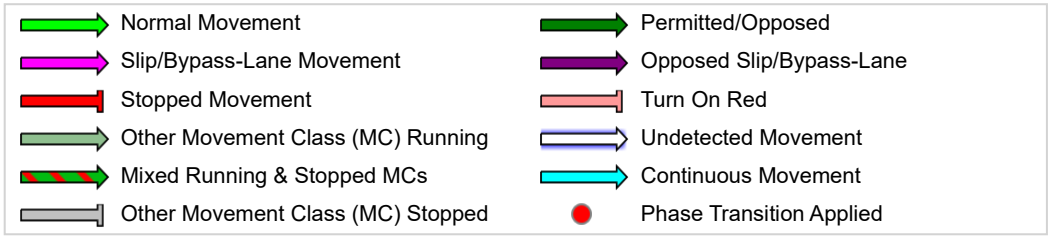
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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Organisation: URBIS | Licence: NETWORK / 1PC | Processed: Thursday, 14 May 2026 9:35:09 AM
Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba\IR Response\P0053364_Aura Transport Masterplan_2031 Intersection Analysis_260430.sipx

MOVEMENT SUMMARY

Site: [110PM] PM Peak (Intersection 110 - 2031)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 87.3 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	*0.184	36.4	LOS D	3.3	23.6	0.77	0.68	0.77	38.6
2	T1	All MCs	105	2.0	105	2.0	*0.184	24.8	LOS C	3.3	23.6	0.82	0.66	0.82	28.0
3	R2	All MCs	82	0.0	82	0.0	*0.644	52.4	LOS D	3.7	26.2	1.00	0.82	1.12	23.0
Approach			240	0.9	240	0.9	0.644	36.8	LOS D	3.7	26.2	0.87	0.72	0.91	28.4
East: RoadName (E)															
4	L2	All MCs	88	0.0	88	0.0	*0.328	38.5	LOS D	5.1	35.8	0.88	0.75	0.88	28.8
5	T1	All MCs	53	0.0	53	0.0	0.328	27.4	LOS C	5.1	35.8	0.88	0.75	0.88	32.8
6	R2	All MCs	53	0.0	53	0.0	0.413	50.8	LOS D	2.3	16.2	1.00	0.74	1.00	23.5
Approach			194	0.0	194	0.0	0.413	38.8	LOS D	5.1	35.8	0.91	0.75	0.91	28.2
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.184	36.4	LOS D	3.3	23.6	0.77	0.68	0.77	32.0
8	T1	All MCs	105	2.0	105	2.0	0.184	24.8	LOS C	3.3	23.6	0.82	0.66	0.82	28.0
9	R2	All MCs	53	0.0	53	0.0	0.413	50.8	LOS D	2.3	16.2	1.00	0.74	1.00	30.1
Approach			211	1.0	211	1.0	0.413	34.2	LOS C	3.3	23.6	0.85	0.69	0.85	29.3
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	0.236	37.9	LOS D	3.7	25.8	0.85	0.72	0.85	36.3
11	T1	All MCs	53	0.0	53	0.0	0.236	26.9	LOS C	3.7	25.8	0.85	0.72	0.85	33.7
12	R2	All MCs	53	0.0	53	0.0	*0.413	50.8	LOS D	2.3	16.2	1.00	0.74	1.00	30.2
Approach			158	0.0	158	0.0	0.413	38.5	LOS D	3.7	25.8	0.90	0.73	0.90	33.2
All Vehicles			802	0.5	802	0.5	0.644	36.9	LOS D	5.1	35.8	0.88	0.72	0.89	29.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: RoadName (S)												
P1	Full	100	105	38.0	LOS D	0.2	0.2	0.94	0.94	191.9	200.0	1.04
East: RoadName (E)												
P2	Full	100	105	38.0	LOS D	0.2	0.2	0.94	0.94	191.9	200.0	1.04
North: RoadName (N)												
P3	Full	100	105	38.0	LOS D	0.2	0.2	0.94	0.94	191.9	200.0	1.04
West: RoadName (W)												
P4	Full	100	105	38.0	LOS D	0.2	0.2	0.94	0.94	191.9	200.0	1.04
All Pedestrians		400	421	38.0	LOS D	0.2	0.2	0.94	0.94	191.9	200.0	1.04

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: [110PM] PM Peak (Intersection 110 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 87.3 seconds (Site Optimum Cycle Time - Minimum Delay)
Site Scenario: 1 | Local Volumes

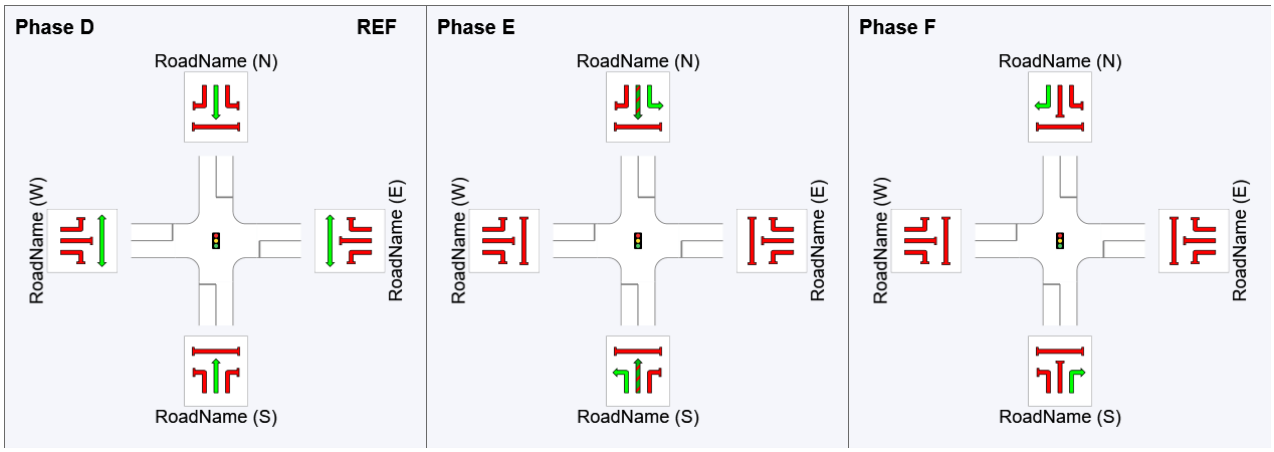
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns - Import
Input Phase Sequence: D, E, F, A, C
Output Phase Sequence: D, E, F, A, C
Reference Phase: Phase D

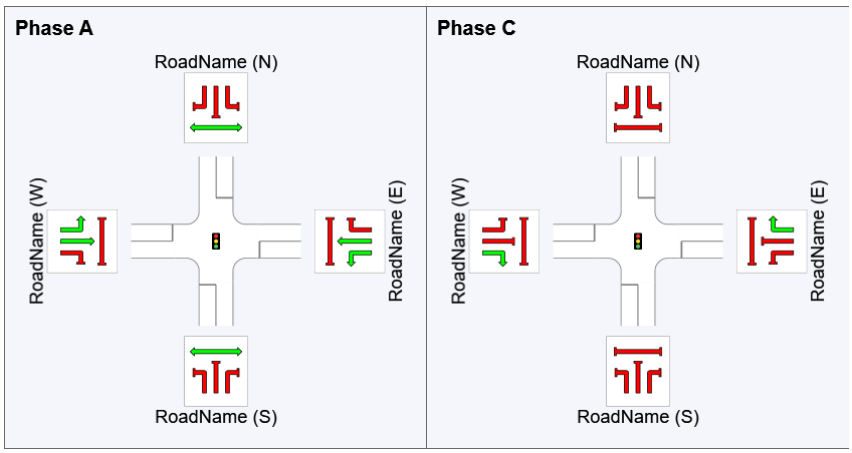
Phase Timing Summary

Phase	D	E	F	A	C
Phase Change Time (sec)	0.0	20.6	32.6	44.6	75.3
Green Time (sec)	14.6	6.0	6.0	24.7	6.0
Phase Time (sec)	20.6	12.0	12.0	30.7	12.0
Phase Split	24%	14%	14%	35%	14%
Phase Frequency (%)	100.0	100.0	100.0	100.0	100.0

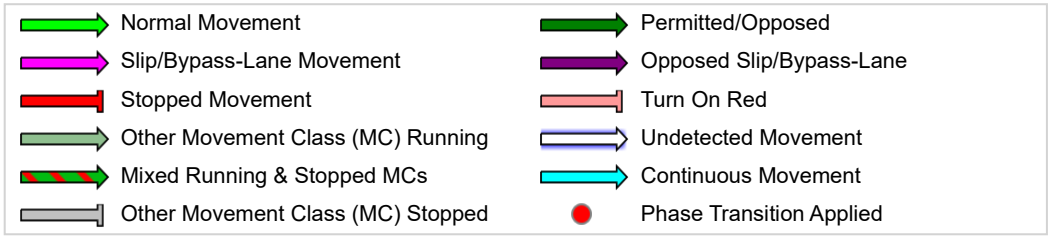
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence





REF: Reference Phase
VAR: Variable Phase



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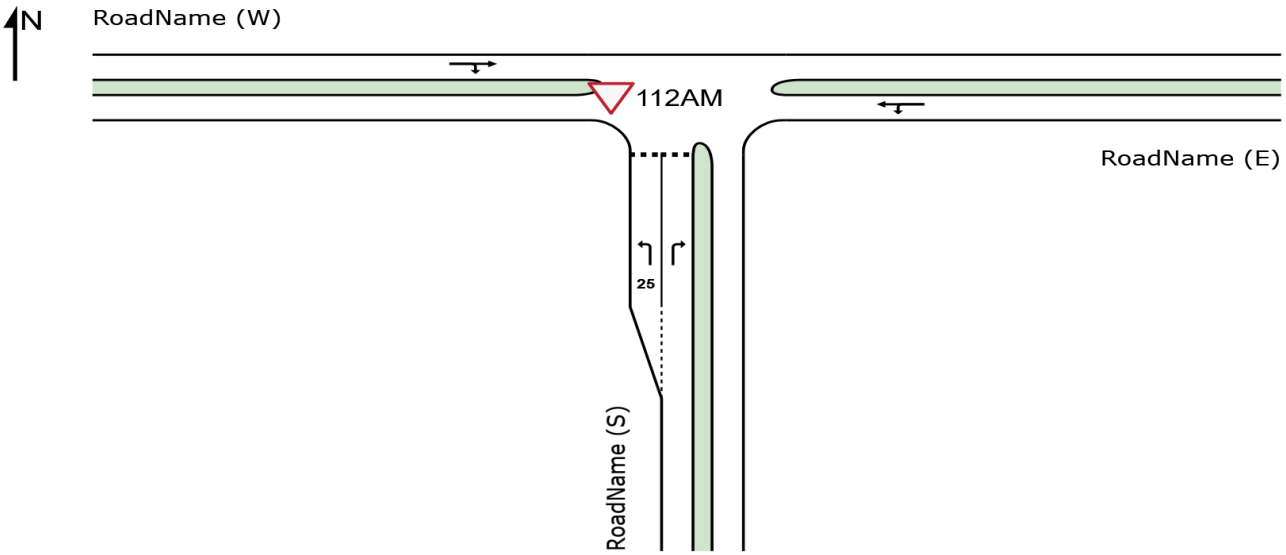
SITE LAYOUT

Site: [112AM] AM Peak (Intersection 112 - 2031)

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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MOVEMENT SUMMARY

Site: [112AM] AM Peak (Intersection 112 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	80	5.3	80	5.3	0.053	5.8	LOS A	0.2	1.6	0.13	0.54	0.13	52.3
3	R2	All MCs	53	4.0	53	4.0	0.050	6.3	LOS A	0.2	1.2	0.27	0.58	0.27	51.9
Approach			133	4.8	133	4.8	0.053	6.0	LOS A	0.2	1.6	0.19	0.56	0.19	52.1
East: RoadName (E)															
4	L2	All MCs	53	4.0	53	4.0	0.057	5.6	LOS A	0.0	0.0	0.00	0.29	0.00	54.9
5	T1	All MCs	53	4.0	53	4.0	0.057	0.0	LOS A	0.0	0.0	0.00	0.29	0.00	57.4
Approach			105	4.0	105	4.0	0.057	2.8	NA	0.0	0.0	0.00	0.29	0.00	56.1
West: RoadName (W)															
11	T1	All MCs	53	4.0	53	4.0	0.071	0.3	LOS A	0.3	2.3	0.20	0.34	0.20	56.3
12	R2	All MCs	68	4.6	68	4.6	0.071	5.9	LOS A	0.3	2.3	0.20	0.34	0.20	53.9
Approach			121	4.3	121	4.3	0.071	3.5	NA	0.3	2.3	0.20	0.34	0.20	54.9
All Vehicles			359	4.4	359	4.4	0.071	4.2	NA	0.3	2.3	0.14	0.41	0.14	54.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: [112PM] PM Peak (Intersection 112 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	4.0	53	4.0	0.034	5.7	LOS A	0.1	1.0	0.13	0.54	0.13	52.3
3	R2	All MCs	53	4.0	53	4.0	0.050	6.3	LOS A	0.2	1.2	0.26	0.58	0.26	51.9
Approach			105	4.0	105	4.0	0.050	6.0	LOS A	0.2	1.2	0.20	0.56	0.20	52.1
East: RoadName (E)															
4	L2	All MCs	53	4.0	53	4.0	0.057	5.6	LOS A	0.0	0.0	0.00	0.29	0.00	54.9
5	T1	All MCs	53	4.0	53	4.0	0.057	0.0	LOS A	0.0	0.0	0.00	0.29	0.00	57.4
Approach			105	4.0	105	4.0	0.057	2.8	NA	0.0	0.0	0.00	0.29	0.00	56.1
West: RoadName (W)															
11	T1	All MCs	53	4.0	53	4.0	0.066	0.3	LOS A	0.3	2.1	0.20	0.32	0.20	56.5
12	R2	All MCs	59	5.4	59	5.4	0.066	6.0	LOS A	0.3	2.1	0.20	0.32	0.20	54.1
Approach			112	4.7	112	4.7	0.066	3.3	NA	0.3	2.1	0.20	0.32	0.20	55.2
All Vehicles			322	4.2	322	4.2	0.066	4.0	NA	0.3	2.1	0.13	0.39	0.13	54.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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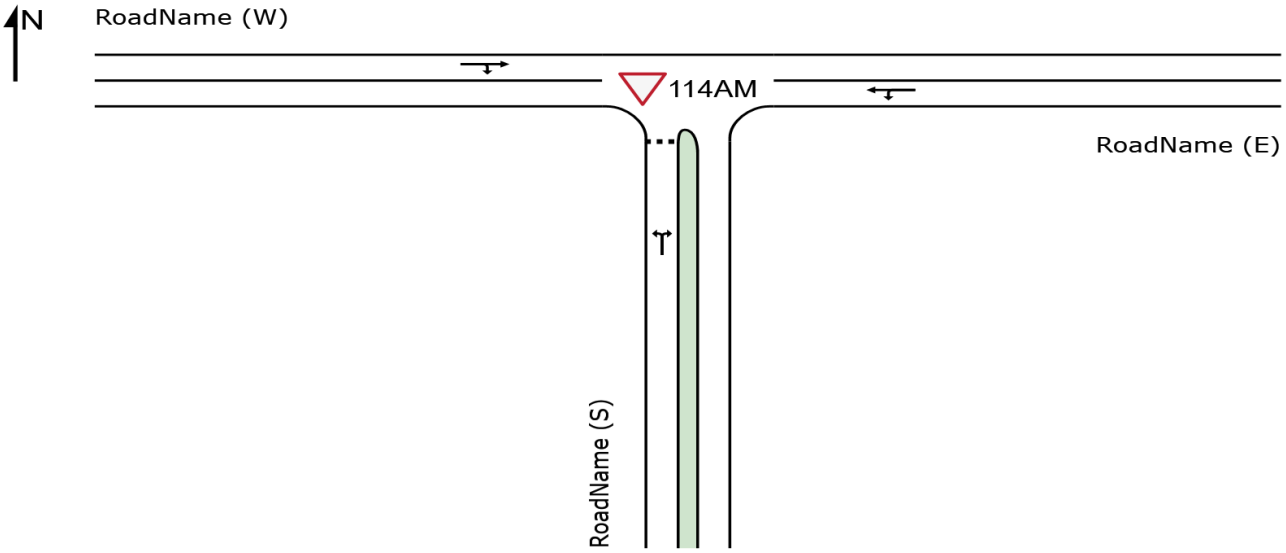
SITE LAYOUT

Site: [114AM] AM Peak (Intersection 114 - 2031)

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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MOVEMENT SUMMARY

Site: [114AM] AM Peak (Intersection 114 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	4.0	53	4.0	0.092	6.1	LOS A	0.3	2.4	0.29	0.59	0.29	51.9
3	R2	All MCs	53	4.0	53	4.0	0.092	6.8	LOS A	0.3	2.4	0.29	0.59	0.29	51.7
Approach			105	4.0	105	4.0	0.092	6.4	LOS A	0.3	2.4	0.29	0.59	0.29	51.8
East: RoadName (E)															
4	L2	All MCs	53	4.0	53	4.0	0.106	5.6	LOS A	0.0	0.0	0.00	0.16	0.00	56.0
5	T1	All MCs	145	5.1	145	5.1	0.106	0.0	LOS A	0.0	0.0	0.00	0.16	0.00	58.5
Approach			198	4.8	198	4.8	0.106	1.5	NA	0.0	0.0	0.00	0.16	0.00	57.8
West: RoadName (W)															
11	T1	All MCs	64	4.9	64	4.9	0.071	0.5	LOS A	0.3	2.2	0.26	0.33	0.26	56.7
12	R2	All MCs	53	4.0	53	4.0	0.071	6.2	LOS A	0.3	2.2	0.26	0.33	0.26	54.1
Approach			117	4.5	117	4.5	0.071	3.1	NA	0.3	2.2	0.26	0.33	0.26	55.5
All Vehicles			420	4.5	420	4.5	0.106	3.2	NA	0.3	2.4	0.15	0.31	0.15	55.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: [114PM] PM Peak (Intersection 114 - 2031)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	4.0	53	4.0	0.087	5.8	LOS A	0.3	2.3	0.22	0.56	0.22	52.1
3	R2	All MCs	53	4.0	53	4.0	0.087	6.5	LOS A	0.3	2.3	0.22	0.56	0.22	51.9
Approach			105	4.0	105	4.0	0.087	6.2	LOS A	0.3	2.3	0.22	0.56	0.22	52.0
East: RoadName (E)															
4	L2	All MCs	53	4.0	53	4.0	0.072	5.6	LOS A	0.0	0.0	0.00	0.23	0.00	55.4
5	T1	All MCs	80	5.3	80	5.3	0.072	0.0	LOS A	0.0	0.0	0.00	0.23	0.00	57.9
Approach			133	4.8	133	4.8	0.072	2.2	NA	0.0	0.0	0.00	0.23	0.00	56.8
West: RoadName (W)															
11	T1	All MCs	82	5.1	82	5.1	0.078	0.3	LOS A	0.3	2.2	0.19	0.27	0.19	57.2
12	R2	All MCs	53	4.0	53	4.0	0.078	6.0	LOS A	0.3	2.2	0.19	0.27	0.19	54.6
Approach			135	4.7	135	4.7	0.078	2.5	NA	0.3	2.2	0.19	0.27	0.19	56.1
All Vehicles			373	4.5	373	4.5	0.087	3.4	NA	0.3	2.3	0.13	0.34	0.13	55.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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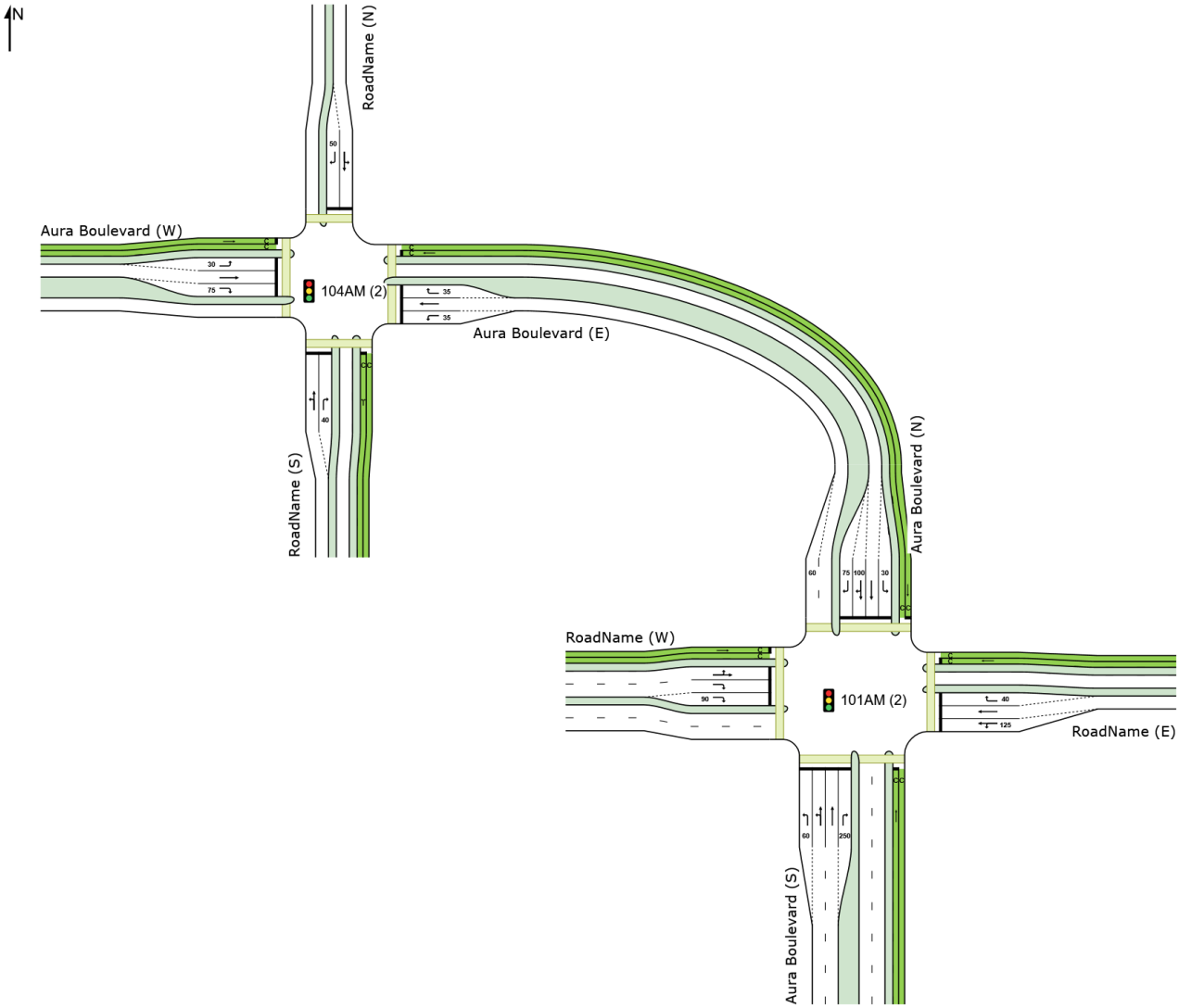
NETWORK LAYOUT

Network: [1] AM Peak (Aura Boulevard)

New Network
Network Category: (None)
Network Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
101AM (2)	NA	101 - AM Peak - Network
104AM (2)	NA	104 - AM Peak - Network

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Organisation: URBIS | Licence: NETWORK / 1PC | Created: Friday, 15 May 2026 10:50:48 AM
Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba\IR Response\P0053364_Aura Transport Masterplan_2031 Intersection Analysis_260430.sipx

MOVEMENT SUMMARY

Site: [101AM (2)] 101 - AM Peak - Network (Network 1 - Aura Boulevard)

Network: [1] AM Peak (Aura Boulevard)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120.0 seconds (Network User-Given Cycle Time)
Network Scenario: 1 | Local Volumes **Site Scenario: 1 | Local Volumes**

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Aura Boulevard (S)															
1	L2	All MCs	153	0.0	153	0.0	* 0.209	24.5	LOS C	3.9	27.2	0.78	1.12	0.78	22.5
2	T1	All MCs	200	3.7	200	3.7	0.177	21.7	LOS C	3.6	25.3	0.72	0.84	0.72	20.6
3	R2	All MCs	122	0.0	122	0.0	0.360	52.4	LOS D	6.3	44.4	0.92	0.78	0.92	28.7
Approach			475	1.6	475	1.6	0.360	30.5	LOS C	6.3	44.4	0.79	0.92	0.79	23.9
East: RoadName (E)															
4	L2	All MCs	291	0.0	291	0.0	* 0.862	65.6	LOS E	18.6	131.3	1.00	0.96	1.21	25.1
5	T1	All MCs	105	2.0	105	2.0	0.862	49.5	LOS D	18.6	131.3	0.92	0.68	0.92	21.7
6	R2	All MCs	53	0.0	53	0.0	0.219	57.0	LOS E	2.8	19.7	0.93	0.74	0.93	20.5
Approach			448	0.5	448	0.5	0.862	60.8	LOS E	18.6	131.3	0.97	0.87	1.11	23.9
North: Aura Boulevard (N)															
7	L2	All MCs	53	0.0	53	0.0	0.283	59.1	LOS E	2.9	20.1	0.94	0.74	0.94	29.3
8	T1	All MCs	314	0.0	314	0.0	0.189	27.2	LOS C	5.4	37.7	0.75	0.66	0.75	32.3
9	R2	All MCs	53	0.0	53	0.0	* 0.189	49.7	LOS D	5.0	35.0	0.79	0.68	0.79	26.6
Approach			419	0.0	419	0.0	0.283	34.0	LOS C	5.4	37.7	0.78	0.67	0.78	31.2
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	* 0.852	80.8	LOS F	6.9	48.9	1.00	0.95	1.34	7.8
11	T1	All MCs	105	2.0	105	2.0	0.852	55.1	LOS E	6.9	48.9	0.95	0.80	1.12	19.8
12	R2	All MCs	193	0.0	193	0.0	0.381	57.7	LOS E	5.3	36.9	0.95	0.77	0.95	20.7
Approach			351	0.6	351	0.6	0.852	60.4	LOS E	6.9	48.9	0.96	0.81	1.06	18.7
All Vehicles			1693	0.7	1693	0.7	0.862	45.6	LOS D	18.6	131.3	0.87	0.82	0.93	24.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Qued	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: Aura Boulevard (S)										
P11 Stage 1	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
P12 Stage 2	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
East: RoadName (E)										
P2 Full	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
North: Aura Boulevard (N)										
P31 Stage 1	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
P32 Stage 2	158	24.6	LOS C	0.3	0.3	0.91	0.91	178.4	200.0	1.12
West: RoadName (W)										
P4 Full	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
All Pedestrians	947	49.5	LOS E	0.5	0.5	0.95	0.95	203.4	200.0	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: [104AM (2)] 104 - AM Peak - Network (Network 1 - Aura Boulevard)

Network: [1] AM Peak (Aura Boulevard)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120.0 seconds (Network User-Given Cycle Time)
Network Scenario: 1 | Local Volumes **Site Scenario: 1 | Local Volumes**

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	79	0.0	79	0.0	*0.400	57.4	LOS E	6.0	42.0	0.94	0.74	0.94	27.0
2	T1	All MCs	58	0.0	58	0.0	0.400	48.3	LOS D	6.0	42.0	0.95	0.77	0.95	31.9
3	R2	All MCs	79	0.0	79	0.0	0.158	49.1	LOS D	2.6	18.3	0.89	0.72	0.89	20.5
Approach			216	0.0	216	0.0	0.400	51.9	LOS D	6.0	42.0	0.92	0.74	0.92	26.4
East: Aura Boulevard (E)															
4	L2	All MCs	53	0.0	53	0.0	*0.093	18.6	LOS B	1.1	7.8	0.52	1.10	0.52	35.2
5	T1	All MCs	167	3.1	167	3.1	*0.170	25.1	LOS C	2.9	18.8	0.71	0.77	0.71	30.4
6	R2	All MCs	53	0.0	53	0.0	0.154	54.4	LOS D	2.8	19.7	0.95	0.75	0.95	31.1
Approach			273	1.9	273	1.9	0.170	29.5	LOS C	2.9	19.7	0.72	0.83	0.72	31.3
North: RoadName (N)															
7	L2	All MCs	58	0.0	58	0.0	0.395	50.5	LOS D	6.0	41.9	0.95	0.77	0.95	22.0
8	T1	All MCs	53	0.0	53	0.0	*0.395	57.4	LOS E	6.0	41.9	0.95	0.77	0.95	31.9
9	R2	All MCs	53	0.0	53	0.0	0.218	57.0	LOS E	2.8	19.7	0.93	0.74	0.93	30.6
Approach			163	0.0	163	0.0	0.395	54.8	LOS D	6.0	41.9	0.94	0.76	0.94	28.6
West: Aura Boulevard (W)															
10	L2	All MCs	53	0.0	53	0.0	0.283	68.1	LOS E	3.0	20.7	0.96	0.75	0.96	29.3
11	T1	All MCs	254	4.1	254	4.1	0.367	42.5	LOS D	9.2	67.2	0.84	0.68	0.84	25.1
12	R2	All MCs	53	0.0	53	0.0	*0.337	63.8	LOS E	3.0	21.2	0.98	0.75	0.98	28.9
Approach			359	2.9	359	2.9	0.367	49.4	LOS D	9.2	67.2	0.88	0.70	0.88	25.4
All Vehicles			1011	1.6	1011	1.6	0.400	45.4	LOS D	9.2	67.2	0.86	0.75	0.86	27.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Qued	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: RoadName (S)										
P1 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
East: Aura Boulevard (E)										
P21 Stage 1	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P22 Stage 2	53	30.2	LOS D	0.1	0.1	0.90	0.90	184.0	200.0	1.09
North: RoadName (N)										
P3 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
West: Aura Boulevard (W)										
P41 Stage 1	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P42 Stage 2	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians	421	47.6	LOS E	0.3	0.3	0.94	0.94	201.4	200.0	0.99

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: [101PM (2)] 101 - PM Peak - Network (Network 1 - Aura Boulevard)

Network: [2] PM Peak (Aura Boulevard)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120.0 seconds (Network User-Given Cycle Time)
Network Scenario: 1 | Local Volumes **Site Scenario: 1 | Local Volumes**

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Aura Boulevard (S)															
1	L2	All MCs	181	0.0	181	0.0	* 0.257	23.7	LOS C	5.0	35.0	0.77	1.13	0.77	23.2
2	T1	All MCs	300	4.2	300	4.2	0.257	18.9	LOS B	5.5	38.4	0.72	0.91	0.72	21.7
3	R2	All MCs	233	0.0	233	0.0	0.618	53.2	LOS D	12.6	88.1	0.97	0.83	0.97	28.5
Approach			714	1.8	714	1.8	0.618	31.3	LOS C	12.6	88.1	0.81	0.94	0.81	25.0
East: RoadName (E)															
4	L2	All MCs	154	0.0	154	0.0	* 0.567	57.8	LOS E	8.7	61.6	0.98	0.81	0.98	26.9
5	T1	All MCs	107	2.0	107	2.0	0.567	51.6	LOS D	8.7	61.6	0.93	0.69	0.93	21.4
6	R2	All MCs	53	0.0	53	0.0	0.372	65.1	LOS E	3.1	21.5	0.99	0.75	0.99	18.8
Approach			314	0.7	314	0.7	0.567	56.9	LOS E	8.7	61.6	0.96	0.76	0.96	23.8
North: Aura Boulevard (N)															
7	L2	All MCs	53	0.0	53	0.0	0.283	58.2	LOS E	2.8	19.8	0.93	0.74	0.93	29.5
8	T1	All MCs	298	3.9	298	3.9	0.198	30.3	LOS C	5.5	38.8	0.80	0.70	0.80	30.7
9	R2	All MCs	53	0.0	53	0.0	* 0.198	53.7	LOS D	5.5	38.7	0.85	0.70	0.85	25.6
Approach			403	2.9	403	2.9	0.283	37.0	LOS D	5.5	38.8	0.82	0.71	0.82	29.9
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	* 0.575	69.6	LOS E	6.3	44.5	1.00	0.79	1.00	9.0
11	T1	All MCs	107	2.0	107	2.0	0.575	48.0	LOS D	6.3	44.5	0.94	0.71	0.94	21.1
12	R2	All MCs	104	0.0	104	0.0	0.166	51.9	LOS D	2.6	18.4	0.89	0.74	0.89	22.1
Approach			264	0.8	264	0.8	0.575	53.9	LOS D	6.3	44.5	0.93	0.74	0.93	19.6
All Vehicles			1695	1.7	1695	1.7	0.618	40.9	LOS D	12.6	88.1	0.86	0.82	0.86	25.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Qued	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: Aura Boulevard (S)										
P11 Stage 1	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
P12 Stage 2	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
East: RoadName (E)										
P2 Full	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
North: Aura Boulevard (N)										
P31 Stage 1	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
P32 Stage 2	158	24.6	LOS C	0.3	0.3	0.91	0.91	178.4	200.0	1.12
West: RoadName (W)										
P4 Full	158	54.5	LOS E	0.5	0.5	0.96	0.96	208.4	200.0	0.96
All Pedestrians	947	49.5	LOS E	0.5	0.5	0.95	0.95	203.4	200.0	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: [104PM (2)] 104 - PM Peak - Network (Network 1 - Aura Boulevard)

Network: [2] PM Peak (Aura Boulevard)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120.0 seconds (Network User-Given Cycle Time)
Network Scenario: 1 | Local Volumes **Site Scenario: 1 | Local Volumes**

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	79	0.0	79	0.0	*0.383	57.2	LOS E	5.7	39.9	0.94	0.74	0.94	27.0
2	T1	All MCs	53	0.0	53	0.0	0.383	48.1	LOS D	5.7	39.9	0.95	0.77	0.95	31.9
3	R2	All MCs	79	0.0	79	0.0	0.157	49.0	LOS D	2.6	18.3	0.89	0.72	0.89	20.5
Approach			211	0.0	211	0.0	0.383	51.9	LOS D	5.7	39.9	0.92	0.74	0.92	26.3
East: Aura Boulevard (E)															
4	L2	All MCs	61	0.0	61	0.0	*0.107	18.9	LOS B	1.3	9.3	0.54	1.12	0.54	34.9
5	T1	All MCs	226	3.7	226	3.7	*0.258	21.9	LOS C	4.0	29.3	0.69	0.79	0.69	31.9
6	R2	All MCs	53	0.0	53	0.0	0.154	53.4	LOS D	2.8	19.4	0.93	0.75	0.93	31.3
Approach			340	2.5	340	2.5	0.258	26.3	LOS C	4.0	29.3	0.70	0.84	0.70	32.3
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.382	50.4	LOS D	5.7	39.9	0.95	0.77	0.95	22.0
8	T1	All MCs	53	0.0	53	0.0	*0.382	57.2	LOS E	5.7	39.9	0.95	0.77	0.95	31.9
9	R2	All MCs	53	0.0	53	0.0	0.219	57.1	LOS E	2.8	19.7	0.93	0.74	0.93	30.5
Approach			158	0.0	158	0.0	0.382	54.9	LOS D	5.7	39.9	0.94	0.76	0.94	28.8
West: Aura Boulevard (W)															
10	L2	All MCs	53	0.0	53	0.0	0.283	61.2	LOS E	3.0	20.7	0.96	0.75	0.96	29.3
11	T1	All MCs	221	3.8	221	3.8	0.291	36.6	LOS D	7.5	54.6	0.82	0.66	0.82	24.9
12	R2	All MCs	53	0.0	53	0.0	*0.337	63.8	LOS E	3.0	21.2	0.98	0.75	0.98	28.9
Approach			326	2.6	326	2.6	0.337	44.9	LOS D	7.5	54.6	0.87	0.69	0.87	26.8
All Vehicles			1035	1.6	1035	1.6	0.383	41.7	LOS D	7.5	54.6	0.84	0.76	0.84	28.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Qued	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: RoadName (S)										
P1 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
East: Aura Boulevard (E)										
P21 Stage 1	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P22 Stage 2	53	30.2	LOS D	0.1	0.1	0.90	0.90	184.1	200.0	1.09
North: RoadName (N)										
P3 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
West: Aura Boulevard (W)										
P41 Stage 1	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P42 Stage 2	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians	421	47.6	LOS E	0.3	0.3	0.94	0.94	201.4	200.0	0.99

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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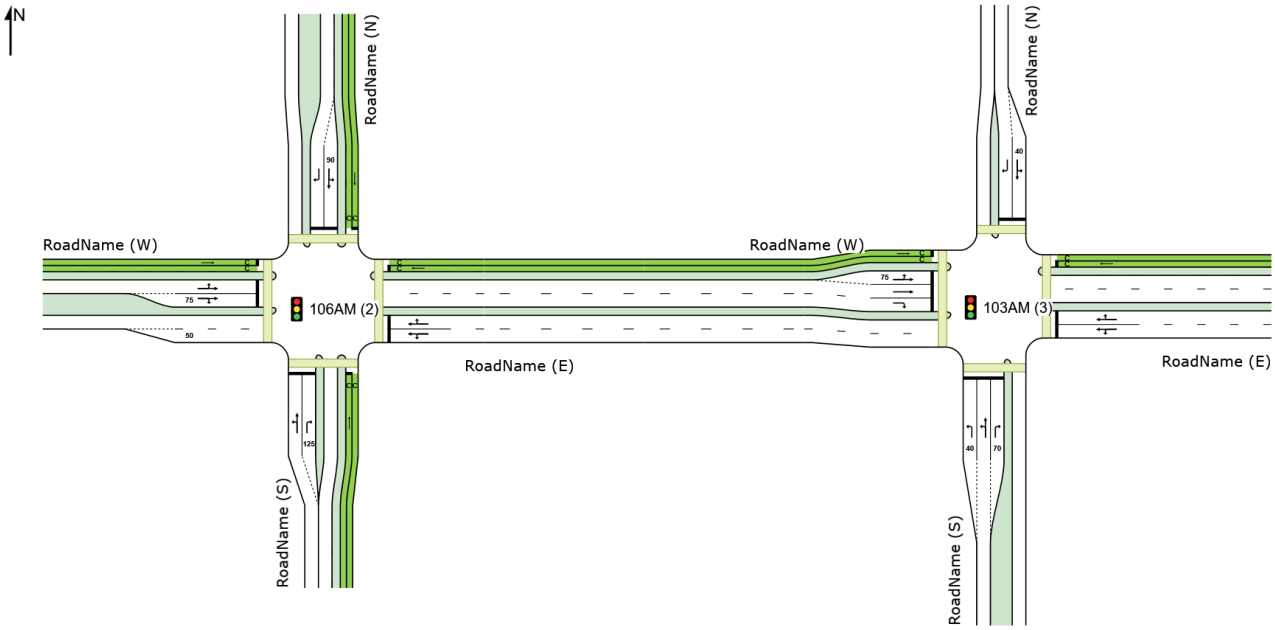
NETWORK LAYOUT

Network: [3] AM Peak (East-West Link)

New Network
Network Category: (None)
Network Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
103AM (3)	NA	103 - AM Peak
106AM (2)	NA	106 - AM Peak

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Organisation: URBIS | Licence: NETWORK / 1PC | Created: Friday, 15 May 2026 10:51:00 AM
Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba\IR Response\P0053364_Aura Transport Masterplan_2031 Intersection Analysis_260430.sipx

MOVEMENT SUMMARY

Site: [103AM (3)] 103 - AM Peak (Network 2 - East-West Link)
Network: [3] AM Peak (East-West Link)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120.0 seconds (Network User-Given Cycle Time)
Network Scenario: 1 | Local Volumes **Site Scenario: 1 | Local Volumes**

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	0.124	47.8	LOS D	2.7	18.7	0.85	0.72	0.85	14.2
2	T1	All MCs	53	0.0	53	0.0	0.124	37.5	LOS D	2.7	18.7	0.82	0.64	0.82	23.1
3	R2	All MCs	87	0.0	87	0.0	* 0.607	66.7	LOS E	5.2	36.7	1.00	0.80	1.04	16.3
Approach			193	0.0	193	0.0	0.607	53.6	LOS D	5.2	36.7	0.91	0.73	0.93	17.4
East: RoadName (E)															
4	L2	All MCs	115	0.0	115	0.0	* 0.607	63.6	LOS E	6.8	48.5	1.00	0.80	1.02	16.8
5	T1	All MCs	105	2.0	105	2.0	0.607	43.7	LOS D	6.8	48.5	0.94	0.71	0.94	10.5
6	R2	All MCs	53	0.0	53	0.0	0.454	72.9	LOS E	5.8	40.5	0.98	0.77	0.98	15.8
Approach			273	0.8	273	0.8	0.607	57.7	LOS E	6.8	48.5	0.97	0.76	0.98	14.5
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	* 0.256	50.5	LOS D	5.1	36.0	0.87	0.73	0.87	18.6
8	T1	All MCs	53	0.0	53	0.0	0.256	39.5	LOS D	5.1	36.0	0.87	0.73	0.87	20.8
9	R2	All MCs	53	0.0	53	0.0	0.366	64.9	LOS E	3.1	21.5	0.99	0.75	0.99	8.3
Approach			158	0.0	158	0.0	0.366	51.6	LOS D	5.1	36.0	0.91	0.74	0.91	15.7
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	* 0.161	28.6	LOS C	2.1	15.8	0.76	1.10	0.76	21.6
11	T1	All MCs	175	3.6	175	3.6	* 0.161	27.2	LOS C	2.9	19.9	0.82	0.93	0.82	21.1
12	R2	All MCs	53	0.0	53	0.0	0.165	58.8	LOS E	3.0	21.0	1.00	0.77	1.00	17.8
Approach			280	2.3	280	2.3	0.165	33.4	LOS C	3.0	21.0	0.84	0.93	0.84	20.4
All Vehicles			903	0.9	903	0.9	0.607	48.2	LOS D	6.8	48.5	0.91	0.80	0.91	17.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: RoadName (S)										
P1 Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
East: RoadName (E)										
P2 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: RoadName (N)										
P3 Full	105	26.3	LOS C	0.2	0.2	0.90	0.90	180.1	200.0	1.11
West: RoadName (W)										
P4 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians	368	46.3	LOS E	0.3	0.3	0.94	0.94	200.2	200.0	1.00

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Organisation: URBIS | Licence: NETWORK / 1PC | Processed: Thursday, 14 May 2026 11:22:11 AM
Project: C:\Users\rpeel\Urbis Ltd\P0053364 SUB Aura Transport Masterplanning - General\02_Workspace\08_Transport\01_Analysis\Gagalba\IR Response\P0053364_Aura Transport Masterplan_2031 Intersection Analysis_260430.sipx

MOVEMENT SUMMARY

Site: [106AM (2)] 106 - AM Peak (Network 2 - East-West Link)
Network: [3] AM Peak (East-West Link)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120.0 seconds (Network Site User-Given Phase Times)
Network Scenario: 1 | Local Volumes **Site Scenario: 1 | Local Volumes**

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	*0.747	86.5	LOS F	6.5	45.8	1.00	0.87	1.17	19.9
2	T1	All MCs	105	0.0	105	0.0	0.747	44.8	LOS D	6.5	45.8	0.93	0.75	1.01	16.1
3	R2	All MCs	58	0.0	58	0.0	*0.534	68.7	LOS E	3.5	24.6	1.00	0.76	1.01	10.6
Approach			216	0.0	216	0.0	0.747	61.4	LOS E	6.5	45.8	0.97	0.78	1.05	15.8
East: RoadName (E)															
4	L2	All MCs	53	0.0	53	0.0	*0.170	33.7	LOS C	2.0	14.7	1.00	1.00	1.00	19.5
5	T1	All MCs	105	2.0	105	2.0	*0.190	29.4	LOS C	2.9	14.7	0.77	0.85	0.77	22.3
6	R2	All MCs	53	0.0	53	0.0	0.190	23.0	LOS C	2.0	14.2	0.53	0.95	0.53	28.1
Approach			211	1.0	211	1.0	0.190	28.9	LOS C	2.9	14.7	0.77	0.91	0.77	22.5
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.747	86.3	LOS F	6.5	45.8	1.00	0.87	1.17	8.4
8	T1	All MCs	105	0.0	105	0.0	0.747	44.8	LOS D	6.5	45.8	0.93	0.75	1.01	16.1
9	R2	All MCs	53	0.0	53	0.0	0.486	68.4	LOS E	3.2	22.3	1.00	0.75	1.00	18.2
Approach			211	0.0	211	0.0	0.747	61.1	LOS E	6.5	45.8	0.96	0.78	1.05	15.0
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	*0.398	68.6	LOS E	3.6	26.4	0.99	0.76	0.99	18.9
11	T1	All MCs	125	2.5	125	2.5	0.398	40.4	LOS D	6.2	43.6	0.92	0.71	0.92	15.8
12	R2	All MCs	53	0.0	53	0.0	0.398	71.0	LOS E	6.2	43.6	0.95	0.77	0.95	23.2
Approach			231	1.4	231	1.4	0.398	53.8	LOS D	6.2	43.6	0.94	0.74	0.94	18.3
All Vehicles			867	0.6	867	0.6	0.747	51.4	LOS D	6.5	45.8	0.91	0.80	0.95	17.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Qued	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: RoadName (S)										
P1 Full	105	26.8	LOS C	0.2	0.2	0.90	0.90	180.7	200.0	1.11
East: RoadName (E)										
P2 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: RoadName (N)										
P3 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
West: RoadName (W)										
P4 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians	421	47.5	LOS E	0.3	0.3	0.94	0.94	201.3	200.0	0.99

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: [103PM (3)] 103 - PM Peak (Network 2 - East-West Link)
Network: [4] PM Peak (East-West Link)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120.0 seconds (Network User-Given Cycle Time)
Network Scenario: 1 | Local Volumes **Site Scenario: 1 | Local Volumes**

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	0.124	47.8	LOS D	2.7	18.7	0.85	0.72	0.85	14.2
2	T1	All MCs	53	0.0	53	0.0	0.124	37.5	LOS D	2.7	18.7	0.82	0.64	0.82	23.1
3	R2	All MCs	53	0.0	53	0.0	0.460	67.8	LOS E	3.2	22.1	1.00	0.75	1.00	16.1
Approach			158	0.0	158	0.0	0.460	51.0	LOS D	3.2	22.1	0.89	0.70	0.89	17.6
East: RoadName (E)															
4	L2	All MCs	61	0.0	61	0.0	0.460	70.2	LOS E	6.3	46.1	0.97	0.78	0.97	18.2
5	T1	All MCs	177	3.6	177	3.6	0.460	42.0	LOS D	6.9	48.0	0.95	0.74	0.95	10.7
6	R2	All MCs	53	0.0	53	0.0	* 0.460	73.0	LOS E	6.9	48.0	0.96	0.78	0.96	16.4
Approach			291	2.2	291	2.2	0.460	53.6	LOS D	6.9	48.0	0.95	0.76	0.95	13.6
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	* 0.256	50.5	LOS D	5.1	36.0	0.87	0.73	0.87	18.6
8	T1	All MCs	53	0.0	53	0.0	0.256	39.5	LOS D	5.1	36.0	0.87	0.73	0.87	20.8
9	R2	All MCs	53	0.0	53	0.0	* 0.460	67.8	LOS E	3.2	22.1	1.00	0.75	1.00	8.0
Approach			158	0.0	158	0.0	0.460	52.6	LOS D	5.1	36.0	0.91	0.74	0.91	15.5
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	* 0.143	21.4	LOS C	1.3	9.5	0.65	1.18	0.65	22.8
11	T1	All MCs	108	2.9	108	2.9	* 0.143	32.8	LOS C	2.9	9.5	0.80	0.83	0.80	19.4
12	R2	All MCs	53	0.0	53	0.0	0.165	60.1	LOS E	3.1	21.4	1.00	0.78	1.00	17.6
Approach			214	1.5	214	1.5	0.165	36.7	LOS D	3.1	21.4	0.81	0.90	0.81	19.5
All Vehicles			820	1.2	820	1.2	0.460	48.5	LOS D	6.9	48.0	0.90	0.78	0.90	16.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Qued	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: RoadName (S)										
P1	Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
East: RoadName (E)										
P2	Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: RoadName (N)										
P3	Full	105	25.8	LOS C	0.2	0.2	0.90	0.90	179.7	200.0	1.11
West: RoadName (W)										
P4	Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians		368	46.2	LOS E	0.3	0.3	0.94	0.94	200.1	200.0	1.00

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: [106PM (2)] 106 - PM Peak (Network 2 - East-West Link)
Network: [4] PM Peak (East-West Link)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120.0 seconds (Network Site User-Given Phase Times)
Network Scenario: 1 | Local Volumes **Site Scenario: 1 | Local Volumes**

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: RoadName (S)															
1	L2	All MCs	53	0.0	53	0.0	*0.747	86.6	LOS F	6.5	45.8	1.00	0.87	1.17	19.9
2	T1	All MCs	105	0.0	105	0.0	0.747	44.8	LOS D	6.5	45.8	0.93	0.75	1.01	16.1
3	R2	All MCs	53	0.0	53	0.0	0.486	68.4	LOS E	3.2	22.3	1.00	0.75	1.00	10.7
Approach			211	0.0	211	0.0	0.747	61.1	LOS E	6.5	45.8	0.96	0.78	1.05	15.9
East: RoadName (E)															
4	L2	All MCs	55	0.0	55	0.0	*0.209	36.9	LOS D	2.5	20.0	1.00	1.00	1.00	19.8
5	T1	All MCs	135	8.6	135	8.6	*0.227	26.7	LOS C	3.3	23.3	0.86	0.93	0.86	22.6
6	R2	All MCs	53	0.0	53	0.0	0.227	32.5	LOS C	3.3	23.3	0.72	1.07	0.72	24.3
Approach			242	4.8	242	4.8	0.227	30.2	LOS C	3.3	23.3	0.86	0.98	0.86	22.2
North: RoadName (N)															
7	L2	All MCs	53	0.0	53	0.0	0.747	86.3	LOS F	6.5	45.8	1.00	0.87	1.17	8.4
8	T1	All MCs	105	0.0	105	0.0	0.747	44.8	LOS D	6.5	45.8	0.93	0.75	1.01	16.1
9	R2	All MCs	53	0.0	53	0.0	*0.486	68.4	LOS E	3.2	22.3	1.00	0.75	1.00	18.2
Approach			211	0.0	211	0.0	0.747	61.1	LOS E	6.5	45.8	0.96	0.78	1.05	15.0
West: RoadName (W)															
10	L2	All MCs	53	0.0	53	0.0	*0.363	65.4	LOS E	3.2	23.2	0.98	0.75	0.98	18.8
11	T1	All MCs	105	2.0	105	2.0	0.363	40.7	LOS D	5.5	38.5	0.91	0.70	0.91	15.6
12	R2	All MCs	53	0.0	53	0.0	0.363	69.1	LOS E	5.5	38.5	0.94	0.76	0.94	23.1
Approach			211	1.0	211	1.0	0.363	54.0	LOS D	5.5	38.5	0.94	0.73	0.94	18.4
All Vehicles			874	1.6	874	1.6	0.747	50.8	LOS D	6.5	45.8	0.93	0.82	0.97	17.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Qued	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: RoadName (S)										
P1 Full	105	26.8	LOS C	0.2	0.2	0.90	0.90	180.7	200.0	1.11
East: RoadName (E)										
P2 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: RoadName (N)										
P3 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
West: RoadName (W)										
P4 Full	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians	421	47.5	LOS E	0.3	0.3	0.94	0.94	201.3	200.0	0.99

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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