Moss Vale Road North Urban Release Area Traffic Study

External Traffic Analysis Report

Shoalhaven City Council

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CONTENTS

		Page
1.	**INTRODUCTION**	**5**
1.1	Background	5
1.2	Context	5
1.3	Scope	6
2.	**SIDRA MODEL DEVELOPMENT**	**7**
2.1	Traffic Scenarios	7
2.2	Capacity Mechanisms	7
3.	**MOSS VALE ROAD / BELLS LANE / FAR NORTH COLLECTOR ROAD SIGNALISED INTERSECTION**	**8**
3.1	Traffic Redistribution	8
3.2	Model Outputs	8
3.3	Second Iteration Layout	8
3.3.1	Intersection Capacity	8
3.4	Ultimate Form Layout	9
3.4.1	Intersection Capacity	9
3.5	Queue Length Review	9
3.6	Results Summary	12
3.7	Recommendations	12
4.	**MOSS VALE ROAD / MVRS URA ACCESS / CENTRAL BOULEVARD**	**13**
4.1	Sensitivity Analysis	13
4.2	Model Outputs	13
4.3	Queue Length Review	13
4.4	Intersection Capacity	14
4.4.1	Proposed Arrangement	14
4.4.2	Sensitivity Scenario	14
4.5	Results Summary	14
4.6	Recommendations	14
5.	**PESTELLS LANE INTERCHANGE & BOXSELLS LANE INTERSECTION**	**15**
5.1	Traffic Redistribution	15
5.2	Model Outputs	15
5.3	Intersection Capacity	16
5.3.1	Pestells Lane Interchange	16
5.3.2	Princes Highway / Boxsells Lane Intersection	16
5.4	Results Summary	16
5.5	Recommendations	17
6.	**CONCLUSION**	**18**

Tables

Table 2.1: Control Delay for Vehicle LOS Calculations
Table 3.1: 2041 AAST 95th Percentile Queue Length Comparisons
Table 3.2: 2041 100HH 95th Percentile Queue Length Comparisons
Table 3.3: MVR / Bells Lane / FNCR Signalised Intersection Results Summary
Table 4.1: MVR / MVRS URA Access / Central Boulevard Roundabout Results Summary
Table 5.1: Pestells Lane Interchange Results Summary
Table 5.2: Princes Highway / Boxsells Lane Intersection Results Summary

Figures

Figure 1.1: External Intersections Surrounding MRVN URA

Appendices

Appendix A: Moss Vale Road North URA Model Update – Supplemental Report (Stantec)

Original analysis based on November 2018 TRACKS Models:

Appendix B: P3968.001T Moss Vale Road SIDRA Analysis Updates Technical Note (Moss Vale Road / Bells Lane / Far North Collector Road Signalised Intersection)

Appendix C: P4516.002R Moss Vale Road North URA SIDRA Assessment Report (Moss Vale Road / MVRS URA Access / Central Boulevard Roundabout)

Appendix D: P4516.002R Pestells Lane Interchange SIDRA Assessment Report

Updated analysis based on May 2020 TRACKS models:

Appendix E: Moss Vale Road / Bells Lane / Far North Collector Road Detailed SIDRA Summaries

Appendix F: Moss Vale Road / Bells Lane / Far North Collector Road SIDRA Outputs

Appendix G: Moss Vale Road / MVRS URA Access / Central Boulevard Roundabout SIDRA Summaries

Appendix H: Moss Vale Road / MVRS URA Access / Central Boulevard Roundabout SIDRA Outputs

Appendix I: Pestells Lane Interchange & Boxsells Lane Intersection SIDRA Summaries

Appendix J: Pestells Lane Interchange & Boxsells Lane Intersection SIDRA Outputs

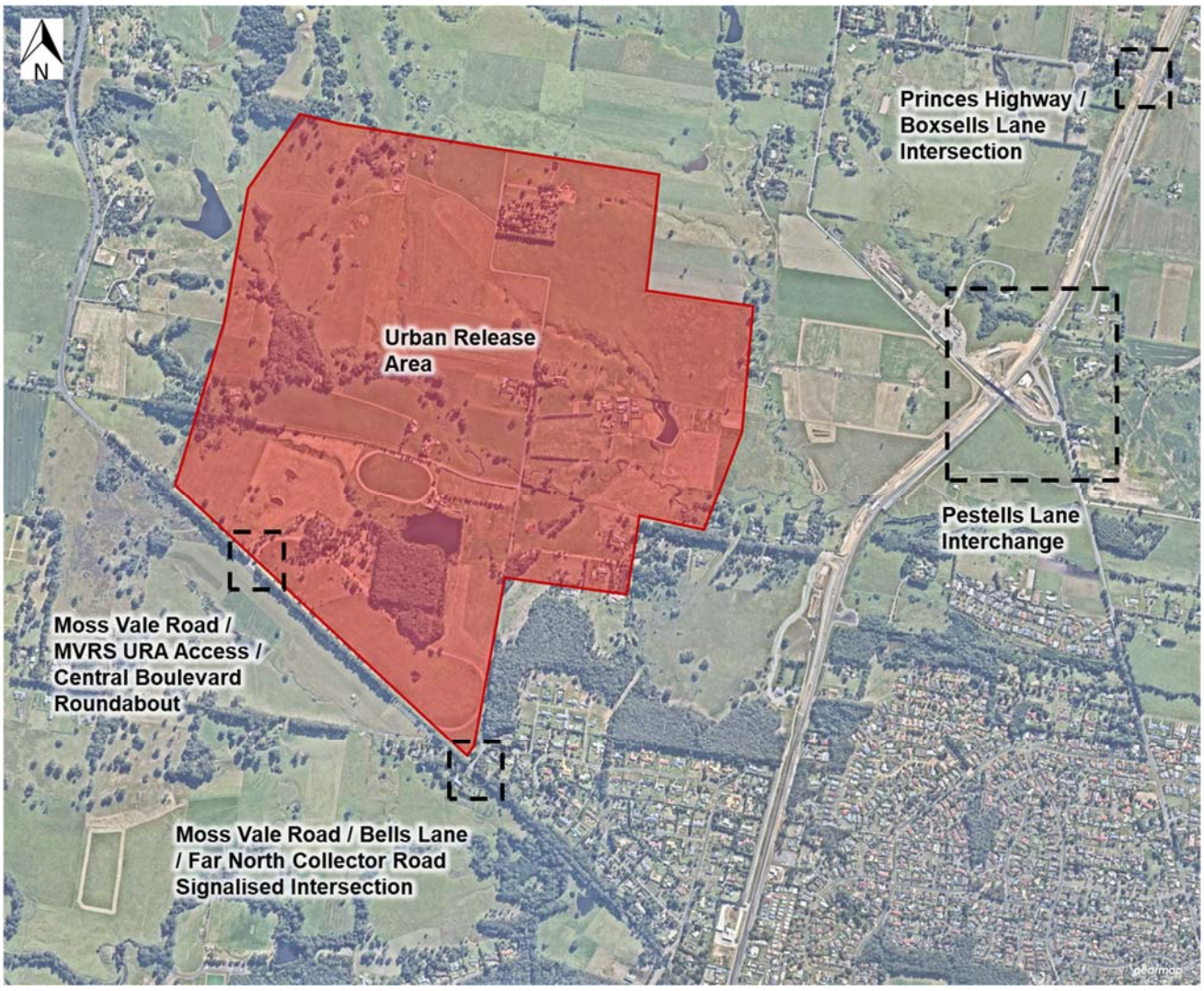
Appendix K: P4627.001T Moss Vale Road Revised SIDRA Analysis Updates Technical Note (Moss Vale Road / Bells Lane / Far North Collector Road Signalised Intersection)

1. INTRODUCTION

1.1 Background

Bitzios Consulting (Bitzios) has been engaged by Shoalhaven City Council (Council) to undertake an external traffic analysis for the proposed Moss Vale Road North (MVRN) Urban Release Area (URA), located in Cambewarra, New South Wales (NSW). The external traffic analysis forms Phase A of the MVRN URA Traffic Study undertaken by Bitzios.

The key external intersections which are proposed to facilitate access between the URA, and Moss Vale Road (MVR) and Princes Highway are shown in Figure 1.1.



Source: Nearmap

Figure 1.1: External Intersections Surrounding MRVN URA

1.2 Context

This traffic study involves undertaking an external traffic analysis which assesses the key intersections surrounding the URA. This study is a revision of the previous traffic studies conducted by Bitzios, including:

- P3968.001T Moss Vale Road SIDRA Analysis Updates, *dated 24/01/2020* – **Appendix B**
- P4516.002R Moss Vale Road North URA SIDRA Assessment Report, *dated 03/03/2020* – **Appendix C**

- P4516.002R Pestells Lane Interchange SIDRA Assessment Report, *dated 25/03/2020* – **Appendix D.**

The previous analyses conducted for the subject intersections involved extracting forecast traffic volumes from the Shoalhaven-Kiama November 2018 TRACKS model. This study has adopted the May 2020 TRACKS model for the purposes of extracting forecast traffic volumes. The May 2020 TRACKS model includes updates to the layout of the latest development, expected changes to other release area proposals and the local road network. The revised TRACKS model consists of the following key updates:

- The yield for the MVRN URA has been increased from 2,032 to 2,515 dwellings
- The internal MVRN URA road network has been amended to provide three (3) additional external connections to/from the proposed Meroo Meadow URA to the north. The previous TRACKS model included a single connection between Meroo Meadow URA and Pestells Lane to the east
- To accommodate the level of detail required for the MVRN development, the number of zones within the model were increased from 650 to 850. This allows for the new development detail and additional spare zones for future expansion of detail in other URAs
- Development zones are structured and numbered from 649 to 737 within the MVRN URA.

Further details on the May 2020 TRACKS model and the included updates are provided in Stantec's *Moss Vale Road North URA Model Update – Supplemental Report*, provided at **Appendix A**.

1.3 Scope

The scope for assessment is detailed below:

- Extract relevant intersection volumes from the May 2020 Shoalhaven-Kiama TRACKS model in five-year intervals from year 2021 to year 2041, for both Annual Average School Term (AAST) and 100th Highest Hour (100HH)
- Update existing SIDRA intersection models with revised TRACKS traffic volumes
- Summarise the findings, including year of failure, failure mechanisms and potential improvements to the layout of the concept design
- Confirm whether the proponent's proposed increase in lot yield (2,515 dwellings) in the MVRN URA can be accommodated on the external state road network based on traffic impact analysis, and whether any physical works or design modifications are required to accommodate the increase in traffic
- Confirm the role of Pestells Lane to facilitate a satisfactory mitigation of traffic impact associated with the MVRN URA and proposed future Meroo Meadow development. Also, determine whether the Abernethy's Lane connection is 'required' to accommodate the MVRN URA or should just be retained as a possible future connection.

2. SIDRA MODEL DEVELOPMENT

2.1 Traffic Scenarios

Future year modelling scenarios were based on those modelled in the Shoalhaven-Kiama TRACKS model, noting the primary purpose of the intersection modelling is to analyse traffic conditions in the medium to long-term. The following future year modelling scenarios were developed:

- 2021 AAST AM and PM peak volumes (forecast growth)
- 2021 100HH AM and PM peak volumes (forecast growth)
- 2026 AAST AM and PM peak volumes (forecast growth)
- 2026 100HH AM and PM peak volumes (forecast growth)
- 2031 AAST AM and PM peak volumes (forecast growth)
- 2031 100HH AM and PM peak volumes (forecast growth)
- 2036 AAST AM and PM peak volumes (forecast growth)
- 2036 100HH AM and PM peak volumes (forecast growth)
- 2041 AAST AM and PM peak volumes (not actual forecast 2041, but an ultimate development scenario including full occupancy of all other planned URA's including Meroo Meadow)
- 2041 100HH AM and PM peak volumes (not actual forecast 2041, but an ultimate development scenario including full occupancy of all other planned URA's including Meroo Meadow).

Traffic volumes for each scenario were extracted from Council's Shoalhaven-Kiama 'future link's TRACKS models May 2020 Version.

2.2 Capacity Mechanisms

It is necessary to define intersection capacity and over-capacity mechanisms in order to inform the intersection upgrades required. Intersection modelling is undertaken under Roads and Maritime Services' (RMS) *Traffic Modelling Guidelines* (2013). Intersection capacity limits are to be consistent with the following conditions:

- Signals: Maximum practical Degree of Saturation (DOS) is 0.90
- Roundabouts: Maximum practical DOS is 0.85
- Sign-controlled: Maximum practical DOS is 0.80
- Continuous lanes: Maximum practical DOS is 0.98

Table 2.1 is extracted from RMS' *Traffic Modelling Guidelines* (2013) and indicates the control delay for vehicle Level of Service (LOS) calculations.

Table 2.1: Control Delay for Vehicle LOS Calculations

Level of Service	Control delay per vehicle in seconds (d) (including geometric delay)
	All Intersection Types
A	d < 14
B	d < 15 to 28
C	d < 29 to 42
D	d < 43 to 56
E	d < 57 to 70
F	d > 70

3. MOSS VALE ROAD / BELLS LANE / FAR NORTH COLLECTOR ROAD SIGNALISED INTERSECTION

3.1 Traffic Redistribution

In the process of extracting traffic volumes for the MVR / Bells Lane / Far North Collector Road (FNCR) intersection, two (2) movements were identified to have no assigned traffic volumes. Those movements are identified as follows:

- MVR north-western approach to Bells Lane departure (left turn)
- Bells Lane north-eastern approach to Moss Vale Road departure (right turn).

Notwithstanding, following the development of the MRVN URA road network within TRACKS, these movements have been able to reroute internally through the URA, which is to be expected.

The traffic demands of the above movements are expected to be low, as the majority of the traffic is to/from the Princes Highway, rather than to/from West of the URA. An assumption was made to reinstate a low traffic demand (for those movements) through the MVR / Bells Lane / FNCR intersection.

3.2 Far North Collector Road Considerations

As part of TfNSW's traffic signal design review for the MVR / Bells Lane / FNCR intersection, an issue was identified for the left-turn movement from FNCR. It was determined the sight distance to/from vehicles at the FNCR left-turn movement and through traffic from the MVR south-eastern approach is insufficient when assessed against TfNSW's *Traffic Signal Design – Appendix E Left Turn on Red* and Austroads' *Guide to Road Design Part 4A*. As such, the left-turn movement is to be fully-signalised and not permitted for use on a red signal. As a result, SIDRA modelling of the MVR / Bells Lane / FNCR signalised intersection is to reflect this outcome.

3.3 Model Outputs

The SIDRA output summary sheets for each traffic and intersection scenario of the proposed MVR / Bells Lane / FNCR signalised intersection are provided in **Appendix E**.

The SIDRA assessment outputs for the proposed MVR / Bells Lane / FNCR signalised intersection are provided in **Appendix F.**

3.4 Second Iteration Layout

3.4.1 Intersection Capacity

The intersection exceeds its queuing capacity in the year 2041 during AM peak hour in the AAST scenario and during PM peak in the 100HH scenario. The Bells Lane left-turn movement exceeds the available turn pocket length by 2.5m in the AAST AM peak and the FNCR right-turn movement exceeds the available turn pocket length by 20.9m in the 100HH PM peak.

The intersection reaches DOS limits by year 2041 in the 100HH and exceeds DOS limits in AAST year 2041. It is reiterated that results for the year 2041 scenarios are not actual 2041 results, but rather reflects all known future growth as an ultimate development scenario. Year 2036 is the final year of actual projected growth within the May 2020 TRACKS models.

3.5 Ultimate Form Layout

3.5.1 Intersection Capacity

The intersection exceeds its queuing capacity in the year 2041 during PM peak hour in the 100HH scenario. The FNCR right-turn movement exceeds the available turn pocket length by 29.6m. Overall, intersection delays in the 2041 AAST scenario are considered acceptable.

The ultimate form intersection is expected to reach DOS capacity by the year 2041 in both the AAST and 100HH scenarios.

3.6 Queue Length Review

A comparison of queue lengths (95th percentile queue length) for each movement from the previous analysis and revised analysis for 2041 AAST and 2041 100HH scenarios (AM and PM peak periods) are shown in Table 3.1 and Table 3.2 respectively. Red shading indicates the back of queue length has exceeded the available lane length, yellow shading indicates an increase in queue length while remaining within the available lane length, and green shading indicates a decrease / no increase in queue length.

Table 3.1: 2041 AAST 95th Percentile Queue Length Comparisons

Approach	Movement	Lane Length (m)	AM Queue Length (m)			PM Queue Length (m)		
			Previous Analysis	Revised Analysis	+/-	Previous Analysis	Revised Analysis	+/-
Second Iteration								
Moss Vale Road (SE)	Left	170	38	32	-6	59	53	-6
	Through	500	43	51	+8	72	84	+12
	Right	180	60	101	+41	74	159	+85
Bells Lane (NE)	Left	105	**118**	**108**	-10	21	46	+25
	Through	500	70	91	+21	48	67	+19
	Right	35	0	2	+2	0	5	+5
Moss Vale Road (NW)	Left	80	0	2	+2	0	1	+1
	Through	500	115	75	-40	86	83	-3
	Right	110	15	2	-13	21	21	0
Far North Collector Road (SW)	Left	35	1	1	0	1	1	0
	Through	500	146	102	-44	80	89	+9
	Right	120	**146**	102	-44	80	89	+9
Ultimate Form								
Moss Vale Road (SE)	Left	170	36	21	-15	59	60	+1
	Through	500	39	47	+8	72	90	+18
	Right	180	61	92	+31	74	157	+83
Bells Lane (NE)	Left	105	70	60	-10	15	31	+16
	Through	500	72	89	+17	48	84	+36
	Right	500	72	89	+17	48	84	+36
Moss Vale Road (NW)	Left	80	0	2	+2	0	1	+1
	Through	500	101	74	-27	86	89	+3
	Right	110	14	2	-12	21	23	+2
Far North Collector Road (SW)	Left	35	1	1	0	1	1	0
	Through	500	119	95	-24	80	96	+16
	Right	120	119	95	-24	80	96	+16

As shown in Table 3.1, the second iteration results demonstrate the queue lengths are contained within the proposed lane lengths for all movements except the left turn from Bells Lane to MVR in the AM peak period. That said, revised results indicate a reduction in the queue length whereby it is only expected to exceed the turn pocket by 3m (i.e. half a car length). The results for the ultimate iteration also indicated queue lengths are contained with the proposed lane lengths.

Table 3.2: 2041 100HH 95th Percentile Queue Length Comparisons

Approach	Movement	Lane Length (m)	AM Queue Length (m)			PM Queue Length (m)		
			Previous Analysis	Revised Analysis	+/-	Previous Analysis	Revised Analysis	+/-
Second Iteration								
Moss Vale Road (SE)	Left	170	34	25	-9	93	79	-14
	Through	500	39	37	-2	101	124	+23
	Right	180	63	92	+29	108	180	+72
Bells Lane (NE)	Left	105	81	88	+7	42	75	+33
	Through	500	62	70	+8	68	108	+40
	Right	35	0	2	+2	0	8	+8
Moss Vale Road (NW)	Left	80	0	2	+2	0	2	+2
	Through	500	90	71	-19	132	118	-14
	Right	110	18	13	-5	33	37	+4
Far North Collector Road (SW)	Left	35	1	1	0	2	1	-1
	Through	500	108	94	-14	117	141	+24
	Right	120	108	94	-14	117	**141**	+24
Ultimate Form								
Moss Vale Road (SE)	Left	170	32	23	-9	86	80	-6
	Through	500	35	33	-2	94	124	+30
	Right	180	55	89	+34	100	180	+80
Bells Lane (NE)	Left	105	43	50	+7	23	42	+19
	Through	500	61	68	+7	67	120	+53
	Right	500	61	68	+7	67	120	+53
Moss Vale Road (NW)	Left	80	0	2	+2	0	2	+2
	Through	500	85	65	-20	129	118	-11
	Right	110	15	11	-4	30	37	+7
Far North Collector Road (SW)	Left	35	1	1	0	2	1	-1
	Through	500	104	92	-12	114	150	+36
	Right	120	104	92	-12	114	**150**	+36

As shown in Table 3.2, the second and ultimate iteration results demonstrate the queue lengths are contained with the proposed lane lengths for all movements except the right turn from FNCR to MVR in the PM peak period.

3.7 Results Summary

A summary of the intersection assessment is provided in Table 3.3, with green boxes indicating the intersection is within capacity, yellow boxes indicating is at capacity, and red boxes indicating the intersection is over-capacity.

Table 3.3: MVR / Bells Lane / FNCR Signalised Intersection Results Summary

Intersection Scenario	Model Year				
	2021	2026	2031	2036	2041
Second Iteration – AAST	Under	Under	Under	Capacity	Over
Second Iteration – 100HH	Under	Under	Under	Capacity	Over
Ultimate Form – AAST	Under	Under	Under	Capacity	Capacity
Ultimate Form – 100HH	Under	Under	Under	Under	Over

As shown, the modified second iteration intersection proposed is expected to cater for forecast traffic volumes until the year 2036. The modified ultimate intersection form is expected to cater for forecast traffic volumes until the year 2041 in the AAST scenario. Queue lengths are exceeded in the 2041 100HH scenario, however DOS limits are at capacity. It should be noted that the performance of the intersection in 2041 PM 100HH scenario declines when compared to the 2041 PM AAST scenario, which is mainly attributed to the right turn from FNCR to MVR attracting an additional 89 trips. It should be noted that this is influenced by the higher seasonal demands along the state road network, which in reality may not be that high on the local road network. The 2041 results are also influenced by the addition of the Meroo Meadow URA which has only been introduced into the models at the year 2041 as part of the ultimate development scenario.

The results indicate that the turn pockets associated with the MVR / Bells Lane / FNCR intersection (in particular the right turn out of FNC and the left turn out of Bells Lane) will need to be extended by 20m (FNCR right turn) and 3m (Bells Lane left turn). It is noted these extensions are not necessary to be provided up front as part of the 'second iteration', but more an amendment to the 'ultimate form'. Accordingly, the design and subsequent land acquisitions should factor in the ultimate design of these turn pocket extensions.

A technical note summarising the revised findings of the Moss Vale Road / Bells Lane / FNCR signalised intersection is provided in **Appendix K**.

3.8 Recommendations

While the intersection saturation capacity is not exceeded in the ultimate year, intersection operations could be further improved by adding additional short lanes on approach and on exit, such as an additional right-turn short lane on MVR south eastern approach and short lane on Bells Lane exiting the intersection.

Based on the results from the second iteration scenario, it is recommended that the intersection be upgraded to its ultimate from by the year 2036.

Notwithstanding, these are considerations for road authorities in future once actual development rates are known with more certainty, and the timing at the future western bypass is confirmed. The strategy of building the 'second iteration' up front but with land reservation to accommodate the 'ultimate form' is still supported as the preferred approach, following this revised analysis.

It is Bitzios view that any additional upgrade beyond the 'second iteration' is more attributed to the addition of the Meroo Meadow URA, in conjunction with the increase in State road travel demand over time.

4. MOSS VALE ROAD / MVRS URA ACCESS / CENTRAL BOULEVARD

4.1 Sensitivity Analysis

The existing MVR / Main Road intersection (Node #20509) is proposed to be upgraded to a four-leg roundabout in future years. The southern leg of the roundabout is proposed to provide an additional access to/from the MVRS URA and MVR. In the event that the roundabout is not constructed, or its construction is postponed to beyond 2041, development traffic would be unable to travel to/from MVRS URA and MVR (i.e. removal of link between Nodes #21671 and #20509). As such, development traffic would be required to travel to/from the MVRS URA via either the MVR / MVRS URA Access / Central Boulevard roundabout, or the Taylors Lane access.

In order to assess the impacts of this scenario, a sensitivity test was performed which involved rerouting development traffic from the MVR / Main Road roundabout and reassigning it to respective movements at the MVR / MVRS URA Access / Central Boulevard roundabout. Practically, some of the rerouted development traffic is expected to travel to/from the MVRS URA via Taylors Lane, however the sensitivity test has considered the 'worst case' scenario.

4.2 Model Outputs

The SIDRA output summary sheets for each traffic and intersection scenario of the proposed MVR / MVRS URA Access / Central Boulevard roundabout are provided in **Appendix G**.

The SIDRA assessment detailed results for the proposed MVR / MVRS URA Access / Central Boulevard roundabout are provided in **Appendix H.**

4.3 Queue Length Review

A review of the queue lengths has been undertaken in relation to the MVR approaches of the proposed MVR / MVRS URA Access / Central Boulevard roundabout. This specifically compares the 95th percentile queue length against the proposed approach distance.

The western approach distance is measured as 576m along MVR northwest (NW). Reviewing the proposed MVR / MVRS URA Access / Central Boulevard roundabout SIDRA summary in **Appendix G**, the maximum 95th percentile queue length is 55m within the 2036 PM Peak hour 100HH (without) scenario. Therefore, the western approach ensures the 95th percentile queue length is considerably less than the distance of the MVR approach.

The eastern approach distance is measured as 1,225m along MVR southeast (SE). Reviewing the MVR / MVRS URA Access / Central Boulevard roundabout SIDRA summary in **Appendix G**, the maximum 95th percentile queue length is 31.3m within the 2041 PM Peak hour 100HH (without) scenario.

The maximum queue length of the adjacent MVR / Bells Lane signalised intersection has also been reviewed to identify any future impacts to the MVR / MVRS URA Access / Central Boulevard roundabout. The maximum 95th percentile queue length calculated on the MVR NW is 118.2m during the 2041 PM peak hour 100HH scenario in the ultimate intersection form. Therefore, the eastern approach ensures the 95th percentile queue length is considerably less than the distance of the MVR approach.

4.4 Intersection Capacity

4.4.1 Proposed Arrangement

The intersection remains within acceptable limits of DOS, delay times and LOS outcomes for both AAST and 100HH models.

DOS values in the 2021 100HH are at the lowest of 0.22 and rise to a maximum of 0.60 in the PM peak hour of the 2041 100HH in the MVR north-western approach. A LOS of 'A' remains consistent throughout all scenarios of the intersection. The 95th percentile queuing length reaches 43.1m in the PM peak hour of the 2036 100HH, however the delay time remains consistent with the RMS conditions detailed in Table 2.1.

4.4.2 Sensitivity Scenario

The intersection remains within acceptable limits of DOS, delay times and LOS outcomes for both AAST and 100HH models.

DOS values in the 2021 100HH are at the lowest of 0.22 and rise to a maximum of 0.68 in the PM peak hour of 2036 AAST in the MVR north-western approach. A LOS of 'A' remains consistent throughout all scenarios of the intersection. The 95th percentile queue length reaches 55m in the peak hour of the 2036 100HH, however the delay time remains consistent with the RMS conditions detailed in Table 2.1.

4.5 Results Summary

A summary of the intersection assessment is provided in Table 4.1, with green boxes indicating the intersection is within capacity, yellow boxes indicating is at capacity, and red boxes indicating the intersection is over-capacity.

Table 4.1: MVR / MVRS URA Access / Central Boulevard Roundabout Results Summary

Intersection Scenario	Model Year				
	2021	2026	2031	2036	2041
Proposed Layout	Under	Under	Under	Under	Under
Sensitivity Analysis	Under	Under	Under	Under	Under

4.6 Recommendations

The proposed layout is evidently efficient in all scenarios proposed in the SIDRA assessment. Noting the MVR north-western approach experiences large peak hour volumes, the results shown conclude a single lane roundabout approach is sufficient for the application of this intersection. Section 4.3, **Appendix G** and **Appendix H** highlight the short 95th percentile back of queue lengths indicating that a single lane approach is deemed sufficient on all approaches.

5. PESTELLS LANE INTERCHANGE & BOXSELLS LANE INTERSECTION

5.1 Traffic Redistribution

In the process of extracting traffic volumes for the Pestells Lane Interchange, it was identified that two (2) movements have no volumes assigned to it. The following movements are detailed below:

- Pestells Lane / Princes Highway NB on-ramp intersection:
  - Left-turn movement off the Princes Highway, turning left onto Pestells Lane.

The traffic demand of this movement is reflected in traffic travelling to the northern extent of Bomaderry. Rationally, motorists travelling to north Bomaderry are expected to travel through Bomaderry rather than travelling north on the Princes Highway and exit onto to Pestells Lane to travel further south. Notwithstanding, there is currently a small demand for these movements and traffic demands are expected to increase marginally with future development in Emerald Drive. The traffic volumes for the current demand plus the expected small growth have been coded accordingly.

The other turn movement includes:

- Pestells Lane / Meroo Road / Princes Highway SB off-ramp intersection:
  - Right turn movements into Pestells Lane via Meroo Road.

The route choice into the URA are expected to utilise the right turn into Boxsells Lane further north of this intersection, due to this route being identified as the most efficient trip within the TRACKS model. Subject to the ongoing condition of Boxsells Lane and Pestells Lane north, it is assumed 20% of these trips could use the right-turn movement of the Pestells Lane / Meroo Road / Princes Highway SB off-ramp intersection and has therefore been coded accordingly.

It should be noted that in future, all traffic is likely to be rerouted via Pestells lane as TfNSW will have to ultimately address the designated right-turn pockets on Princes Highway.

In the process of extracting traffic volumes for the Princes Highway / Boxsells Lane intersection, it was identified that one (1) movement has no volumes assigned to it. The following movement is detailed below:

- Princes Highway southern approach to Boxsells Lane (left turn).

The route choice of these motorists is expected to utilise the Princes Highway off-ramp onto Pestells Lane, rather than travelling further north to exit onto Boxsells Lane. However, a low traffic demand is still expected for this turn movement and therefore 10% of motorists exiting onto Pestells Lane has been reassigned back to the Princes Highway left-turn exit onto Boxsells Lane for the purposes of the analysis.

5.2 Model Outputs

The SIDRA output summary sheets for each traffic and intersection scenario of the proposed Pestells Lane Interchange and Boxsells Lane intersection are provided in **Appendix I**.

The SIDRA assessment outputs for the proposed Pestells Lane Interchange and Boxsells Lane intersection are provided in **Appendix J.**

5.3 Intersection Capacity

5.3.1 Pestells Lane Interchange

The intersection remains within acceptable limits of DOS, delay times and LOS outcomes for both AAST and 100HH models.

The overall intersection vehicle demand is at the lowest of 195 veh/h in 2021 100HH for Site 1 and at a maximum of 1,918 veh/h in the PM peak hour of 2041 100HH for Site 2. DOS values in 2021 AAST are at the lowest of 0.05 in the AM peak hour of 2021 AAST Site 1 NB Ramp (N) and rise to a maximum of 0.49 in the PM peak hour of 2041 100HH for Site 1 Pestells Lane (W). A LOS of 'A' remains consistent throughout all of all intersections. The 95th percentile queue length reaches 9.2m in the PM peak hour of 2041 100HH for Site 1 Pestells Lane (W), however a delay time of 9.8 seconds remains consistent with the RMS' conditions detailed in Table 2.1.

5.3.2 Princes Highway / Boxsells Lane Intersection

Majority of the revised intersection scenarios remain within acceptable limits of DOS, delay times and LOS outcomes for both AAST and 100HH models.

The intersection vehicle demand is at the lowest of 1,598 veh/h in 2021 100HH AM peak hour and at a maximum of 3,535 veh/h in the PM peak hour of 2041 100HH. DOS values are at the lowest of 0.25 in the AM peak hour of 2021 100HH and rise to a maximum of 2.18 in the PM peak hour of 2041 100HH. The 95th percentile queue length reaches 152.3m in the PM peak hour of 2041 100HH for Princes Highway northern approach and the delay time of 1,120.5 seconds significantly exceeds RMS' conditions detailed in Table 2.1.

LOS reaches 'F' by 2031 in the 100HH PM peak period along Princes Highway northern approach right turn. By 2036, the intersection fails in both AAST and 100HH scenarios in the Median Storage eastern approach and by 2041 100HH for the Boxsells Lane western approach. The occurrence of this failure is due to a significantly high forecast of traffic utilising the right-turn movement into Boxsells Lane from the Princes Highway, as well as the forecast through volumes on the Princes Highway regardless of the inclusion of the MVRN URA. This is not forecast to occur in the models until the final stages of the MVRN URA development.

5.4 Results Summary

A summary of the intersection assessment is provided in Table 5.1 and Table 5.2, with green boxes indicating the intersection is within capacity, yellow boxes indicating is at capacity, and red boxes indicating the intersection is over-capacity.

Table 5.1: Pestells Lane Interchange Results Summary

Intersection Scenario of Pestells Lane Interchange	Model Year				
	2021	2026	2031	2036	2041
Site 1 – Pestells Lane / Princes Highway on-ramp	Under	Under	Under	Under	Under
Site 2 – Princes Highway NB / Princes Highway on-ramp	Under	Under	Under	Under	Under
Site 3 – Princes Highway SB / Princes Highway on-ramp	Under	Under	Under	Under	Under
Site 4 – Pestells Lane / Meroo Road	Under	Under	Under	Under	Under

Table 5.2: Princes Highway / Boxsells Lane Intersection Results Summary

Intersection Scenario of Princes Highway / Boxsells Lane	Model Year				
	2021	2026	2031	2036	2041
Site 1 (West) – Princes Highway / Boxsells Lane NB	Under	Under	Over	Over	Over
Site 2 (East) – Lamonds Lane / Princes Highway SB	Under	Under	Under	Under	Over

5.5 Recommendations

The proposed layout is evidently efficient in scenarios from year 2021 to 2026 proposed in the SIDRA assessment noting both intersections experience large peak hour traffic volumes. DOS, delay times, 95th percentile queue lengths and LOS values comfortably remain within capacity despite large traffic flow through these intersections. The result shown conclude the proposed layout of the intersection is sufficient for the application of the intersection.

Notwithstanding, this occurrence of failures at each approach of the intersection would be easily addressed in future by proposing to close the median break and deny the subject right-turn movements by physical restriction. It is noted these movements could be redirected in future to the adjacent grade separated intersections of the Pestells Lane Interchange to the south and the Devitts Lane / Morschels Lane Interchange to the north, which can adequately accommodate the reassigned traffic. As a consequence, physical works aren't required to improve intersection capacity that could be attributed to the MVRN URA, other than potential right turn pocket closures in the very final stages of the URA development, which are likely to be addressed by TfNSW ahead of that time.

6. CONCLUSION

The key findings of this external traffic analysis for the proposed intersections are as follows:

- The updated design speed limit of 90km/h on MVR had minimal impact on the MVR / Bells Lane / FNCR intersection performance. However, results of the second iteration form within year 2041 indicate turn pocket lengths were required to be lengthened on the right-turn of the FNCR and left-turn from Bells Lane, to provide sufficient vehicle storage and deceleration
- The results indicate that the turn pockets associated with the MVR / Bells Lane / FNCR intersection will need to be extended by 20m along the FNCR right turn and 3m along the Bells Lane left turn. These extensions are an amendment to the 'ultimate form' layout of the intersection and not necessary to the 'second iteration' form
- The modified second iteration intersection proposed is expected to cater for forecast traffic volumes until the year 2036. The strategy of building the 'second iteration' up front but with land reservation to accommodate the 'ultimate form' is still supported as the preferred approach, noting the required extension of turn pockets
- The modified ultimate intersection form is expected to cater for forecast traffic volumes until the year 2041 in the AAST scenario. While queue lengths are exceeded in the 2041 100HH scenario, DOS limits are contained at capacity
- It is reiterated that the year 2041 scenario does not reflect year 2041 however reflects all known future growth as an ultimate development scenario. Year 2036 is the final year of actual projected growth in the TRACKS models
- A single circulating lane is deemed sufficient for the application of the MVR / MVRS URA Access / Central Boulevard roundabout
- Single lane approaches are deemed sufficient for each roundabout approach leg
- 95th percentile back of queue lengths extracted from the SIDRA modelling are significantly less than the distance of the MVR western and eastern approaches
- The maximum 95th percentile back of queue length from the MVR NW approach of the MVR / Bells Lane signalised intersection is significantly less than the distance of the MVR approach connecting to the MVR / MVRS URA Access / Central Boulevard roundabout
- The capacity of the URA roundabout (Central Boulevard) intersection remains within limits for all capacity mechanisms in all scenarios
- The capacity of the Pestells Lane Interchange remains within acceptable limits for all capacity mechanisms in all scenarios
- The capacity of the Princes Highway / Boxsells Lane intersection remains within acceptable limits for majority of capacity mechanisms from years 2021 to 2026. The right turn from Princes Highway northern approach is noted to fail in year 2031 100HH PM peak period. The Median Storage eastern approach fails by year 2036 in both AAST and 100HH scenarios (the very final stages of the MRVN URA), and Median Storage western approach fails by 2041 100HH PM peak period. This is a result of the forecast traffic volumes on the Princes Highway and traffic turning into Boxsells Lane from the Princes Highway. Notwithstanding, this occurrence would be easily addressed in future by proposing to close the median break and deny the subject right-turn movements by physical restriction, noting these movements could be redirected in future to the adjacent grade separated intersections of Pestells Lane Interchange to the south and the proposed Devitts Lane / Morschels Lane Interchange to the north. These modifications are likely to be addressed by TfNSW ahead of the timeframes indicated by the analysis
- The proposed layout and conditions are deemed sufficient for the application of the approved Pestells Lane Interchange and the approved intersection treatment for the Princes Highway / Boxsells Lane intersection

- This external impact analysis, following refinement of the Shoalhaven-Kiama TRACKS models to reflect the proponents proposed 2,515 dwellings in MRVN URA, indicates that this level of development could be accommodated by the surrounding state road network. This is subject to the proposed distribution of traffic via the four external access points (Central Boulevard, Bells Lane, Pestells Lane and Boxsells Lane), and based on the current proposed design of these intersections but subject to minor refinements to the MVR / Bells Lane / FNCR intersection. This also assumes the internal road network will be designed to facilitate efficient movement of traffic to/from all four access points, based on the design ultimate traffic demands projected in the updated TRACKS models
- Phase B of MVRN URA Traffic Study will review the internal road network to ensure it is fit for purposed internally, while ensuring the modelled traffic distribution to the external road network can be achieved by the internal road network design
- Whilst the Abernethy's Lane connection is not 'required' to accommodate the MVRN URA, its role as a possible future connection needs to be preserved with all aspects of planning of the MVRN. This includes ensuring any built works along Abernethy's Lane are at collector road standard to protect this option, which may be triggered in future by either the future Meroo Meadow URA, or as part of the local access solutions associated with the future design of the Western Bypass of Nowra / Bomaderry.

Appendix A: Moss Vale Road North URA Model Update – Supplemental Report (Stantec)

Moss Vale Road North URA Model Update - Supplemental Report

This report has been prepared for the benefit of Shoalhaven City Council. No liability is accepted by this company or any employee or sub-consultant of this company with respect to its use by any other person.

This disclaimer shall apply notwithstanding that the report may be made available to the RMS and other persons for an application for permission or approval or to fulfil a legal requirement.

Rev. No.	Date	Description	Prepared By	Checked By	Reviewed By	Approved By
1	30/04/20	Draft Final	DJH	MC	DJH	DJH
2	06/05/20	Final	DJH	MC	DJH	DJH
3	13/05/20	Final	DJH	MC	DJH	DJH

1 Introduction

1.1 Background

Shoalhaven City Council (SCC) is undertaking an assessment of the impacts of the proposed Moss Vale Road North (MVRN) Urban Release Area (URA). The assessment is considering the impacts on both the internal development road network and the external greater Shoalhaven network. Stantec has been asked to undertake the TRACKS model analysis of the proposed development by updating the existing Shoalhaven TRACKS model to include the latest development, expected changes to other Release Area proposals and the local road network.

The MVRN development is already included in all current future Shoalhaven models. However, the assumed development size and composition used in the current models are no longer adequate for the level of detailed impact assessment needed by the Council. As a result, SCC have asked Stantec to expand and refine the model to allow for an improved level of assessment.

1.2 Purpose of Supplemental Report

The purpose of this supplemental report is to record the changes to the existing validated SCC TRACKS transport models (model build circa 2015 and updated in 2018) that have occurred as a result of incorporating a more detailed model description of the MVRN development.

The 2011 base year Average Annual School Time (AAST) and 100th Highest Hour (100th HH)models are based on 2011 Census data at a Statistical Area 1 (SA1) level of detail and outputs from the Road and Maritime Services (RMS) Road Assignment Model. Traffic counts used in the model validation were provided by SCC using previous screenlines used in the Illawarra Regional Model, Nowra-Bomaderry Model and Milton-Ulladulla Model. The counts were adjusted to take into account the AAST and 100th HH nature of the model period.

The generation and attraction models have come from the analysis of the Sydney Household Travel Survey (HTS) data under a separate contract with Road and Maritime Services (RMS). The External model flows are extracted from the RMS Road Assignment Model.

The existing 2016, 2021, 2026, 2031, 2026 and 2041 future AAST and 100th HH year models are all developed from Council land use projections that, at the time, were substantially based on Transport for New South Wales (TfNSW) projections and initial council estimates of future growth. The modelling of the future council projections included initial projections for the various URAs, particularly those in and around the Nowra Bomaderry area.

The existing AAST and 100th HH models include initial URA development composition, coarse URA zone structures and no internal URA road networks.

More accurate future land use assumptions, for the MVRN development, and local road networks have been provided so that these updated futures models are able to improve the accuracy and robustness of future vehicle flow projections for the various network assumptions modelled.

2 URA Future Land Use Projections

An important element of these updated models is the improved description of the proposed land use changes expected throughout the Shoalhaven area and in particular in the MVRN development area.

The process used for creating the updated future land use projections used in the update was as follows:

- SCC planning staff provided an improved future household and employment distribution for each five period from 2016-2041 based on the expected uptake of development in the URAs and supporting employment growth.
- Previously assumed development area land use was removed to avoid "double counting" development uptake.
- The land use in all other areas of the model were left as originally projected by the TfNSW and prepared by SCC.
- Each development expected persons per household and cars per household were estimated by using an average of values from comparable existing zones within the Nowra Bombaderry area of the model.

Comparable zones were selected based on density of lots per hectare being similar to that expected in each development area.

The locations of each of the URAs are shown in Figure 3-1. Table 2-1 to Table 2-6 detail the assumed household and commercial land use included in each URA for each future year.

Table 2-1: 2016 URA Development Land Use

Area (Figure Area)	Households					Employment
	Detached	Townhouse	Unit	Other	Total	
Moss Vale Rd South (A,B,C,D,E,F,G)	15	0	0	0	15	4
Meroo Meadow (O)	9	0	0	0	9	1
Worrigee (P)	2	0	0	0	2	0
Crams Rd (Q,R,X)	0	0	0	0	0	0
Mundamia (S,T,U)	1	0	0	0	1	0
Bamarang (V)	0	0	0	0	0	0
Cabbage Tree Lane (W)	23	0	0	0	23	2
Moss Vale Rd North	15	0	0	3	18	0

Table 2-2: 2021 URA Development Land Use

Area (Figure Area)	Households					Employment
	Detached	Townhouse	Unit	Other	Total	
Moss Vale Rd South (A,B,C,D,E,F,G)	75	19	0	0	94	12
Meroo Meadow (O)	9	0	0	0	9	1
Worrigee (P)	2	0	0	0	2	0
Crams Rd (Q,R,X)	0	0	0	0	0	0
Mundamia (S,T,U)	1	0	0	0	1	0
Bamarang (V)	0	0	0	0	0	0
Cabbage Tree Lane (W)	23	0	0	0	23	2
Moss Vale Rd North	15	0	0	3	18	0

Table 2-3: 2026 URA Development Land Use

Area (Figure Area)	Households					Employment
	Detached	Townhouse	Unit	Other	Total	
Moss Vale Rd South (A,B,C,D,E,F,G)	530	181	0	0	711	74
Meroo Meadow (O)	9	0	0	0	9	1
Worrigee (P)	67	5	0	0	72	7
Crams Rd (Q,R,X)	0	0	0	0	0	0
Mundamia (S,T,U)	86	22	0	0	108	11
Bamarang (V)	0	0	0	0	0	0
Cabbage Tree Lane (W)	23	0	0	0	23	2
Moss Vale Rd North	452	234	0	3	689	67

Table 2-4: 2031 URA Development Land Use

Area (Figure Area)	Households					Employment
	Detached	Townhouse	Unit	Other	Total	
Moss Vale Rd South (A,B,C,D,E,F,G)	785	322	0	0	1107	109
Meroo Meadow (O)	9	0	0	0	9	1
Worrigee (P)	133	11	0	0	144	15
Crams Rd (Q,R,X)	100	0	0	0	100	11
Mundamia (S,T,U)	206	50	0	0	256	27
Bamarang (V)	0	0	0	0	0	0
Cabbage Tree Lane (W)	23	0	0	0	23	2
Moss Vale Rd North	900	834	0	3	1737	177

Table 2-5: 2036 URA Development Land Use

Area (Figure Area)	Households					Employment
	Detached	Townhouse	Unit	Other	Total	
Moss Vale Rd South (A,B,C,D,E,F,G)	785	322	0	0	1107	110
Meroo Meadow (O)	9	0	0	0	9	1
Worrigee (P)	133	11	0	0	144	16
Crams Rd (Q,R,X)	254	17	0	12	283	29
Mundamia (S,T,U)	346	88	0	0	434	43
Bamarang (V)	0	0	0	0	0	0
Cabbage Tree Lane (W)	23	0	0	0	23	2
Moss Vale Rd North	1522	834	0	3	2359	239

Table 2-6: 2041 URA Development Land Use

Area (Figure Area)	Households					Employment
	Detached	Townhouse	Unit	Other	Total	
Moss Vale Rd South (A,B,C,D,E,F,G)	785	322	0	0	1107	182
Meroo Meadow (O)	1609	0	0	0	1609	162
Worrigee (P)	133	11	0	0	144	16
Crams Rd (Q,R,X)	286	17	0	12	315	34
Mundamia (S,T,U)	400	100	0	0	500	51
Bamarang (V)	2453	0	0	0	2453	232
Cabbage Tree Lane (W)	1962	218	0	0	2180	216
Moss Vale Rd North	1522	890	103	3	2518	676

Table 2-7: Revised Dwelling Yields For Nowra-Bomaderry URA's Incorporated Into 29 April 2020 TRACKS Model Update

Area	Households		
	Previous	Revised	Change
Moss Vale Rd Sth	1066	1107	+41
Meroo Meadow	1609	1609	0
Worrigee	153	144	-9
Crams Rd	344	315	-29
Mundamia	674	500	-174
Bamarang	2200	2453	+253
Cabbage Tree Lane	1868	2180	+312
Moss Vale Rd Nth	2032	2515	+483
Combined Total All URA's	9946	10823	+877

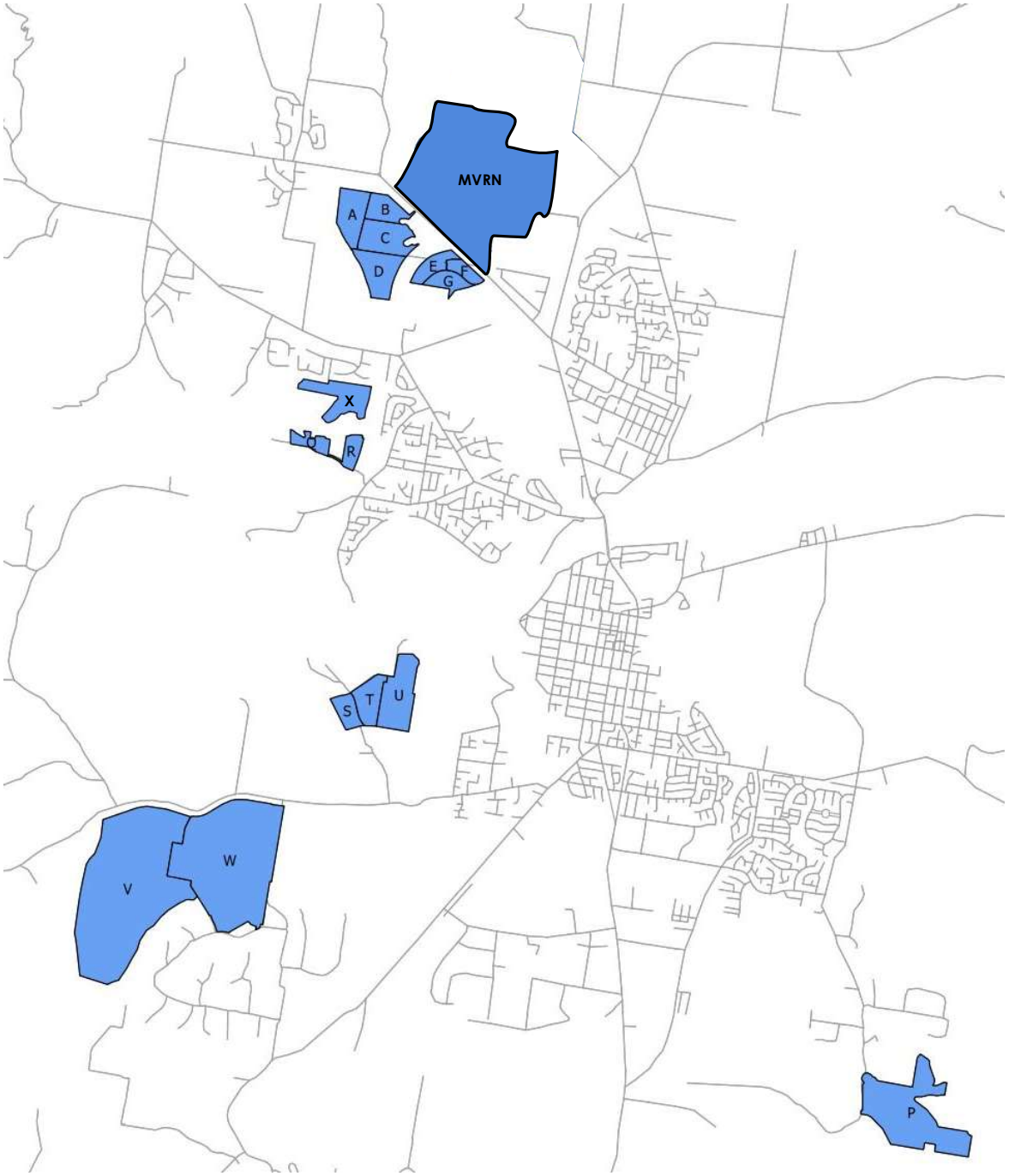
3 MVRN Development Generation

To ensure that the model is generating an appropriate number of trips for the households included in the MVRN development area, all trips to and from the development zones have been combined for each model year and time period. Trip rates have been calculated based on the number of households in the development for each model year.

Trips have been separated into those that have destinations that are internal and external to the development. Development trip rates have also been calculated using both the base do0minimum network and the future infrastructure network so as to see how trip making behaviour may change with increased network capacity. Table 3-1 details the modelled trip rates for each model year from 2026-2041 and for both the AAST and 100th HH periods separately. Note, the results are rounded to two decimal places and individual number may not add to total.

Table 3-1: MVRN Development Trips Rates

Year	Period	Hour	Base Do-minimum Network			Future Infrastructure Network		
			External	Internal	Total	External	Internal	Total
2026	AAST	AMP	0.73	0.03	0.77	0.74	0.03	0.77
		PMP	0.73	0.03	0.76	0.74	0.03	0.77
	100th HH	AMP	0.68	0.03	0.71	0.68	0.02	0.71
		PMP	0.85	0.04	0.89	0.87	0.03	0.90
2031	AAST	AMP	0.64	0.06	0.70	0.66	0.05	0.70
		PMP	0.64	0.05	0.70	0.66	0.05	0.70
	100th HH	AMP	0.60	0.05	0.65	0.61	0.04	0.65
		PMP	0.73	0.07	0.80	0.76	0.02	0.82
2036	AAST	AMP	0.62	0.08	0.70	0.64	0.06	0.71
		PMP	0.62	0.08	0.70	0.64	0.06	0.71
	100th HH	AMP	0.58	0.07	0.65	0.60	0.06	0.66
		PMP	0.69	0.10	0.79	0.75	0.08	0.83
2041	AAST	AMP	0.60	0.08	0.68	0.65	0.06	0.71
		PMP	0.60	0.07	0.67	0.66	0.05	0.71
	100th HH	AMP	0.57	0.07	0.64	0.61	0.05	0.66
		PMP	0.66	0.11	0.77	0.76	0.06	0.82



Stantec	Locations of URA Developments	3-1

4 Network Changes

4.1 Zone Changes

To accommodate the level of detail required for the MVRN development, the number of zones within the model were increased from 650 to 850. This allowed for the new development detail and additional spare zones for future expansion of detail in other URAs. This process involved:

- Renumbering the existing external model zones from 642-650 to 842-850.
- Including MVRN zones in the network as shown in Figure 4-1 for zones 649-737.
- Add spare zones throughout the network area for zones 738-841.

4.2 Network Changes

4.2.1 Future Do Minimum 000

The future Do-minimum network was created to reflect the network in 2021 and this was used as the base for all future network deficiencies and therefore forms a more robust basis for assessment. Each Base 000 future year network from 2021-2041 was sent through a series of distribution-assignment loops until the distribution of trips and flows on the base network converged into a consistent pattern that changed by less than 0.02%. This equated to have over 99% of all link volumes changing by less than 5% from one convergence iteration to another.

The following is a list of changes made to the 2011 Do-nothing network to create the 2021 Do-minimum network. It is acknowledged that not all of the following intersections and road works may be completed and opened to traffic in 2021, however as the updated 000 network was being compiled primarily for future year runs (2021 and beyond) it was intended to capture the more notable intersection and network upgrades, to eliminate known capacity constraints in the model and improve the robustness and reliability of the future model assignments:

Roundabouts:

- Princes Hwy/Moss Vale Rd - two approach lanes west approach
- Naval College Rd/The Wool Rd – additional approach lanes
- Princes Hwy/Browns Rd – upgrade to four leg roundabout
- Parma Rd turnaround facility
- George Evans Rd/Future Access
- Bunberra St/Coomea St
- Clifton St/Leumeah St
- BTU Rd/Albatross Rd
- Gemini Way/Seawinds
- Dolphin Pt Rd/Highview Rd
- Parsons St/Vincent St
- Quinns Ln/Southern Rd
- South St/Jubilee Ave
- Paradice Beach Rd/Kerry St
- Deering St/Jubilee St
- Northern Link Rd/Matron Porter Rd
- Princes Hwy/Dolphin Point Rd
- Princes Hwy/McDonald Parade
- Flinders Rd/Albatross Rd
- Flinders Rd/Service Rd

Traffic Signals:

- Kinghorne St/Worrigee St
- Princes Hwy/Junction St
- Brereton St/North St
- Brereton St/Junction St
- Princes Hwy/South St

Roading Projects:

- Flinders Rd to Browns Rd link
- Burrill Lake Princes Hwy upgrade

- Stage 2 Foxground and Berry Bypass involving:
    - Toolijooa Rd interchange
    - Austral Park Rd interchange
    - Tindalls Ln interchange
    - Berry northern interchange
    - Berry southern interchange
    - Schofields Ln junction
- Shoalhaven River Bridge design including changes to Bridge Rd, Pleasant Way, Illaroo Rd and Bolong Rd intersections

4.2.2 Future Links Option Network 001

Option 001 is an interim future network that encompasses most of the proposed future Nowra-Bomaderry road infrastructure but excludes the Western Bypass and associated interchanges. Major infrastructure changes to the network include those links highlighted in blue in Figure 4-3.

Again, each Option 001 future year network from 2021-2041 was sent through a series of distribution-assignment loops until the distribution of trips and flows on the base network converged into a consistent pattern that changed by less than 0.02%. This equated to have over 99% of all link volumes changing by less than 5% from one convergence iteration to another.

This convergence process allows the model to redistribute trips on the Option 001 network taking into account the additional network capacity created between areas. This may create interactions between areas that would not have occurred under do-minimum conditions.

Option 001 is based on the Do-minimum network but also includes the following network changes:

Roundabouts:

- Bells Ln/northern link road
- Bells Ln/Abernethys Ln
- Bells Ln/southern link road
- Abernethys Ln/northern link road
- Abernethys Ln/southern link road
- Moss Vale Rd/Abernethys Ln extension
- Moss Vale Rd/Main Rd
- Taylors Ln/Abernethys Ln extension
- Taylors Ln/western link road
- Taylors Ln/southern link road
- Illaroo Rd/southern link road
- Illaroo Rd/West Camberwarra Rd
- Junction St/ENSA
- North St/ENSA
- Plunkett St/ENSA
- Plunkett St/Junction St extension
- Warra Rd/Old Southern Rd extension

Traffic Signals:

- Yalwal Rd/Albatross Rd
- Greenwell Pt Rd/ENSA
- Moss Vale Rd/Bells Ln
- East St/Hawthorn Ave ext
- Brereton St/Moss St
- East St/North St
- East St/O'Keefe Ave
- North St/Moss St
- O'Keefe Ave/Junction St
- East St/Junction St – ban right turn N to W
- East St/Moss St – ban right turn S to E

Roading Projects:

- Full Moss Vale Road North precinct roading infrastructure. The location of the development infrastructure is shown in Figure 4-2.
- Local road connections – south Moss Vale Rd precinct
- ENSA
- Hillcrest Ave to Yalwal Road Sub Arterial (HYSA)

- Old Southern Rd link
- 4L Moss Vale Rd – Princes Hwy to north of Bells Ln
- 6L Princes Hwy - Cambewarra Rd to Warra Rd
- Shoalhaven River Bridge design including changes to Bridge Rd, Pleasant Way, Illaroo Rd and Bolong Rd intersections
- Stage 3 Foxground and Berry Bypass involving:
    - Strongs Rd overpass
    - Morschels Ln underpass
    - Latest updated Pestells Ln and Meroo Rd half interchange

4.2.3 Futures Links Option Network 002

Option 002 is a future network that encompasses all the proposed future Nowra-Bomaderry road infrastructure detailed in Option 001 and includes the Western Bypass and associated interchanges. The additional major infrastructure changes added in this network include those links highlighted in orange in Figure 4-3 as well as the proposed Milton-Ulladulla Bypass.

Again, each Option 002 future year network from 2021-2041 was sent through a series of distribution-assignment loops until the distribution of trips and flows on the base network converged into a consistent pattern that changed by less than 0.02%. This equated to have over 99% of all link volumes changing by less than 5% from one convergence iteration to another.

This convergence process again allows the model to redistribute trips on the Option 002 network taking into account the additional bypass capacity created between areas. This may create interactions between areas that would not have occurred under either the Do-minimum or Option 001 conditions.

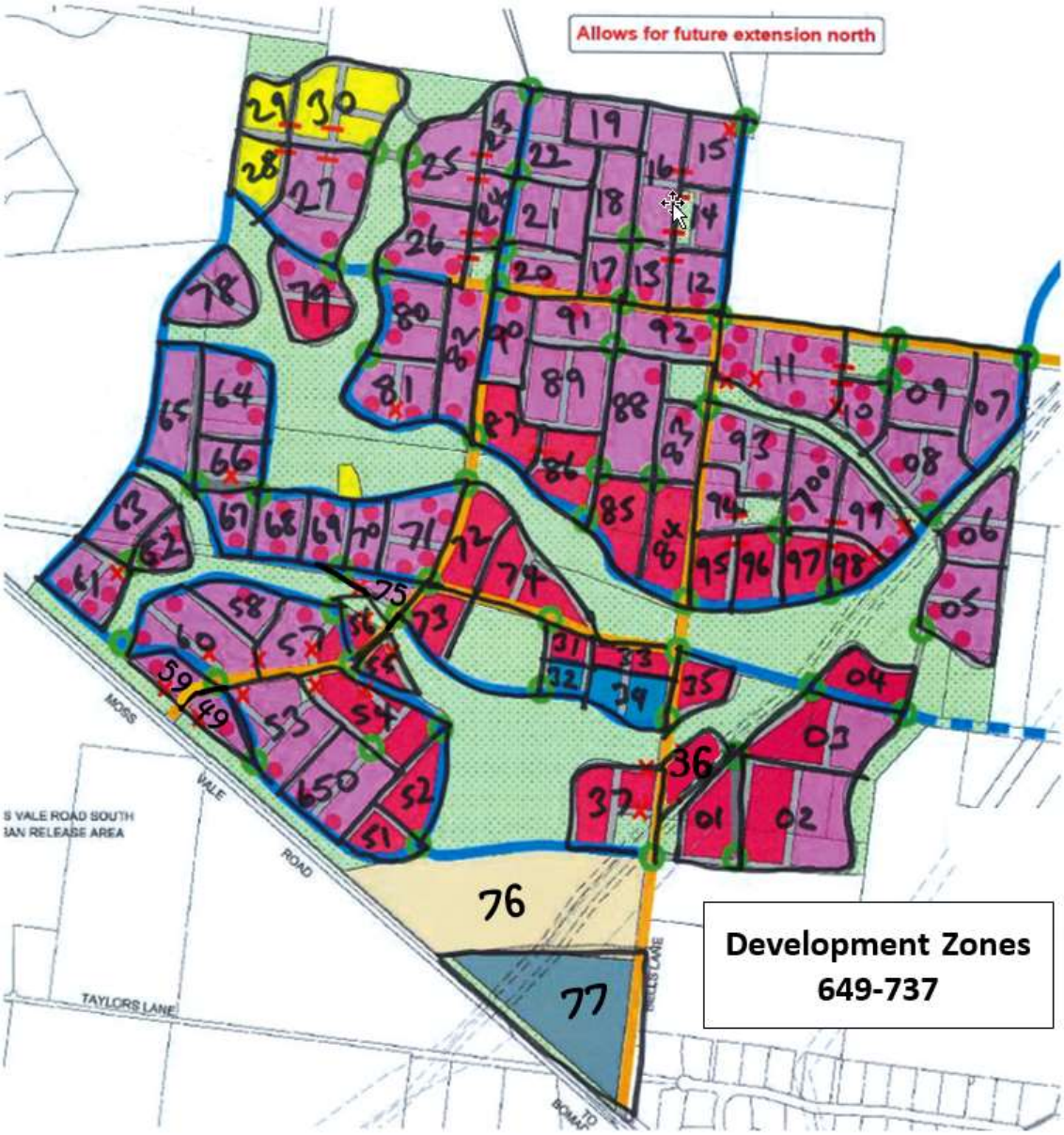
Option 002 is based on the Option 001 network but also includes the following intersection changes:

Roundabouts:

- Princes Hwy/Western Bypass On-ramp
- Princes Hwy/Western Bypass Off-ramp

Roading Projects:

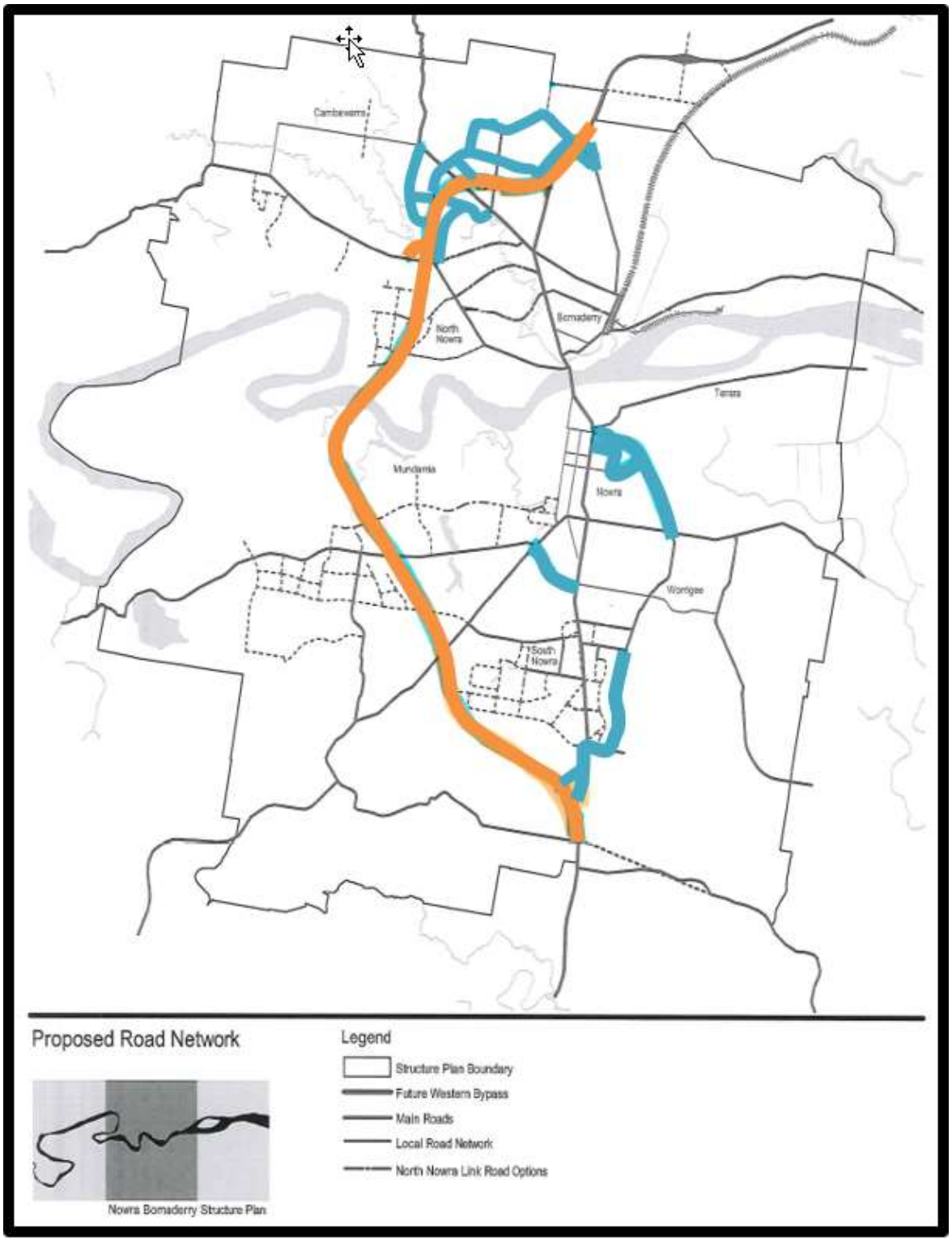
- Two lane Western Bypass from Abernathy's Ln to south of Warra Rd
- Western Bypass flyover at Princes Hwy-Abernathy's Ln
- Western Bypass interchange at Moss Vale Rd with full ramps on/off Moss Vale Rd
- Western Bypass flyover at Illaroo Rd
- Link road between Illaroo Rd and West Cambewarra Link Rd
- South facing on/off ramps at Illaroo Rd link road
- Western Bypass interchange at Yalwal Rd with full ramps on/off Yalwal Rd
- Western Bypass interchange at Albatross with full ramps on/off Albatross Rd
- Milton-Ulladulla Bypass, including connections back to the local road network as originally envisaged in the zoning of the current corridor



Stantec	MVRN Development Zone Structure	4-1



Stantec	MVRN Development Network In Model Surrounding	4-2


Cambewarra
North Nowra
Bomaderry
Terara
Mundamia
Nowra
Worrigee
South Nowra
Proposed Road Network
Nowra Bomaderry Structure Plan
Legend
Structure Plan Boundary
Future Western Bypass
Main Roads
Local Road Network
North Nowra Link Road Options

Appendix B: P3968.001T Moss Vale Road SIDRA Analysis Updates Technical Note

(*Moss Vale Road / Bells Lane / Far North Collector Road Signalised Intersection)*

Original Analysis Based on November 2018 TRACKS Models

Issue History

File Name	Prepared	Reviewed	Issued by	Date	Issued to
P3968.001T Moss Vale Road SIDRA Analysis Updates	A. Payne	L. Johnston	L. Johnston	24/01/2020	Micaiah Tipton Micaiah.Tipton@shoalhaven.nsw.gov.au

Moss Vale Road / Far North Collector Road Intersection

SIDRA Analysis Updates

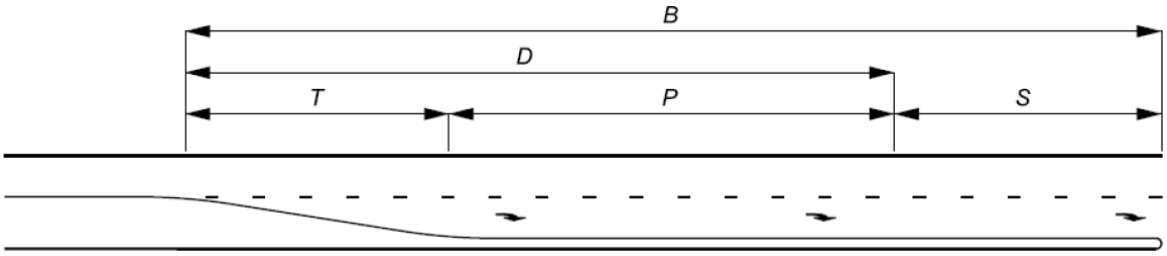
1. Introduction

Bitzios Consulting has been engaged by Shoalhaven City Council (Council) to undertake an updated SIDRA assessment of the proposed Moss Vale Road / Bells Lane / Far North Collector Road signalised intersection, Cambewarra. A detailed SIDRA analysis has previously been conducted by Bitzios Consulting (*P3968.002R Moss Vale Road SIDRA Assessment Report*). Roads and Maritime Services undertook a review of this previous assessment, with the following updates undertaken based on feedback from this review.

2. Model Development

2.1 Model Updates

Roads and Maritime requested that SIDRA models be updated with a posted speed of 90km/h on Moss Vale Road in both directions. Changes to posted speed limits impact required deceleration length (D) illustrated in Figure 2.1 below.



Source: Figure 5.1 Austroads Guide to Road Design Part 4A

Figure 2.1: Components of a Deceleration Turning Lane

It is also noted that the turn pocket length in SIDRA notates the length of lane available for vehicles to store in, equivalent to S + P in the above figure. Turn pocket lengths in the following assessment will therefore be updated to accommodate the required storage length (S) and deceleration length (D). Minimum required deceleration lengths (D) and taper lengths (T) are outlined in Table 2.1.

Table 2.1: Deceleration & Taper Lengths

Design Speed*	Minimum Deceleration Length (D)	Minimum Taper Length (T)
70	55	20
100	110	30

Note: Design speed is adopted as 10km/h faster than the posted speed limit

2.2 Methodology

2.2.1 Traffic Scenarios

Traffic volumes were adopted as per the previous assessments with Average Annual Daily Traffic (AADT) and 100th Highest Hour (100HH) intersection volumes assessed for the following years:

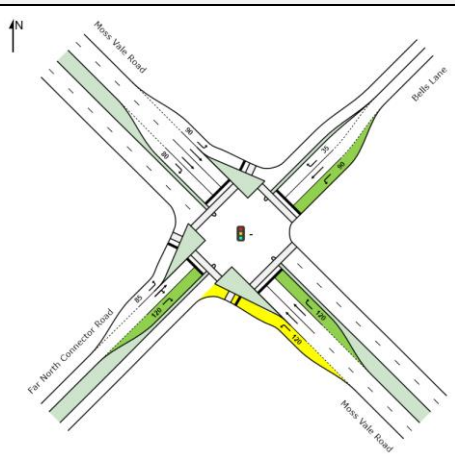
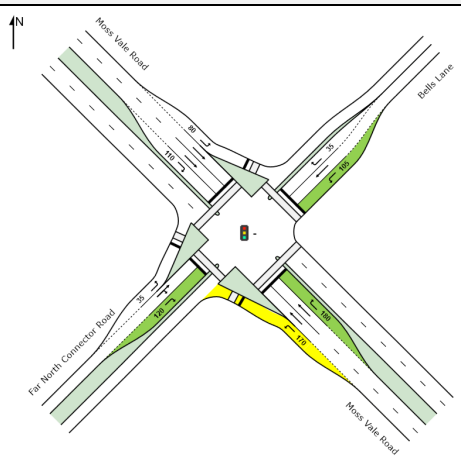
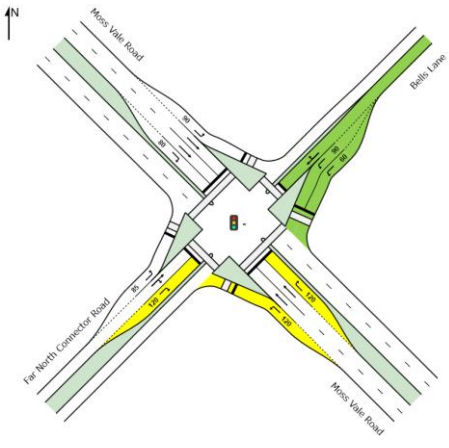
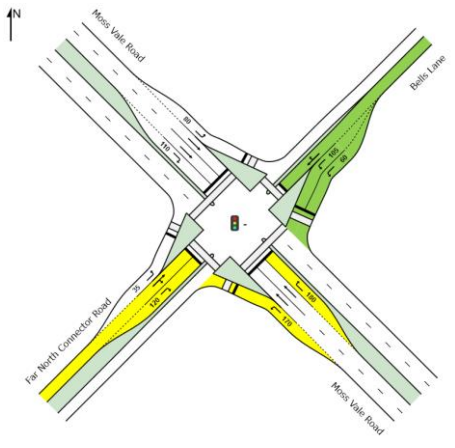
- 2021
- 2026
- 2031
- 2036
- 2041

Traffic volumes for these scenarios are provided at **Attachment A.**

2.2.2 Intersection Scenarios

As requested, the SIDRA analysis has been updated for the second iteration and ultimate form intersection arrangements. The SIDRA layouts of the previous and updated configurations are illustrated in Table 2.2.

Table 2.2: SIDRA Intersection Layouts

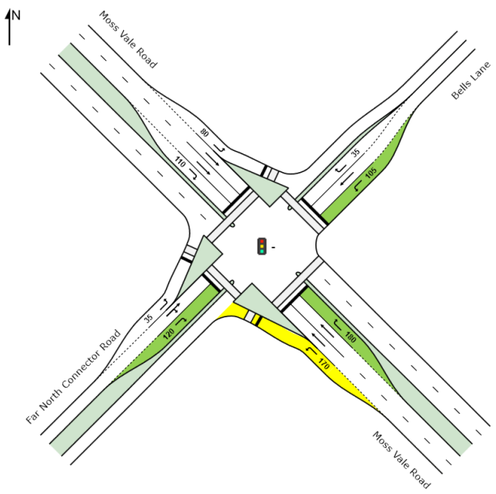
Scenario	Previous Configuration	Updated Configuration
Second Iteration		
Ultimate Form		

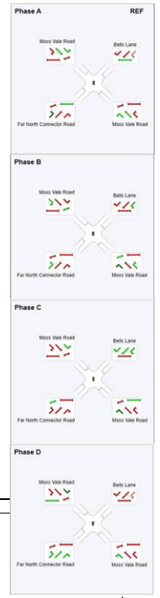
3. Findings

3.1 Model Outputs

Output sheets for each traffic and intersection scenario updated are provided overleaf.

Moss Vale Road / Far North Connector Road Signals - Second Iteration





Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model (Node #20725 November 2018 version).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.90 and 1.00; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021 (year of opening), 2026 (5-year design horizon), 2031 (10-year design horizon), 2036 (15-year design horizon), and 2041 (20-year design horizon).

Model Description

The traffic volumes represent the AM and PM peak hour for the average annual daily traffic volumes.

The intersection form is as per the previous assessment with modified turn pocket lengths and a 90km/h posted speed limit on Moss Vale Road

The signal phasing is diamond overlap turn phasing for the Moss Vale Road approaches, and split phasing for the Bells Lane and Far North Collector Road approaches.

Key Findings

The intersection reaches over-capacity in queuing in the ultimate year during AM peak hour in the AADT scenario . A total of two (2) movements are exceeded in the AADT AM peak: the Bells Lane left-turn movement and the Far North Collector Road right-turn movement short lanes are exceeded in the order of 30m.

The intersection remains within acceptable limits for saturation in the ultimate year.

Intersection Performance - Average Annual Daily Traffic

Year 2021 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	296	0.66	30	53	C
	Through	249	0.40	25	25	C
	Right	88	0.49	38	20	D
Bells Lane (NE)	Left	211	0.24	10	19	B
	Through	61	0.32	29	13	C
	Right	1	0.01	33	0	C
Moss Vale Road (NW)	Left	1	0.00	11	0	B
	Through	389	0.62	27	41	C
	Right	20	0.11	36	4	D
Far North Connector Road (SW)	Left	1	0.00	9	0	A
	Through	40	0.59	23	49	C
	Right	452	0.59	29	49	C
Intersection	**All**	**1809**	**0.33**	**26**	**53**	**C**

Year 2021 PM Peak Hour — Cycle Time: 50s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	486	0.41	10	20	A
	Through	401	0.66	24	37	C
	Right	160	0.74	35	32	C
Bells Lane (NE)	Left	96	0.10	9	6	A
	Through	47	0.21	23	8	C
	Right	1	0.01	27	0	C
Moss Vale Road (NW)	Left	1	0.00	12	0	B
	Through	445	0.74	25	43	C
	Right	64	0.30	31	11	C
Far North Connector Road (SW)	Left	1	0.00	10	0	B
	Through	49	0.65	25	27	C
	Right	232	0.65	31	27	C
Intersection	**All**	**1984**	**0.74**	**22**	**43**	**C**

Year 2026 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	334	0.27	9	12	A
	Through	251	0.40	25	25	C
	Right	152	0.73	39	35	D
Bells Lane (NE)	Left	255	0.29	11	25	B
	Through	77	0.41	30	17	C
	Right	1	0.01	33	0	C
Moss Vale Road (NW)	Left	1	0.00	12	0	B
	Through	422	0.67	28	46	C
	Right	19	0.09	35	4	C
Far North Connector Road (SW)	Left	1	0.00	9	0	A
	Through	61	0.68	25	57	C
	Right	469	0.68	31	57	C
Intersection	**All**	**2042**	**0.73**	**24**	**57**	**C**

Year 2026 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	518	0.42	10	25	B
	Through	402	0.53	24	40	C
	Right	207	0.69	36	46	D
Bells Lane (NE)	Left	141	0.15	9	11	A
	Through	77	0.41	30	17	C
	Right	1	0.01	33	0	C
Moss Vale Road (NW)	Left	1	0.00	13	0	B
	Through	496	0.66	26	52	C
	Right	55	0.18	32	11	C
Far North Connector Road (SW)	Left	1	0.00	10	0	A
	Through	62	0.65	29	35	C
	Right	249	0.65	35	35	C
Intersection	**All**	**2211**	**0.69**	**23**	**52**	**C**

Year 2031 AM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	380	0.30	9	18	A
	Through	293	0.27	21	29	C
	Right	169	0.74	43	45	D
Bells Lane (NE)	Left	271	0.35	15	38	B
	Through	93	0.57	36	24	D
	Right	1	0.01	38	0	D
Moss Vale Road (NW)	Left	1	0.00	12	0	B
	Through	832	0.77	28	104	C
	Right	46	0.20	39	11	D
Far North Connector Road (SW)	Left	1	0.00	9	0	A
	Through	67	0.77	35	59	C
	Right	369	0.77	41	59	D
Intersection	**All**	**2523**	**0.77**	**27**	**104**	**C**

Year 2031 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	601	0.50	10	35	A
	Through	503	0.67	26	53	C
	Right	259	0.79	38	61	D
Bells Lane (NE)	Left	167	0.18	10	15	B
	Through	87	0.46	30	19	C
	Right	1	0.01	33	0	C
Moss Vale Road (NW)	Left	1	0.00	13	0	B
	Through	600	0.79	29	70	C
	Right	72	0.22	31	14	C
Far North Connector Road (SW)	Left	2	0.00	10	0	B
	Through	75	0.82	34	43	C
	Right	271	0.82	40	43	D
Intersection	**All**	**2639**	**0.82**	**25**	**70**	**C**

Year 2036 AM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	444	0.37	10	27	A
	Through	308	0.38	26	34	C
	Right	184	0.80	45	51	D
Bells Lane (NE)	Left	366	0.48	17	61	B
	Through	109	0.68	37	29	D
	Right	1	0.01	38	0	D
Moss Vale Road (NW)	Left	1	0.00	12	0	B
	Through	675	0.83	35	94	C
	Right	71	0.31	39	17	D
Far North Connector Road (SW)	Left	6	0.01	8	0	A
	Through	81	0.82	34	93	C
	Right	597	0.82	40	93	D
Intersection	**All**	**2844**	**0.83**	**29**	**93**	**C**

Year 2036 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	639	0.55	10	43	B
	Through	544	0.79	30	63	C
	Right	280	0.85	41	70	D
Bells Lane (NE)	Left	183	0.20	12	18	B
	Through	98	0.52	30	22	C
	Right	1	0.01	33	0	C
Moss Vale Road (NW)	Left	1	0.00	13	0	B
	Through	633	0.91	40	88	D
	Right	92	0.28	32	18	C
Far North Connector Road (SW)	Left	15	0.02	10	1	A
	Through	91	0.91	40	60	D
	Right	347	0.91	46	60	D
Intersection	**All**	**2923**	**0.91**	**30**	**88**	**C**

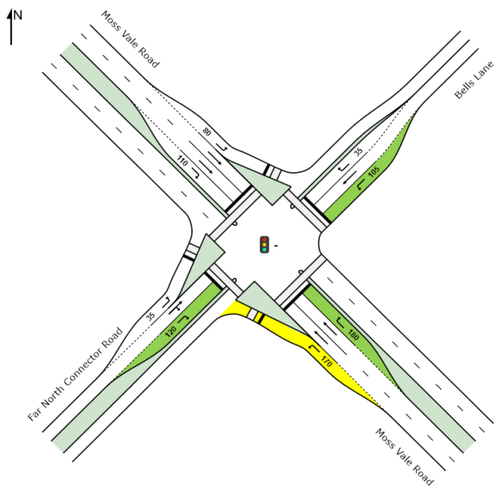
Year 2041 AM Peak Hour — Cycle Time: 90s

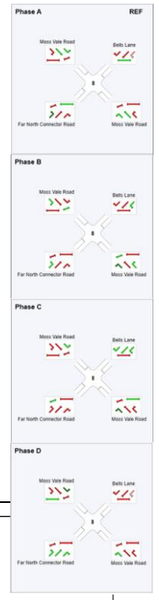
Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	427	0.37	11	38	B
	Through	298	0.42	36	43	D
	Right	179	0.75	52	60	D
Bells Lane (NE)	Left	594	0.71	25	118	C
	Through	220	0.70	41	70	D
	Right	1	0.00	39	0	D
Moss Vale Road (NW)	Left	1	0.00	12	0	B
	Through	615	0.86	47	111	D
	Right	52	0.22	47	15	D
Far North Connector Road (SW)	Left	6	0.01	10	1	B
	Through	137	0.89	47	146	D
	Right	642	0.89	43	146	D
Intersection	**All**	**3172**	**0.89**	**38**	**146**	**D**

Year 2041 PM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	639	0.56	11	59	B
	Through	578	0.71	30	72	C
	Right	259	0.84	45	74	D
Bells Lane (NE)	Left	176	0.20	13	21	B
	Through	163	0.86	42	48	D
	Right	1	0.01	37	0	D
Moss Vale Road (NW)	Left	1	0.00	14	0	B
	Through	646	0.80	33	86	C
	Right	94	0.31	36	21	D
Far North Connector Road (SW)	Left	15	0.02	9	1	A
	Through	173	0.87	40	80	D
	Right	368	0.87	45	80	D
Intersection	**All**	**3113**	**0.87**	**30**	**86**	**C**

Moss Vale Road / Far North Connector Road Signals - Second Iteration





Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model (Node #20725 November 2018 version).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.90 and 1.00; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
- the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021 (year of opening), 2026 (5-year design horizon), 2031 (10-year design horizon), 2036 (15-year design horizon), and 2041 (20-year design horizon).

Model Description

The traffic volumes represent the annual 100th highest hour for each AM and PM peak hour.

The intersection form is as per the previous assessment with modifed turn pokcet lengths and a 90km/h posted speed limit on Moss Vale Road

The signal phasing is diamond overlap turn phasing for the Moss Vale Road approaches, and split phasing for the Bells Lane and Far North Collector Road approaches.

Key Findings

The intersection reaches capacity by 2036 during the PM peak in the 100HH scenario.

The intersection remains within acceptable limits for saturation in the ultimate year.

Intersection Performance - 100th Highest Hour

Year 2021 AM Peak Hour — Cycle Time: 50s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	259	0.21	9	8	A
	Through	238	0.39	22	20	C
	Right	72	0.33	31	13	C
Bells Lane (NE)	Left	114	0.12	9	7	A
	Through	34	0.15	23	6	C
	Right	1	0.01	27	0	C
Moss Vale Road (NW)	Left	1	0.00	12	0	B
	Through	334	0.55	22	29	C
	Right	19	0.09	30	3	C
Far North Connector Road (SW)	Left	1	0.00	10	0	A
	Through	31	0.84	30	38	C
	Right	331	0.84	35	38	D
Intersection	**All**	**1433**	**0.84**	**22**	**38**	**C**

Year 2021 PM Peak Hour — Cycle Time: 50s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	497	0.42	10	23	A
	Through	466	0.77	26	46	C
	Right	107	0.50	32	20	C
Bells Lane (NE)	Left	91	0.10	9	6	A
	Through	46	0.20	23	8	C
	Right	1	0.01	27	0	C
Moss Vale Road (NW)	Left	1	0.00	12	0	B
	Through	515	0.85	29	55	C
	Right	76	0.35	31	14	C
Far North Connector Road (SW)	Left	1	0.00	10	0	B
	Through	39	0.69	26	29	C
	Right	260	0.69	32	29	C
Intersection	**All**	**2100**	**0.85**	**23**	**55**	**C**

Year 2026 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	313	0.75	33	60	C
	Through	243	0.43	26	25	C
	Right	145	0.61	36	32	D
Bells Lane (NE)	Left	247	0.27	10	22	B
	Through	69	0.37	29	15	C
	Right	1	0.01	33	0	C
Moss Vale Road (NW)	Left	1	0.00	10	0	B
	Through	374	0.66	28	41	C
	Right	18	0.08	33	4	C
Far North Connector Road (SW)	Left	1	0.00	9	0	A
	Through	56	0.65	25	53	C
	Right	449	0.65	30	53	C
Intersection	**All**	**1918**	**0.75**	**28**	**60**	**C**

Year 2026 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	612	0.51	10	36	A
	Through	485	0.64	25	51	C
	Right	232	0.78	38	54	D
Bells Lane (NE)	Left	176	0.19	10	16	B
	Through	91	0.48	30	20	C
	Right	1	0.01	33	0	C
Moss Vale Road (NW)	Left	1	0.00	13	0	B
	Through	593	0.78	29	68	C
	Right	65	0.22	32	13	C
Far North Connector Road (SW)	Left	1	0.00	9	0	A
	Through	72	0.76	31	43	C
	Right	294	0.76	37	43	D
Intersection	**All**	**2621**	**0.78**	**24**	**68**	**C**

Year 2031 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	358	0.29	9	15	A
	Through	284	0.41	24	28	C
	Right	163	0.78	40	39	D
Bells Lane (NE)	Left	283	0.34	13	32	B
	Through	85	0.45	30	19	C
	Right	1	0.01	33	0	C
Moss Vale Road (NW)	Left	1	0.00	12	0	B
	Through	575	0.83	32	70	C
	Right	42	0.20	35	9	D
Far North Connector Road (SW)	Left	1	0.00	9	0	A
	Through	61	0.80	30	68	C
	Right	515	0.80	35	68	D
Intersection	**All**	**2369**	**0.83**	**27**	**70**	**C**

Year 2031 PM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	696	0.58	11	55	B
	Through	594	0.69	28	72	C
	Right	288	0.80	42	78	D
Bells Lane (NE)	Left	185	0.21	12	22	B
	Through	101	0.62	37	27	D
	Right	1	0.01	38	0	D
Moss Vale Road (NW)	Left	1	0.00	14	0	B
	Through	731	0.85	35	103	D
	Right	92	0.26	34	20	C
Far North Connector Road (SW)	Left	1	0.00	9	0	A
	Through	86	0.79	36	57	D
	Right	323	0.79	42	57	D
Intersection	**All**	**3099**	**0.85**	**28**	**103**	**C**

Year 2036 AM Peak Hour — Cycle Time: 80s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	432	0.34	10	26	A
	Through	308	0.26	22	33	C
	Right	181	0.73	47	54	D
Bells Lane (NE)	Left	279	0.37	16	47	B
	Through	99	0.70	43	31	D
	Right	1	0.01	44	0	D
Moss Vale Road (NW)	Left	1	0.00	12	0	B
	Through	855	0.72	28	113	C
	Right	65	0.27	42	17	D
Far North Connector Road (SW)	Left	6	0.01	9	0	A
	Through	73	0.71	36	66	D
	Right	378	0.71	42	66	D
Intersection	**All**	**2678**	**0.73**	**27**	**110**	**C**

Year 2036 PM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	726	0.62	11	68	B
	Through	634	0.73	30	79	C
	Right	308	0.93	55	101	E
Bells Lane (NE)	Left	197	0.23	14	25	B
	Through	114	0.70	38	31	D
	Right	1	0.01	38	0	D
Moss Vale Road (NW)	Left	1	0.00	14	0	B
	Through	766	0.89	39	116	D
	Right	116	0.35	36	26	D
Far North Connector Road (SW)	Left	18	0.02	9	1	A
	Through	104	0.90	43	79	D
	Right	405	0.90	49	79	D
Intersection	**All**	**3391**	**0.93**	**32**	**116**	**C**

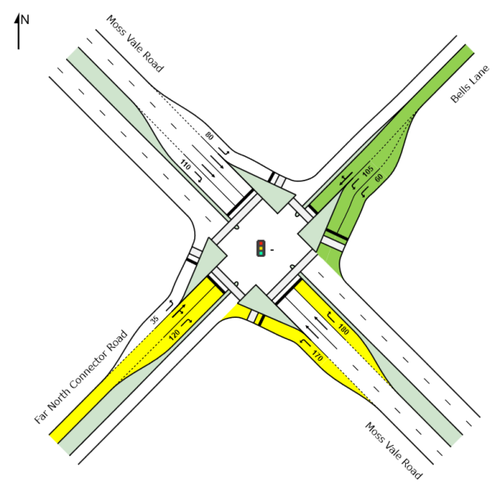
Year 2041 AM Peak Hour — Cycle Time: 80s

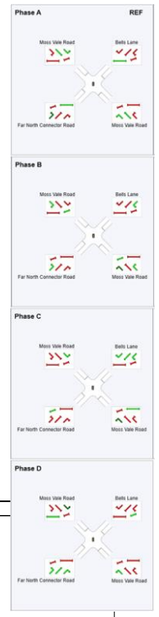
Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	425	0.37	11	34	B
	Through	303	0.40	31	39	C
	Right	182	0.90	58	63	E
Bells Lane (NE)	Left	429	0.55	20	81	B
	Through	196	0.83	44	62	D
	Right	1	0.01	39	0	D
Moss Vale Road (NW)	Left	1	0.00	12	0	B
	Through	597	0.79	37	90	D
	Right	63	0.31	45	18	D
Far North Connector Road (SW)	Left	6	0.01	10	1	A
	Through	125	0.78	33	108	C
	Right	614	0.78	39	108	D
Intersection	**All**	**2943**	**0.90**	**32**	**108**	**C**

Year 2041 PM Peak Hour — Cycle Time: 90s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	709	0.62	13	93	B
	Through	631	0.75	38	101	D
	Right	284	0.89	59	108	E
Bells Lane (NE)	Left	233	0.28	17	42	B
	Through	192	0.83	49	68	D
	Right	1	0.01	43	0	D
Moss Vale Road (NW)	Left	1	0.00	14	0	B
	Through	729	0.87	46	132	D
	Right	114	0.36	44	33	D
Far North Connector Road (SW)	Left	19	0.02	10	2	B
	Through	207	0.86	46	117	D
	Right	444	0.86	51	117	D
Intersection	**All**	**3564**	**0.89**	**38**	**132**	**D**

Moss Vale Road / Far North Connector Road Signals - Ultimate Form





Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model (Node #20725 November 2018 version).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.90 and 1.00; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021 (year of opening), 2026 (5-year design horizon), 2031 (10-year design horizon), 2036 (15-year design horizon), and 2041 (20-year design horizon).

Model Description

The traffic volumes represent the AM and PM peak hour for the average annual daily traffic volumes.

The intersection form is as per the previous assessment with modified turn pocket lengths and a posted speed limit of 90km/h on Moss Vale Road.

The signal phasing is diamond overlap turn phasing for the Moss Vale Road approaches, and split phasing for the Bells Lane and Far North Collector Road approaches.

Key Findings

The intersection rdoes not exceed acceptable limits at the year 2041.

Intersection Performance - Average Annual Daily Traffic

Year 2021 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	296	0.24	9	10	A
	Through	249	0.40	25	25	C
	Right	88	0.49	38	20	D
Bells Lane (NE)	Left	211	0.20	23	17	C
	Through	61	0.33	29	13	C
	Right	1	0.33	35	13	C
Moss Vale Road (NW)	Left	1	0.00	11	0	B
	Through	389	0.62	27	41	C
	Right	20	0.11	36	4	D
Far North Connector Road (SW)	Left	1	0.00	9	0	A
	Through	40	0.59	23	49	C
	Right	452	0.59	29	49	C
Intersection	**All**	**1809**	**0.62**	**24**	**49**	**C**

Year 2021 PM Peak Hour — Cycle Time: 50s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	486	0.41	10	20	A
	Through	401	0.66	24	37	C
	Right	160	0.74	35	32	C
Bells Lane (NE)	Left	96	0.07	17	6	B
	Through	47	0.21	23	8	C
	Right	1	0.21	29	8	C
Moss Vale Road (NW)	Left	1	0.00	12	0	B
	Through	445	0.74	25	43	C
	Right	64	0.30	31	11	C
Far North Connector Road (SW)	Left	1	0.00	10	0	B
	Through	49	0.65	25	27	C
	Right	232	0.65	31	27	C
Intersection	**All**	**1984**	**0.74**	**22**	**43**	**C**

Year 2026 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	334	0.27	9	12	A
	Through	251	0.40	25	25	C
	Right	152	0.73	39	35	D
Bells Lane (NE)	Left	255	0.22	22	21	C
	Through	77	0.41	30	17	C
	Right	1	0.41	35	17	D
Moss Vale Road (NW)	Left	1	0.00	12	0	B
	Through	422	0.67	28	46	C
	Right	19	0.09	35	4	C
Far North Connector Road (SW)	Left	1	0.00	9	0	A
	Through	61	0.68	25	57	C
	Right	469	0.68	31	57	C
Intersection	**All**	**2042**	**0.73**	**25**	**57**	**C**

Year 2026 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	518	0.42	10	25	A
	Through	402	0.53	24	40	C
	Right	207	0.69	36	46	D
Bells Lane (NE)	Left	141	0.11	19	10	B
	Through	77	0.41	30	17	C
	Right	1	0.41	35	17	D
Moss Vale Road (NW)	Left	1	0.00	13	0	B
	Through	496	0.66	26	52	C
	Right	55	0.18	32	11	C
Far North Connector Road (SW)	Left	1	0.00	10	0	A
	Through	62	0.65	29	35	C
	Right	249	0.65	35	35	C
Intersection	**All**	**2211**	**0.69**	**24**	**52**	**C**

Year 2031 AM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	380	0.30	9	18	A
	Through	293	0.27	21	29	C
	Right	169	0.74	43	45	D
Bells Lane (NE)	Left	271	0.23	26	26	C
	Through	93	0.58	36	25	D
	Right	1	0.58	42	25	D
Moss Vale Road (NW)	Left	1	0.00	12	0	B
	Through	832	0.77	28	104	C
	Right	46	0.20	39	11	D
Far North Connector Road (SW)	Left	1	0.00	9	0	A
	Through	67	0.77	35	59	C
	Right	369	0.77	41	59	D
Intersection	**All**	**2523**	**0.77**	**28**	**104**	**C**

Year 2031 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	601	0.50	10	35	A
	Through	503	0.67	26	53	C
	Right	259	0.79	38	61	D
Bells Lane (NE)	Left	167	0.12	19	12	B
	Through	87	0.47	30	19	C
	Right	1	0.47	35	19	D
Moss Vale Road (NW)	Left	1	0.00	13	0	B
	Through	600	0.79	29	70	C
	Right	72	0.22	31	14	C
Far North Connector Road (SW)	Left	2	0.00	10	0	B
	Through	75	0.82	34	43	C
	Right	271	0.82	40	43	D
Intersection	**All**	**2639**	**0.82**	**26**	**70**	**C**

Year 2036 AM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	444	0.37	10	27	A
	Through	308	0.38	26	34	C
	Right	184	0.80	45	51	D
Bells Lane (NE)	Left	366	0.34	27	36	C
	Through	109	0.68	37	30	D
	Right	1	0.68	43	30	D
Moss Vale Road (NW)	Left	1	0.00	12	0	B
	Through	675	0.83	35	94	C
	Right	71	0.31	39	17	D
Far North Connector Road (SW)	Left	6	0.01	8	0	A
	Through	81	0.82	34	93	C
	Right	597	0.82	40	93	D
Intersection	**All**	**2844**	**0.83**	**31**	**94**	**C**

Year 2036 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	639	0.55	10	43	B
	Through	544	0.79	30	63	C
	Right	280	0.85	41	70	D
Bells Lane (NE)	Left	183	0.13	19	13	B
	Through	98	0.52	30	22	C
	Right	1	0.52	36	22	D
Moss Vale Road (NW)	Left	1	0.00	13	0	B
	Through	633	0.91	40	88	D
	Right	92	0.28	32	18	C
Far North Connector Road (SW)	Left	15	0.02	10	1	A
	Through	91	0.91	40	60	D
	Right	347	0.91	46	60	D
Intersection	**All**	**2923**	**0.91**	**30**	**88**	**C**

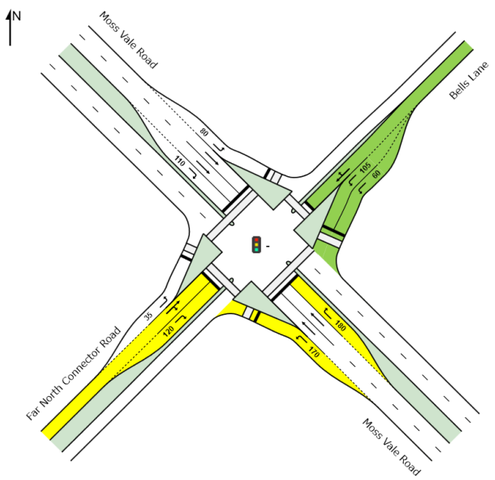
Year 2041 AM Peak Hour — Cycle Time: 80s

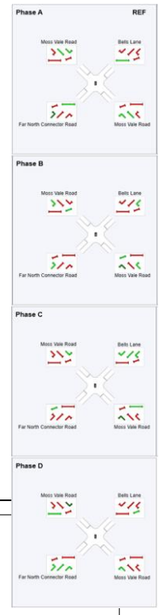
Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	427	0.37	11	36	B
	Through	298	0.42	32	39	C
	Right	179	0.89	57	61	E
Bells Lane (NE)	Left	594	0.51	30	70	C
	Through	220	0.85	44	72	D
	Right	1	0.85	50	72	D
Moss Vale Road (NW)	Left	1	0.00	12	0	B
	Through	615	0.87	43	101	D
	Right	52	0.26	44	14	D
Far North Connector Road (SW)	Left	6	0.01	10	1	B
	Through	137	0.82	36	119	D
	Right	642	0.82	42	119	D
Intersection	**All**	**3172**	**0.89**	**35**	**119**	**D**

Year 2041 PM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	639	0.56	11	59	B
	Through	578	0.71	30	72	C
	Right	259	0.84	45	74	D
Bells Lane (NE)	Left	176	0.14	22	15	C
	Through	163	0.87	42	48	D
	Right	1	0.87	48	48	D
Moss Vale Road (NW)	Left	1	0.00	14	0	B
	Through	646	0.80	33	86	C
	Right	94	0.31	36	21	D
Far North Connector Road (SW)	Left	15	0.02	9	1	A
	Through	173	0.87	40	80	D
	Right	368	0.87	45	80	D
Intersection	**All**	**3113**	**0.87**	**31**	**86**	**C**

Moss Vale Road / Far North Connector Road Signals - Ultimate Form





Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model (Node #20725 November 2018 version).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.90 and 1.00; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021 (year of opening), 2026 (5-year design horizon), 2031 (10-year design horizon), 2036 (15-year design horizon), and 2041 (20-year design horizon).

Model Description

The traffic volumes represent the annual 100th highest hour for each AM and PM peak hour.

The intersection form is as per the previous assersment with modified turn pocket lengths and a posted speed limit of 90km/h on Moss Vale Road

The signal phasing is diamond overlap turn phasing for the Moss Vale Road approaches, and split phasing for the Bells Lane and Far North Collector Road approaches.

Key Findings

The intersection reaches saturation capacity by the year 2036, however vehicle queus and delays do not exceed acceptable limits by 2041.

Intersection Performance - 100th Highest Hour

Year 2021 AM Peak Hour — Cycle Time: 50s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	259	0.21	9	8	A
	Through	238	0.39	22	20	C
	Right	72	0.33	31	13	C
Bells Lane (NE)	Left	114	0.09	17	7	B
	Through	34	0.15	23	6	C
	Right	1	0.15	28	6	C
Moss Vale Road (NW)	Left	1	0.00	12	0	B
	Through	334	0.63	22	29	C
	Right	19	0.09	30	3	C
Far North Connector Road (SW)	Left	1	0.00	10	0	A
	Through	31	0.84	30	38	C
	Right	331	0.84	35	38	D
Intersection	**All**	**1433**	**0.84**	**23**	**38**	**C**

Year 2031 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	358	0.29	9	15	A
	Through	284	0.41	24	28	C
	Right	163	0.78	40	39	D
Bells Lane (NE)	Left	283	0.25	22	23	C
	Through	85	0.46	30	19	C
	Right	1	0.46	35	19	D
Moss Vale Road (NW)	Left	1	0.00	12	0	B
	Through	575	0.83	32	70	C
	Right	42	0.20	35	9	D
Far North Connector Road (SW)	Left	1	0.00	9	0	A
	Through	61	0.80	30	68	C
	Right	515	0.80	35	68	D
Intersection	**All**	**2369**	**0.83**	**28**	**70**	**C**

Year 2041 AM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	425	0.37	11	32	B
	Through	303	0.43	28	35	C
	Right	182	0.89	51	55	D
Bells Lane (NE)	Left	429	0.38	26	43	C
	Through	196	0.91	46	61	D
	Right	1	0.91	52	61	D
Moss Vale Road (NW)	Left	1	0.00	12	0	B
	Through	597	0.85	37	85	D
	Right	63	0.31	40	15	D
Far North Connector Road (SW)	Left	6	0.01	10	1	A
	Through	125	0.84	35	104	C
	Right	614	0.84	40	104	D
Intersection	**All**	**2943**	**0.91**	**33**	**104**	**C**

Year 2021 PM Peak Hour — Cycle Time: 50s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	497	0.72	10	23	A
	Through	466	0.77	26	46	C
	Right	107	0.50	32	20	C
Bells Lane (NE)	Left	91	0.07	17	5	B
	Through	46	0.21	23	8	C
	Right	1	0.21	29	8	C
Moss Vale Road (NW)	Left	1	0.00	12	0	B
	Through	515	0.85	29	55	C
	Right	76	0.35	31	14	C
Far North Connector Road (SW)	Left	1	0.00	10	0	B
	Through	39	0.69	26	29	C
	Right	260	0.69	32	29	C
Intersection	**All**	**2100**	**0.85**	**24**	**55**	**C**

Year 2031 PM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	696	0.58	11	55	B
	Through	594	0.69	28	72	C
	Right	288	0.80	42	78	D
Bells Lane (NE)	Left	185	0.14	21	15	C
	Through	101	0.63	37	27	D
	Right	1	0.63	42	27	D
Moss Vale Road (NW)	Left	1	0.00	14	0	B
	Through	731	0.85	35	103	D
	Right	92	0.26	34	20	C
Far North Connector Road (SW)	Left	1	0.00	9	0	A
	Through	86	0.79	36	57	D
	Right	323	0.79	42	57	D
Intersection	**All**	**3099**	**0.85**	**29**	**103**	**C**

Year 2041 PM Peak Hour — Cycle Time: 80s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	709	0.63	13	86	B
	Through	631	0.79	36	94	D
	Right	284	0.91	57	100	E
Bells Lane (NE)	Left	233	0.18	24	23	C
	Through	192	0.91	51	67	D
	Right	1	0.91	56	67	E
Moss Vale Road (NW)	Left	1	0.00	14	0	B
	Through	729	0.91	48	129	D
	Right	114	0.36	40	30	D
Far North Connector Road (SW)	Left	19	0.02	10	2	B
	Through	207	0.90	48	114	D
	Right	444	0.90	53	114	D
Intersection	**All**	**3564**	**0.91**	**38**	**129**	**D**

Year 2026 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	313	0.25	9	11	A
	Through	243	0.43	26	25	C
	Right	145	0.61	36	32	D
Bells Lane (NE)	Left	247	0.21	21	19	C
	Through	69	0.37	29	15	C
	Right	1	0.37	35	15	C
Moss Vale Road (NW)	Left	1	0.00	12	0	B
	Through	374	0.66	28	41	C
	Right	18	0.08	33	4	C
Far North Connector Road (SW)	Left	1	0.00	9	0	A
	Through	56	0.65	25	53	C
	Right	449	0.65	30	53	C
Intersection	**All**	**1918**	**0.66**	**25**	**53**	**C**

Year 2036 AM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	432	0.34	10	26	A
	Through	308	0.26	22	33	C
	Right	181	0.73	47	54	D
Bells Lane (NE)	Left	279	0.27	30	31	C
	Through	99	0.71	43	31	D
	Right	1	0.71	49	31	D
Moss Vale Road (NW)	Left	1	0.00	12	0	B
	Through	855	0.72	28	113	C
	Right	65	0.27	42	17	D
Far North Connector Road (SW)	Left	6	0.01	9	0	A
	Through	73	0.71	36	66	D
	Right	378	0.71	42	66	D
Intersection	**All**	**2678**	**0.73**	**29**	**113**	**C**

Year 2026 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	612	0.51	10	36	A
	Through	485	0.64	25	51	C
	Right	232	0.78	38	54	D
Bells Lane (NE)	Left	176	0.13	19	13	B
	Through	91	0.49	30	20	C
	Right	1	0.49	35	20	D
Moss Vale Road (NW)	Left	1	0.00	13	0	B
	Through	593	0.78	29	68	C
	Right	65	0.22	32	13	C
Far North Connector Road (SW)	Left	1	0.00	9	0	A
	Through	72	0.76	31	43	C
	Right	294	0.76	37	43	D
Intersection	**All**	**2621**	**0.78**	**25**	**68**	**C**

Year 2036 PM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	726	0.62	11	68	C
	Through	634	0.73	30	79	C
	Right	308	0.93	55	101	D
Bells Lane (NE)	Left	197	0.15	22	17	C
	Through	114	0.71	38	31	D
	Right	1	0.71	43	31	D
Moss Vale Road (NW)	Left	1	0.00	14	0	B
	Through	766	0.89	39	116	D
	Right	116	0.35	36	26	C
Far North Connector Road (SW)	Left	18	0.02	9	1	B
	Through	104	0.90	43	79	D
	Right	405	0.90	49	79	D
Intersection	**All**	**3391**	**0.93**	**33**	**116**	**C**

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3.2 Second Iteration

The second iteration intersection is expected to reach capacity at the year 2036 in both the AADT and 100HH scenarios. By 2041 queue lengths are expected to exceed turn pocket lengths in the AADT scenarios. It is therefore recommended that the intersection be upgraded to its ultimate form by the year 2036.

3.3 Ultimate Intersection Form

The ultimate form intersection is expected to reach capacity by the year 2041. It is however noted that overall intersection delays at 2041 are considered acceptable and expected vehicle queues are contained within proposed turn pocket lengths.

3.4 Results Summary

A summary of the SIDRA analysis is provided in Table 3.1. Detailed SIDRA outputs are provided at **Attachment B**.

Table 3.1: Results Summary

Intersection Scenario	Model Year				
	2021	2026	2031	2036	2041
Second Iteration	Under	Under	Under	Capacity	Over
Ultimate Form	Under	Under	Under	Capacity	Capacity

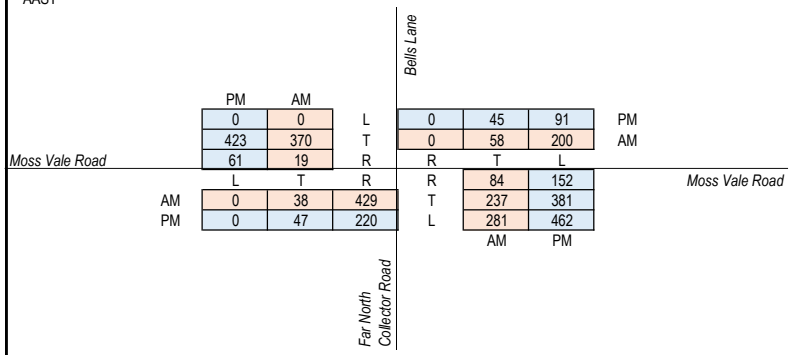
4. Conclusion

The key findings of the updates SIDRA analysis for the proposed Moss Vale Road / Bells Lane / Far North Collector Road signalised intersection are as follows:

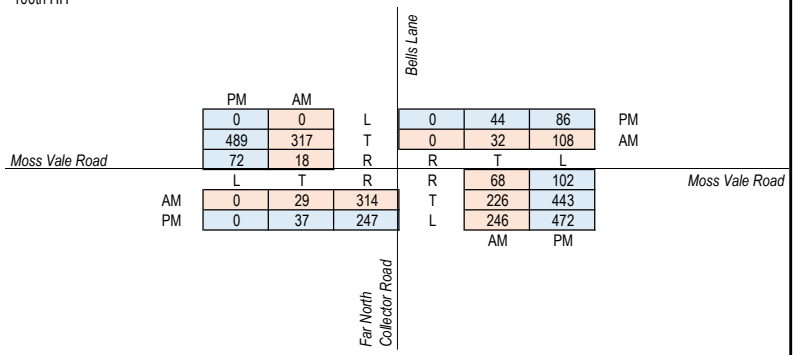
- The updated posted speed limit of 90km/h on Moss Vale Road had minimal impact on intersection performance. However, turn pocket lengths were required to be lengthened to provide sufficient vehicle storage and deceleration
- The modified second iteration intersection proposed is expected to cater for forecast traffic volumes until the year 2036
- The modified ultimate intersection form is expected to cater for forecast traffic volumes at the ear 2041.

Attachment A: Traffic Volumes

AAST



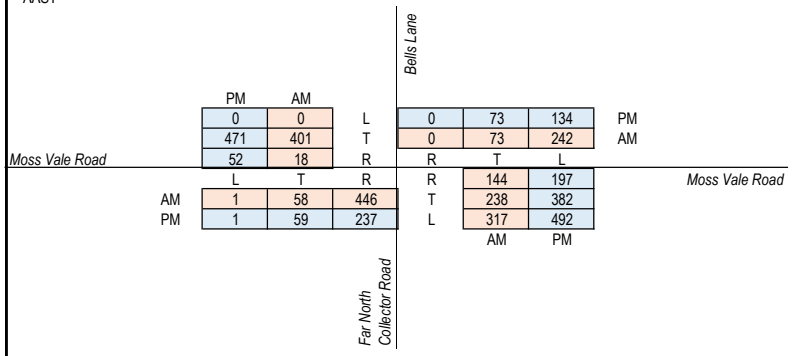
100th HH



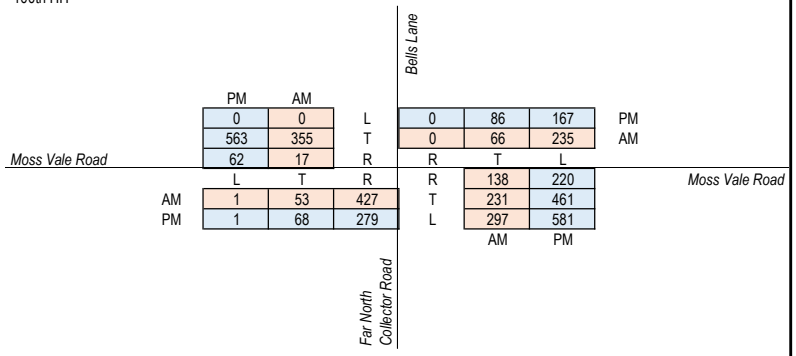
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Sheet: **Year 2021 TRACKS Traffic Volumes**
Sheet 1 of 5
Project: Moss Vale Road SIDRA Assessment
Project Number: P3968

AAST



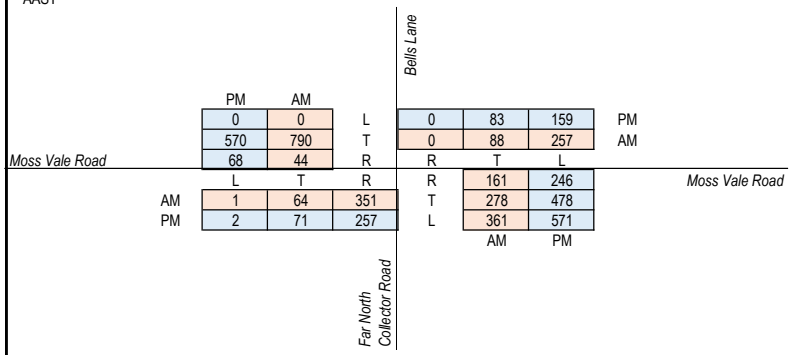
100th HH



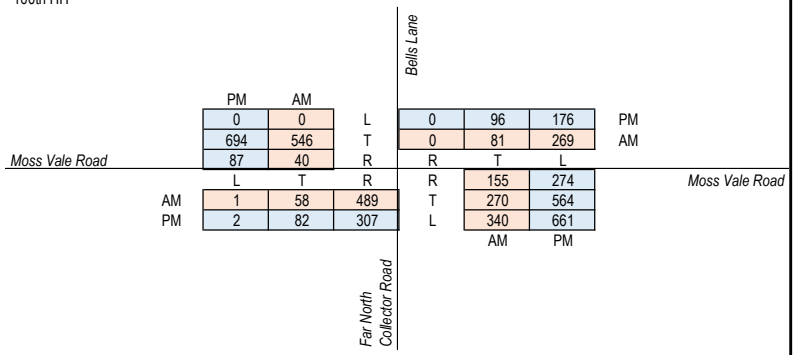
BITZIOS consulting

Sheet: **Year 2026 TRACKS Traffic Volumes**
Sheet 2 of 5
Project: Moss Vale Road SIDRA Assessment
Project Number: P3968

AAST



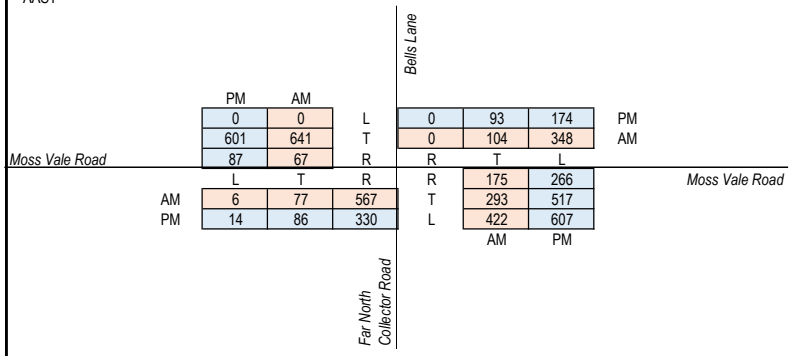
100th HH



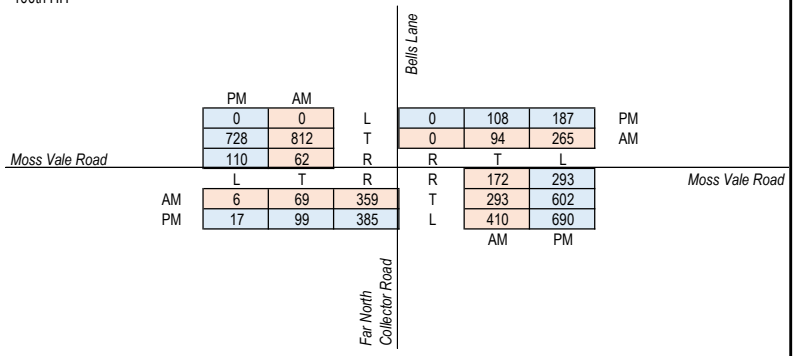
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Sheet: **Year 2031 TRACKS Traffic Volumes**
Sheet 3 of 5
Project: Moss Vale Road SIDRA Assessment
Project Number: P3968

AAST



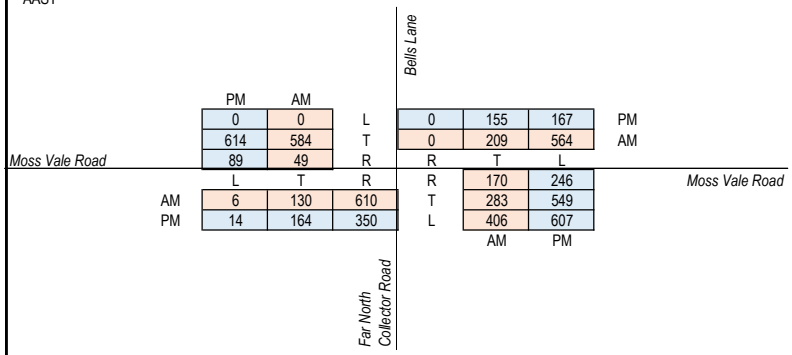
100th HH



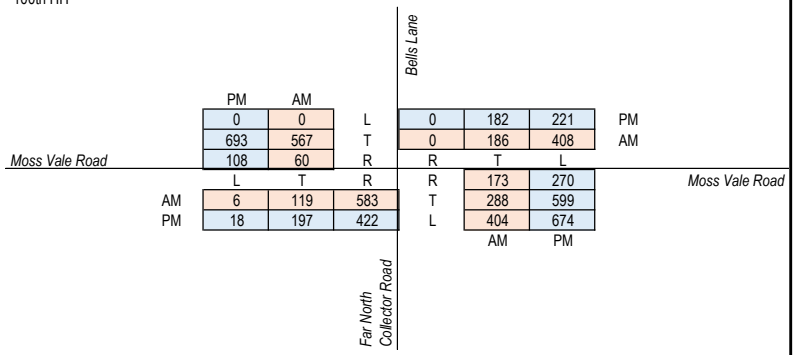
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Sheet: **Year 2036 TRACKS Traffic Volumes**
Sheet 4 of 5
Project: Moss Vale Road SIDRA Assessment
Project Number: P3968

AAST



100th HH



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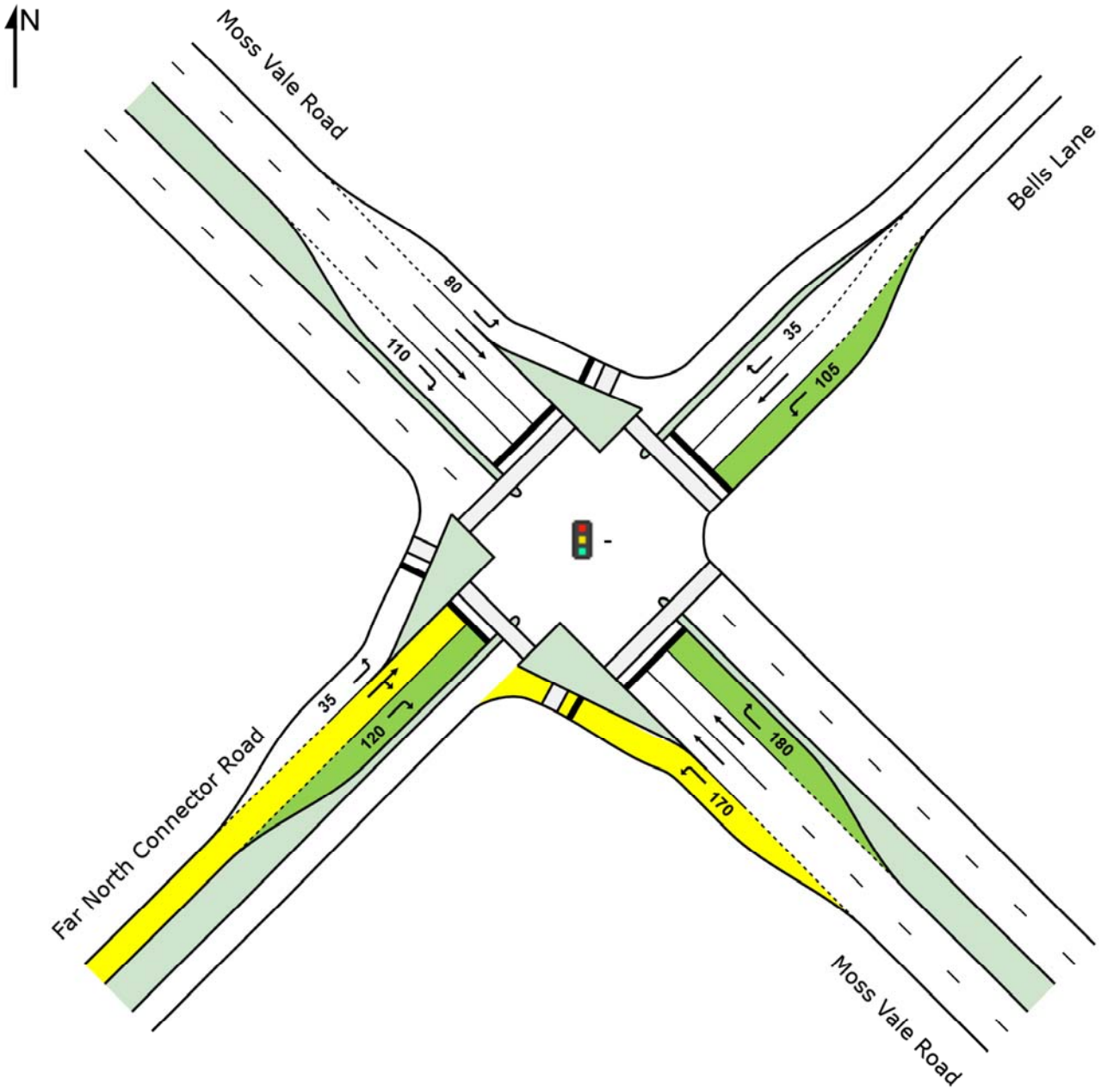
Sheet: **Year 2041 TRACKS Traffic Volumes**
Sheet 5 of 5
Project: Moss Vale Road SIDRA Assessment
Project Number: P3968

Attachment B: SIDRA Outputs

SITE LAYOUT

Site: - [2021_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: - [100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	259	5.0	0.208	9.1	LOS A	1.1	7.8	0.32	0.70	0.32	60.0
22	T1	238	5.0	0.394	21.6	LOS C	2.8	20.3	0.94	0.74	0.94	58.8
23	R2	72	5.0	0.333	31.2	LOS C	1.7	12.7	0.95	0.75	0.95	43.9
Approach		568	5.0	0.394	17.1	LOS B	2.8	20.3	0.66	0.72	0.66	56.9
NorthEast: Bells Lane												
24	L2	114	5.0	0.115	8.5	LOS A	0.9	6.5	0.45	0.68	0.45	56.6
25	T1	34	5.0	0.149	22.7	LOS C	0.8	5.7	0.93	0.67	0.93	43.8
26	R2	1	5.0	0.005	27.1	LOS C	0.0	0.2	0.90	0.59	0.90	44.2
Approach		148	5.0	0.149	11.8	LOS B	0.9	6.5	0.56	0.67	0.56	53.0
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	11.9	LOS B	0.0	0.1	0.49	0.61	0.49	57.5
28	T1	334	5.0	0.552	22.4	LOS C	4.0	29.4	0.97	0.78	0.98	58.0
29	R2	19	5.0	0.088	30.1	LOS C	0.4	3.2	0.92	0.70	0.92	44.5
Approach		354	5.0	0.552	22.8	LOS C	4.0	29.4	0.96	0.77	0.98	57.1
SouthWest: Far North Connector Road												
30	L2	1	5.0	0.001	9.9	LOS A	0.0	0.1	0.53	0.57	0.53	55.9
31	T1	31	5.0	0.835	29.6	LOS C	5.2	38.2	1.00	1.00	1.52	38.5
32	R2	331	5.0	0.835	35.3	LOS D	5.2	38.2	1.00	1.00	1.52	40.4
Approach		362	5.0	0.835	34.7	LOS C	5.2	38.2	1.00	0.99	1.52	40.3
All Vehicles		1433	5.0	0.835	22.4	LOS C	5.2	38.2	0.81	0.80	0.95	51.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P5B	SouthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6	NorthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7	NorthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7B	NorthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8	SouthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8B	SouthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88

All Pedestrians	37	19.4	LOS B	0.88	0.88

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: - [100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	497	5.0	0.419	9.8	LOS A	3.2	23.2	0.45	0.74	0.45	59.5
22	T1	466	5.0	0.772	25.8	LOS C	6.3	45.9	1.00	0.91	1.29	55.1
23	R2	107	5.0	0.499	31.9	LOS C	2.7	19.5	0.98	0.77	0.98	43.5
Approach		1071	5.0	0.772	19.0	LOS B	6.3	45.9	0.74	0.82	0.87	55.5
NorthEast: Bells Lane												
24	L2	91	5.0	0.096	9.1	LOS A	0.8	5.9	0.49	0.68	0.49	56.0
25	T1	46	5.0	0.204	22.9	LOS C	1.1	8.0	0.94	0.69	0.94	43.7
26	R2	1	5.0	0.005	27.1	LOS C	0.0	0.2	0.90	0.59	0.90	44.2
Approach		138	5.0	0.204	13.9	LOS B	1.1	8.0	0.64	0.68	0.64	51.0
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	11.9	LOS B	0.0	0.1	0.49	0.61	0.49	57.5
28	T1	515	5.0	0.852	29.1	LOS C	7.5	54.7	1.00	0.98	1.49	52.5
29	R2	76	5.0	0.352	31.3	LOS C	1.8	13.5	0.96	0.76	0.96	43.8
Approach		592	5.0	0.852	29.4	LOS C	7.5	54.7	0.99	0.95	1.42	51.2
SouthWest: Far North Connector Road												
30	L2	1	5.0	0.001	10.1	LOS B	0.0	0.1	0.55	0.57	0.55	55.8
31	T1	39	5.0	0.690	25.9	LOS C	4.0	29.1	1.00	0.87	1.20	40.2
32	R2	260	5.0	0.690	31.6	LOS C	4.0	29.1	1.00	0.87	1.21	42.2
Approach		300	5.0	0.690	30.8	LOS C	4.0	29.1	1.00	0.87	1.20	42.0
All Vehicles		2100	5.0	0.852	23.3	LOS C	7.5	54.7	0.84	0.85	1.06	51.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P5B	SouthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6	NorthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7	NorthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7B	NorthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8	SouthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8B	SouthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88

All Pedestrians	37	19.4	LOS B	0.88	0.88

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: - [AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	296	5.0	0.663	29.8	LOS C	7.3	52.9	0.95	0.88	1.24	45.1
22	T1	249	5.0	0.396	25.3	LOS C	3.4	25.0	0.94	0.74	0.94	55.5
23	R2	88	5.0	0.493	37.6	LOS D	2.7	19.5	0.99	0.77	0.99	40.8
Approach		634	5.0	0.663	29.1	LOS C	7.3	52.9	0.95	0.81	1.08	47.9
NorthEast: Bells Lane												
24	L2	211	5.0	0.244	10.2	LOS B	2.5	18.6	0.53	0.71	0.53	55.1
25	T1	61	5.0	0.323	29.1	LOS C	1.8	13.1	0.97	0.72	0.97	40.7
26	R2	1	5.0	0.006	32.6	LOS C	0.0	0.2	0.92	0.59	0.92	41.4
Approach		273	5.0	0.323	14.5	LOS B	2.5	18.6	0.63	0.72	0.63	51.0
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	11.4	LOS B	0.0	0.1	0.42	0.62	0.42	58.1
28	T1	389	5.0	0.619	26.8	LOS C	5.7	41.4	0.98	0.81	1.03	54.2
29	R2	20	5.0	0.112	35.9	LOS D	0.6	4.1	0.94	0.70	0.94	41.6
Approach		411	5.0	0.619	27.2	LOS C	5.7	41.4	0.97	0.81	1.02	53.4
SouthWest: Far North Connector Road												
30	L2	1	5.0	0.001	9.3	LOS A	0.0	0.1	0.46	0.57	0.46	56.5
31	T1	40	5.0	0.585	22.9	LOS C	6.7	48.9	0.94	0.81	0.94	41.3
32	R2	452	5.0	0.585	28.6	LOS C	6.7	48.9	0.94	0.81	0.94	43.6
Approach		493	5.0	0.585	28.1	LOS C	6.7	48.9	0.94	0.81	0.94	43.4
All Vehicles		1809	5.0	0.663	26.2	LOS C	7.3	52.9	0.90	0.79	0.96	48.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90

All Pedestrians	37	24.3	LOS C	0.90	0.90

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: - [AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	486	5.0	0.407	9.6	LOS A	2.8	20.2	0.42	0.73	0.42	59.6
22	T1	401	5.0	0.664	23.6	LOS C	5.1	37.0	0.99	0.84	1.11	56.9
23	R2	160	5.0	0.744	34.6	LOS C	4.3	31.7	1.00	0.88	1.29	42.2
Approach		1047	5.0	0.744	18.8	LOS B	5.1	37.0	0.73	0.79	0.82	55.1
NorthEast: Bells Lane												
24	L2	96	5.0	0.099	8.8	LOS A	0.8	5.8	0.47	0.67	0.47	56.3
25	T1	47	5.0	0.209	23.0	LOS C	1.1	8.2	0.94	0.69	0.94	43.7
26	R2	1	5.0	0.005	27.1	LOS C	0.0	0.2	0.90	0.59	0.90	44.2
Approach		144	5.0	0.209	13.6	LOS B	1.1	8.2	0.63	0.68	0.63	51.3
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	12.1	LOS B	0.0	0.1	0.51	0.61	0.51	57.4
28	T1	445	5.0	0.737	24.9	LOS C	5.9	42.8	1.00	0.88	1.22	55.8
29	R2	64	5.0	0.298	31.1	LOS C	1.5	11.3	0.95	0.75	0.95	44.0
Approach		511	5.0	0.737	25.6	LOS C	5.9	42.8	0.99	0.87	1.19	54.0
SouthWest: Far North Connector Road												
30	L2	1	5.0	0.001	10.3	LOS B	0.0	0.1	0.57	0.57	0.57	55.6
31	T1	49	5.0	0.647	25.4	LOS C	3.7	26.9	1.00	0.84	1.15	40.7
32	R2	232	5.0	0.647	31.1	LOS C	3.7	26.9	1.00	0.84	1.15	42.6
Approach		282	5.0	0.647	30.0	LOS C	3.7	26.9	1.00	0.84	1.14	42.3
All Vehicles		1984	5.0	0.744	21.8	LOS C	5.9	42.8	0.83	0.81	0.95	52.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P5B	SouthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6	NorthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7	NorthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7B	NorthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8	SouthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8B	SouthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88

All Pedestrians	37	19.4	LOS B	0.88	0.88

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: - [2026_100HH AM - Diamond Overlap - Split - Movements]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	313	5.0	0.751	32.8	LOS C	8.2	59.7	0.98	0.93	1.42	43.5
22	T1	243	5.0	0.429	26.4	LOS C	3.4	25.0	0.95	0.75	0.95	54.6
23	R2	145	5.0	0.608	36.4	LOS D	4.4	31.8	0.99	0.82	1.06	41.3
Approach		701	5.0	0.751	31.3	LOS C	8.2	59.7	0.97	0.84	1.18	46.2
NorthEast: Bells Lane												
24	L2	247	5.0	0.274	10.3	LOS B	3.1	22.4	0.54	0.72	0.54	55.0
25	T1	69	5.0	0.368	29.3	LOS C	2.1	15.0	0.97	0.73	0.97	40.6
26	R2	1	5.0	0.006	32.6	LOS C	0.0	0.2	0.92	0.59	0.92	41.4
Approach		318	5.0	0.368	14.5	LOS B	3.1	22.4	0.64	0.72	0.64	51.0
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	12.1	LOS B	0.0	0.1	0.46	0.61	0.46	57.4
28	T1	374	5.0	0.660	28.3	LOS C	5.6	41.0	0.99	0.83	1.09	53.1
29	R2	18	5.0	0.075	33.3	LOS C	0.5	3.5	0.90	0.70	0.90	42.8
Approach		393	5.0	0.660	28.5	LOS C	5.6	41.0	0.99	0.83	1.08	52.5
SouthWest: Far North Connector Road												
30	L2	1	5.0	0.001	9.3	LOS A	0.0	0.1	0.46	0.57	0.46	56.5
31	T1	56	5.0	0.647	24.7	LOS C	7.2	52.8	0.96	0.84	1.02	40.7
32	R2	449	5.0	0.647	30.3	LOS C	7.2	52.8	0.96	0.84	1.02	42.8
Approach		506	5.0	0.647	29.7	LOS C	7.2	52.8	0.96	0.84	1.02	42.6
All Vehicles		1918	5.0	0.751	27.5	LOS C	8.2	59.7	0.92	0.82	1.03	47.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90

All Pedestrians	37	24.3	LOS C	0.90	0.90

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: - [2026_100HH PM - Diamond Overlap - Split - Movements]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	612	5.0	0.509	10.0	LOS A	5.0	36.2	0.45	0.75	0.45	59.3
22	T1	485	5.0	0.642	25.4	LOS C	7.0	50.8	0.97	0.82	1.02	55.4
23	R2	232	5.0	0.775	37.9	LOS D	7.4	53.9	1.00	0.90	1.25	40.6
Approach		1328	5.0	0.775	20.5	LOS C	7.4	53.9	0.74	0.80	0.80	53.6
NorthEast: Bells Lane												
24	L2	176	5.0	0.190	10.4	LOS B	2.1	15.5	0.52	0.70	0.52	54.9
25	T1	91	5.0	0.479	29.8	LOS C	2.7	19.8	0.99	0.76	0.99	40.4
26	R2	1	5.0	0.006	32.6	LOS C	0.0	0.2	0.92	0.59	0.92	41.4
Approach		267	5.0	0.479	17.0	LOS B	2.7	19.8	0.68	0.72	0.68	48.9
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	13.0	LOS B	0.0	0.1	0.51	0.61	0.51	56.7
28	T1	593	5.0	0.784	28.9	LOS C	9.4	68.3	1.00	0.92	1.23	52.6
29	R2	65	5.0	0.218	32.1	LOS C	1.7	12.6	0.90	0.75	0.90	43.4
Approach		659	5.0	0.784	29.2	LOS C	9.4	68.3	0.99	0.90	1.20	51.6
SouthWest: Far North Connector Road												
30	L2	1	5.0	0.001	9.2	LOS A	0.0	0.1	0.44	0.57	0.44	56.5
31	T1	72	5.0	0.756	31.2	LOS C	5.9	43.0	1.00	0.91	1.25	38.3
32	R2	294	5.0	0.756	36.9	LOS D	5.9	43.0	1.00	0.91	1.26	39.9
Approach		366	5.0	0.756	35.7	LOS D	5.9	43.0	1.00	0.91	1.25	39.6
All Vehicles		2621	5.0	0.784	24.4	LOS C	9.4	68.3	0.83	0.83	0.95	50.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90

All Pedestrians	37	24.3	LOS C	0.90	0.90

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: - [2026_AADT AM - Diamond Overlap - Split - Movements]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	334	5.0	0.268	9.1	LOS A	1.7	12.2	0.31	0.70	0.31	60.1
22	T1	251	5.0	0.398	25.3	LOS C	3.4	25.2	0.94	0.74	0.94	55.5
23	R2	152	5.0	0.725	39.1	LOS D	4.8	35.2	1.00	0.86	1.23	40.1
Approach		736	5.0	0.725	20.8	LOS C	4.8	35.2	0.67	0.75	0.71	53.2
NorthEast: Bells Lane												
24	L2	255	5.0	0.293	10.9	LOS B	3.4	24.7	0.57	0.73	0.57	54.6
25	T1	77	5.0	0.407	29.5	LOS C	2.3	16.7	0.98	0.74	0.98	40.5
26	R2	1	5.0	0.006	32.6	LOS C	0.0	0.2	0.92	0.59	0.92	41.4
Approach		333	5.0	0.407	15.2	LOS B	3.4	24.7	0.67	0.73	0.67	50.5
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	11.7	LOS B	0.0	0.1	0.44	0.61	0.44	57.8
28	T1	422	5.0	0.670	27.6	LOS C	6.3	45.9	0.99	0.84	1.09	53.6
29	R2	19	5.0	0.091	34.6	LOS C	0.5	3.8	0.92	0.70	0.92	42.2
Approach		442	5.0	0.670	27.8	LOS C	6.3	45.9	0.98	0.83	1.08	53.0
SouthWest: Far North Connector Road												
30	L2	1	5.0	0.001	9.3	LOS A	0.0	0.1	0.46	0.57	0.46	56.5
31	T1	61	5.0	0.679	25.3	LOS C	7.7	56.5	0.97	0.87	1.06	40.5
32	R2	469	5.0	0.679	30.9	LOS C	7.7	56.5	0.97	0.86	1.06	42.5
Approach		532	5.0	0.679	30.2	LOS C	7.7	56.5	0.97	0.86	1.05	42.3
All Vehicles		2042	5.0	0.725	23.9	LOS C	7.7	56.5	0.81	0.79	0.87	49.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90

All Pedestrians	37	24.3	LOS C	0.90	0.90

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: - [2026_AADT PM - Diamond Overlap - Split - Movements]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	518	5.0	0.423	9.6	LOS A	3.4	25.2	0.39	0.73	0.39	59.7
22	T1	402	5.0	0.532	24.2	LOS C	5.5	40.3	0.94	0.77	0.94	56.4
23	R2	207	5.0	0.694	35.8	LOS D	6.3	45.9	0.99	0.86	1.13	41.6
Approach		1127	5.0	0.694	19.6	LOS B	6.3	45.9	0.70	0.77	0.72	54.2
NorthEast: Bells Lane												
24	L2	141	5.0	0.147	9.4	LOS A	1.5	10.8	0.47	0.69	0.47	55.8
25	T1	77	5.0	0.407	29.5	LOS C	2.3	16.7	0.98	0.74	0.98	40.5
26	R2	1	5.0	0.006	32.6	LOS C	0.0	0.2	0.92	0.59	0.92	41.4
Approach		219	5.0	0.407	16.6	LOS B	2.3	16.7	0.65	0.71	0.65	49.2
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	12.9	LOS B	0.0	0.1	0.49	0.61	0.49	56.8
28	T1	496	5.0	0.656	25.6	LOS C	7.2	52.2	0.97	0.83	1.04	55.2
29	R2	55	5.0	0.183	31.9	LOS C	1.4	10.5	0.89	0.74	0.89	43.5
Approach		552	5.0	0.656	26.2	LOS C	7.2	52.2	0.96	0.82	1.02	53.8
SouthWest: Far North Connector Road												
30	L2	1	5.0	0.001	9.7	LOS A	0.0	0.1	0.49	0.57	0.49	56.1
31	T1	62	5.0	0.645	29.1	LOS C	4.8	34.9	0.99	0.84	1.10	39.2
32	R2	249	5.0	0.645	34.8	LOS C	4.8	34.9	0.99	0.84	1.10	40.8
Approach		313	5.0	0.645	33.6	LOS C	4.8	34.9	0.99	0.84	1.10	40.5
All Vehicles		2211	5.0	0.694	22.9	LOS C	7.2	52.2	0.80	0.78	0.84	51.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90

All Pedestrians	37	24.3	LOS C	0.90	0.90

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: - [2031_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	358	5.0	0.292	9.3	LOS A	2.1	15.0	0.34	0.71	0.34	60.0
22	T1	284	5.0	0.410	24.4	LOS C	3.9	28.1	0.93	0.74	0.93	56.2
23	R2	163	5.0	0.780	40.4	LOS D	5.3	39.0	1.00	0.89	1.32	39.5
Approach		805	5.0	0.780	21.0	LOS C	5.3	39.0	0.68	0.76	0.75	53.2
NorthEast: Bells Lane												
24	L2	283	5.0	0.342	12.6	LOS B	4.4	32.1	0.65	0.75	0.65	53.2
25	T1	85	5.0	0.451	29.7	LOS C	2.5	18.6	0.98	0.75	0.98	40.5
26	R2	1	5.0	0.006	32.6	LOS C	0.0	0.2	0.92	0.59	0.92	41.4
Approach		369	5.0	0.451	16.6	LOS B	4.4	32.1	0.72	0.75	0.72	49.5
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	11.7	LOS B	0.0	0.1	0.44	0.61	0.44	57.8
28	T1	575	5.0	0.830	31.7	LOS C	9.5	69.7	1.00	0.95	1.34	50.6
29	R2	42	5.0	0.201	35.2	LOS D	1.2	8.7	0.94	0.73	0.94	41.9
Approach		618	5.0	0.830	31.9	LOS C	9.5	69.7	0.99	0.94	1.31	49.9
SouthWest: Far North Connector Road												
30	L2	1	5.0	0.001	9.3	LOS A	0.0	0.1	0.46	0.57	0.46	56.5
31	T1	61	5.0	0.798	29.6	LOS C	9.3	67.9	1.00	0.97	1.26	38.6
32	R2	515	5.0	0.798	35.3	LOS D	9.3	67.9	1.00	0.96	1.27	40.5
Approach		577	5.0	0.798	34.6	LOS C	9.3	67.9	1.00	0.96	1.26	40.3
All Vehicles		2369	5.0	0.830	26.5	LOS C	9.5	69.7	0.85	0.85	1.02	48.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90

All Pedestrians	37	24.3	LOS C	0.90	0.90

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: - [2031_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	696	5.0	0.578	10.5	LOS B	7.5	55.0	0.49	0.76	0.49	58.8
22	T1	594	5.0	0.688	28.4	LOS C	9.8	71.8	0.97	0.84	1.03	53.0
23	R2	288	5.0	0.804	41.8	LOS D	10.7	78.2	1.00	0.91	1.24	38.9
Approach		1578	5.0	0.804	23.0	LOS C	10.7	78.2	0.76	0.82	0.83	51.9
NorthEast: Bells Lane												
24	L2	185	5.0	0.208	12.4	LOS B	2.9	21.5	0.56	0.71	0.56	53.3
25	T1	101	5.0	0.624	36.6	LOS D	3.7	26.7	1.00	0.81	1.11	37.6
26	R2	1	5.0	0.007	38.1	LOS D	0.0	0.2	0.93	0.59	0.93	39.0
Approach		287	5.0	0.624	21.0	LOS C	3.7	26.7	0.71	0.75	0.75	46.4
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	13.9	LOS B	0.0	0.1	0.51	0.61	0.51	55.9
28	T1	731	5.0	0.846	35.2	LOS D	14.1	102.7	1.00	0.97	1.29	48.2
29	R2	92	5.0	0.255	34.0	LOS C	2.7	19.9	0.88	0.77	0.88	42.5
Approach		823	5.0	0.846	35.0	LOS D	14.1	102.7	0.99	0.95	1.25	47.5
SouthWest: Far North Connector Road												
30	L2	2	5.0	0.002	8.9	LOS A	0.0	0.1	0.41	0.58	0.41	56.8
31	T1	86	5.0	0.791	36.3	LOS D	7.7	56.5	1.00	0.94	1.27	36.4
32	R2	323	5.0	0.791	42.0	LOS D	7.7	56.5	1.00	0.94	1.27	37.8
Approach		412	5.0	0.791	40.7	LOS D	7.7	56.5	1.00	0.94	1.27	37.6
All Vehicles		3100	5.0	0.846	28.3	LOS C	14.1	102.7	0.85	0.86	0.99	47.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P5B	SouthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6	NorthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7	NorthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7B	NorthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8	SouthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8B	SouthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91

All Pedestrians	37	29.3	LOS C	0.91	0.91

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: - [2031_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	380	5.0	0.298	9.4	LOS A	2.5	18.1	0.32	0.71	0.32	60.0
22	T1	293	5.0	0.271	21.2	LOS C	3.9	28.8	0.82	0.66	0.82	59.1
23	R2	169	5.0	0.735	43.3	LOS D	6.2	45.2	1.00	0.87	1.20	38.4
Approach		842	5.0	0.735	20.3	LOS C	6.2	45.2	0.63	0.72	0.67	53.6
NorthEast: Bells Lane												
24	L2	271	5.0	0.347	14.5	LOS B	5.2	38.3	0.67	0.76	0.67	51.8
25	T1	93	5.0	0.572	36.1	LOS D	3.3	24.2	1.00	0.79	1.06	37.8
26	R2	1	5.0	0.007	38.1	LOS D	0.0	0.2	0.93	0.59	0.93	39.0
Approach		364	5.0	0.572	20.1	LOS C	5.2	38.3	0.75	0.77	0.77	47.2
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	11.9	LOS B	0.0	0.1	0.42	0.62	0.42	57.6
28	T1	832	5.0	0.771	28.0	LOS C	14.3	104.3	0.98	0.90	1.10	53.3
29	R2	46	5.0	0.201	38.6	LOS D	1.5	10.9	0.93	0.74	0.93	40.4
Approach		879	5.0	0.771	28.5	LOS C	14.3	104.3	0.97	0.89	1.09	52.4
SouthWest: Far North Connector Road												
30	L2	1	5.0	0.001	8.9	LOS A	0.0	0.1	0.41	0.57	0.41	56.8
31	T1	67	5.0	0.769	34.8	LOS C	8.1	58.8	1.00	0.93	1.22	36.8
32	R2	369	5.0	0.769	40.5	LOS D	8.1	58.8	1.00	0.92	1.22	38.3
Approach		438	5.0	0.769	39.5	LOS D	8.1	58.8	1.00	0.92	1.22	38.1
All Vehicles		2523	5.0	0.771	26.5	LOS C	14.3	104.3	0.83	0.82	0.92	48.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P5B	SouthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6	NorthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7	NorthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7B	NorthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8	SouthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8B	SouthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91

All Pedestrians	37	29.3	LOS C	0.91	0.91

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: - [2031_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	601	5.0	0.502	10.0	LOS A	4.8	35.3	0.45	0.75	0.45	59.3
22	T1	503	5.0	0.666	25.8	LOS C	7.3	53.3	0.97	0.83	1.05	55.1
23	R2	259	5.0	0.788	37.6	LOS D	8.3	60.5	1.00	0.91	1.26	40.8
Approach		1363	5.0	0.788	21.1	LOS C	8.3	60.5	0.75	0.81	0.83	53.2
NorthEast: Bells Lane												
24	L2	167	5.0	0.177	10.3	LOS B	2.0	14.5	0.51	0.70	0.51	55.0
25	T1	87	5.0	0.463	29.7	LOS C	2.6	19.1	0.98	0.75	0.98	40.4
26	R2	1	5.0	0.006	32.6	LOS C	0.0	0.2	0.92	0.59	0.92	41.4
Approach		256	5.0	0.463	17.0	LOS B	2.6	19.1	0.68	0.72	0.68	48.9
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	13.4	LOS B	0.0	0.1	0.53	0.61	0.53	56.3
28	T1	600	5.0	0.794	29.3	LOS C	9.6	69.8	1.00	0.93	1.25	52.3
29	R2	72	5.0	0.218	31.1	LOS C	1.9	13.6	0.89	0.75	0.89	44.0
Approach		673	5.0	0.794	29.4	LOS C	9.6	69.8	0.99	0.91	1.21	51.3
SouthWest: Far North Connector Road												
30	L2	2	5.0	0.003	10.2	LOS B	0.0	0.1	0.53	0.59	0.53	55.7
31	T1	75	5.0	0.816	33.9	LOS C	5.8	42.6	1.00	0.96	1.40	37.4
32	R2	271	5.0	0.816	39.6	LOS D	5.8	42.6	1.00	0.96	1.41	38.8
Approach		347	5.0	0.816	38.2	LOS D	5.8	42.6	1.00	0.96	1.40	38.5
All Vehicles		2639	5.0	0.816	25.1	LOS C	9.6	69.8	0.84	0.85	0.98	49.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90

All Pedestrians	37	24.3	LOS C	0.90	0.90

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: - [2036_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	432	5.0	0.336	9.6	LOS A	3.5	25.8	0.33	0.71	0.33	59.7
22	T1	308	5.0	0.261	22.4	LOS C	4.5	33.2	0.79	0.64	0.79	58.1
23	R2	181	5.0	0.734	47.2	LOS D	7.4	54.2	1.00	0.86	1.16	36.9
Approach		921	5.0	0.734	21.3	LOS C	7.4	54.2	0.61	0.72	0.65	52.8
NorthEast: Bells Lane												
24	L2	279	5.0	0.373	15.8	LOS B	6.5	47.3	0.68	0.77	0.68	50.8
25	T1	99	5.0	0.699	43.3	LOS D	4.2	30.5	1.00	0.84	1.19	35.2
26	R2	1	5.0	0.008	43.6	LOS D	0.0	0.3	0.94	0.59	0.94	36.8
Approach		379	5.0	0.699	23.1	LOS C	6.5	47.3	0.77	0.79	0.82	45.5
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	12.1	LOS B	0.0	0.1	0.39	0.62	0.39	57.5
28	T1	855	5.0	0.724	27.8	LOS C	15.5	113.1	0.95	0.84	0.99	53.5
29	R2	65	5.0	0.265	42.4	LOS D	2.4	17.4	0.93	0.76	0.93	38.7
Approach		921	5.0	0.724	28.8	LOS C	15.5	113.1	0.95	0.84	0.99	52.1
SouthWest: Far North Connector Road												
30	L2	6	5.0	0.007	8.5	LOS A	0.1	0.4	0.36	0.59	0.36	57.1
31	T1	73	5.0	0.712	36.3	LOS D	9.0	65.5	1.00	0.88	1.10	36.3
32	R2	378	5.0	0.712	42.0	LOS D	9.0	65.5	1.00	0.87	1.10	37.8
Approach		457	5.0	0.712	40.6	LOS D	9.0	65.5	0.99	0.87	1.09	37.7
All Vehicles		2678	5.0	0.734	27.4	LOS C	15.5	113.1	0.81	0.80	0.86	48.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P5B	SouthEast Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P6	NorthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7	NorthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7B	NorthWest Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8	SouthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8B	SouthWest Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93

All Pedestrians	37	34.2	LOS D	0.93	0.93

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: - [2036_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	726	5.0	0.618	11.3	LOS B	9.4	68.4	0.55	0.78	0.55	58.1
22	T1	634	5.0	0.734	29.6	LOS C	10.9	79.3	0.98	0.88	1.09	52.1
23	R2	308	5.0	0.926	55.1	LOS E	13.9	101.3	1.00	1.04	1.63	34.1
Approach		1668	5.0	0.926	26.4	LOS C	13.9	101.3	0.80	0.86	0.96	49.5
NorthEast: Bells Lane												
24	L2	197	5.0	0.232	14.0	LOS B	3.5	25.4	0.61	0.72	0.61	52.1
25	T1	114	5.0	0.702	37.6	LOS D	4.2	30.7	1.00	0.85	1.20	37.2
26	R2	1	5.0	0.007	38.1	LOS D	0.0	0.2	0.93	0.59	0.93	39.0
Approach		312	5.0	0.702	22.7	LOS C	4.2	30.7	0.75	0.77	0.82	45.4
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	13.5	LOS B	0.0	0.1	0.50	0.61	0.50	56.3
28	T1	766	5.0	0.888	39.4	LOS D	15.8	115.5	1.00	1.03	1.41	45.7
29	R2	116	5.0	0.348	35.5	LOS D	3.6	26.1	0.91	0.78	0.91	41.8
Approach		883	5.0	0.888	38.9	LOS D	15.8	115.5	0.99	0.99	1.34	45.2
SouthWest: Far North Connector Road												
30	L2	18	5.0	0.020	9.2	LOS A	0.2	1.2	0.43	0.62	0.43	56.6
31	T1	104	5.0	0.896	43.1	LOS D	10.8	78.6	1.00	1.09	1.53	34.2
32	R2	405	5.0	0.896	48.8	LOS D	10.8	78.6	1.00	1.07	1.54	35.3
Approach		527	5.0	0.896	46.3	LOS D	10.8	78.6	0.98	1.06	1.50	35.5
All Vehicles		3391	5.0	0.926	32.4	LOS C	15.8	115.5	0.87	0.92	1.13	45.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P5B	SouthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6	NorthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7	NorthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7B	NorthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8	SouthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8B	SouthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91

All Pedestrians	37	29.3	LOS C	0.91	0.91

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: - [2036_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	444	5.0	0.365	9.9	LOS A	3.7	26.7	0.38	0.72	0.38	59.4
22	T1	308	5.0	0.381	26.1	LOS C	4.7	34.0	0.90	0.73	0.90	54.8
23	R2	184	5.0	0.799	45.2	LOS D	7.0	50.9	1.00	0.91	1.31	37.6
Approach		937	5.0	0.799	22.2	LOS C	7.0	50.9	0.67	0.76	0.73	52.0
NorthEast: Bells Lane												
24	L2	366	5.0	0.479	16.7	LOS B	8.3	60.6	0.77	0.79	0.77	50.2
25	T1	109	5.0	0.676	37.2	LOS D	4.0	29.4	1.00	0.84	1.17	37.4
26	R2	1	5.0	0.007	38.1	LOS D	0.0	0.2	0.93	0.59	0.93	39.0
Approach		477	5.0	0.676	21.4	LOS C	8.3	60.6	0.82	0.80	0.86	46.5
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	11.9	LOS B	0.0	0.1	0.42	0.62	0.42	57.6
28	T1	675	5.0	0.834	34.9	LOS C	12.8	93.6	1.00	0.96	1.28	48.4
29	R2	71	5.0	0.306	39.1	LOS D	2.3	16.8	0.95	0.76	0.95	40.1
Approach		746	5.0	0.834	35.3	LOS D	12.8	93.6	0.99	0.94	1.25	47.5
SouthWest: Far North Connector Road												
30	L2	6	5.0	0.006	8.4	LOS A	0.1	0.4	0.35	0.59	0.35	57.1
31	T1	81	5.0	0.824	33.8	LOS C	12.8	93.2	1.00	0.98	1.26	37.0
32	R2	597	5.0	0.824	39.5	LOS D	12.8	93.2	1.00	0.97	1.26	38.7
Approach		684	5.0	0.824	38.6	LOS D	12.8	93.2	0.99	0.97	1.25	38.6
All Vehicles		2844	5.0	0.834	29.4	LOS C	12.8	93.6	0.86	0.86	1.01	46.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P5B	SouthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6	NorthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7	NorthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7B	NorthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8	SouthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8B	SouthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91

All Pedestrians	37	29.3	LOS C	0.91	0.91

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: - [2036_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	639	5.0	0.548	10.4	LOS B	5.9	43.0	0.50	0.76	0.50	58.9
22	T1	544	5.0	0.786	29.7	LOS C	8.7	63.2	1.00	0.92	1.25	52.0
23	R2	280	5.0	0.852	41.1	LOS D	9.6	70.2	1.00	0.96	1.41	39.3
Approach		1463	5.0	0.852	23.4	LOS C	9.6	70.2	0.78	0.86	0.95	51.5
NorthEast: Bells Lane												
24	L2	183	5.0	0.199	11.7	LOS B	2.5	18.1	0.57	0.71	0.57	53.9
25	T1	98	5.0	0.518	30.0	LOS C	3.0	21.6	0.99	0.77	1.00	40.3
26	R2	1	5.0	0.006	32.6	LOS C	0.0	0.2	0.92	0.59	0.92	41.4
Approach		282	5.0	0.518	18.1	LOS B	3.0	21.6	0.72	0.73	0.72	48.2
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	13.4	LOS B	0.0	0.1	0.53	0.61	0.53	56.3
28	T1	633	5.0	0.914	39.7	LOS D	12.0	87.9	1.00	1.06	1.63	45.5
29	R2	92	5.0	0.279	31.5	LOS C	2.4	17.6	0.90	0.77	0.90	43.8
Approach		725	5.0	0.914	38.6	LOS D	12.0	87.9	0.99	1.02	1.54	45.3
SouthWest: Far North Connector Road												
30	L2	15	5.0	0.018	9.8	LOS A	0.1	1.0	0.50	0.62	0.50	56.0
31	T1	91	5.0	0.906	39.8	LOS D	8.2	60.1	1.00	1.11	1.69	35.2
32	R2	347	5.0	0.906	45.5	LOS D	8.2	60.1	1.00	1.11	1.69	36.5
Approach		453	5.0	0.906	43.2	LOS D	8.2	60.1	0.98	1.09	1.65	36.6
All Vehicles		2923	5.0	0.914	29.7	LOS C	12.0	87.9	0.86	0.92	1.18	46.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90

All Pedestrians	37	24.3	LOS C	0.90	0.90

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: - [2041_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	425	5.0	0.365	10.7	LOS B	4.6	33.7	0.40	0.73	0.40	58.7
22	T1	303	5.0	0.401	30.8	LOS C	5.3	38.6	0.92	0.74	0.92	51.2
23	R2	182	5.0	0.903	58.3	LOS E	8.7	63.2	1.00	0.99	1.58	33.2
Approach		911	5.0	0.903	26.9	LOS C	8.7	63.2	0.69	0.78	0.81	48.8
NorthEast: Bells Lane												
24	L2	429	5.0	0.552	19.8	LOS B	11.1	81.2	0.80	0.86	0.90	48.2
25	T1	196	5.0	0.829	43.6	LOS D	8.5	62.3	1.00	0.97	1.33	35.1
26	R2	1	5.0	0.005	38.9	LOS D	0.0	0.3	0.89	0.59	0.89	38.7
Approach		626	5.0	0.829	27.3	LOS C	11.1	81.2	0.86	0.89	1.04	43.1
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	11.6	LOS B	0.0	0.1	0.40	0.62	0.40	58.0
28	T1	597	5.0	0.790	37.3	LOS D	12.3	89.5	1.00	0.92	1.18	46.9
29	R2	63	5.0	0.313	44.8	LOS D	2.4	17.5	0.96	0.75	0.96	37.8
Approach		661	5.0	0.790	38.0	LOS D	12.3	89.5	1.00	0.90	1.16	45.9
SouthWest: Far North Connector Road												
30	L2	6	5.0	0.007	9.7	LOS A	0.1	0.5	0.43	0.60	0.43	56.1
31	T1	125	5.0	0.781	33.3	LOS C	14.7	107.5	0.99	0.93	1.12	37.4
32	R2	614	5.0	0.781	39.0	LOS D	14.7	107.5	0.99	0.92	1.12	38.9
Approach		745	5.0	0.781	37.8	LOS D	14.7	107.5	0.98	0.92	1.12	38.8
All Vehicles		2943	5.0	0.903	32.2	LOS C	14.7	107.5	0.87	0.87	1.01	44.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P5B	SouthEast Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P6	NorthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7	NorthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7B	NorthWest Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8	SouthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8B	SouthWest Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93

All Pedestrians	37	34.2	LOS D	0.93	0.93

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: - [2041_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	709	5.0	0.622	12.5	LOS B	12.7	92.9	0.56	0.78	0.56	57.0
22	T1	631	5.0	0.751	38.1	LOS D	13.8	100.7	0.99	0.88	1.09	46.5
23	R2	284	5.0	0.892	59.2	LOS E	14.8	107.9	1.00	0.97	1.40	32.9
Approach		1624	5.0	0.892	30.6	LOS C	14.8	107.9	0.80	0.85	0.91	46.9
NorthEast: Bells Lane												
24	L2	233	5.0	0.279	17.3	LOS B	5.7	41.9	0.63	0.74	0.63	49.8
25	T1	192	5.0	0.830	48.5	LOS D	9.3	67.9	1.00	0.96	1.30	33.5
26	R2	1	5.0	0.005	43.1	LOS D	0.0	0.3	0.89	0.59	0.89	37.0
Approach		425	5.0	0.830	31.5	LOS C	9.3	67.9	0.80	0.84	0.94	40.8
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	14.0	LOS B	0.0	0.1	0.49	0.62	0.49	55.9
28	T1	729	5.0	0.869	45.9	LOS D	18.1	132.3	1.00	0.99	1.29	42.3
29	R2	114	5.0	0.357	43.7	LOS D	4.5	32.9	0.92	0.78	0.92	38.2
Approach		844	5.0	0.869	45.6	LOS D	18.1	132.3	0.99	0.96	1.24	41.7
SouthWest: Far North Connector Road												
30	L2	19	5.0	0.020	10.1	LOS B	0.2	1.6	0.43	0.62	0.43	55.8
31	T1	207	5.0	0.859	45.5	LOS D	16.0	116.7	1.00	1.02	1.28	33.8
32	R2	444	5.0	0.859	51.4	LOS D	16.0	117.1	1.00	0.99	1.28	34.5
Approach		671	5.0	0.859	48.4	LOS D	16.0	117.1	0.98	0.99	1.26	34.6
All Vehicles		3564	5.0	0.892	37.6	LOS D	18.1	132.3	0.88	0.90	1.06	42.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P5B	SouthEast Slip/Bypass Lane Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P6	NorthEast Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P7	NorthWest Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P7B	NorthWest Slip/Bypass Lane Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P8	SouthWest Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P8B	SouthWest Slip/Bypass Lane Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93

All Pedestrians	37	39.2	LOS D	0.93	0.93

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: - [2041_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 90 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	427	5.0	0.369	11.0	LOS B	5.3	38.3	0.39	0.73	0.39	58.5
22	T1	298	5.0	0.418	35.5	LOS D	5.9	43.1	0.93	0.75	0.93	48.1
23	R2	179	5.0	0.748	52.3	LOS D	8.3	60.2	1.00	0.86	1.17	35.0
Approach		904	5.0	0.748	27.2	LOS C	8.3	60.2	0.69	0.76	0.72	48.6
NorthEast: Bells Lane												
24	L2	594	5.0	0.712	25.1	LOS C	16.2	118.0	0.86	0.96	1.13	45.1
25	T1	220	5.0	0.699	40.5	LOS D	9.6	70.4	1.00	0.86	1.07	36.1
26	R2	1	5.0	0.004	39.1	LOS D	0.0	0.3	0.85	0.59	0.85	38.6
Approach		815	5.0	0.712	29.3	LOS C	16.2	118.0	0.90	0.93	1.11	42.2
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	12.2	LOS B	0.0	0.1	0.41	0.62	0.41	57.4
28	T1	615	5.0	0.862	47.0	LOS D	15.2	110.9	1.00	0.97	1.30	41.8
29	R2	52	5.0	0.216	46.5	LOS D	2.1	15.3	0.93	0.75	0.93	37.1
Approach		667	5.0	0.862	46.9	LOS D	15.2	110.9	0.99	0.95	1.27	41.4
SouthWest: Far North Connector Road												
30	L2	6	5.0	0.006	10.2	LOS B	0.1	0.6	0.38	0.60	0.38	55.6
31	T1	137	5.0	0.885	47.0	LOS D	20.0	145.7	1.00	1.04	1.32	32.8
32	R2	642	5.0	0.885	52.8	LOS D	20.0	145.7	1.00	1.02	1.32	34.0
Approach		785	5.0	0.885	51.4	LOS D	20.0	145.7	1.00	1.02	1.31	33.9
All Vehicles		3172	5.0	0.885	37.9	LOS D	20.0	145.7	0.88	0.91	1.08	41.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P5B	SouthEast Slip/Bypass Lane Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P6	NorthEast Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P7	NorthWest Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P7B	NorthWest Slip/Bypass Lane Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P8	SouthWest Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P8B	SouthWest Slip/Bypass Lane Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93

All Pedestrians	37	39.2	LOS D	0.93	0.93

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: - [2041_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	639	5.0	0.558	11.4	LOS B	8.0	58.7	0.53	0.77	0.53	58.0
22	T1	578	5.0	0.714	29.9	LOS C	9.8	71.9	0.98	0.86	1.08	51.9
23	R2	259	5.0	0.842	45.4	LOS D	10.1	73.6	1.00	0.94	1.35	37.5
Approach		1476	5.0	0.842	24.6	LOS C	10.1	73.6	0.79	0.84	0.89	50.8
NorthEast: Bells Lane												
24	L2	176	5.0	0.202	12.8	LOS B	2.9	20.9	0.57	0.72	0.57	53.0
25	T1	163	5.0	0.864	41.9	LOS D	6.5	47.7	1.00	1.01	1.51	35.7
26	R2	1	5.0	0.006	36.9	LOS D	0.0	0.2	0.92	0.59	0.92	39.5
Approach		340	5.0	0.864	26.9	LOS C	6.5	47.7	0.78	0.85	1.02	42.9
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	13.6	LOS B	0.0	0.1	0.52	0.61	0.52	56.2
28	T1	646	5.0	0.799	32.9	LOS C	11.8	86.2	1.00	0.93	1.21	49.7
29	R2	94	5.0	0.305	36.1	LOS D	2.9	21.3	0.91	0.77	0.91	41.5
Approach		741	5.0	0.799	33.3	LOS C	11.8	86.2	0.99	0.91	1.17	48.5
SouthWest: Far North Connector Road												
30	L2	15	5.0	0.016	9.3	LOS A	0.1	1.0	0.43	0.62	0.43	56.5
31	T1	173	5.0	0.868	39.6	LOS D	11.0	80.2	1.00	1.04	1.42	35.7
32	R2	368	5.0	0.868	45.4	LOS D	11.0	80.2	1.00	1.03	1.42	36.6
Approach		556	5.0	0.868	42.6	LOS D	11.0	80.2	0.98	1.02	1.40	36.7
All Vehicles		3113	5.0	0.868	30.1	LOS C	11.8	86.2	0.87	0.89	1.06	46.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P5B	SouthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6	NorthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7	NorthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7B	NorthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8	SouthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8B	SouthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91

All Pedestrians	37	29.3	LOS C	0.91	0.91

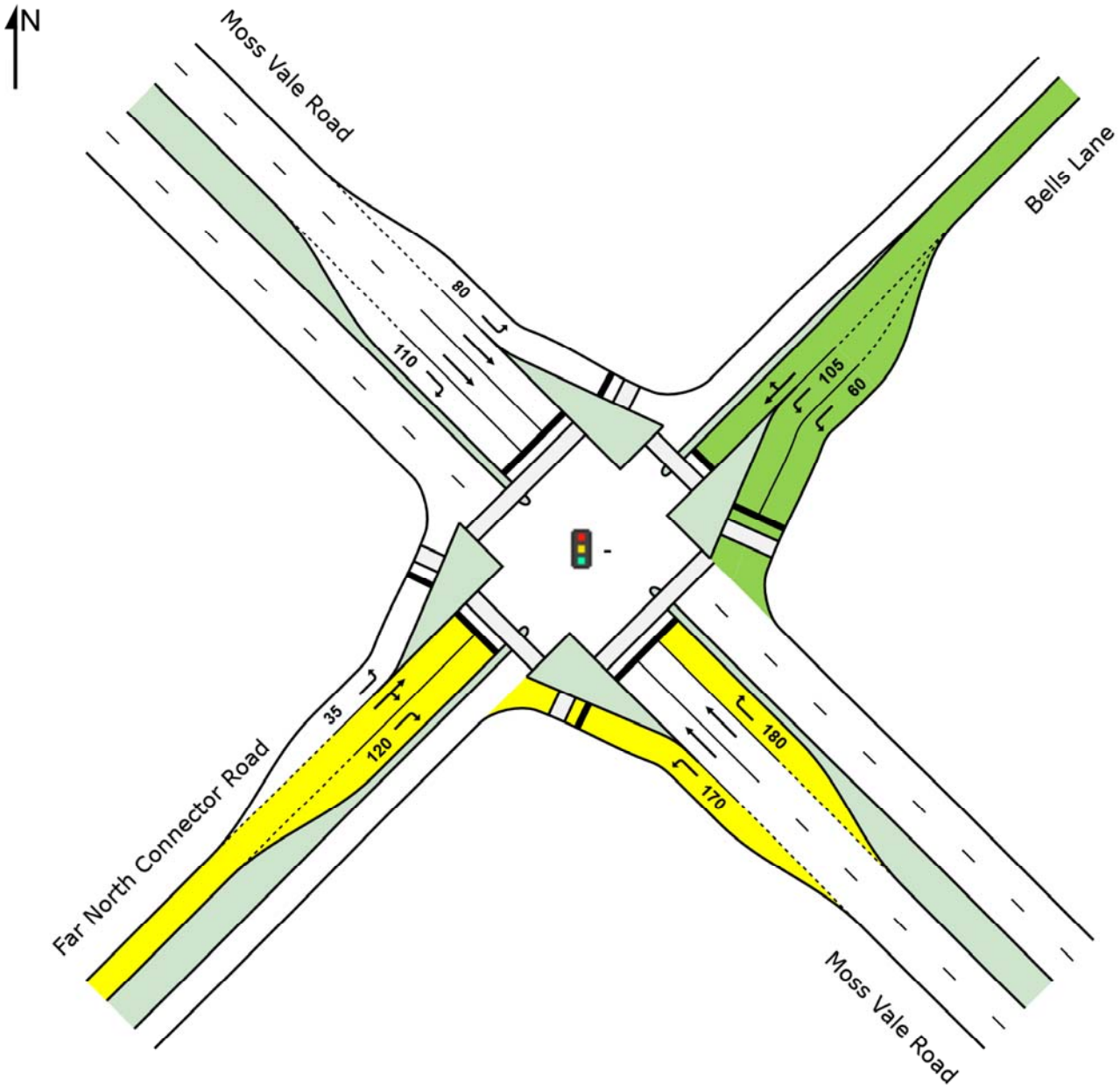
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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SITE LAYOUT

Site: - [2021_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: - [2021_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	259	5.0	0.208	9.1	LOS A	1.1	7.8	0.32	0.70	0.32	60.0
22	T1	238	5.0	0.394	21.6	LOS C	2.8	20.3	0.94	0.74	0.94	58.8
23	R2	72	5.0	0.333	31.2	LOS C	1.7	12.7	0.95	0.75	0.95	43.9
Approach		568	5.0	0.394	17.1	LOS B	2.8	20.3	0.66	0.72	0.66	56.9
NorthEast: Bells Lane												
24	L2	114	5.0	0.088	17.2	LOS B	0.9	6.8	0.69	0.70	0.69	50.3
25	T1	34	5.0	0.154	22.7	LOS C	0.8	5.9	0.93	0.67	0.93	43.7
26	R2	1	5.0	0.154	28.3	LOS C	0.8	5.9	0.93	0.67	0.93	46.5
Approach		148	5.0	0.154	18.6	LOS B	0.9	6.8	0.75	0.69	0.75	48.6
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	11.9	LOS B	0.0	0.1	0.49	0.61	0.49	57.5
28	T1	334	5.0	0.552	22.4	LOS C	4.0	29.4	0.97	0.78	0.98	58.0
29	R2	19	5.0	0.088	30.1	LOS C	0.4	3.2	0.92	0.70	0.92	44.5
Approach		354	5.0	0.552	22.8	LOS C	4.0	29.4	0.96	0.77	0.98	57.1
SouthWest: Far North Connector Road												
30	L2	1	5.0	0.001	9.9	LOS A	0.0	0.1	0.53	0.57	0.53	55.9
31	T1	31	5.0	0.835	29.6	LOS C	5.2	38.2	1.00	1.00	1.52	38.5
32	R2	331	5.0	0.835	35.3	LOS D	5.2	38.2	1.00	1.00	1.52	40.4
Approach		362	5.0	0.835	34.7	LOS C	5.2	38.2	1.00	0.99	1.52	40.3
All Vehicles		1433	5.0	0.835	23.1	LOS C	5.2	38.2	0.83	0.80	0.96	50.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P5B	SouthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6	NorthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6B	NorthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7	NorthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7B	NorthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8	SouthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8B	SouthWest Slip/Bypass Lane	5	19.4	LOS B	0.0	0.0	0.88	0.88

Crossing					
All Pedestrians	42	19.4	LOS B	0.88	0.88

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.

MOVEMENT SUMMARY

Site: - [2021_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	497	5.0	0.419	9.8	LOS A	3.2	23.2	0.45	0.74	0.45	59.5
22	T1	466	5.0	0.772	25.8	LOS C	6.3	45.9	1.00	0.91	1.29	55.1
23	R2	107	5.0	0.499	31.9	LOS C	2.7	19.5	0.98	0.77	0.98	43.5
Approach		1071	5.0	0.772	19.0	LOS B	6.3	45.9	0.74	0.82	0.87	55.5
NorthEast: Bells Lane												
24	L2	91	5.0	0.070	17.1	LOS B	0.7	5.4	0.68	0.69	0.68	50.4
25	T1	46	5.0	0.209	23.0	LOS C	1.1	8.2	0.94	0.69	0.94	43.6
26	R2	1	5.0	0.209	28.6	LOS C	1.1	8.2	0.94	0.69	0.94	46.4
Approach		138	5.0	0.209	19.2	LOS B	1.1	8.2	0.77	0.69	0.77	47.9
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	11.9	LOS B	0.0	0.1	0.49	0.61	0.49	57.5
28	T1	515	5.0	0.852	29.1	LOS C	7.5	54.7	1.00	0.98	1.49	52.5
29	R2	76	5.0	0.352	31.3	LOS C	1.8	13.5	0.96	0.76	0.96	43.8
Approach		592	5.0	0.852	29.4	LOS C	7.5	54.7	0.99	0.95	1.42	51.2
SouthWest: Far North Connector Road												
30	L2	1	5.0	0.001	10.1	LOS B	0.0	0.1	0.55	0.57	0.55	55.8
31	T1	39	5.0	0.690	25.9	LOS C	4.0	29.1	1.00	0.87	1.20	40.2
32	R2	260	5.0	0.690	31.6	LOS C	4.0	29.1	1.00	0.87	1.21	42.2
Approach		300	5.0	0.690	30.8	LOS C	4.0	29.1	1.00	0.87	1.20	42.0
All Vehicles		2100	5.0	0.852	23.6	LOS C	7.5	54.7	0.85	0.85	1.07	51.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P5B	SouthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6	NorthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6B	NorthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7	NorthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7B	NorthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8	SouthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8B	SouthWest Slip/Bypass Lane	5	19.4	LOS B	0.0	0.0	0.88	0.88

Crossing					
All Pedestrians	42	19.4	LOS B	0.88	0.88

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.

MOVEMENT SUMMARY

Site: - [2021_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	296	5.0	0.235	9.1	LOS A	1.4	10.4	0.30	0.70	0.30	60.1
22	T1	249	5.0	0.396	25.3	LOS C	3.4	25.0	0.94	0.74	0.94	55.5
23	R2	88	5.0	0.493	37.6	LOS D	2.7	19.5	0.99	0.77	0.99	40.8
Approach		634	5.0	0.493	19.4	LOS B	3.4	25.0	0.65	0.72	0.65	54.7
NorthEast: Bells Lane												
24	L2	211	5.0	0.196	22.8	LOS C	2.3	17.1	0.78	0.74	0.78	46.8
25	T1	61	5.0	0.329	29.2	LOS C	1.8	13.3	0.97	0.73	0.97	40.6
26	R2	1	5.0	0.329	34.8	LOS C	1.8	13.3	0.97	0.73	0.97	43.1
Approach		273	5.0	0.329	24.3	LOS C	2.3	17.1	0.82	0.74	0.82	45.2
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	11.4	LOS B	0.0	0.1	0.42	0.62	0.42	58.1
28	T1	389	5.0	0.619	26.8	LOS C	5.7	41.4	0.98	0.81	1.03	54.2
29	R2	20	5.0	0.112	35.9	LOS D	0.6	4.1	0.94	0.70	0.94	41.6
Approach		411	5.0	0.619	27.2	LOS C	5.7	41.4	0.97	0.81	1.02	53.4
SouthWest: Far North Connector Road												
30	L2	1	5.0	0.001	9.3	LOS A	0.0	0.1	0.46	0.57	0.46	56.5
31	T1	40	5.0	0.585	22.9	LOS C	6.7	48.9	0.94	0.81	0.94	41.3
32	R2	452	5.0	0.585	28.6	LOS C	6.7	48.9	0.94	0.81	0.94	43.6
Approach		493	5.0	0.585	28.1	LOS C	6.7	48.9	0.94	0.81	0.94	43.4
All Vehicles		1809	5.0	0.619	24.3	LOS C	6.7	48.9	0.83	0.77	0.84	49.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	24.3	LOS C	0.0	0.0	0.90	0.90

Crossing					
All Pedestrians	42	24.3	LOS C	0.90	0.90

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.

MOVEMENT SUMMARY

Site: - [2021_AADT PM -Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	486	5.0	0.407	9.6	LOS A	2.8	20.2	0.42	0.73	0.42	59.6
22	T1	401	5.0	0.664	23.6	LOS C	5.1	37.0	0.99	0.84	1.11	56.9
23	R2	160	5.0	0.744	34.6	LOS C	4.3	31.7	1.00	0.88	1.29	42.2
Approach		1047	5.0	0.744	18.8	LOS B	5.1	37.0	0.73	0.79	0.82	55.1
NorthEast: Bells Lane												
24	L2	96	5.0	0.074	17.2	LOS B	0.8	5.7	0.69	0.69	0.69	50.4
25	T1	47	5.0	0.214	23.0	LOS C	1.1	8.4	0.94	0.69	0.94	43.6
26	R2	1	5.0	0.214	28.6	LOS C	1.1	8.4	0.94	0.69	0.94	46.4
Approach		144	5.0	0.214	19.2	LOS B	1.1	8.4	0.77	0.69	0.77	47.9
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	12.1	LOS B	0.0	0.1	0.51	0.61	0.51	57.4
28	T1	445	5.0	0.737	24.9	LOS C	5.9	42.8	1.00	0.88	1.22	55.8
29	R2	64	5.0	0.298	31.1	LOS C	1.5	11.3	0.95	0.75	0.95	44.0
Approach		511	5.0	0.737	25.6	LOS C	5.9	42.8	0.99	0.87	1.19	54.0
SouthWest: Far North Connector Road												
30	L2	1	5.0	0.001	10.3	LOS B	0.0	0.1	0.57	0.57	0.57	55.6
31	T1	49	5.0	0.647	25.4	LOS C	3.7	26.9	1.00	0.84	1.15	40.7
32	R2	232	5.0	0.647	31.1	LOS C	3.7	26.9	1.00	0.84	1.15	42.6
Approach		282	5.0	0.647	30.0	LOS C	3.7	26.9	1.00	0.84	1.14	42.3
All Vehicles		1984	5.0	0.744	22.2	LOS C	5.9	42.8	0.84	0.81	0.96	52.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P5B	SouthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6	NorthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6B	NorthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7	NorthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7B	NorthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8	SouthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8B	SouthWest Slip/Bypass Lane	5	19.4	LOS B	0.0	0.0	0.88	0.88

Crossing					
All Pedestrians	42	19.4	LOS B	0.88	0.88

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: - [2026_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	313	5.0	0.251	9.1	LOS A	1.5	11.2	0.31	0.70	0.31	60.1
22	T1	243	5.0	0.429	26.4	LOS C	3.4	25.0	0.95	0.75	0.95	54.6
23	R2	145	5.0	0.608	36.4	LOS D	4.4	31.8	0.99	0.82	1.06	41.3
Approach		701	5.0	0.608	20.8	LOS C	4.4	31.8	0.67	0.74	0.69	53.2
NorthEast: Bells Lane												
24	L2	247	5.0	0.207	21.4	LOS C	2.6	19.3	0.75	0.74	0.75	47.7
25	T1	69	5.0	0.374	29.3	LOS C	2.1	15.2	0.97	0.74	0.97	40.6
26	R2	1	5.0	0.374	35.0	LOS C	2.1	15.2	0.97	0.74	0.97	43.0
Approach		318	5.0	0.374	23.2	LOS C	2.6	19.3	0.80	0.74	0.80	45.9
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	12.1	LOS B	0.0	0.1	0.46	0.61	0.46	57.4
28	T1	374	5.0	0.660	28.3	LOS C	5.6	41.0	0.99	0.83	1.09	53.1
29	R2	18	5.0	0.075	33.3	LOS C	0.5	3.5	0.90	0.70	0.90	42.8
Approach		393	5.0	0.660	28.5	LOS C	5.6	41.0	0.99	0.83	1.08	52.5
SouthWest: Far North Connector Road												
30	L2	1	5.0	0.001	9.3	LOS A	0.0	0.1	0.46	0.57	0.46	56.5
31	T1	56	5.0	0.647	24.7	LOS C	7.2	52.8	0.96	0.84	1.02	40.7
32	R2	449	5.0	0.647	30.3	LOS C	7.2	52.8	0.96	0.84	1.02	42.8
Approach		506	5.0	0.647	29.7	LOS C	7.2	52.8	0.96	0.84	1.02	42.6
All Vehicles		1918	5.0	0.660	25.1	LOS C	7.2	52.8	0.83	0.79	0.87	48.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	24.3	LOS C	0.0	0.0	0.90	0.90

Crossing					
All Pedestrians	42	24.3	LOS C	0.90	0.90

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.

MOVEMENT SUMMARY

Site: - [2026_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	612	5.0	0.509	10.0	LOS A	5.0	36.2	0.45	0.75	0.45	59.3
22	T1	485	5.0	0.642	25.4	LOS C	7.0	50.8	0.97	0.82	1.02	55.4
23	R2	232	5.0	0.775	37.9	LOS D	7.4	53.9	1.00	0.90	1.25	40.6
Approach		1328	5.0	0.775	20.5	LOS C	7.4	53.9	0.74	0.80	0.80	53.6
NorthEast: Bells Lane												
24	L2	176	5.0	0.134	19.4	LOS B	1.7	12.7	0.70	0.72	0.70	48.9
25	T1	91	5.0	0.485	29.8	LOS C	2.7	20.1	0.99	0.76	0.99	40.4
26	R2	1	5.0	0.485	35.4	LOS D	2.7	20.1	0.99	0.76	0.99	42.8
Approach		267	5.0	0.485	23.0	LOS C	2.7	20.1	0.80	0.73	0.80	45.6
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	13.0	LOS B	0.0	0.1	0.51	0.61	0.51	56.7
28	T1	593	5.0	0.784	28.9	LOS C	9.4	68.3	1.00	0.92	1.23	52.6
29	R2	65	5.0	0.218	32.1	LOS C	1.7	12.6	0.90	0.75	0.90	43.4
Approach		659	5.0	0.784	29.2	LOS C	9.4	68.3	0.99	0.90	1.20	51.6
SouthWest: Far North Connector Road												
30	L2	1	5.0	0.001	9.2	LOS A	0.0	0.1	0.44	0.57	0.44	56.5
31	T1	72	5.0	0.756	31.2	LOS C	5.9	43.0	1.00	0.91	1.25	38.3
32	R2	294	5.0	0.756	36.9	LOS D	5.9	43.0	1.00	0.91	1.26	39.9
Approach		366	5.0	0.756	35.7	LOS D	5.9	43.0	1.00	0.91	1.25	39.6
All Vehicles		2621	5.0	0.784	25.0	LOS C	9.4	68.3	0.84	0.83	0.96	49.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	24.3	LOS C	0.0	0.0	0.90	0.90

Crossing					
All Pedestrians	42	24.3	LOS C	0.90	0.90

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.

MOVEMENT SUMMARY

Site: - [2026_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	334	5.0	0.268	9.1	LOS A	1.7	12.2	0.31	0.70	0.31	60.1
22	T1	251	5.0	0.398	25.3	LOS C	3.4	25.2	0.94	0.74	0.94	55.5
23	R2	152	5.0	0.725	39.1	LOS D	4.8	35.2	1.00	0.86	1.23	40.1
Approach		736	5.0	0.725	20.8	LOS C	4.8	35.2	0.67	0.75	0.71	53.2
NorthEast: Bells Lane												
24	L2	255	5.0	0.224	22.2	LOS C	2.8	20.5	0.77	0.75	0.77	47.1
25	T1	77	5.0	0.413	29.5	LOS C	2.3	16.9	0.98	0.74	0.98	40.5
26	R2	1	5.0	0.413	35.1	LOS D	2.3	16.9	0.98	0.74	0.98	42.9
Approach		333	5.0	0.413	24.0	LOS C	2.8	20.5	0.82	0.74	0.82	45.4
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	11.7	LOS B	0.0	0.1	0.44	0.61	0.44	57.8
28	T1	422	5.0	0.670	27.6	LOS C	6.3	45.9	0.99	0.84	1.09	53.6
29	R2	19	5.0	0.091	34.6	LOS C	0.5	3.8	0.92	0.70	0.92	42.2
Approach		442	5.0	0.670	27.8	LOS C	6.3	45.9	0.98	0.83	1.08	53.0
SouthWest: Far North Connector Road												
30	L2	1	5.0	0.001	9.3	LOS A	0.0	0.1	0.46	0.57	0.46	56.5
31	T1	61	5.0	0.679	25.3	LOS C	7.7	56.5	0.97	0.87	1.06	40.5
32	R2	469	5.0	0.679	30.9	LOS C	7.7	56.5	0.97	0.86	1.06	42.5
Approach		532	5.0	0.679	30.2	LOS C	7.7	56.5	0.97	0.86	1.05	42.3
All Vehicles		2042	5.0	0.725	25.3	LOS C	7.7	56.5	0.84	0.80	0.90	48.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	24.3	LOS C	0.0	0.0	0.90	0.90

Crossing					
All Pedestrians	42	24.3	LOS C	0.90	0.90

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.

MOVEMENT SUMMARY

Site: - [2026_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	518	5.0	0.423	9.6	LOS A	3.4	25.2	0.39	0.73	0.39	59.7
22	T1	402	5.0	0.532	24.2	LOS C	5.5	40.3	0.94	0.77	0.94	56.4
23	R2	207	5.0	0.694	35.8	LOS D	6.3	45.9	0.99	0.86	1.13	41.6
Approach		1127	5.0	0.694	19.6	LOS B	6.3	45.9	0.70	0.77	0.72	54.2
NorthEast: Bells Lane												
24	L2	141	5.0	0.107	19.3	LOS B	1.4	10.0	0.69	0.71	0.69	49.0
25	T1	77	5.0	0.413	29.5	LOS C	2.3	16.9	0.98	0.74	0.98	40.5
26	R2	1	5.0	0.413	35.1	LOS D	2.3	16.9	0.98	0.74	0.98	42.9
Approach		219	5.0	0.413	22.9	LOS C	2.3	16.9	0.79	0.72	0.79	45.6
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	12.9	LOS B	0.0	0.1	0.49	0.61	0.49	56.8
28	T1	496	5.0	0.656	25.6	LOS C	7.2	52.2	0.97	0.83	1.04	55.2
29	R2	55	5.0	0.183	31.9	LOS C	1.4	10.5	0.89	0.74	0.89	43.5
Approach		552	5.0	0.656	26.2	LOS C	7.2	52.2	0.96	0.82	1.02	53.8
SouthWest: Far North Connector Road												
30	L2	1	5.0	0.001	9.7	LOS A	0.0	0.1	0.49	0.57	0.49	56.1
31	T1	62	5.0	0.645	29.1	LOS C	4.8	34.9	0.99	0.84	1.10	39.2
32	R2	249	5.0	0.645	34.8	LOS C	4.8	34.9	0.99	0.84	1.10	40.8
Approach		313	5.0	0.645	33.6	LOS C	4.8	34.9	0.99	0.84	1.10	40.5
All Vehicles		2211	5.0	0.694	23.6	LOS C	7.2	52.2	0.82	0.79	0.86	50.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	24.3	LOS C	0.0	0.0	0.90	0.90

Crossing					
All Pedestrians	42	24.3	LOS C	0.90	0.90

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.

MOVEMENT SUMMARY

Site: - [2031_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	358	5.0	0.292	9.3	LOS A	2.1	15.0	0.34	0.71	0.34	60.0
22	T1	284	5.0	0.410	24.4	LOS C	3.9	28.1	0.93	0.74	0.93	56.2
23	R2	163	5.0	0.780	40.4	LOS D	5.3	39.0	1.00	0.89	1.32	39.5
Approach		805	5.0	0.780	21.0	LOS C	5.3	39.0	0.68	0.76	0.75	53.2
NorthEast: Bells Lane												
24	L2	283	5.0	0.249	22.4	LOS C	3.1	23.0	0.78	0.75	0.78	47.0
25	T1	85	5.0	0.457	29.7	LOS C	2.6	18.8	0.98	0.75	0.98	40.4
26	R2	1	5.0	0.457	35.3	LOS D	2.6	18.8	0.98	0.75	0.98	42.8
Approach		369	5.0	0.457	24.1	LOS C	3.1	23.0	0.83	0.75	0.83	45.3
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	11.7	LOS B	0.0	0.1	0.44	0.61	0.44	57.8
28	T1	575	5.0	0.830	31.7	LOS C	9.5	69.7	1.00	0.95	1.34	50.6
29	R2	42	5.0	0.201	35.2	LOS D	1.2	8.7	0.94	0.73	0.94	41.9
Approach		618	5.0	0.830	31.9	LOS C	9.5	69.7	0.99	0.94	1.31	49.9
SouthWest: Far North Connector Road												
30	L2	1	5.0	0.001	9.3	LOS A	0.0	0.1	0.46	0.57	0.46	56.5
31	T1	61	5.0	0.798	29.6	LOS C	9.3	67.9	1.00	0.97	1.26	38.6
32	R2	515	5.0	0.798	35.3	LOS D	9.3	67.9	1.00	0.96	1.27	40.5
Approach		577	5.0	0.798	34.6	LOS C	9.3	67.9	1.00	0.96	1.26	40.3
All Vehicles		2369	5.0	0.830	27.6	LOS C	9.5	69.7	0.86	0.85	1.03	47.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	24.3	LOS C	0.0	0.0	0.90	0.90

Crossing					
All Pedestrians	42	24.3	LOS C	0.90	0.90

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.

MOVEMENT SUMMARY

Site: - [2031_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	696	5.0	0.578	10.5	LOS B	7.5	55.0	0.49	0.76	0.49	58.8
22	T1	594	5.0	0.688	28.4	LOS C	9.8	71.8	0.97	0.84	1.03	53.0
23	R2	288	5.0	0.804	41.8	LOS D	10.7	78.2	1.00	0.91	1.24	38.9
Approach		1578	5.0	0.804	23.0	LOS C	10.7	78.2	0.76	0.82	0.83	51.9
NorthEast: Bells Lane												
24	L2	185	5.0	0.139	21.4	LOS C	2.1	15.4	0.70	0.72	0.70	47.6
25	T1	101	5.0	0.631	36.7	LOS D	3.7	27.1	1.00	0.82	1.11	37.5
26	R2	1	5.0	0.631	42.3	LOS D	3.7	27.1	1.00	0.82	1.11	39.6
Approach		287	5.0	0.631	26.9	LOS C	3.7	27.1	0.80	0.75	0.84	43.5
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	13.9	LOS B	0.0	0.1	0.51	0.61	0.51	55.9
28	T1	731	5.0	0.846	35.2	LOS D	14.1	102.7	1.00	0.97	1.29	48.2
29	R2	92	5.0	0.255	34.0	LOS C	2.7	19.9	0.88	0.77	0.88	42.5
Approach		823	5.0	0.846	35.0	LOS D	14.1	102.7	0.99	0.95	1.25	47.5
SouthWest: Far North Connector Road												
30	L2	2	5.0	0.002	8.9	LOS A	0.0	0.1	0.41	0.58	0.41	56.8
31	T1	86	5.0	0.791	36.3	LOS D	7.7	56.5	1.00	0.94	1.27	36.4
32	R2	323	5.0	0.791	42.0	LOS D	7.7	56.5	1.00	0.94	1.27	37.8
Approach		412	5.0	0.791	40.7	LOS D	7.7	56.5	1.00	0.94	1.27	37.6
All Vehicles		3100	5.0	0.846	28.9	LOS C	14.1	102.7	0.86	0.86	1.00	47.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P5B	SouthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6	NorthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6B	NorthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7	NorthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7B	NorthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8	SouthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8B	SouthWest Slip/Bypass Lane	5	29.3	LOS C	0.0	0.0	0.91	0.91

Crossing					
All Pedestrians	42	29.3	LOS C	0.91	0.91

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: - [2031_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	380	5.0	0.298	9.4	LOS A	2.5	18.1	0.32	0.71	0.32	60.0
22	T1	293	5.0	0.271	21.2	LOS C	3.9	28.8	0.82	0.66	0.82	59.1
23	R2	169	5.0	0.735	43.3	LOS D	6.2	45.2	1.00	0.87	1.20	38.4
Approach		842	5.0	0.735	20.3	LOS C	6.2	45.2	0.63	0.72	0.67	53.6
NorthEast: Bells Lane												
24	L2	271	5.0	0.251	26.0	LOS C	3.6	26.0	0.80	0.75	0.80	45.0
25	T1	93	5.0	0.579	36.2	LOS D	3.4	24.5	1.00	0.79	1.06	37.7
26	R2	1	5.0	0.579	41.8	LOS D	3.4	24.5	1.00	0.79	1.06	39.8
Approach		364	5.0	0.579	28.6	LOS C	3.6	26.0	0.85	0.76	0.87	42.9
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	11.9	LOS B	0.0	0.1	0.42	0.62	0.42	57.6
28	T1	832	5.0	0.771	28.0	LOS C	14.3	104.3	0.98	0.90	1.10	53.3
29	R2	46	5.0	0.201	38.6	LOS D	1.5	10.9	0.93	0.74	0.93	40.4
Approach		879	5.0	0.771	28.5	LOS C	14.3	104.3	0.97	0.89	1.09	52.4
SouthWest: Far North Connector Road												
30	L2	1	5.0	0.001	8.9	LOS A	0.0	0.1	0.41	0.57	0.41	56.8
31	T1	67	5.0	0.769	34.8	LOS C	8.1	58.8	1.00	0.93	1.22	36.8
32	R2	369	5.0	0.769	40.5	LOS D	8.1	58.8	1.00	0.92	1.22	38.3
Approach		438	5.0	0.769	39.5	LOS D	8.1	58.8	1.00	0.92	1.22	38.1
All Vehicles		2523	5.0	0.771	27.7	LOS C	14.3	104.3	0.84	0.82	0.94	48.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P5B	SouthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6	NorthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6B	NorthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7	NorthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7B	NorthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8	SouthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8B	SouthWest Slip/Bypass Lane	5	29.3	LOS C	0.0	0.0	0.91	0.91

Crossing					
All Pedestrians	42	29.3	LOS C	0.91	0.91

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: - [2031_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	601	5.0	0.502	10.0	LOS A	4.8	35.3	0.45	0.75	0.45	59.3
22	T1	503	5.0	0.666	25.8	LOS C	7.3	53.3	0.97	0.83	1.05	55.1
23	R2	259	5.0	0.788	37.6	LOS D	8.3	60.5	1.00	0.91	1.26	40.8
Approach		1363	5.0	0.788	21.1	LOS C	8.3	60.5	0.75	0.81	0.83	53.2
NorthEast: Bells Lane												
24	L2	167	5.0	0.122	18.7	LOS B	1.6	11.7	0.68	0.71	0.68	49.4
25	T1	87	5.0	0.468	29.7	LOS C	2.6	19.3	0.98	0.75	0.98	40.4
26	R2	1	5.0	0.468	35.4	LOS D	2.6	19.3	0.98	0.75	0.98	42.8
Approach		256	5.0	0.468	22.5	LOS C	2.6	19.3	0.78	0.72	0.78	45.9
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	13.4	LOS B	0.0	0.1	0.53	0.61	0.53	56.3
28	T1	600	5.0	0.794	29.3	LOS C	9.6	69.8	1.00	0.93	1.25	52.3
29	R2	72	5.0	0.218	31.1	LOS C	1.9	13.6	0.89	0.75	0.89	44.0
Approach		673	5.0	0.794	29.4	LOS C	9.6	69.8	0.99	0.91	1.21	51.3
SouthWest: Far North Connector Road												
30	L2	1	5.0	0.001	10.1	LOS B	0.0	0.1	0.53	0.57	0.53	55.8
31	T1	75	5.0	0.816	33.9	LOS C	5.8	42.6	1.00	0.96	1.40	37.4
32	R2	271	5.0	0.816	39.6	LOS D	5.8	42.6	1.00	0.96	1.41	38.8
Approach		346	5.0	0.816	38.2	LOS D	5.8	42.6	1.00	0.96	1.40	38.5
All Vehicles		2638	5.0	0.816	25.6	LOS C	9.6	69.8	0.85	0.85	1.00	49.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	24.3	LOS C	0.0	0.0	0.90	0.90

Crossing					
All Pedestrians	42	24.3	LOS C	0.90	0.90

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.

MOVEMENT SUMMARY

Site: - [2036_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	432	5.0	0.336	9.6	LOS A	3.5	25.8	0.33	0.71	0.33	59.7
22	T1	308	5.0	0.261	22.4	LOS C	4.5	33.2	0.79	0.64	0.79	58.1
23	R2	181	5.0	0.734	47.2	LOS D	7.4	54.2	1.00	0.86	1.16	36.9
Approach		921	5.0	0.734	21.3	LOS C	7.4	54.2	0.61	0.72	0.65	52.8
NorthEast: Bells Lane												
24	L2	279	5.0	0.271	29.7	LOS C	4.3	31.1	0.81	0.76	0.81	43.0
25	T1	99	5.0	0.706	43.4	LOS D	4.2	30.9	1.00	0.85	1.20	35.1
26	R2	1	5.0	0.706	49.1	LOS D	4.2	30.9	1.00	0.85	1.20	36.9
Approach		379	5.0	0.706	33.3	LOS C	4.3	31.1	0.86	0.78	0.92	40.6
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	12.1	LOS B	0.0	0.1	0.39	0.62	0.39	57.5
28	T1	855	5.0	0.724	27.8	LOS C	15.5	113.1	0.95	0.84	0.99	53.5
29	R2	65	5.0	0.265	42.4	LOS D	2.4	17.4	0.93	0.76	0.93	38.7
Approach		921	5.0	0.724	28.8	LOS C	15.5	113.1	0.95	0.84	0.99	52.1
SouthWest: Far North Connector Road												
30	L2	6	5.0	0.007	8.5	LOS A	0.1	0.4	0.36	0.59	0.36	57.1
31	T1	73	5.0	0.712	36.3	LOS D	9.0	65.5	1.00	0.88	1.10	36.3
32	R2	378	5.0	0.712	42.0	LOS D	9.0	65.5	1.00	0.87	1.10	37.8
Approach		457	5.0	0.712	40.6	LOS D	9.0	65.5	0.99	0.87	1.09	37.7
All Vehicles		2678	5.0	0.734	28.9	LOS C	15.5	113.1	0.83	0.79	0.88	47.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P5B	SouthEast Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P6	NorthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P6B	NorthEast Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7	NorthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7B	NorthWest Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8	SouthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8B	SouthWest Slip/Bypass Lane	5	34.2	LOS D	0.0	0.0	0.93	0.93

Crossing					
All Pedestrians	42	34.2	LOS D	0.93	0.93

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.

MOVEMENT SUMMARY

Site: - [2036_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	726	5.0	0.618	11.3	LOS B	9.4	68.4	0.55	0.78	0.55	58.1
22	T1	634	5.0	0.734	29.6	LOS C	10.9	79.3	0.98	0.88	1.09	52.1
23	R2	308	5.0	0.926	55.1	LOS E	13.9	101.3	1.00	1.04	1.63	34.1
Approach		1668	5.0	0.926	26.4	LOS C	13.9	101.3	0.80	0.86	0.96	49.5
NorthEast: Bells Lane												
24	L2	197	5.0	0.154	22.3	LOS C	2.3	16.8	0.71	0.72	0.71	47.1
25	T1	114	5.0	0.709	37.7	LOS D	4.3	31.1	1.00	0.86	1.21	37.2
26	R2	1	5.0	0.709	43.3	LOS D	4.3	31.1	1.00	0.86	1.21	39.2
Approach		312	5.0	0.709	28.0	LOS C	4.3	31.1	0.82	0.77	0.90	42.9
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	13.5	LOS B	0.0	0.1	0.50	0.61	0.50	56.3
28	T1	766	5.0	0.888	39.4	LOS D	15.8	115.5	1.00	1.03	1.41	45.7
29	R2	116	5.0	0.348	35.5	LOS D	3.6	26.1	0.91	0.78	0.91	41.8
Approach		883	5.0	0.888	38.9	LOS D	15.8	115.5	0.99	0.99	1.34	45.2
SouthWest: Far North Connector Road												
30	L2	18	5.0	0.020	9.2	LOS A	0.2	1.2	0.43	0.62	0.43	56.6
31	T1	104	5.0	0.896	43.1	LOS D	10.8	78.6	1.00	1.09	1.53	34.2
32	R2	405	5.0	0.896	48.8	LOS D	10.8	78.6	1.00	1.07	1.54	35.3
Approach		527	5.0	0.896	46.3	LOS D	10.8	78.6	0.98	1.06	1.50	35.5
All Vehicles		3391	5.0	0.926	32.9	LOS C	15.8	115.5	0.88	0.92	1.14	45.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P5B	SouthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6	NorthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6B	NorthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7	NorthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7B	NorthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8	SouthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8B	SouthWest Slip/Bypass Lane	5	29.3	LOS C	0.0	0.0	0.91	0.91

Crossing					
All Pedestrians	42	29.3	LOS C	0.91	0.91

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.

MOVEMENT SUMMARY

Site: - [2036_AADT AM -Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	444	5.0	0.365	9.9	LOS A	3.7	26.7	0.38	0.72	0.38	59.4
22	T1	308	5.0	0.381	26.1	LOS C	4.7	34.0	0.90	0.73	0.90	54.8
23	R2	184	5.0	0.799	45.2	LOS D	7.0	50.9	1.00	0.91	1.31	37.6
Approach		937	5.0	0.799	22.2	LOS C	7.0	50.9	0.67	0.76	0.73	52.0
NorthEast: Bells Lane												
24	L2	366	5.0	0.340	26.6	LOS C	5.0	36.3	0.82	0.77	0.82	44.6
25	T1	109	5.0	0.683	37.3	LOS D	4.1	29.7	1.00	0.84	1.17	37.3
26	R2	1	5.0	0.683	43.0	LOS D	4.1	29.7	1.00	0.84	1.17	39.3
Approach		477	5.0	0.683	29.1	LOS C	5.0	36.3	0.86	0.79	0.90	42.7
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	11.9	LOS B	0.0	0.1	0.42	0.62	0.42	57.6
28	T1	675	5.0	0.834	34.9	LOS C	12.8	93.6	1.00	0.96	1.28	48.4
29	R2	71	5.0	0.306	39.1	LOS D	2.3	16.8	0.95	0.76	0.95	40.1
Approach		746	5.0	0.834	35.3	LOS D	12.8	93.6	0.99	0.94	1.25	47.5
SouthWest: Far North Connector Road												
30	L2	6	5.0	0.006	8.4	LOS A	0.1	0.4	0.35	0.59	0.35	57.1
31	T1	81	5.0	0.824	33.8	LOS C	12.8	93.2	1.00	0.98	1.26	37.0
32	R2	597	5.0	0.824	39.5	LOS D	12.8	93.2	1.00	0.97	1.26	38.7
Approach		684	5.0	0.824	38.6	LOS D	12.8	93.2	0.99	0.97	1.25	38.6
All Vehicles		2844	5.0	0.834	30.7	LOS C	12.8	93.6	0.87	0.86	1.02	45.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P5B	SouthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6	NorthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6B	NorthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7	NorthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7B	NorthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8	SouthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8B	SouthWest Slip/Bypass Lane	5	29.3	LOS C	0.0	0.0	0.91	0.91

Crossing					
All Pedestrians	42	29.3	LOS C	0.91	0.91

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.

MOVEMENT SUMMARY

Site: - [2036_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	639	5.0	0.548	10.4	LOS B	5.9	43.0	0.50	0.76	0.50	58.9
22	T1	544	5.0	0.786	29.7	LOS C	8.7	63.2	1.00	0.92	1.25	52.0
23	R2	280	5.0	0.852	41.1	LOS D	9.6	70.2	1.00	0.96	1.41	39.3
Approach		1463	5.0	0.852	23.4	LOS C	9.6	70.2	0.78	0.86	0.95	51.5
NorthEast: Bells Lane												
24	L2	183	5.0	0.133	18.7	LOS B	1.8	12.9	0.68	0.71	0.68	49.3
25	T1	98	5.0	0.524	30.0	LOS C	3.0	21.8	0.99	0.77	1.01	40.3
26	R2	1	5.0	0.524	35.6	LOS D	3.0	21.8	0.99	0.77	1.01	42.7
Approach		282	5.0	0.524	22.7	LOS C	3.0	21.8	0.79	0.73	0.80	45.7
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	13.4	LOS B	0.0	0.1	0.53	0.61	0.53	56.3
28	T1	633	5.0	0.914	39.7	LOS D	12.0	87.9	1.00	1.06	1.63	45.5
29	R2	92	5.0	0.279	31.5	LOS C	2.4	17.6	0.90	0.77	0.90	43.8
Approach		725	5.0	0.914	38.6	LOS D	12.0	87.9	0.99	1.02	1.54	45.3
SouthWest: Far North Connector Road												
30	L2	15	5.0	0.018	9.8	LOS A	0.1	1.0	0.50	0.62	0.50	56.0
31	T1	91	5.0	0.906	39.8	LOS D	8.2	60.1	1.00	1.11	1.69	35.2
32	R2	347	5.0	0.906	45.5	LOS D	8.2	60.1	1.00	1.11	1.69	36.5
Approach		453	5.0	0.906	43.2	LOS D	8.2	60.1	0.98	1.09	1.65	36.6
All Vehicles		2923	5.0	0.914	30.2	LOS C	12.0	87.9	0.86	0.92	1.19	46.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	24.3	LOS C	0.0	0.0	0.90	0.90

Crossing					
All Pedestrians	42	24.3	LOS C	0.90	0.90

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.

MOVEMENT SUMMARY

Site: - [2041_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	425	5.0	0.372	10.7	LOS B	4.3	31.5	0.43	0.74	0.43	58.6
22	T1	303	5.0	0.432	28.2	LOS C	4.8	34.8	0.93	0.75	0.93	53.1
23	R2	182	5.0	0.889	51.4	LOS D	7.5	55.0	1.00	0.99	1.58	35.3
Approach		911	5.0	0.889	24.7	LOS C	7.5	55.0	0.71	0.79	0.83	50.3
NorthEast: Bells Lane												
24	L2	429	5.0	0.381	26.2	LOS C	5.8	42.5	0.82	0.78	0.82	44.9
25	T1	196	5.0	0.912	46.1	LOS D	8.4	61.3	1.00	1.09	1.66	34.3
26	R2	1	5.0	0.912	51.7	LOS D	8.4	61.3	1.00	1.09	1.66	36.0
Approach		626	5.0	0.912	32.5	LOS C	8.4	61.3	0.88	0.88	1.09	40.9
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	11.8	LOS B	0.0	0.1	0.44	0.62	0.44	57.8
28	T1	597	5.0	0.851	37.4	LOS D	11.7	85.1	1.00	0.97	1.35	46.9
29	R2	63	5.0	0.308	40.2	LOS D	2.1	15.4	0.96	0.75	0.96	39.6
Approach		661	5.0	0.851	37.7	LOS D	11.7	85.1	0.99	0.95	1.31	46.1
SouthWest: Far North Connector Road												
30	L2	6	5.0	0.007	9.5	LOS A	0.1	0.5	0.44	0.60	0.44	56.3
31	T1	125	5.0	0.844	34.6	LOS C	14.3	104.1	1.00	1.02	1.29	36.9
32	R2	614	5.0	0.844	40.3	LOS D	14.3	104.1	1.00	1.00	1.29	38.4
Approach		745	5.0	0.844	39.1	LOS D	14.3	104.1	1.00	1.00	1.28	38.3
All Vehicles		2943	5.0	0.912	32.9	LOS C	14.3	104.1	0.88	0.90	1.11	43.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P5B	SouthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6	NorthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6B	NorthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7	NorthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7B	NorthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8	SouthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8B	SouthWest Slip/Bypass Lane	5	29.3	LOS C	0.0	0.0	0.91	0.91

Crossing					
All Pedestrians	42	29.3	LOS C	0.91	0.91

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: - [2041_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	709	5.0	0.632	12.5	LOS B	11.8	86.4	0.59	0.79	0.59	57.0
22	T1	631	5.0	0.786	36.3	LOS D	12.8	93.7	1.00	0.91	1.16	47.5
23	R2	284	5.0	0.906	56.6	LOS E	13.7	99.8	1.00	0.99	1.50	33.7
Approach		1624	5.0	0.906	29.5	LOS C	13.7	99.8	0.82	0.87	0.97	47.6
NorthEast: Bells Lane												
24	L2	233	5.0	0.179	24.4	LOS C	3.1	22.7	0.72	0.73	0.72	45.8
25	T1	192	5.0	0.907	50.7	LOS D	9.2	66.9	1.00	1.07	1.58	32.8
26	R2	1	5.0	0.907	56.4	LOS E	9.2	66.9	1.00	1.07	1.58	34.4
Approach		425	5.0	0.907	36.4	LOS D	9.2	66.9	0.85	0.89	1.11	38.9
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	13.9	LOS B	0.0	0.1	0.51	0.61	0.51	56.0
28	T1	729	5.0	0.909	47.6	LOS D	17.6	128.6	1.00	1.04	1.45	41.4
29	R2	114	5.0	0.362	40.1	LOS D	4.0	29.6	0.92	0.78	0.92	39.7
Approach		844	5.0	0.909	46.6	LOS D	17.6	128.6	0.99	1.01	1.38	41.2
SouthWest: Far North Connector Road												
30	L2	19	5.0	0.021	10.0	LOS B	0.2	1.5	0.46	0.63	0.46	55.8
31	T1	207	5.0	0.904	47.5	LOS D	15.6	114.2	1.00	1.10	1.46	33.2
32	R2	444	5.0	0.904	53.4	LOS D	15.6	114.2	1.00	1.06	1.46	33.9
Approach		671	5.0	0.904	50.3	LOS D	15.6	114.2	0.98	1.06	1.43	34.0
All Vehicles		3564	5.0	0.909	38.3	LOS D	17.6	128.6	0.89	0.94	1.17	41.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P5B	SouthEast Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P6	NorthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P6B	NorthEast Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7	NorthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7B	NorthWest Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8	SouthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8B	SouthWest Slip/Bypass Lane	5	34.2	LOS D	0.0	0.0	0.93	0.93

Crossing					
All Pedestrians	42	34.2	LOS D	0.93	0.93

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: - [2041_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	427	5.0	0.372	11.0	LOS B	4.9	36.0	0.42	0.73	0.42	58.4
22	T1	298	5.0	0.421	31.8	LOS C	5.3	38.6	0.93	0.75	0.93	50.5
23	R2	179	5.0	0.887	56.5	LOS E	8.3	60.7	1.00	0.97	1.53	33.7
Approach		904	5.0	0.887	26.9	LOS C	8.3	60.7	0.70	0.79	0.81	48.8
NorthEast: Bells Lane												
24	L2	594	5.0	0.509	29.5	LOS C	9.5	69.5	0.86	0.81	0.86	43.1
25	T1	220	5.0	0.851	44.3	LOS D	9.8	71.5	1.00	1.00	1.37	34.8
26	R2	1	5.0	0.851	49.9	LOS D	9.8	71.5	1.00	1.00	1.37	36.6
Approach		815	5.0	0.851	33.5	LOS C	9.8	71.5	0.90	0.86	1.00	40.5
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	11.7	LOS B	0.0	0.1	0.41	0.62	0.41	57.9
28	T1	615	5.0	0.868	43.3	LOS D	13.8	100.9	1.00	0.98	1.35	43.6
29	R2	52	5.0	0.256	44.4	LOS D	1.9	14.1	0.95	0.74	0.95	37.9
Approach		667	5.0	0.868	43.3	LOS D	13.8	100.9	1.00	0.96	1.32	43.1
SouthWest: Far North Connector Road												
30	L2	6	5.0	0.007	10.0	LOS B	0.1	0.5	0.44	0.60	0.44	55.8
31	T1	137	5.0	0.823	35.9	LOS D	16.3	119.1	1.00	0.97	1.20	36.5
32	R2	642	5.0	0.823	41.6	LOS D	16.3	119.1	1.00	0.96	1.20	37.9
Approach		785	5.0	0.823	40.4	LOS D	16.3	119.1	1.00	0.96	1.19	37.8
All Vehicles		3172	5.0	0.887	35.4	LOS D	16.3	119.1	0.89	0.89	1.06	42.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P5B	SouthEast Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P6	NorthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P6B	NorthEast Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7	NorthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7B	NorthWest Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8	SouthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8B	SouthWest Slip/Bypass Lane	5	34.2	LOS D	0.0	0.0	0.93	0.93

Crossing					
All Pedestrians	42	34.2	LOS D	0.93	0.93

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.

MOVEMENT SUMMARY

Site: - [2041_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	639	5.0	0.558	11.4	LOS B	8.0	58.7	0.53	0.77	0.53	58.0
22	T1	578	5.0	0.714	29.9	LOS C	9.8	71.9	0.98	0.86	1.08	51.9
23	R2	259	5.0	0.842	45.4	LOS D	10.1	73.6	1.00	0.94	1.35	37.5
Approach		1476	5.0	0.842	24.6	LOS C	10.1	73.6	0.79	0.84	0.89	50.8
NorthEast: Bells Lane												
24	L2	176	5.0	0.137	22.1	LOS C	2.0	14.9	0.71	0.72	0.71	47.2
25	T1	163	5.0	0.870	42.3	LOS D	6.6	48.3	1.00	1.01	1.53	35.5
26	R2	1	5.0	0.870	48.0	LOS D	6.6	48.3	1.00	1.01	1.53	37.4
Approach		340	5.0	0.870	31.9	LOS C	6.6	48.3	0.85	0.86	1.11	40.7
NorthWest: Moss Vale Road												
27	L2	1	5.0	0.001	13.6	LOS B	0.0	0.1	0.52	0.61	0.52	56.2
28	T1	646	5.0	0.799	32.9	LOS C	11.8	86.2	1.00	0.93	1.21	49.7
29	R2	94	5.0	0.305	36.1	LOS D	2.9	21.3	0.91	0.77	0.91	41.5
Approach		741	5.0	0.799	33.3	LOS C	11.8	86.2	0.99	0.91	1.17	48.5
SouthWest: Far North Connector Road												
30	L2	15	5.0	0.016	9.3	LOS A	0.1	1.0	0.43	0.62	0.43	56.5
31	T1	173	5.0	0.868	39.6	LOS D	11.0	80.2	1.00	1.04	1.42	35.7
32	R2	368	5.0	0.868	45.4	LOS D	11.0	80.2	1.00	1.03	1.42	36.6
Approach		556	5.0	0.868	42.6	LOS D	11.0	80.2	0.98	1.02	1.40	36.7
All Vehicles		3113	5.0	0.870	30.7	LOS C	11.8	86.2	0.88	0.89	1.07	45.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P5B	SouthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6	NorthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6B	NorthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7	NorthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7B	NorthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8	SouthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8B	SouthWest Slip/Bypass Lane	5	29.3	LOS C	0.0	0.0	0.91	0.91

Crossing					
All Pedestrians	42	29.3	LOS C	0.91	0.91

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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Appendix C: P4516.002R Moss Vale Road North URA SIDRA Assessment Report

(Moss Vale Road / MVRS URA Access / Central Boulevard Roundabout)

Original Analysis Based on November 2018 TRACKS Models

Assessment of Proposed URA Roundabout on Moss Vale Road

SIDRA Assessment Report

Shoalhaven City Council

3 March 2020

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CONTENTS

		Page
1.	**INTRODUCTION**	**4**
1.1	Background	4
1.2	Scope of Works	4
2.	**PROPOSED UPGRADES**	**5**
3.	**MODEL DEVELOPMENT**	**6**
3.1	Traffic Scenarios	6
3.2	Sensitivity Analysis	6
3.3	Model Scenarios	7
3.4	Queue Length Review	7
3.5	Capacity Mechanisms	7
3.6	Model Outputs	8
4.	**KEY FINDINGS**	**9**
4.1	Intersection Capacity	9
4.1.1	Proposed Layout	9
4.1.2	Sensitivity Analysis	9
4.2	Recommendations	9
4.3	Results Summary	9
5.	**CONCLUSIONS**	**10**

Tables

Table 2.1: Roundabout Geometric Design
Table 3.1: Control Delay for Vehicle LoS Calculations
Table 4.1: Results Summary

Figures

Figure 1.1: Subject Roundabout Intersection Location
Figure 2.1: Roundabout Concept Design Layout

Appendices

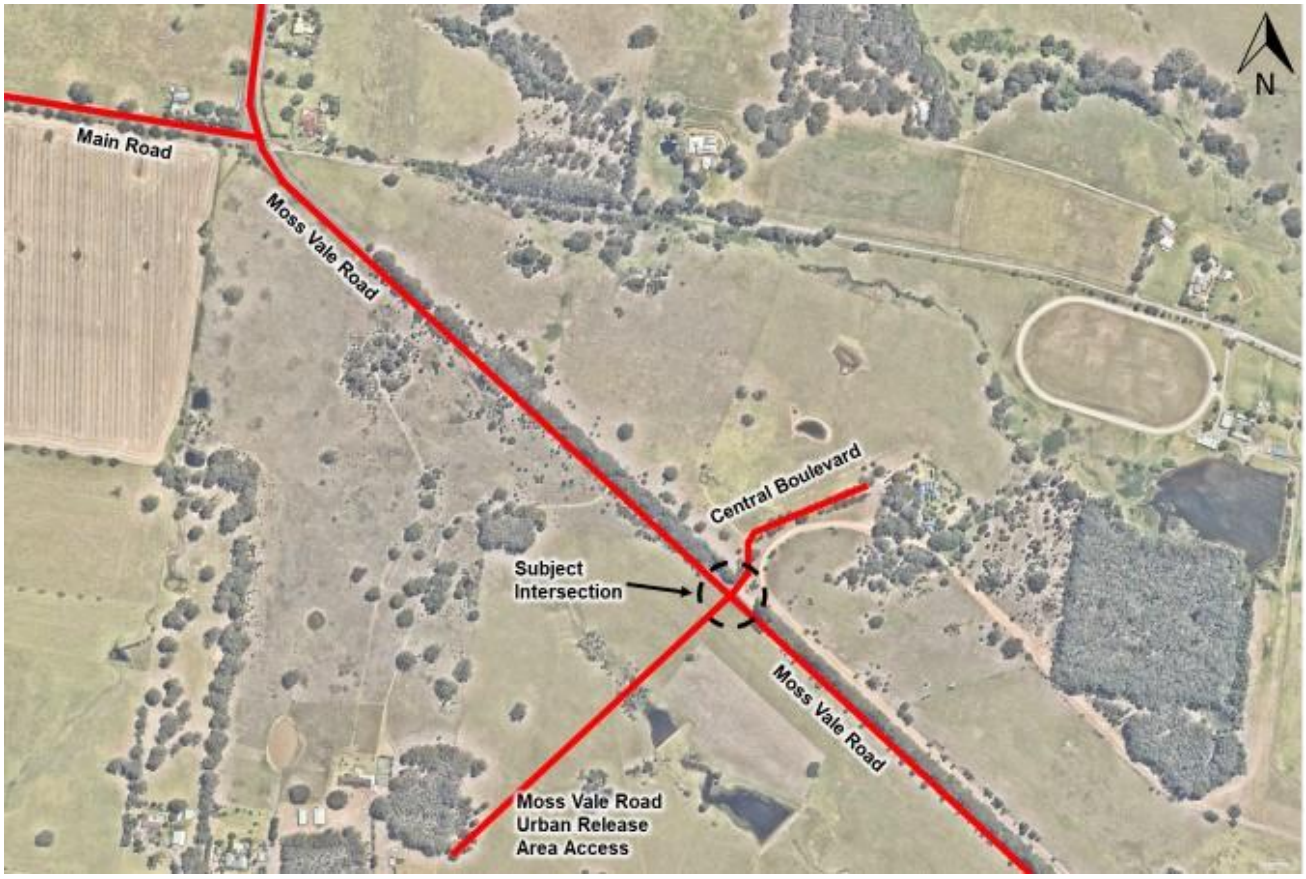
Appendix A: TRACKS Model Data
Appendix B: SIDRA Model Outputs
Appendix C: SIDRA Output Summaries

1. INTRODUCTION

1.1 Background

Bitzios Consulting has been engaged by Shoalhaven City Council (Council) to undertake an assessment of the Moss Vale Road / Moss Vale Road South (MVRS) Urban Release Area (URA) Access / Central Boulevard roundabout, located in Cambewarra, NSW.

The Moss Vale Road / MVRS URA Access / Central Boulevard intersection is a future intersection, providing links to/from Moss Vale Road and the North and South URA. The subject site is shown in Figure 1.1.



SOURCE: Nearmap

Figure 1.1: Subject Roundabout Intersection Location

1.2 Scope of Works

The scope for assessment is detailed below:

- Extract relevant intersection volumes from the Shoalhaven Kiama TRACKS model in five-year intervals from year 2021 to year 2041, for both Annual Average School Term (AAST) and 100th Highest Hour (100HH)
- Develop SIDRA intersection models for the current concept design layout provided by Council
- Summarise the findings, including year of failure, failure mechanisms and potential improvements to the layout of the current concept design.

2. PROPOSED UPGRADES

The roundabout configuration and geometry adopted for the SIDRA modelling is provided in Figure 2.1.

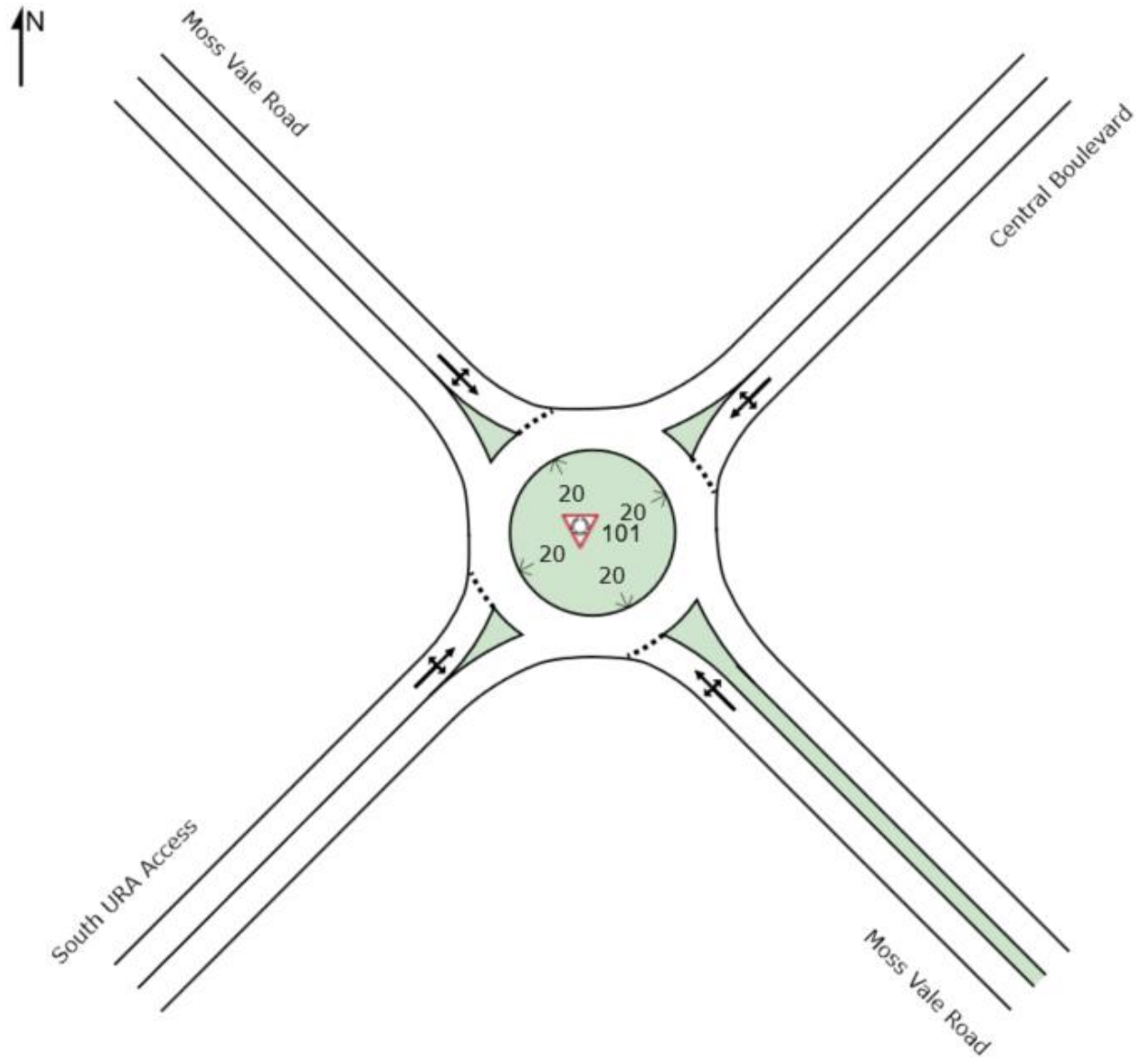


Figure 2.1: Roundabout Concept Design Layout

Table 2.1 details the geometry of the roundabout:

Table 2.1: Roundabout Geometric Design

Design Element	Dimension
Number of circulating lanes	1 lane
Circulating width	8m
Island diameter	20m
Entry radius	20m
Entry angle	30º

3. MODEL DEVELOPMENT

3.1 Traffic Scenarios

Future year modelling scenarios were based on those modelled in the Shoalhaven-Kiama TRACKS model, noting the primary purpose of the intersection modelling is to analyse traffic conditions in the medium to long-term. The following future year modelling scenarios were developed:

- 2021 AAST AM and PM peak volumes
- 2021 100HH AM and PM peak volumes
- 2026 AAST AM and PM peak volumes
- 2026 100HH AM and PM peak volumes
- 2031 AAST AM and PM peak volumes
- 2031 100HH AM and PM peak volumes
- 2036 AAST AM and PM peak volumes
- 2036 100HH AM and PM peak volumes
- 2041 AAST AM and PM peak volumes
- 2041 100HH AM and PM peak volumes.

Traffic volumes for each scenario were extracted from Council's Shoalhaven-Kiama 'future links' TRACKS models November 2018 Version. Diagrams showing the traffic volumes for each scenario are attached at **Appendix A**.

The settings consistent across all models are as follows:

- 'Level of Service Method' was set to 'Delay RTA'
- extra bunching factors remain as SIDRA default values
- peak flow period and peak flow factors remain as SIDRA default values
- the base gap acceptance values remain as SIDRA default values
- a 60km/h speed limit approaching and exiting the intersection was applied to all intersection legs
- a heavy vehicle traffic proportion of 5% was applied to all intersection movements.

The roundabout geometry is also shown in Table 2.1.

3.2 Sensitivity Analysis

The existing Moss Vale Road / Main Road intersection (Node #20509) is proposed to be upgraded to a four-leg roundabout in future years. The southern leg of the roundabout is proposed to provide an additional access to/from the MVRS URA and Moss Vale Road. In the event that the roundabout is not constructed, or its construction is postponed to beyond 2041, development traffic would be unable to travel to/from MVRS URA and Moss Vale Road (i.e. removal of link between Nodes #21671 and #20509). As such, development traffic would be required to travel to/from the MVRS URA via either the Moss Vale Road / MVRS URA Access / Central Boulevard roundabout, or the Taylors Lane access.

In order assess the impacts of this scenario, a sensitivity test was performed which involved rerouting development traffic from the Moss Vale Road / Main Road roundabout and reassigning it to respective movements at the Moss Vale Road / MVRS URA Access / Central Boulevard roundabout. Practically, some of the rerouted development traffic would be expected to travel to/from the MVRS URA via Taylors Lane, however the sensitivity test considered the 'worst case' scenario.

3.3 Model Scenarios

Model scenarios have been developed for the 'with' and 'without' Moss Vale Road / Main Road roundabout cases for both AAST and 100HH forecast traffic volumes.

3.4 Queue Length Review

A review of the queue lengths has been undertaken in relation to the Moss Vale Road approaches of the proposed Moss Vale Road / MVRS URA Access / Central Boulevard roundabout. This specifically compares the 95th percentile back of queue distance against the proposed approach distance.

The western approach distance is measured as 576m along Moss Vale Road (NW). Reviewing the SIDRA Output Summary in **Appendix C**, the maximum 95th percentile queue length is 95m within the 2041 PM Peak hour 100HH (without) scenario. Therefore, the western approach ensures the 95th percentile back of queue length is considerably less than the distance of the Moss Vale Road approach.

The eastern approach distance is measured as 1,225m along Moss Vale Road (SE). Reviewing the SIDRA Output Summary in **Appendix C**, the maximum 95th percentile queue length is 42.3m within the 2041 PM Peak hour 100HH (without) scenario.

The maximum queue length of the adjacent Moss Vale Road / Bells Lane signalised intersection has also been reviewed to identify any future impacts to the Moss Vale Road / MVRS URA Access / Central Boulevard roundabout. The results of the Moss Vale Road / Bells Lane signalised intersection analysis were sourced from Bitzios Consulting's *P3968.002R Moss Vale Road SIDRA Assessment Report.* The maximum 95th percentile back of queue length calculated on the Moss Vale Road NW is 281m during the 2041 PM peak hour 100HH scenario. Therefore, the eastern approach ensures the 95th percentile back of queue length is considerably less than the distance of the Moss Vale Road approach.

3.5 Capacity Mechanisms

It is necessary to define intersection capacity and over-capacity mechanisms in order to inform the intersection upgrades required. Intersection modelling is undertaken under Roads and Maritime Services' (RMS) *Traffic Modelling Guidelines* (2013). Intersection capacity outputs for a roundabout are to be consistent with the following conditions:

- Maximum practical Degree of Saturation (DoS) of 0.85

Table 3.1 is extracted from RMS' *Traffic Modelling Guidelines* (2013) and indicates the control delay for vehicle Level of Service (LoS) calculations.

Table 3.1: Control Delay for Vehicle LoS Calculations

Level of Service	Control delay per vehicle in seconds (d) (including geometric delay)
	All Intersection Types
A	d < 14
B	d < 15 to 28
C	d < 29 to 42
D	d < 43 to 56
E	d < 57 to 70
F	d > 70

3.6 Model Outputs

Output sheets for each traffic and intersection scenario (i.e. 40 sheets in total) are provided in **Appendix B**.

4. KEY FINDINGS

4.1 Intersection Capacity

4.1.1 Proposed Layout

The intersection remains within acceptable limits of DoS, delay times and Level of Service outcomes for both AAST and 100HH models.

DoS values in 2021 100HH are at the lowest of 0.23 and rise to a maximum of 0.75 in the PM peak hour of 2041 AAST in the Moss Vale Road north-western approach. A LoS of 'A' remains consistent throughout all scenarios except for Central Boulevard north-eastern, Moss Vale Road north-western and MVRS URA Access approaches in the PM peak hour of 2041 100HH, where the LoS is 'B'. The 95th percentile queuing length reaches 71.7m in the peak hour of the 2041 100HH, however the delay time remains consistent with the RMS conditions detailed in Table 3.1.

4.1.2 Sensitivity Analysis

The intersection remains within acceptable limits of DoS, delay times and Level of Service outcomes for both AAST and 100HH models.

DoS values in 2021 100HH are at the lowest of 0.23 and rise to a maximum of 0.82 in the PM peak hour of 2041 AAST in the Moss Vale Road north-western approach. A LoS of 'A' remains consistent throughout all scenarios except for Central Boulevard north-eastern, Moss Vale Road north-western and MVRS URA Access approaches in the PM peak hour of 2041 100HH, where the LoS is 'B'. The 95th percentile queuing length reaches 95m in the peak hour of the 2041 100HH, however the delay time remains consistent with the RMS conditions detailed in Table 3.1.

4.2 Recommendations

The proposed layout is evidently efficient in all scenarios proposed in the SIDRA assessment. Noting the Moss Vale Road north-western approach experiences large peak hour volumes, the results shown conclude a single lane roundabout approach is sufficient for the application of this intersection. Section 3.4, **Appendix B** and **Appendix C** highlight the low 95th percentile back of queue lengths indicating that a single lane approach is deemed sufficient on both Moss Vale Road approaches.

4.3 Results Summary

A summary of the intersection assessment is provided in Table 4.1, with green boxes indicating the intersection is within capacity, yellow boxes indicating is at capacity, and red boxes indicating the intersection is over-capacity.

Table 4.1: Results Summary

Intersection Scenario	Model Year				
	2021	2026	2031	2036	2041
Proposed Layout	Under	Under	Under	Under	Under
Sensitivity Analysis	Under	Under	Under	Under	Under

The summary of results is provided on **Appendix C**.

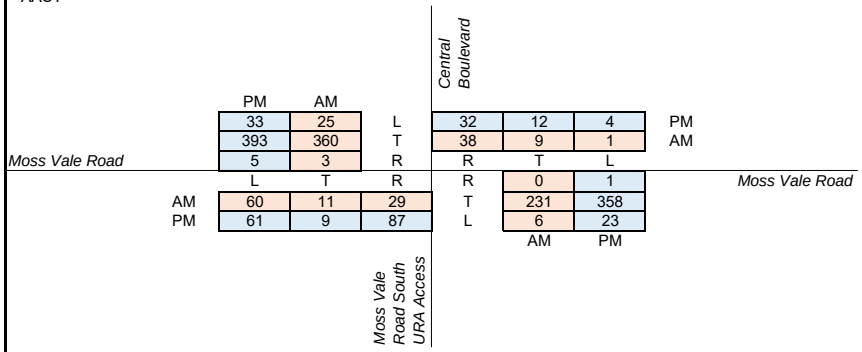
5. CONCLUSIONS

The key findings of this SIDRA assessment report for the proposed Moss Vale Road / MVRS URA Access / Central Boulevard roundabout are as follows:

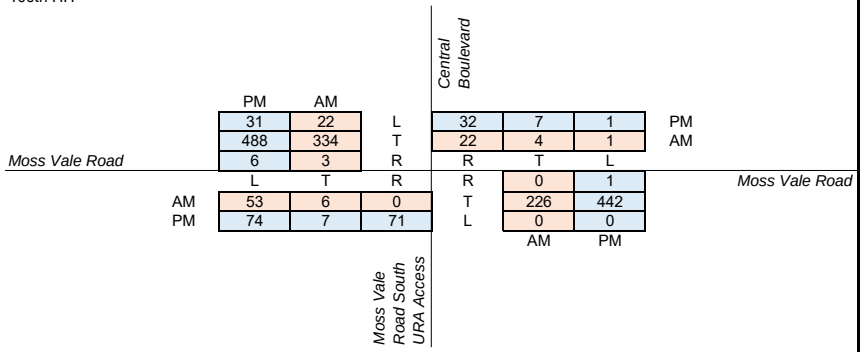
- A single circulating lane is deemed sufficient for the application of the Moss Vale Road / MVRS URA Access / Central Boulevard roundabout
- Single lane approaches are deemed sufficient for each roundabout approach leg
- 95th percentile back of queue lengths extracted from the SIDRA modelling are significantly less than the distance of the Moss Vale Road western and eastern approaches
- The maximum 95th percentile back of queue length from the Moss Vale Road NW approach of the Moss Vale Road / Bells Lane signalised intersection is significantly less than the distance of the Moss Vale Road approach connecting to the Moss Vale Road / MVRS URA Access / Central Boulevard roundabout
- The capacity of the intersection remains within limits for all capacity mechanisms in all scenarios.

Appendix A: TRACKS Model Data

AAST



100th HH

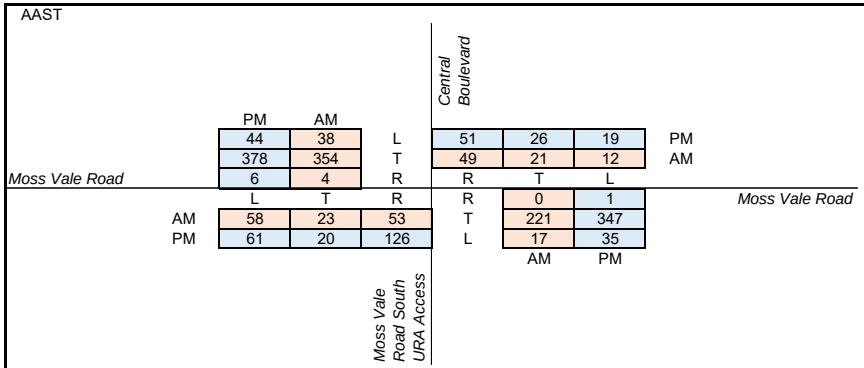


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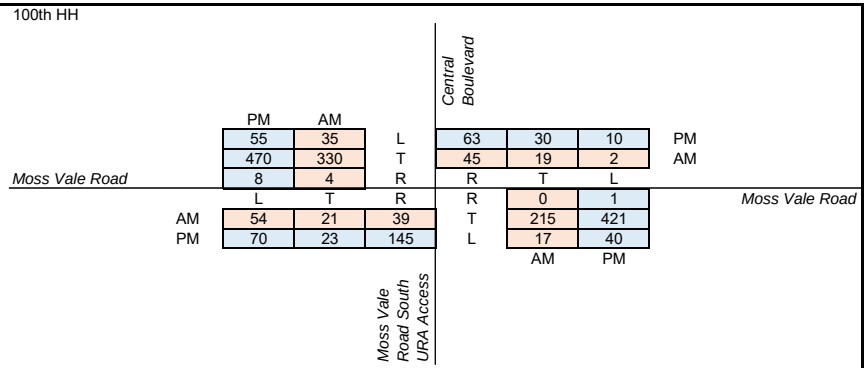
Sheet: **Year 2021 TRACKS Traffic Volumes - With Moss Vale Road / Main Road Roundabout**

Project: Moss Vale Road SIDRA Assessment
Project Number: P4516

AAST



100th HH

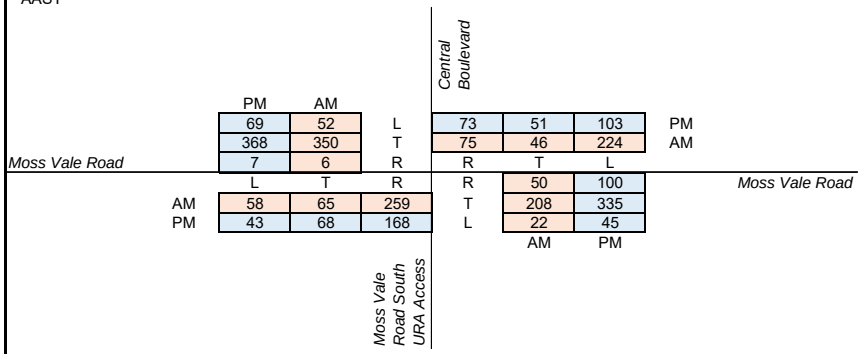


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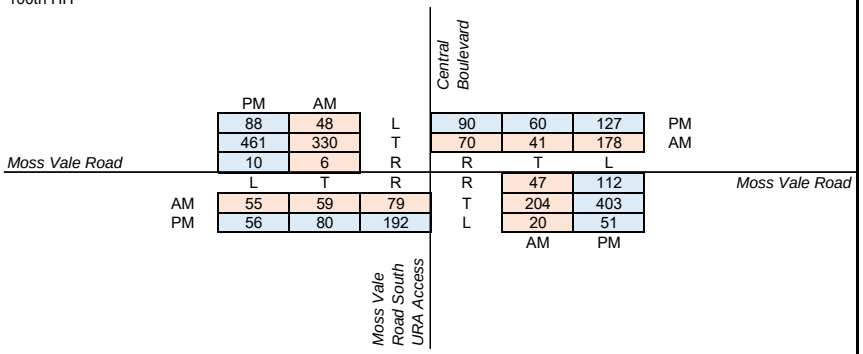
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Project: Moss Vale Road SIDRA Assessment
Project Number: P4516

AAST



100th HH

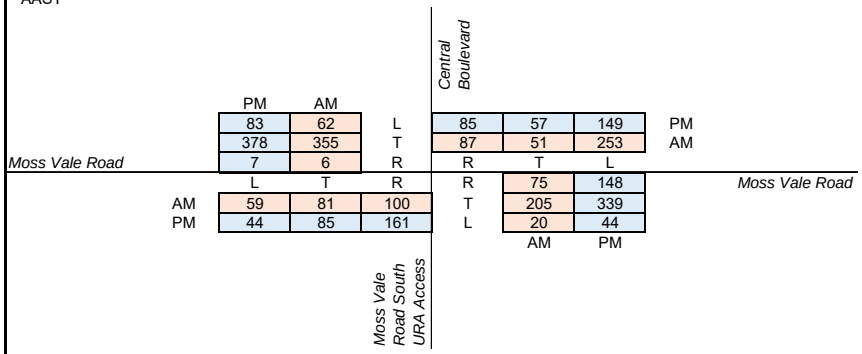


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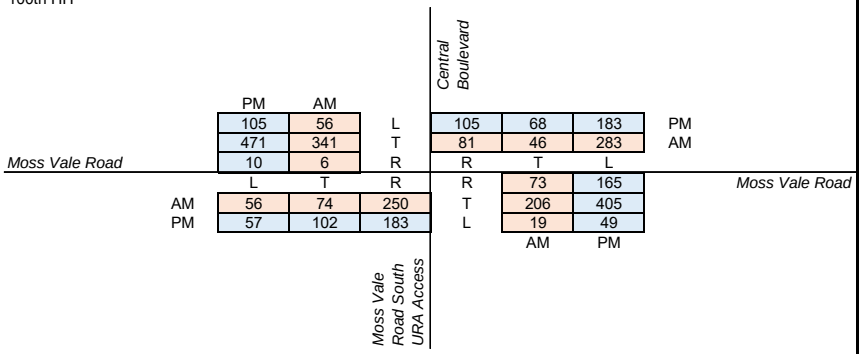
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Project: Moss Vale Road SIDRA Assessment
Project Number: P4516

AAST



100th HH



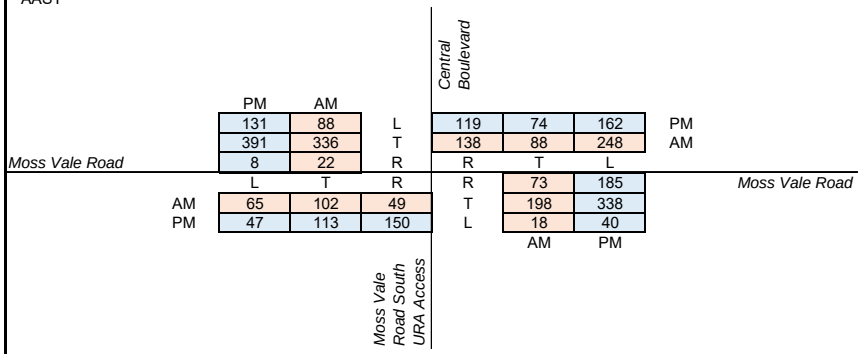
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Sheet: **Year 2036 TRACKS Traffic Volumes - With Moss Vale Road / Main Road Roundabout**

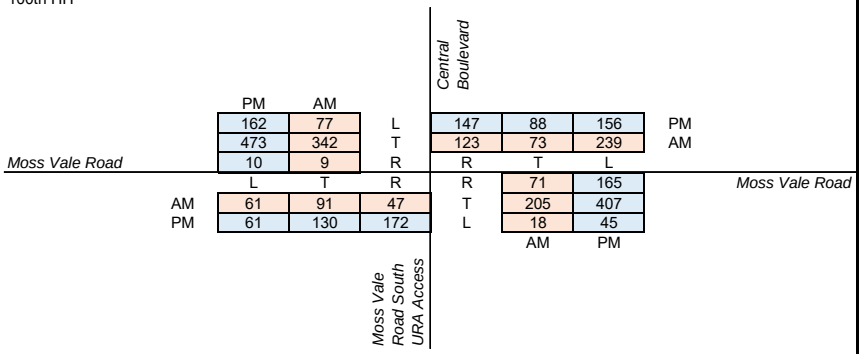
Project: Moss Vale Road SIDRA Assessment

Project Number: P4516

AAST



100th HH

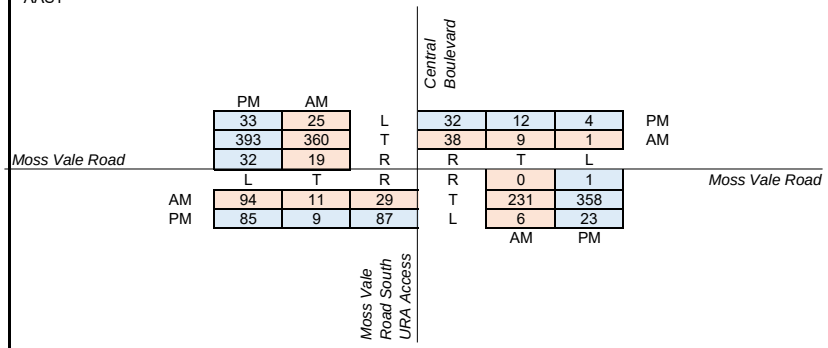


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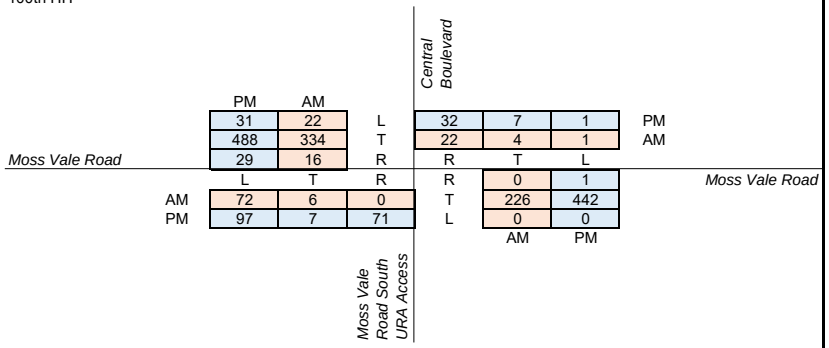
Sheet: **Year 2041 TRACKS Traffic Volumes - With Moss Vale Road / Main Road Roundabout**

Project: Moss Vale Road SIDRA Assessment
Project Number: P4516

AAST

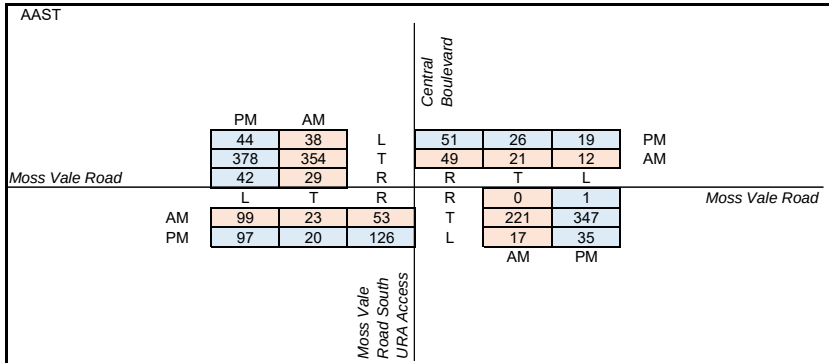


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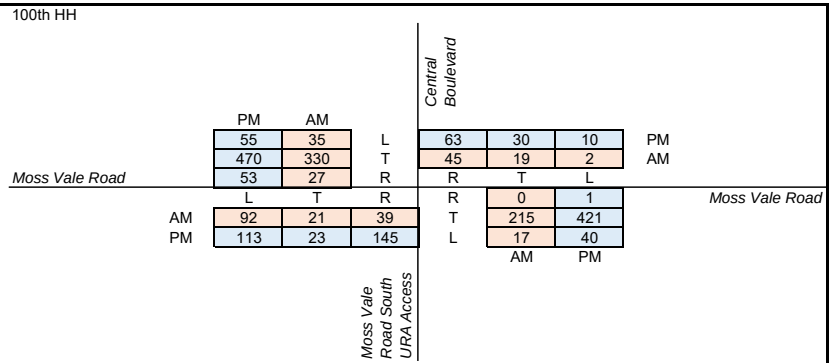


Sheet:	**Year 2021 TRACKS Traffic Volumes - Without Moss Vale Road / Main Road Roundabout**
Project:	Moss Vale Road SIDRA Assessment
Project Number:	P4516

AAST

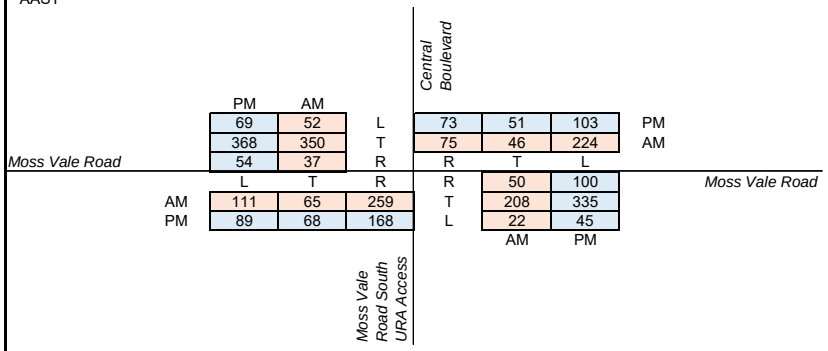


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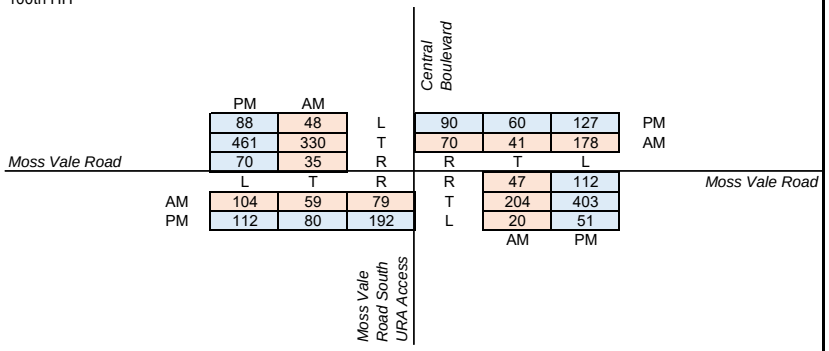


Sheet:	**Year 2026 TRACKS Traffic Volumes - Without Moss Vale Road / Main Road Roundabout**
Project:	Moss Vale Road SIDRA Assessment
Project Number:	P4516

AAST



100th HH

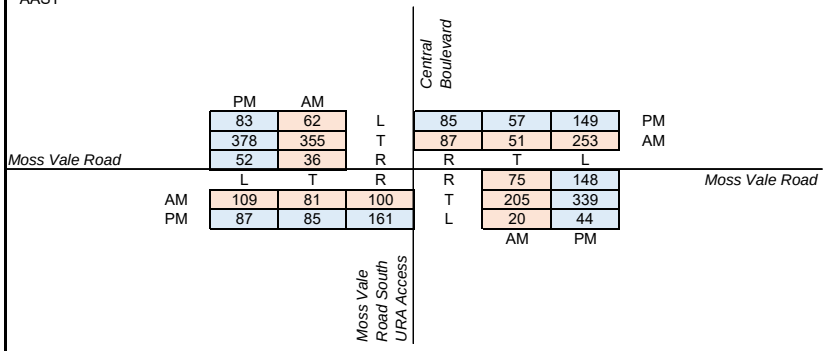


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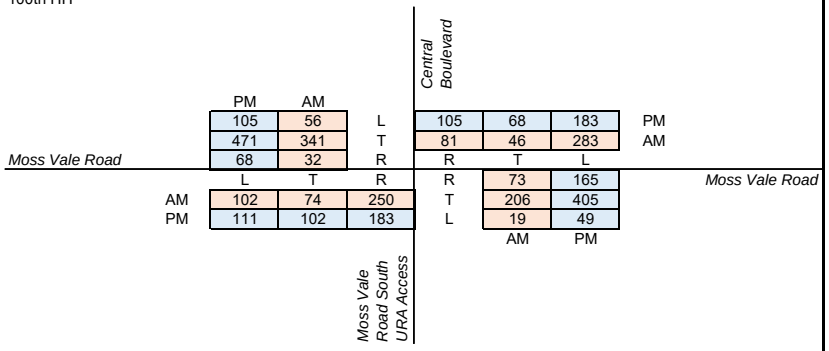
Sheet: **Year 2031 TRACKS Traffic Volumes - Without Moss Vale Road / Main Road Roundabout**

Project: Moss Vale Road SIDRA Assessment
Project Number: P4516

AAST



100th HH

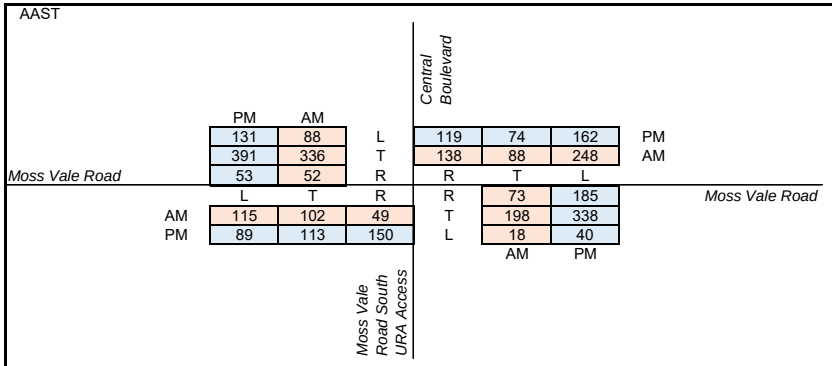


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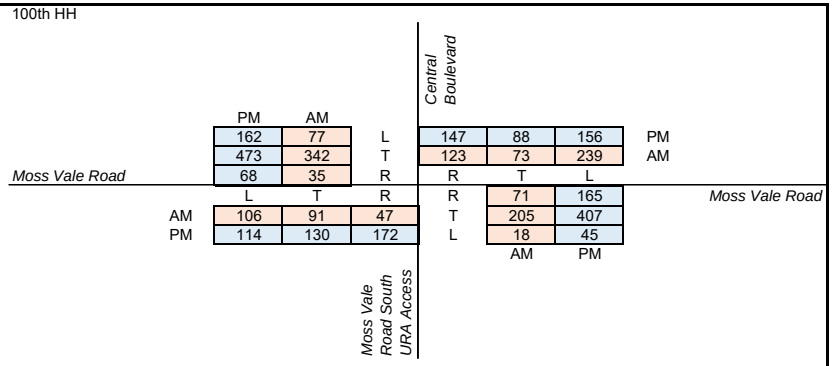
Sheet: **Year 2036 TRACKS Traffic Volumes - Without Moss Vale Road / Main Road Roundabout**

Project: Moss Vale Road SIDRA Assessment
Project Number: P4516

AAST



100th HH



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Sheet: **Year 2041 TRACKS Traffic Volumes - Without Moss Vale Road / Main Road Roundabout**

Project: Moss Vale Road SIDRA Assessment

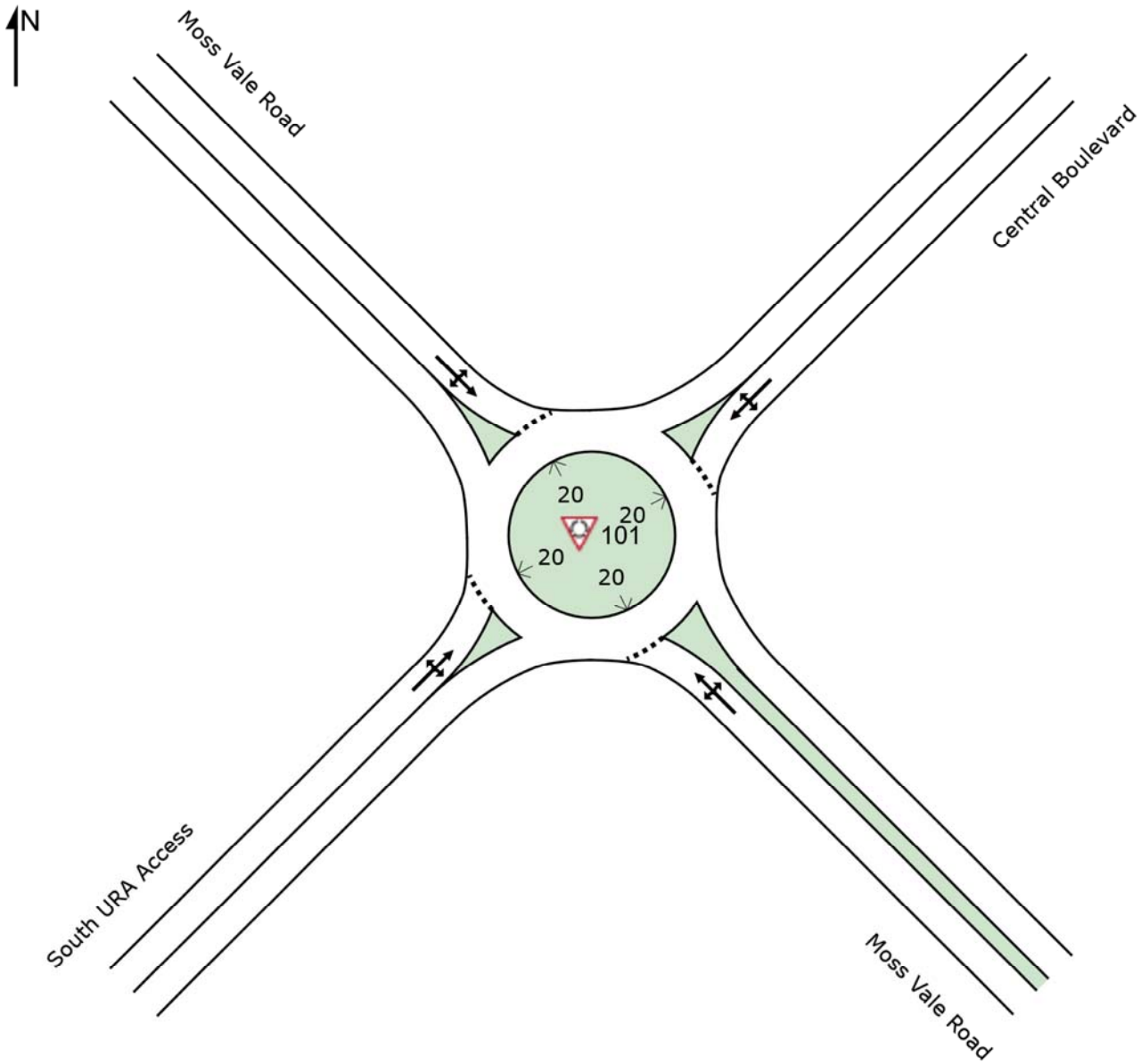
Project Number: P4516

Appendix B: SIDRA Model Outputs

SITE LAYOUT

Site: 101 [2021_AAST_W_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout



MOVEMENT SUMMARY

Site: 101 [2021_AAST_W_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	6	0.0	0.174	3.1	LOS A	1.0	7.3	0.20	0.33	0.20	47.5
5	T1	243	0.0	0.174	3.0	LOS A	1.0	7.3	0.20	0.33	0.20	48.6
6	R2	1	0.0	0.174	7.5	LOS A	1.0	7.3	0.20	0.33	0.20	48.8
Approach		251	0.0	0.174	3.0	LOS A	1.0	7.3	0.20	0.33	0.20	48.6
NorthEast: Central Boulevard												
7	L2	1	0.0	0.050	4.7	LOS A	0.3	1.8	0.50	0.62	0.50	45.0
8	T1	9	0.0	0.050	4.7	LOS A	0.3	1.8	0.50	0.62	0.50	45.9
9	R2	40	0.0	0.050	9.2	LOS A	0.3	1.8	0.50	0.62	0.50	46.1
Approach		51	0.0	0.050	8.3	LOS A	0.3	1.8	0.50	0.62	0.50	46.1
NorthWest: Moss Vale Road												
10	L2	26	0.0	0.272	3.0	LOS A	1.8	12.5	0.19	0.33	0.19	47.5
11	T1	379	0.0	0.272	3.0	LOS A	1.8	12.5	0.19	0.33	0.19	48.6
12	R2	3	0.0	0.272	7.5	LOS A	1.8	12.5	0.19	0.33	0.19	48.8
Approach		408	0.0	0.272	3.0	LOS A	1.8	12.5	0.19	0.33	0.19	48.5
SouthWest: South URA Access												
1	L2	63	0.0	0.094	4.2	LOS A	0.5	3.4	0.43	0.55	0.43	46.3
2	T1	12	0.0	0.094	4.1	LOS A	0.5	3.4	0.43	0.55	0.43	47.4
3	R2	31	0.0	0.094	8.6	LOS A	0.5	3.4	0.43	0.55	0.43	47.6
Approach		105	0.0	0.094	5.4	LOS A	0.5	3.4	0.43	0.55	0.43	46.8
All Vehicles		815	0.0	0.272	3.7	LOS A	1.8	12.5	0.24	0.38	0.24	48.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2021_AAST_W_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	24	0.0	0.274	3.1	LOS A	1.8	12.9	0.22	0.34	0.22	47.4
5	T1	377	0.0	0.274	3.0	LOS A	1.8	12.9	0.22	0.34	0.22	48.5
6	R2	1	0.0	0.274	7.5	LOS A	1.8	12.9	0.22	0.34	0.22	48.7
Approach		402	0.0	0.274	3.0	LOS A	1.8	12.9	0.22	0.34	0.22	48.5
NorthEast: Central Boulevard												
7	L2	4	0.0	0.054	5.3	LOS A	0.3	2.1	0.57	0.64	0.57	44.9
8	T1	13	0.0	0.054	5.3	LOS A	0.3	2.1	0.57	0.64	0.57	45.9
9	R2	34	0.0	0.054	9.8	LOS A	0.3	2.1	0.57	0.64	0.57	46.1
Approach		51	0.0	0.054	8.3	LOS A	0.3	2.1	0.57	0.64	0.57	45.9
NorthWest: Moss Vale Road												
10	L2	35	0.0	0.334	3.4	LOS A	2.4	16.5	0.34	0.39	0.34	47.0
11	T1	414	0.0	0.334	3.3	LOS A	2.4	16.5	0.34	0.39	0.34	48.1
12	R2	5	0.0	0.334	7.8	LOS A	2.4	16.5	0.34	0.39	0.34	48.3
Approach		454	0.0	0.334	3.4	LOS A	2.4	16.5	0.34	0.39	0.34	48.0
SouthWest: South URA Access												
1	L2	64	0.0	0.164	5.0	LOS A	0.9	6.3	0.54	0.65	0.54	45.4
2	T1	9	0.0	0.164	4.9	LOS A	0.9	6.3	0.54	0.65	0.54	46.4
3	R2	92	0.0	0.164	9.4	LOS A	0.9	6.3	0.54	0.65	0.54	46.6
Approach		165	0.0	0.164	7.4	LOS A	0.9	6.3	0.54	0.65	0.54	46.1
All Vehicles		1072	0.0	0.334	4.1	LOS A	2.4	16.5	0.34	0.42	0.34	47.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2021_100HH_W_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	1	0.0	0.159	3.0	LOS A	0.9	6.5	0.14	0.32	0.14	47.7
5	T1	238	0.0	0.159	2.9	LOS A	0.9	6.5	0.14	0.32	0.14	48.8
6	R2	1	0.0	0.159	7.4	LOS A	0.9	6.5	0.14	0.32	0.14	49.0
Approach		240	0.0	0.159	2.9	LOS A	0.9	6.5	0.14	0.32	0.14	48.8
NorthEast: Central Boulevard												
7	L2	1	0.0	0.027	4.4	LOS A	0.1	0.9	0.45	0.59	0.45	45.0
8	T1	4	0.0	0.027	4.3	LOS A	0.1	0.9	0.45	0.59	0.45	46.0
9	R2	23	0.0	0.027	8.8	LOS A	0.1	0.9	0.45	0.59	0.45	46.2
Approach		28	0.0	0.027	8.0	LOS A	0.1	0.9	0.45	0.59	0.45	46.1
NorthWest: Moss Vale Road												
10	L2	23	0.0	0.227	2.9	LOS A	1.4	9.9	0.07	0.32	0.07	47.9
11	T1	352	0.0	0.227	2.8	LOS A	1.4	9.9	0.07	0.32	0.07	49.1
12	R2	3	0.0	0.227	7.3	LOS A	1.4	9.9	0.07	0.32	0.07	49.3
Approach		378	0.0	0.227	2.9	LOS A	1.4	9.9	0.07	0.32	0.07	49.0
SouthWest: South URA Access												
1	L2	56	0.0	0.056	4.0	LOS A	0.3	1.9	0.40	0.48	0.40	47.0
2	T1	6	0.0	0.056	3.9	LOS A	0.3	1.9	0.40	0.48	0.40	48.2
3	R2	1	0.0	0.056	8.5	LOS A	0.3	1.9	0.40	0.48	0.40	48.4
Approach		63	0.0	0.056	4.1	LOS A	0.3	1.9	0.40	0.48	0.40	47.2
All Vehicles		709	0.0	0.227	3.2	LOS A	1.4	9.9	0.14	0.34	0.14	48.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2021_100HH_W_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	1	0.0	0.313	3.1	LOS A	2.2	15.6	0.22	0.33	0.22	47.4
5	T1	465	0.0	0.313	3.0	LOS A	2.2	15.6	0.22	0.33	0.22	48.5
6	R2	1	0.0	0.313	7.5	LOS A	2.2	15.6	0.22	0.33	0.22	48.7
Approach		467	0.0	0.313	3.0	LOS A	2.2	15.6	0.22	0.33	0.22	48.5
NorthEast: Central Boulevard												
7	L2	1	0.0	0.049	5.8	LOS A	0.3	1.9	0.62	0.67	0.62	44.4
8	T1	7	0.0	0.049	5.8	LOS A	0.3	1.9	0.62	0.67	0.62	45.4
9	R2	34	0.0	0.049	10.3	LOS A	0.3	1.9	0.62	0.67	0.62	45.5
Approach		42	0.0	0.049	9.4	LOS A	0.3	1.9	0.62	0.67	0.62	45.5
NorthWest: Moss Vale Road												
10	L2	33	0.0	0.391	3.3	LOS A	3.0	21.2	0.33	0.38	0.33	47.0
11	T1	514	0.0	0.391	3.3	LOS A	3.0	21.2	0.33	0.38	0.33	48.1
12	R2	6	0.0	0.391	7.8	LOS A	3.0	21.2	0.33	0.38	0.33	48.3
Approach		553	0.0	0.391	3.3	LOS A	3.0	21.2	0.33	0.38	0.33	48.0
SouthWest: South URA Access												
1	L2	78	0.0	0.169	5.5	LOS A	1.0	6.7	0.59	0.68	0.59	45.3
2	T1	7	0.0	0.169	5.5	LOS A	1.0	6.7	0.59	0.68	0.59	46.4
3	R2	75	0.0	0.169	10.0	LOS A	1.0	6.7	0.59	0.68	0.59	46.5
Approach		160	0.0	0.169	7.6	LOS A	1.0	6.7	0.59	0.68	0.59	45.9
All Vehicles		1222	0.0	0.391	4.0	LOS A	3.0	21.2	0.33	0.41	0.33	47.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2026_AAST_W_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	18	0.0	0.183	3.2	LOS A	1.1	7.7	0.25	0.35	0.25	47.3
5	T1	233	0.0	0.183	3.1	LOS A	1.1	7.7	0.25	0.35	0.25	48.4
6	R2	1	0.0	0.183	7.6	LOS A	1.1	7.7	0.25	0.35	0.25	48.6
Approach		252	0.0	0.183	3.2	LOS A	1.1	7.7	0.25	0.35	0.25	48.3
NorthEast: Central Boulevard												
7	L2	13	0.0	0.087	4.9	LOS A	0.5	3.3	0.53	0.63	0.53	45.3
8	T1	22	0.0	0.087	4.9	LOS A	0.5	3.3	0.53	0.63	0.53	46.3
9	R2	52	0.0	0.087	9.4	LOS A	0.5	3.3	0.53	0.63	0.53	46.4
Approach		86	0.0	0.087	7.6	LOS A	0.5	3.3	0.53	0.63	0.53	46.2
NorthWest: Moss Vale Road												
10	L2	40	0.0	0.297	3.3	LOS A	2.0	13.9	0.28	0.37	0.28	47.2
11	T1	373	0.0	0.297	3.2	LOS A	2.0	13.9	0.28	0.37	0.28	48.3
12	R2	4	0.0	0.297	7.7	LOS A	2.0	13.9	0.28	0.37	0.28	48.5
Approach		417	0.0	0.297	3.3	LOS A	2.0	13.9	0.28	0.37	0.28	48.2
SouthWest: South URA Access												
1	L2	61	0.0	0.127	4.2	LOS A	0.7	4.7	0.44	0.57	0.44	46.0
2	T1	24	0.0	0.127	4.2	LOS A	0.7	4.7	0.44	0.57	0.44	47.1
3	R2	56	0.0	0.127	8.7	LOS A	0.7	4.7	0.44	0.57	0.44	47.3
Approach		141	0.0	0.127	6.0	LOS A	0.7	4.7	0.44	0.57	0.44	46.7
All Vehicles		896	0.0	0.297	4.1	LOS A	2.0	13.9	0.32	0.42	0.32	47.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2026_AAST_W_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	37	0.0	0.292	3.3	LOS A	2.0	14.0	0.30	0.37	0.30	47.1
5	T1	365	0.0	0.292	3.2	LOS A	2.0	14.0	0.30	0.37	0.30	48.2
6	R2	1	0.0	0.292	7.7	LOS A	2.0	14.0	0.30	0.37	0.30	48.4
Approach		403	0.0	0.292	3.3	LOS A	2.0	14.0	0.30	0.37	0.30	48.1
NorthEast: Central Boulevard												
7	L2	20	0.0	0.112	5.6	LOS A	0.6	4.4	0.61	0.67	0.61	45.1
8	T1	27	0.0	0.112	5.6	LOS A	0.6	4.4	0.61	0.67	0.61	46.1
9	R2	54	0.0	0.112	10.1	LOS A	0.6	4.4	0.61	0.67	0.61	46.2
Approach		101	0.0	0.112	8.0	LOS A	0.6	4.4	0.61	0.67	0.61	46.0
NorthWest: Moss Vale Road												
10	L2	46	0.0	0.355	3.7	LOS A	2.5	17.7	0.43	0.43	0.43	46.7
11	T1	398	0.0	0.355	3.7	LOS A	2.5	17.7	0.43	0.43	0.43	47.8
12	R2	6	0.0	0.355	8.2	LOS A	2.5	17.7	0.43	0.43	0.43	47.9
Approach		451	0.0	0.355	3.8	LOS A	2.5	17.7	0.43	0.43	0.43	47.6
SouthWest: South URA Access												
1	L2	64	0.0	0.219	5.1	LOS A	1.3	8.9	0.57	0.68	0.57	45.2
2	T1	21	0.0	0.219	5.1	LOS A	1.3	8.9	0.57	0.68	0.57	46.2
3	R2	133	0.0	0.219	9.6	LOS A	1.3	8.9	0.57	0.68	0.57	46.4
Approach		218	0.0	0.219	7.8	LOS A	1.3	8.9	0.57	0.68	0.57	46.0
All Vehicles		1173	0.0	0.355	4.7	LOS A	2.5	17.7	0.43	0.48	0.43	47.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2026_100HH_W_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	18	0.0	0.177	3.2	LOS A	1.0	7.3	0.24	0.35	0.24	47.3
5	T1	226	0.0	0.177	3.1	LOS A	1.0	7.3	0.24	0.35	0.24	48.5
6	R2	1	0.0	0.177	7.6	LOS A	1.0	7.3	0.24	0.35	0.24	48.7
Approach		245	0.0	0.177	3.1	LOS A	1.0	7.3	0.24	0.35	0.24	48.4
NorthEast: Central Boulevard												
7	L2	2	0.0	0.067	4.7	LOS A	0.3	2.4	0.49	0.62	0.49	45.2
8	T1	20	0.0	0.067	4.6	LOS A	0.3	2.4	0.49	0.62	0.49	46.2
9	R2	47	0.0	0.067	9.1	LOS A	0.3	2.4	0.49	0.62	0.49	46.4
Approach		69	0.0	0.067	7.7	LOS A	0.3	2.4	0.49	0.62	0.49	46.3
NorthWest: Moss Vale Road												
10	L2	37	0.0	0.270	3.1	LOS A	1.7	12.2	0.24	0.35	0.24	47.3
11	T1	347	0.0	0.270	3.1	LOS A	1.7	12.2	0.24	0.35	0.24	48.4
12	R2	4	0.0	0.270	7.6	LOS A	1.7	12.2	0.24	0.35	0.24	48.6
Approach		388	0.0	0.270	3.2	LOS A	1.7	12.2	0.24	0.35	0.24	48.3
SouthWest: South URA Access												
1	L2	57	0.0	0.107	4.1	LOS A	0.6	3.9	0.42	0.55	0.42	46.2
2	T1	22	0.0	0.107	4.1	LOS A	0.6	3.9	0.42	0.55	0.42	47.3
3	R2	41	0.0	0.107	8.6	LOS A	0.6	3.9	0.42	0.55	0.42	47.4
Approach		120	0.0	0.107	5.6	LOS A	0.6	3.9	0.42	0.55	0.42	46.8
All Vehicles		823	0.0	0.270	3.9	LOS A	1.7	12.2	0.29	0.40	0.29	47.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2026_100HH_W_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	42	0.0	0.360	3.4	LOS A	2.7	18.7	0.37	0.39	0.37	46.9
5	T1	443	0.0	0.360	3.4	LOS A	2.7	18.7	0.37	0.39	0.37	48.0
6	R2	1	0.0	0.360	7.9	LOS A	2.7	18.7	0.37	0.39	0.37	48.2
Approach		486	0.0	0.360	3.4	LOS A	2.7	18.7	0.37	0.39	0.37	47.9
NorthEast: Central Boulevard												
7	L2	11	0.0	0.135	6.5	LOS A	0.8	5.7	0.69	0.73	0.69	44.5
8	T1	32	0.0	0.135	6.5	LOS A	0.8	5.7	0.69	0.73	0.69	45.4
9	R2	66	0.0	0.135	11.0	LOS A	0.8	5.7	0.69	0.73	0.69	45.6
Approach		108	0.0	0.135	9.3	LOS A	0.8	5.7	0.69	0.73	0.69	45.4
NorthWest: Moss Vale Road												
10	L2	58	0.0	0.452	4.0	LOS A	3.6	25.1	0.51	0.46	0.51	46.4
11	T1	495	0.0	0.452	3.9	LOS A	3.6	25.1	0.51	0.46	0.51	47.5
12	R2	8	0.0	0.452	8.5	LOS A	3.6	25.1	0.51	0.46	0.51	47.6
Approach		561	0.0	0.452	4.0	LOS A	3.6	25.1	0.51	0.46	0.51	47.3
SouthWest: South URA Access												
1	L2	74	0.0	0.272	5.8	LOS A	1.7	11.7	0.65	0.73	0.65	44.8
2	T1	24	0.0	0.272	5.8	LOS A	1.7	11.7	0.65	0.73	0.65	45.8
3	R2	153	0.0	0.272	10.3	LOS A	1.7	11.7	0.65	0.73	0.65	46.0
Approach		251	0.0	0.272	8.6	LOS A	1.7	11.7	0.65	0.73	0.65	45.6
All Vehicles		1406	0.0	0.452	5.0	LOS A	3.6	25.1	0.50	0.51	0.50	47.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2031_AAST_W_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	23	0.0	0.233	3.5	LOS A	1.5	10.8	0.38	0.45	0.38	46.5
5	T1	219	0.0	0.233	3.5	LOS A	1.5	10.8	0.38	0.45	0.38	47.6
6	R2	53	0.0	0.233	8.0	LOS A	1.5	10.8	0.38	0.45	0.38	47.8
Approach		295	0.0	0.233	4.3	LOS A	1.5	10.8	0.38	0.45	0.38	47.6
NorthEast: Central Boulevard												
7	L2	236	0.0	0.448	7.9	LOS A	3.4	23.5	0.81	0.85	0.86	44.7
8	T1	48	0.0	0.448	7.8	LOS A	3.4	23.5	0.81	0.85	0.86	45.7
9	R2	79	0.0	0.448	12.3	LOS A	3.4	23.5	0.81	0.85	0.86	45.8
Approach		363	0.0	0.448	8.8	LOS A	3.4	23.5	0.81	0.85	0.86	45.0
NorthWest: Moss Vale Road												
10	L2	55	0.0	0.434	5.5	LOS A	3.1	21.7	0.68	0.63	0.68	45.8
11	T1	368	0.0	0.434	5.4	LOS A	3.1	21.7	0.68	0.63	0.68	46.9
12	R2	6	0.0	0.434	9.9	LOS A	3.1	21.7	0.68	0.63	0.68	47.1
Approach		429	0.0	0.434	5.5	LOS A	3.1	21.7	0.68	0.63	0.68	46.8
SouthWest: South URA Access												
1	L2	61	0.0	0.384	5.1	LOS A	2.5	17.7	0.60	0.69	0.60	45.0
2	T1	68	0.0	0.384	5.0	LOS A	2.5	17.7	0.60	0.69	0.60	46.0
3	R2	273	0.0	0.384	9.5	LOS A	2.5	17.7	0.60	0.69	0.60	46.2
Approach		402	0.0	0.384	8.1	LOS A	2.5	17.7	0.60	0.69	0.60	46.0
All Vehicles		1489	0.0	0.448	6.8	LOS A	3.4	23.5	0.63	0.66	0.64	46.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2031_AAST_W_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	47	0.0	0.390	3.7	LOS A	3.0	20.7	0.43	0.47	0.43	46.3
5	T1	353	0.0	0.390	3.6	LOS A	3.0	20.7	0.43	0.47	0.43	47.4
6	R2	105	0.0	0.390	8.1	LOS A	3.0	20.7	0.43	0.47	0.43	47.6
Approach		505	0.0	0.390	4.6	LOS A	3.0	20.7	0.43	0.47	0.43	47.3
NorthEast: Central Boulevard												
7	L2	108	0.0	0.279	6.3	LOS A	1.8	12.6	0.71	0.74	0.71	45.2
8	T1	54	0.0	0.279	6.2	LOS A	1.8	12.6	0.71	0.74	0.71	46.2
9	R2	77	0.0	0.279	10.7	LOS A	1.8	12.6	0.71	0.74	0.71	46.4
Approach		239	0.0	0.279	7.7	LOS A	1.8	12.6	0.71	0.74	0.71	45.8
NorthWest: Moss Vale Road												
10	L2	73	0.0	0.453	5.2	LOS A	3.3	23.0	0.66	0.61	0.66	45.9
11	T1	387	0.0	0.453	5.2	LOS A	3.3	23.0	0.66	0.61	0.66	47.0
12	R2	7	0.0	0.453	9.7	LOS A	3.3	23.0	0.66	0.61	0.66	47.2
Approach		467	0.0	0.453	5.3	LOS A	3.3	23.0	0.66	0.61	0.66	46.8
SouthWest: South URA Access												
1	L2	45	0.0	0.327	6.2	LOS A	2.1	14.9	0.69	0.76	0.69	44.6
2	T1	72	0.0	0.327	6.1	LOS A	2.1	14.9	0.69	0.76	0.69	45.6
3	R2	177	0.0	0.327	10.6	LOS A	2.1	14.9	0.69	0.76	0.69	45.8
Approach		294	0.0	0.327	8.8	LOS A	2.1	14.9	0.69	0.76	0.69	45.6
All Vehicles		1505	0.0	0.453	6.1	LOS A	3.3	23.0	0.60	0.61	0.60	46.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2031_100HH_W_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	21	0.0	0.222	3.4	LOS A	1.4	9.8	0.34	0.44	0.34	46.6
5	T1	215	0.0	0.222	3.4	LOS A	1.4	9.8	0.34	0.44	0.34	47.7
6	R2	49	0.0	0.222	7.9	LOS A	1.4	9.8	0.34	0.44	0.34	47.9
Approach		285	0.0	0.222	4.2	LOS A	1.4	9.8	0.34	0.44	0.34	47.7
NorthEast: Central Boulevard												
7	L2	187	0.0	0.312	5.5	LOS A	2.0	13.9	0.63	0.68	0.63	45.9
8	T1	43	0.0	0.312	5.4	LOS A	2.0	13.9	0.63	0.68	0.63	46.9
9	R2	74	0.0	0.312	9.9	LOS A	2.0	13.9	0.63	0.68	0.63	47.1
Approach		304	0.0	0.312	6.5	LOS A	2.0	13.9	0.63	0.68	0.63	46.3
NorthWest: Moss Vale Road												
10	L2	51	0.0	0.333	4.0	LOS A	2.2	15.3	0.45	0.46	0.45	46.6
11	T1	347	0.0	0.333	3.9	LOS A	2.2	15.3	0.45	0.46	0.45	47.7
12	R2	6	0.0	0.333	8.4	LOS A	2.2	15.3	0.45	0.46	0.45	47.9
Approach		404	0.0	0.333	4.0	LOS A	2.2	15.3	0.45	0.46	0.45	47.5
SouthWest: South URA Access												
1	L2	58	0.0	0.192	4.6	LOS A	1.1	7.6	0.51	0.61	0.51	45.8
2	T1	62	0.0	0.192	4.6	LOS A	1.1	7.6	0.51	0.61	0.51	46.8
3	R2	83	0.0	0.192	9.1	LOS A	1.1	7.6	0.51	0.61	0.51	47.0
Approach		203	0.0	0.192	6.4	LOS A	1.1	7.6	0.51	0.61	0.51	46.6
All Vehicles		1197	0.0	0.333	5.1	LOS A	2.2	15.3	0.48	0.54	0.48	47.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2031_100HH_W_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	54	0.0	0.476	4.0	LOS A	4.0	28.2	0.53	0.50	0.53	46.0
5	T1	424	0.0	0.476	3.9	LOS A	4.0	28.2	0.53	0.50	0.53	47.1
6	R2	118	0.0	0.476	8.4	LOS A	4.0	28.2	0.53	0.50	0.53	47.3
Approach		596	0.0	0.476	4.8	LOS A	4.0	28.2	0.53	0.50	0.53	47.0
NorthEast: Central Boulevard												
7	L2	134	0.0	0.394	7.7	LOS A	2.8	19.8	0.83	0.85	0.83	44.5
8	T1	63	0.0	0.394	7.6	LOS A	2.8	19.8	0.83	0.85	0.83	45.5
9	R2	95	0.0	0.394	12.1	LOS A	2.8	19.8	0.83	0.85	0.83	45.7
Approach		292	0.0	0.394	9.1	LOS A	2.8	19.8	0.83	0.85	0.83	45.1
NorthWest: Moss Vale Road												
10	L2	93	0.0	0.598	7.0	LOS A	5.7	40.1	0.79	0.79	0.89	45.4
11	T1	485	0.0	0.598	7.0	LOS A	5.7	40.1	0.79	0.79	0.89	46.4
12	R2	11	0.0	0.598	11.5	LOS A	5.7	40.1	0.79	0.79	0.89	46.6
Approach		588	0.0	0.598	7.0	LOS A	5.7	40.1	0.79	0.79	0.89	46.3
SouthWest: South URA Access												
1	L2	59	0.0	0.428	7.4	LOS A	3.1	21.7	0.80	0.85	0.82	44.1
2	T1	84	0.0	0.428	7.4	LOS A	3.1	21.7	0.80	0.85	0.82	45.0
3	R2	202	0.0	0.428	11.9	LOS A	3.1	21.7	0.80	0.85	0.82	45.2
Approach		345	0.0	0.428	10.0	LOS A	3.1	21.7	0.80	0.85	0.82	45.0
All Vehicles		1821	0.0	0.598	7.2	LOS A	5.7	40.1	0.72	0.71	0.75	46.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2036_AAST_W_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	21	0.0	0.254	3.6	LOS A	1.7	11.7	0.40	0.48	0.40	46.3
5	T1	216	0.0	0.254	3.6	LOS A	1.7	11.7	0.40	0.48	0.40	47.4
6	R2	79	0.0	0.254	8.1	LOS A	1.7	11.7	0.40	0.48	0.40	47.6
Approach		316	0.0	0.254	4.7	LOS A	1.7	11.7	0.40	0.48	0.40	47.4
NorthEast: Central Boulevard												
7	L2	266	0.0	0.443	6.1	LOS A	3.1	22.0	0.73	0.75	0.73	45.5
8	T1	54	0.0	0.443	6.1	LOS A	3.1	22.0	0.73	0.75	0.73	46.6
9	R2	92	0.0	0.443	10.6	LOS A	3.1	22.0	0.73	0.75	0.73	46.7
Approach		412	0.0	0.443	7.1	LOS A	3.1	22.0	0.73	0.75	0.73	45.9
NorthWest: Moss Vale Road												
10	L2	65	0.0	0.395	4.5	LOS A	2.7	19.1	0.55	0.53	0.55	46.3
11	T1	374	0.0	0.395	4.5	LOS A	2.7	19.1	0.55	0.53	0.55	47.3
12	R2	6	0.0	0.395	9.0	LOS A	2.7	19.1	0.55	0.53	0.55	47.5
Approach		445	0.0	0.395	4.6	LOS A	2.7	19.1	0.55	0.53	0.55	47.2
SouthWest: South URA Access												
1	L2	62	0.0	0.248	5.0	LOS A	1.5	10.4	0.57	0.65	0.57	45.6
2	T1	85	0.0	0.248	4.9	LOS A	1.5	10.4	0.57	0.65	0.57	46.6
3	R2	105	0.0	0.248	9.4	LOS A	1.5	10.4	0.57	0.65	0.57	46.8
Approach		253	0.0	0.248	6.8	LOS A	1.5	10.4	0.57	0.65	0.57	46.4
All Vehicles		1425	0.0	0.443	5.7	LOS A	3.1	22.0	0.57	0.60	0.57	46.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2036_AAST_W_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	46	0.0	0.440	3.8	LOS A	3.5	24.8	0.49	0.50	0.49	46.0
5	T1	357	0.0	0.440	3.8	LOS A	3.5	24.8	0.49	0.50	0.49	47.1
6	R2	156	0.0	0.440	8.3	LOS A	3.5	24.8	0.49	0.50	0.49	47.3
Approach		559	0.0	0.440	5.0	LOS A	3.5	24.8	0.49	0.50	0.49	47.0
NorthEast: Central Boulevard												
7	L2	157	0.0	0.362	6.5	LOS A	2.5	17.4	0.75	0.78	0.75	45.1
8	T1	60	0.0	0.362	6.5	LOS A	2.5	17.4	0.75	0.78	0.75	46.2
9	R2	89	0.0	0.362	11.0	LOS A	2.5	17.4	0.75	0.78	0.75	46.3
Approach		306	0.0	0.362	7.8	LOS A	2.5	17.4	0.75	0.78	0.75	45.7
NorthWest: Moss Vale Road												
10	L2	87	0.0	0.503	6.0	LOS A	3.9	27.3	0.73	0.70	0.75	45.7
11	T1	398	0.0	0.503	6.0	LOS A	3.9	27.3	0.73	0.70	0.75	46.8
12	R2	7	0.0	0.503	10.5	LOS A	3.9	27.3	0.73	0.70	0.75	46.9
Approach		493	0.0	0.503	6.0	LOS A	3.9	27.3	0.73	0.70	0.75	46.6
SouthWest: South URA Access												
1	L2	46	0.0	0.363	6.8	LOS A	2.5	17.2	0.75	0.80	0.75	44.4
2	T1	89	0.0	0.363	6.7	LOS A	2.5	17.2	0.75	0.80	0.75	45.4
3	R2	169	0.0	0.363	11.2	LOS A	2.5	17.2	0.75	0.80	0.75	45.6
Approach		305	0.0	0.363	9.2	LOS A	2.5	17.2	0.75	0.80	0.75	45.4
All Vehicles		1663	0.0	0.503	6.6	LOS A	3.9	27.3	0.66	0.67	0.66	46.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2036_100HH_W_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	20	0.0	0.250	3.6	LOS A	1.7	11.8	0.39	0.47	0.39	46.4
5	T1	217	0.0	0.250	3.5	LOS A	1.7	11.8	0.39	0.47	0.39	47.4
6	R2	77	0.0	0.250	8.0	LOS A	1.7	11.8	0.39	0.47	0.39	47.6
Approach		314	0.0	0.250	4.6	LOS A	1.7	11.8	0.39	0.47	0.39	47.4
NorthEast: Central Boulevard												
7	L2	298	0.0	0.525	8.8	LOS A	4.5	31.5	0.84	0.91	0.97	44.2
8	T1	48	0.0	0.525	8.8	LOS A	4.5	31.5	0.84	0.91	0.97	45.2
9	R2	85	0.0	0.525	13.3	LOS A	4.5	31.5	0.84	0.91	0.97	45.4
Approach		432	0.0	0.525	9.7	LOS A	4.5	31.5	0.84	0.91	0.97	44.5
NorthWest: Moss Vale Road												
10	L2	59	0.0	0.437	5.6	LOS A	3.1	21.9	0.70	0.65	0.70	45.8
11	T1	359	0.0	0.437	5.6	LOS A	3.1	21.9	0.70	0.65	0.70	46.8
12	R2	6	0.0	0.437	10.1	LOS A	3.1	21.9	0.70	0.65	0.70	47.0
Approach		424	0.0	0.437	5.7	LOS A	3.1	21.9	0.70	0.65	0.70	46.7
SouthWest: South URA Access												
1	L2	59	0.0	0.391	5.3	LOS A	2.6	18.2	0.62	0.70	0.62	44.9
2	T1	78	0.0	0.391	5.2	LOS A	2.6	18.2	0.62	0.70	0.62	45.9
3	R2	263	0.0	0.391	9.7	LOS A	2.6	18.2	0.62	0.70	0.62	46.1
Approach		400	0.0	0.391	8.2	LOS A	2.6	18.2	0.62	0.70	0.62	45.9
All Vehicles		1569	0.0	0.525	7.2	LOS A	4.5	31.5	0.66	0.70	0.69	46.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2036_100HH_W_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	52	0.0	0.536	4.2	LOS A	4.8	33.9	0.61	0.54	0.61	45.7
5	T1	426	0.0	0.536	4.2	LOS A	4.8	33.9	0.61	0.54	0.61	46.7
6	R2	174	0.0	0.536	8.7	LOS A	4.8	33.9	0.61	0.54	0.61	46.9
Approach		652	0.0	0.536	5.4	LOS A	4.8	33.9	0.61	0.54	0.61	46.7
NorthEast: Central Boulevard												
7	L2	193	0.0	0.517	9.5	LOS A	4.5	31.8	0.90	0.96	1.04	43.6
8	T1	72	0.0	0.517	9.5	LOS A	4.5	31.8	0.90	0.96	1.04	44.6
9	R2	111	0.0	0.517	14.0	LOS A	4.5	31.8	0.90	0.96	1.04	44.7
Approach		375	0.0	0.517	10.9	LOS A	4.5	31.8	0.90	0.96	1.04	44.1
NorthWest: Moss Vale Road												
10	L2	111	0.0	0.669	9.2	LOS A	7.5	52.5	0.88	0.93	1.09	44.5
11	T1	496	0.0	0.669	9.1	LOS A	7.5	52.5	0.88	0.93	1.09	45.5
12	R2	11	0.0	0.669	13.6	LOS A	7.5	52.5	0.88	0.93	1.09	45.6
Approach		617	0.0	0.669	9.2	LOS A	7.5	52.5	0.88	0.93	1.09	45.3
SouthWest: South URA Access												
1	L2	60	0.0	0.487	9.2	LOS A	4.0	28.2	0.87	0.94	0.98	43.3
2	T1	107	0.0	0.487	9.2	LOS A	4.0	28.2	0.87	0.94	0.98	44.2
3	R2	193	0.0	0.487	13.7	LOS A	4.0	28.2	0.87	0.94	0.98	44.4
Approach		360	0.0	0.487	11.6	LOS A	4.0	28.2	0.87	0.94	0.98	44.2
All Vehicles		2003	0.0	0.669	8.7	LOS A	7.5	52.5	0.79	0.81	0.90	45.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2041_AAST_W_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	77	0.0	0.277	4.3	LOS A	1.8	12.7	0.52	0.52	0.52	46.4
5	T1	208	0.0	0.277	4.3	LOS A	1.8	12.7	0.52	0.52	0.52	47.4
6	R2	19	0.0	0.277	8.8	LOS A	1.8	12.7	0.52	0.52	0.52	47.6
Approach		304	0.0	0.277	4.5	LOS A	1.8	12.7	0.52	0.52	0.52	47.2
NorthEast: Central Boulevard												
7	L2	261	0.0	0.510	6.3	LOS A	4.0	28.2	0.73	0.76	0.77	45.3
8	T1	93	0.0	0.510	6.2	LOS A	4.0	28.2	0.73	0.76	0.77	46.3
9	R2	145	0.0	0.510	10.7	LOS A	4.0	28.2	0.73	0.76	0.77	46.5
Approach		499	0.0	0.510	7.5	LOS A	4.0	28.2	0.73	0.76	0.77	45.8
NorthWest: Moss Vale Road												
10	L2	93	0.0	0.378	3.9	LOS A	2.7	18.8	0.46	0.47	0.46	46.5
11	T1	354	0.0	0.378	3.9	LOS A	2.7	18.8	0.46	0.47	0.46	47.6
12	R2	23	0.0	0.378	8.4	LOS A	2.7	18.8	0.46	0.47	0.46	47.8
Approach		469	0.0	0.378	4.1	LOS A	2.7	18.8	0.46	0.47	0.46	47.4
SouthWest: South URA Access												
1	L2	68	0.0	0.221	4.9	LOS A	1.3	9.1	0.55	0.60	0.55	46.0
2	T1	107	0.0	0.221	4.8	LOS A	1.3	9.1	0.55	0.60	0.55	47.0
3	R2	52	0.0	0.221	9.3	LOS A	1.3	9.1	0.55	0.60	0.55	47.2
Approach		227	0.0	0.221	5.8	LOS A	1.3	9.1	0.55	0.60	0.55	46.8
All Vehicles		1500	0.0	0.510	5.6	LOS A	4.0	28.2	0.58	0.60	0.59	46.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2041_AAST_W_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	42	0.0	0.498	4.3	LOS A	4.2	29.4	0.59	0.56	0.59	45.6
5	T1	356	0.0	0.498	4.2	LOS A	4.2	29.4	0.59	0.56	0.59	46.7
6	R2	195	0.0	0.498	8.8	LOS A	4.2	29.4	0.59	0.56	0.59	46.8
Approach		593	0.0	0.498	5.7	LOS A	4.2	29.4	0.59	0.56	0.59	46.7
NorthEast: Central Boulevard												
7	L2	171	0.0	0.449	7.1	LOS A	3.4	23.9	0.80	0.83	0.83	44.8
8	T1	78	0.0	0.449	7.0	LOS A	3.4	23.9	0.80	0.83	0.83	45.8
9	R2	125	0.0	0.449	11.5	LOS A	3.4	23.9	0.80	0.83	0.83	46.0
Approach		374	0.0	0.449	8.5	LOS A	3.4	23.9	0.80	0.83	0.83	45.4
NorthWest: Moss Vale Road												
10	L2	138	0.0	0.599	7.9	LOS A	5.8	40.4	0.82	0.85	0.95	45.2
11	T1	412	0.0	0.599	7.9	LOS A	5.8	40.4	0.82	0.85	0.95	46.2
12	R2	8	0.0	0.599	12.4	LOS A	5.8	40.4	0.82	0.85	0.95	46.3
Approach		558	0.0	0.599	8.0	LOS A	5.8	40.4	0.82	0.85	0.95	45.9
SouthWest: South URA Access												
1	L2	49	0.0	0.421	7.8	LOS A	3.1	21.7	0.82	0.86	0.85	44.2
2	T1	119	0.0	0.421	7.7	LOS A	3.1	21.7	0.82	0.86	0.85	45.1
3	R2	158	0.0	0.421	12.2	LOS A	3.1	21.7	0.82	0.86	0.85	45.3
Approach		326	0.0	0.421	9.9	LOS A	3.1	21.7	0.82	0.86	0.85	45.0
All Vehicles		1851	0.0	0.599	7.7	LOS A	5.8	40.4	0.75	0.76	0.80	45.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2041_100HH_W_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	19	0.0	0.269	4.0	LOS A	1.8	12.3	0.48	0.51	0.48	46.1
5	T1	216	0.0	0.269	4.0	LOS A	1.8	12.3	0.48	0.51	0.48	47.2
6	R2	75	0.0	0.269	8.5	LOS A	1.8	12.3	0.48	0.51	0.48	47.3
Approach		309	0.0	0.269	5.1	LOS A	1.8	12.3	0.48	0.51	0.48	47.1
NorthEast: Central Boulevard												
7	L2	252	0.0	0.467	5.7	LOS A	3.4	23.7	0.71	0.72	0.71	45.6
8	T1	77	0.0	0.467	5.7	LOS A	3.4	23.7	0.71	0.72	0.71	46.6
9	R2	129	0.0	0.467	10.2	LOS A	3.4	23.7	0.71	0.72	0.71	46.8
Approach		458	0.0	0.467	7.0	LOS A	3.4	23.7	0.71	0.72	0.71	46.1
NorthWest: Moss Vale Road												
10	L2	81	0.0	0.379	4.2	LOS A	2.6	18.2	0.50	0.49	0.50	46.5
11	T1	360	0.0	0.379	4.1	LOS A	2.6	18.2	0.50	0.49	0.50	47.5
12	R2	9	0.0	0.379	8.6	LOS A	2.6	18.2	0.50	0.49	0.50	47.7
Approach		451	0.0	0.379	4.2	LOS A	2.6	18.2	0.50	0.49	0.50	47.3
SouthWest: South URA Access												
1	L2	64	0.0	0.211	5.1	LOS A	1.2	8.7	0.58	0.63	0.58	45.9
2	T1	96	0.0	0.211	5.1	LOS A	1.2	8.7	0.58	0.63	0.58	46.9
3	R2	49	0.0	0.211	9.6	LOS A	1.2	8.7	0.58	0.63	0.58	47.1
Approach		209	0.0	0.211	6.1	LOS A	1.2	8.7	0.58	0.63	0.58	46.6
All Vehicles		1427	0.0	0.467	5.6	LOS A	3.4	23.7	0.57	0.59	0.57	46.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2041_100HH_W_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles

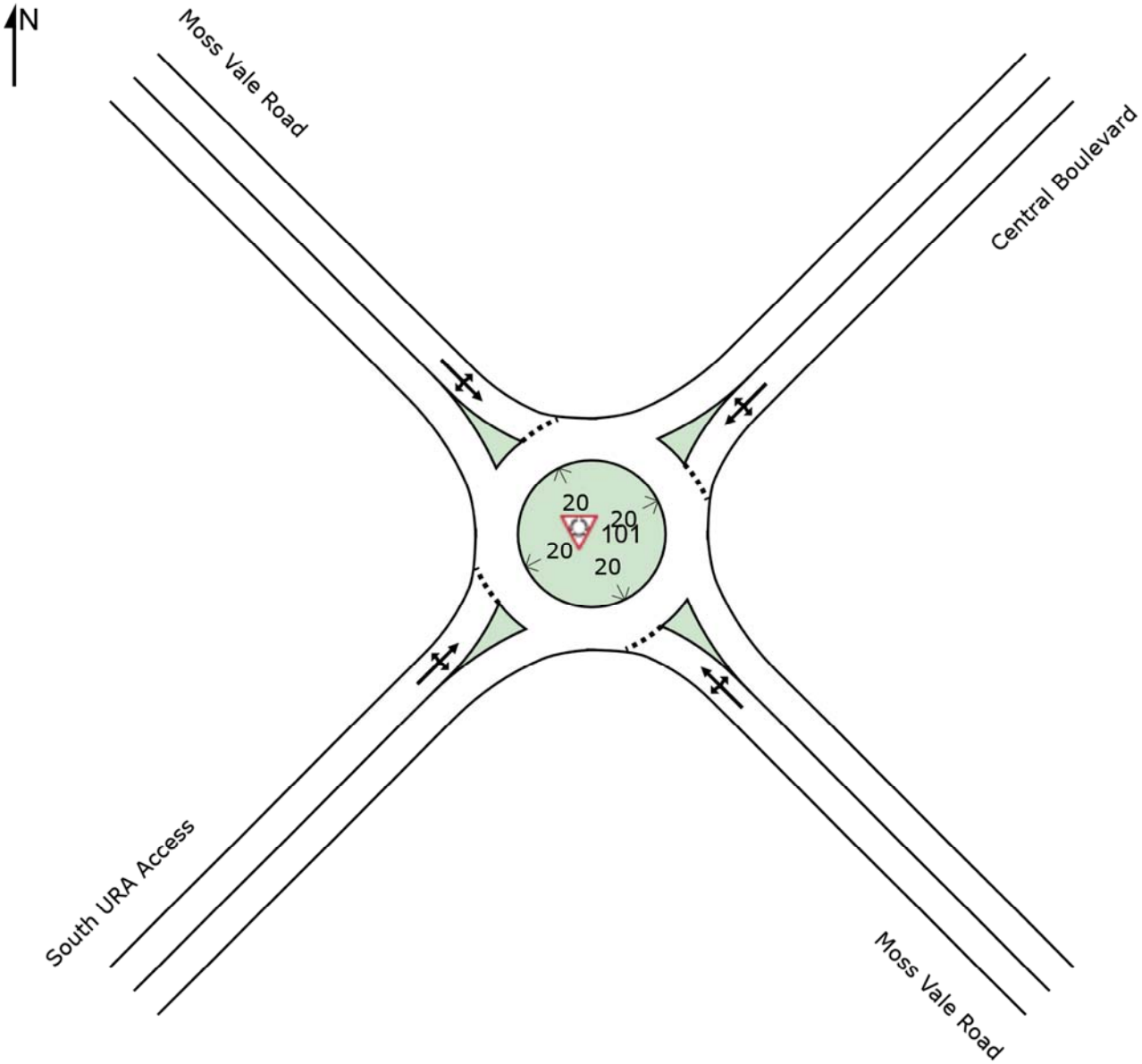
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	47	0.0	0.578	4.8	LOS A	5.3	37.0	0.71	0.60	0.71	45.4
5	T1	428	0.0	0.578	4.7	LOS A	5.3	37.0	0.71	0.60	0.71	46.4
6	R2	174	0.0	0.578	9.2	LOS A	5.3	37.0	0.71	0.60	0.71	46.6
Approach		649	0.0	0.578	5.9	LOS A	5.3	37.0	0.71	0.60	0.71	46.4
NorthEast: Central Boulevard												
7	L2	164	0.0	0.571	10.4	LOS A	5.5	38.5	0.93	1.02	1.13	43.0
8	T1	93	0.0	0.571	10.4	LOS A	5.5	38.5	0.93	1.02	1.13	43.9
9	R2	155	0.0	0.571	14.9	LOS B	5.5	38.5	0.93	1.02	1.13	44.1
Approach		412	0.0	0.571	12.1	LOS A	5.5	38.5	0.93	1.02	1.13	43.6
NorthWest: Moss Vale Road												
10	L2	171	0.0	0.751	11.5	LOS A	10.2	71.7	0.96	1.06	1.31	43.2
11	T1	498	0.0	0.751	11.5	LOS A	10.2	71.7	0.96	1.06	1.31	44.2
12	R2	11	0.0	0.751	16.0	LOS B	10.2	71.7	0.96	1.06	1.31	44.3
Approach		679	0.0	0.751	11.6	LOS A	10.2	71.7	0.96	1.06	1.31	43.9
SouthWest: South URA Access												
1	L2	64	0.0	0.551	11.1	LOS A	5.1	35.8	0.93	1.03	1.14	42.5
2	T1	137	0.0	0.551	11.1	LOS A	5.1	35.8	0.93	1.03	1.14	43.4
3	R2	181	0.0	0.551	15.6	LOS B	5.1	35.8	0.93	1.03	1.14	43.5
Approach		382	0.0	0.551	13.2	LOS A	5.1	35.8	0.93	1.03	1.14	43.3
All Vehicles		2122	0.0	0.751	10.3	LOS A	10.2	71.7	0.87	0.91	1.06	44.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SITE LAYOUT

Site: 101 [2021_AAST_WO_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout



MOVEMENT SUMMARY

Site: 101 [2021_AAST_WO_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	6	0.0	0.179	3.1	LOS A	1.0	7.3	0.23	0.34	0.23	47.4
5	T1	243	0.0	0.179	3.1	LOS A	1.0	7.3	0.23	0.34	0.23	48.5
6	R2	1	0.0	0.179	7.6	LOS A	1.0	7.3	0.23	0.34	0.23	48.7
Approach		251	0.0	0.179	3.1	LOS A	1.0	7.3	0.23	0.34	0.23	48.5
NorthEast: Central Boulevard												
7	L2	1	0.0	0.050	4.8	LOS A	0.3	1.8	0.51	0.63	0.51	44.9
8	T1	9	0.0	0.050	4.8	LOS A	0.3	1.8	0.51	0.63	0.51	45.9
9	R2	40	0.0	0.050	9.3	LOS A	0.3	1.8	0.51	0.63	0.51	46.1
Approach		51	0.0	0.050	8.4	LOS A	0.3	1.8	0.51	0.63	0.51	46.0
NorthWest: Moss Vale Road												
10	L2	26	0.0	0.282	3.0	LOS A	1.9	13.2	0.19	0.35	0.19	47.4
11	T1	379	0.0	0.282	3.0	LOS A	1.9	13.2	0.19	0.35	0.19	48.5
12	R2	20	0.0	0.282	7.5	LOS A	1.9	13.2	0.19	0.35	0.19	48.7
Approach		425	0.0	0.282	3.2	LOS A	1.9	13.2	0.19	0.35	0.19	48.5
SouthWest: South URA Access												
1	L2	99	0.0	0.127	4.2	LOS A	0.7	4.7	0.44	0.55	0.44	46.5
2	T1	12	0.0	0.127	4.2	LOS A	0.7	4.7	0.44	0.55	0.44	47.6
3	R2	31	0.0	0.127	8.7	LOS A	0.7	4.7	0.44	0.55	0.44	47.8
Approach		141	0.0	0.127	5.2	LOS A	0.7	4.7	0.44	0.55	0.44	46.8
All Vehicles		867	0.0	0.282	3.8	LOS A	1.9	13.2	0.26	0.39	0.26	48.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2021_AAST_WO_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	24	0.0	0.287	3.2	LOS A	1.8	12.9	0.27	0.36	0.27	47.2
5	T1	377	0.0	0.287	3.2	LOS A	1.8	12.9	0.27	0.36	0.27	48.3
6	R2	1	0.0	0.287	7.7	LOS A	1.8	12.9	0.27	0.36	0.27	48.5
Approach		402	0.0	0.287	3.2	LOS A	1.8	12.9	0.27	0.36	0.27	48.3
NorthEast: Central Boulevard												
7	L2	4	0.0	0.056	5.5	LOS A	0.3	2.1	0.59	0.65	0.59	44.8
8	T1	13	0.0	0.056	5.4	LOS A	0.3	2.1	0.59	0.65	0.59	45.8
9	R2	34	0.0	0.056	9.9	LOS A	0.3	2.1	0.59	0.65	0.59	46.0
Approach		51	0.0	0.056	8.5	LOS A	0.3	2.1	0.59	0.65	0.59	45.9
NorthWest: Moss Vale Road												
10	L2	35	0.0	0.353	3.4	LOS A	2.6	17.9	0.35	0.41	0.35	46.8
11	T1	414	0.0	0.353	3.4	LOS A	2.6	17.9	0.35	0.41	0.35	47.9
12	R2	34	0.0	0.353	7.9	LOS A	2.6	17.9	0.35	0.41	0.35	48.1
Approach		482	0.0	0.353	3.7	LOS A	2.6	17.9	0.35	0.41	0.35	47.9
SouthWest: South URA Access												
1	L2	89	0.0	0.190	5.0	LOS A	1.1	7.5	0.55	0.66	0.55	45.6
2	T1	9	0.0	0.190	5.0	LOS A	1.1	7.5	0.55	0.66	0.55	46.6
3	R2	92	0.0	0.190	9.5	LOS A	1.1	7.5	0.55	0.66	0.55	46.8
Approach		191	0.0	0.190	7.2	LOS A	1.1	7.5	0.55	0.66	0.55	46.2
All Vehicles		1125	0.0	0.353	4.3	LOS A	2.6	17.9	0.37	0.44	0.37	47.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2021_100HH_WO_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	1	0.0	0.165	3.0	LOS A	0.9	6.5	0.17	0.32	0.17	47.6
5	T1	238	0.0	0.165	3.0	LOS A	0.9	6.5	0.17	0.32	0.17	48.7
6	R2	1	0.0	0.165	7.5	LOS A	0.9	6.5	0.17	0.32	0.17	48.9
Approach		240	0.0	0.165	3.0	LOS A	0.9	6.5	0.17	0.32	0.17	48.7
NorthEast: Central Boulevard												
7	L2	1	0.0	0.027	4.5	LOS A	0.1	0.9	0.45	0.60	0.45	45.0
8	T1	4	0.0	0.027	4.4	LOS A	0.1	0.9	0.45	0.60	0.45	46.0
9	R2	23	0.0	0.027	8.9	LOS A	0.1	0.9	0.45	0.60	0.45	46.2
Approach		28	0.0	0.027	8.1	LOS A	0.1	0.9	0.45	0.60	0.45	46.1
NorthWest: Moss Vale Road												
10	L2	23	0.0	0.234	2.9	LOS A	1.5	10.3	0.07	0.33	0.07	47.8
11	T1	352	0.0	0.234	2.8	LOS A	1.5	10.3	0.07	0.33	0.07	49.0
12	R2	17	0.0	0.234	7.3	LOS A	1.5	10.3	0.07	0.33	0.07	49.2
Approach		392	0.0	0.234	3.0	LOS A	1.5	10.3	0.07	0.33	0.07	48.9
SouthWest: South URA Access												
1	L2	76	0.0	0.073	4.0	LOS A	0.4	2.6	0.40	0.48	0.40	47.0
2	T1	6	0.0	0.073	4.0	LOS A	0.4	2.6	0.40	0.48	0.40	48.2
3	R2	1	0.0	0.073	8.5	LOS A	0.4	2.6	0.40	0.48	0.40	48.4
Approach		83	0.0	0.073	4.1	LOS A	0.4	2.6	0.40	0.48	0.40	47.1
All Vehicles		743	0.0	0.234	3.3	LOS A	1.5	10.3	0.15	0.36	0.15	48.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2021_100HH_WO_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	1	0.0	0.326	3.2	LOS A	2.2	15.5	0.27	0.35	0.27	47.2
5	T1	465	0.0	0.326	3.2	LOS A	2.2	15.5	0.27	0.35	0.27	48.3
6	R2	1	0.0	0.326	7.7	LOS A	2.2	15.5	0.27	0.35	0.27	48.5
Approach		467	0.0	0.326	3.2	LOS A	2.2	15.5	0.27	0.35	0.27	48.3
NorthEast: Central Boulevard												
7	L2	1	0.0	0.050	6.0	LOS A	0.3	1.9	0.63	0.68	0.63	44.3
8	T1	7	0.0	0.050	6.0	LOS A	0.3	1.9	0.63	0.68	0.63	45.3
9	R2	34	0.0	0.050	10.5	LOS A	0.3	1.9	0.63	0.68	0.63	45.5
Approach		42	0.0	0.050	9.6	LOS A	0.3	1.9	0.63	0.68	0.63	45.4
NorthWest: Moss Vale Road												
10	L2	33	0.0	0.408	3.3	LOS A	3.2	22.6	0.34	0.39	0.34	46.9
11	T1	514	0.0	0.408	3.3	LOS A	3.2	22.6	0.34	0.39	0.34	48.0
12	R2	31	0.0	0.408	7.8	LOS A	3.2	22.6	0.34	0.39	0.34	48.2
Approach		577	0.0	0.408	3.5	LOS A	3.2	22.6	0.34	0.39	0.34	47.9
SouthWest: South URA Access												
1	L2	102	0.0	0.196	5.6	LOS A	1.1	8.0	0.61	0.69	0.61	45.5
2	T1	7	0.0	0.196	5.5	LOS A	1.1	8.0	0.61	0.69	0.61	46.5
3	R2	75	0.0	0.196	10.0	LOS A	1.1	8.0	0.61	0.69	0.61	46.7
Approach		184	0.0	0.196	7.4	LOS A	1.1	8.0	0.61	0.69	0.61	46.0
All Vehicles		1271	0.0	0.408	4.2	LOS A	3.2	22.6	0.36	0.43	0.36	47.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2026_AAST_WO_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	18	0.0	0.190	3.3	LOS A	1.1	7.8	0.29	0.37	0.29	47.2
5	T1	233	0.0	0.190	3.3	LOS A	1.1	7.8	0.29	0.37	0.29	48.3
6	R2	1	0.0	0.190	7.8	LOS A	1.1	7.8	0.29	0.37	0.29	48.5
Approach		252	0.0	0.190	3.3	LOS A	1.1	7.8	0.29	0.37	0.29	48.2
NorthEast: Central Boulevard												
7	L2	13	0.0	0.089	5.1	LOS A	0.5	3.4	0.55	0.64	0.55	45.2
8	T1	22	0.0	0.089	5.0	LOS A	0.5	3.4	0.55	0.64	0.55	46.2
9	R2	52	0.0	0.089	9.5	LOS A	0.5	3.4	0.55	0.64	0.55	46.4
Approach		86	0.0	0.089	7.7	LOS A	0.5	3.4	0.55	0.64	0.55	46.1
NorthWest: Moss Vale Road												
10	L2	40	0.0	0.315	3.3	LOS A	2.2	15.1	0.29	0.38	0.29	47.0
11	T1	373	0.0	0.315	3.2	LOS A	2.2	15.1	0.29	0.38	0.29	48.1
12	R2	31	0.0	0.315	7.7	LOS A	2.2	15.1	0.29	0.38	0.29	48.3
Approach		443	0.0	0.315	3.5	LOS A	2.2	15.1	0.29	0.38	0.29	48.0
SouthWest: South URA Access												
1	L2	104	0.0	0.166	4.3	LOS A	0.9	6.4	0.46	0.57	0.46	46.2
2	T1	24	0.0	0.166	4.2	LOS A	0.9	6.4	0.46	0.57	0.46	47.3
3	R2	56	0.0	0.166	8.7	LOS A	0.9	6.4	0.46	0.57	0.46	47.5
Approach		184	0.0	0.166	5.6	LOS A	0.9	6.4	0.46	0.57	0.46	46.7
All Vehicles		965	0.0	0.315	4.2	LOS A	2.2	15.1	0.34	0.44	0.34	47.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2026_AAST_WO_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	37	0.0	0.307	3.5	LOS A	2.0	14.1	0.36	0.40	0.36	46.9
5	T1	365	0.0	0.307	3.5	LOS A	2.0	14.1	0.36	0.40	0.36	48.0
6	R2	1	0.0	0.307	8.0	LOS A	2.0	14.1	0.36	0.40	0.36	48.2
Approach		403	0.0	0.307	3.5	LOS A	2.0	14.1	0.36	0.40	0.36	47.9
NorthEast: Central Boulevard												
7	L2	20	0.0	0.116	5.9	LOS A	0.7	4.7	0.63	0.69	0.63	44.9
8	T1	27	0.0	0.116	5.8	LOS A	0.7	4.7	0.63	0.69	0.63	45.9
9	R2	54	0.0	0.116	10.3	LOS A	0.7	4.7	0.63	0.69	0.63	46.1
Approach		101	0.0	0.116	8.2	LOS A	0.7	4.7	0.63	0.69	0.63	45.8
NorthWest: Moss Vale Road												
10	L2	46	0.0	0.384	3.8	LOS A	2.8	19.8	0.44	0.45	0.44	46.5
11	T1	398	0.0	0.384	3.7	LOS A	2.8	19.8	0.44	0.45	0.44	47.6
12	R2	44	0.0	0.384	8.2	LOS A	2.8	19.8	0.44	0.45	0.44	47.7
Approach		488	0.0	0.384	4.1	LOS A	2.8	19.8	0.44	0.45	0.44	47.5
SouthWest: South URA Access												
1	L2	102	0.0	0.258	5.2	LOS A	1.6	10.9	0.59	0.68	0.59	45.4
2	T1	21	0.0	0.258	5.2	LOS A	1.6	10.9	0.59	0.68	0.59	46.4
3	R2	133	0.0	0.258	9.7	LOS A	1.6	10.9	0.59	0.68	0.59	46.6
Approach		256	0.0	0.258	7.5	LOS A	1.6	10.9	0.59	0.68	0.59	46.1
All Vehicles		1248	0.0	0.384	4.9	LOS A	2.8	19.8	0.46	0.50	0.46	47.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2026_100HH_WO_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	18	0.0	0.183	3.3	LOS A	1.1	7.4	0.27	0.37	0.27	47.2
5	T1	226	0.0	0.183	3.2	LOS A	1.1	7.4	0.27	0.37	0.27	48.3
6	R2	1	0.0	0.183	7.7	LOS A	1.1	7.4	0.27	0.37	0.27	48.5
Approach		245	0.0	0.183	3.3	LOS A	1.1	7.4	0.27	0.37	0.27	48.2
NorthEast: Central Boulevard												
7	L2	2	0.0	0.069	4.8	LOS A	0.4	2.5	0.51	0.62	0.51	45.1
8	T1	20	0.0	0.069	4.8	LOS A	0.4	2.5	0.51	0.62	0.51	46.1
9	R2	47	0.0	0.069	9.3	LOS A	0.4	2.5	0.51	0.62	0.51	46.3
Approach		69	0.0	0.069	7.8	LOS A	0.4	2.5	0.51	0.62	0.51	46.2
NorthWest: Moss Vale Road												
10	L2	37	0.0	0.286	3.2	LOS A	1.9	13.3	0.25	0.37	0.25	47.2
11	T1	347	0.0	0.286	3.1	LOS A	1.9	13.3	0.25	0.37	0.25	48.3
12	R2	28	0.0	0.286	7.6	LOS A	1.9	13.3	0.25	0.37	0.25	48.5
Approach		413	0.0	0.286	3.4	LOS A	1.9	13.3	0.25	0.37	0.25	48.2
SouthWest: South URA Access												
1	L2	97	0.0	0.143	4.2	LOS A	0.8	5.4	0.44	0.55	0.44	46.4
2	T1	22	0.0	0.143	4.1	LOS A	0.8	5.4	0.44	0.55	0.44	47.4
3	R2	41	0.0	0.143	8.6	LOS A	0.8	5.4	0.44	0.55	0.44	47.6
Approach		160	0.0	0.143	5.3	LOS A	0.8	5.4	0.44	0.55	0.44	46.8
All Vehicles		887	0.0	0.286	4.1	LOS A	1.9	13.3	0.31	0.42	0.31	47.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2026_100HH_WO_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	42	0.0	0.380	3.8	LOS A	2.7	19.0	0.43	0.43	0.43	46.7
5	T1	443	0.0	0.380	3.7	LOS A	2.7	19.0	0.43	0.43	0.43	47.8
6	R2	1	0.0	0.380	8.2	LOS A	2.7	19.0	0.43	0.43	0.43	48.0
Approach		486	0.0	0.380	3.7	LOS A	2.7	19.0	0.43	0.43	0.43	47.7
NorthEast: Central Boulevard												
7	L2	11	0.0	0.142	7.0	LOS A	0.9	6.1	0.72	0.75	0.72	44.3
8	T1	32	0.0	0.142	6.9	LOS A	0.9	6.1	0.72	0.75	0.72	45.2
9	R2	66	0.0	0.142	11.4	LOS A	0.9	6.1	0.72	0.75	0.72	45.4
Approach		108	0.0	0.142	9.7	LOS A	0.9	6.1	0.72	0.75	0.72	45.2
NorthWest: Moss Vale Road												
10	L2	58	0.0	0.489	4.0	LOS A	4.1	28.6	0.54	0.48	0.54	46.2
11	T1	495	0.0	0.489	4.0	LOS A	4.1	28.6	0.54	0.48	0.54	47.2
12	R2	56	0.0	0.489	8.5	LOS A	4.1	28.6	0.54	0.48	0.54	47.4
Approach		608	0.0	0.489	4.4	LOS A	4.1	28.6	0.54	0.48	0.54	47.2
SouthWest: South URA Access												
1	L2	119	0.0	0.323	6.0	LOS A	2.1	14.6	0.68	0.74	0.68	45.0
2	T1	24	0.0	0.323	5.9	LOS A	2.1	14.6	0.68	0.74	0.68	46.0
3	R2	153	0.0	0.323	10.4	LOS A	2.1	14.6	0.68	0.74	0.68	46.1
Approach		296	0.0	0.323	8.3	LOS A	2.1	14.6	0.68	0.74	0.68	45.7
All Vehicles		1499	0.0	0.489	5.3	LOS A	4.1	28.6	0.54	0.54	0.54	46.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2031_AAST_WO_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	23	0.0	0.242	3.7	LOS A	1.5	10.8	0.41	0.47	0.41	46.4
5	T1	219	0.0	0.242	3.7	LOS A	1.5	10.8	0.41	0.47	0.41	47.5
6	R2	53	0.0	0.242	8.2	LOS A	1.5	10.8	0.41	0.47	0.41	47.7
Approach		295	0.0	0.242	4.5	LOS A	1.5	10.8	0.41	0.47	0.41	47.4
NorthEast: Central Boulevard												
7	L2	236	0.0	0.465	8.5	LOS A	3.6	25.5	0.83	0.89	0.91	44.3
8	T1	48	0.0	0.465	8.5	LOS A	3.6	25.5	0.83	0.89	0.91	45.3
9	R2	79	0.0	0.465	13.0	LOS A	3.6	25.5	0.83	0.89	0.91	45.5
Approach		363	0.0	0.465	9.5	LOS A	3.6	25.5	0.83	0.89	0.91	44.7
NorthWest: Moss Vale Road												
10	L2	55	0.0	0.468	5.5	LOS A	3.5	24.2	0.70	0.65	0.70	45.7
11	T1	368	0.0	0.468	5.5	LOS A	3.5	24.2	0.70	0.65	0.70	46.7
12	R2	39	0.0	0.468	10.0	LOS A	3.5	24.2	0.70	0.65	0.70	46.9
Approach		462	0.0	0.468	5.9	LOS A	3.5	24.2	0.70	0.65	0.70	46.6
SouthWest: South URA Access												
1	L2	117	0.0	0.436	5.2	LOS A	3.0	21.2	0.63	0.69	0.63	45.1
2	T1	68	0.0	0.436	5.1	LOS A	3.0	21.2	0.63	0.69	0.63	46.1
3	R2	273	0.0	0.436	9.6	LOS A	3.0	21.2	0.63	0.69	0.63	46.3
Approach		458	0.0	0.436	7.8	LOS A	3.0	21.2	0.63	0.69	0.63	46.0
All Vehicles		1578	0.0	0.468	7.0	LOS A	3.6	25.5	0.66	0.68	0.67	46.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2031_AAST_WO_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	47	0.0	0.411	4.0	LOS A	3.0	21.2	0.49	0.51	0.49	46.1
5	T1	353	0.0	0.411	4.0	LOS A	3.0	21.2	0.49	0.51	0.49	47.2
6	R2	105	0.0	0.411	8.5	LOS A	3.0	21.2	0.49	0.51	0.49	47.4
Approach		505	0.0	0.411	4.9	LOS A	3.0	21.2	0.49	0.51	0.49	47.1
NorthEast: Central Boulevard												
7	L2	108	0.0	0.294	6.7	LOS A	1.9	13.6	0.74	0.77	0.74	45.0
8	T1	54	0.0	0.294	6.7	LOS A	1.9	13.6	0.74	0.77	0.74	46.0
9	R2	77	0.0	0.294	11.2	LOS A	1.9	13.6	0.74	0.77	0.74	46.2
Approach		239	0.0	0.294	8.1	LOS A	1.9	13.6	0.74	0.77	0.74	45.6
NorthWest: Moss Vale Road												
10	L2	73	0.0	0.500	5.3	LOS A	3.8	26.6	0.69	0.63	0.69	45.7
11	T1	387	0.0	0.500	5.3	LOS A	3.8	26.6	0.69	0.63	0.69	46.7
12	R2	57	0.0	0.500	9.8	LOS A	3.8	26.6	0.69	0.63	0.69	46.9
Approach		517	0.0	0.500	5.8	LOS A	3.8	26.6	0.69	0.63	0.69	46.6
SouthWest: South URA Access												
1	L2	94	0.0	0.384	6.3	LOS A	2.6	18.3	0.73	0.77	0.73	44.7
2	T1	72	0.0	0.384	6.3	LOS A	2.6	18.3	0.73	0.77	0.73	45.7
3	R2	177	0.0	0.384	10.8	LOS A	2.6	18.3	0.73	0.77	0.73	45.9
Approach		342	0.0	0.384	8.6	LOS A	2.6	18.3	0.73	0.77	0.73	45.5
All Vehicles		1603	0.0	0.500	6.5	LOS A	3.8	26.6	0.64	0.64	0.64	46.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2031_100HH_WO_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	21	0.0	0.230	3.6	LOS A	1.4	9.9	0.38	0.46	0.38	46.5
5	T1	215	0.0	0.230	3.6	LOS A	1.4	9.9	0.38	0.46	0.38	47.6
6	R2	49	0.0	0.230	8.1	LOS A	1.4	9.9	0.38	0.46	0.38	47.8
Approach		285	0.0	0.230	4.4	LOS A	1.4	9.9	0.38	0.46	0.38	47.6
NorthEast: Central Boulevard												
7	L2	187	0.0	0.320	5.7	LOS A	2.1	14.4	0.65	0.70	0.65	45.7
8	T1	43	0.0	0.320	5.6	LOS A	2.1	14.4	0.65	0.70	0.65	46.8
9	R2	74	0.0	0.320	10.1	LOS A	2.1	14.4	0.65	0.70	0.65	47.0
Approach		304	0.0	0.320	6.7	LOS A	2.1	14.4	0.65	0.70	0.65	46.2
NorthWest: Moss Vale Road												
10	L2	51	0.0	0.357	4.0	LOS A	2.4	16.9	0.46	0.48	0.46	46.4
11	T1	347	0.0	0.357	3.9	LOS A	2.4	16.9	0.46	0.48	0.46	47.5
12	R2	37	0.0	0.357	8.4	LOS A	2.4	16.9	0.46	0.48	0.46	47.7
Approach		435	0.0	0.357	4.3	LOS A	2.4	16.9	0.46	0.48	0.46	47.4
SouthWest: South URA Access												
1	L2	109	0.0	0.241	4.7	LOS A	1.4	9.9	0.53	0.61	0.53	45.9
2	T1	62	0.0	0.241	4.6	LOS A	1.4	9.9	0.53	0.61	0.53	47.0
3	R2	83	0.0	0.241	9.1	LOS A	1.4	9.9	0.53	0.61	0.53	47.2
Approach		255	0.0	0.241	6.1	LOS A	1.4	9.9	0.53	0.61	0.53	46.6
All Vehicles		1279	0.0	0.357	5.3	LOS A	2.4	16.9	0.50	0.55	0.50	47.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2031_100HH_WO_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	54	0.0	0.508	4.5	LOS A	4.1	29.0	0.60	0.55	0.60	45.8
5	T1	424	0.0	0.508	4.4	LOS A	4.1	29.0	0.60	0.55	0.60	46.9
6	R2	118	0.0	0.508	8.9	LOS A	4.1	29.0	0.60	0.55	0.60	47.1
Approach		596	0.0	0.508	5.3	LOS A	4.1	29.0	0.60	0.55	0.60	46.8
NorthEast: Central Boulevard												
7	L2	134	0.0	0.429	8.9	LOS A	3.3	23.3	0.89	0.92	0.94	43.9
8	T1	63	0.0	0.429	8.8	LOS A	3.3	23.3	0.89	0.92	0.94	44.9
9	R2	95	0.0	0.429	13.3	LOS A	3.3	23.3	0.89	0.92	0.94	45.0
Approach		292	0.0	0.429	10.3	LOS A	3.3	23.3	0.89	0.92	0.94	44.5
NorthWest: Moss Vale Road												
10	L2	93	0.0	0.661	7.9	LOS A	7.3	51.1	0.84	0.86	1.00	44.9
11	T1	485	0.0	0.661	7.9	LOS A	7.3	51.1	0.84	0.86	1.00	45.9
12	R2	74	0.0	0.661	12.4	LOS A	7.3	51.1	0.84	0.86	1.00	46.1
Approach		652	0.0	0.661	8.4	LOS A	7.3	51.1	0.84	0.86	1.00	45.8
SouthWest: South URA Access												
1	L2	118	0.0	0.508	8.6	LOS A	4.3	30.0	0.85	0.92	0.96	43.7
2	T1	84	0.0	0.508	8.6	LOS A	4.3	30.0	0.85	0.92	0.96	44.6
3	R2	202	0.0	0.508	13.1	LOS A	4.3	30.0	0.85	0.92	0.96	44.8
Approach		404	0.0	0.508	10.8	LOS A	4.3	30.0	0.85	0.92	0.96	44.4
All Vehicles		1943	0.0	0.661	8.3	LOS A	7.3	51.1	0.78	0.79	0.86	45.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2036_AAST_WO_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	21	0.0	0.263	3.8	LOS A	1.7	11.9	0.43	0.50	0.43	46.2
5	T1	216	0.0	0.263	3.8	LOS A	1.7	11.9	0.43	0.50	0.43	47.3
6	R2	79	0.0	0.263	8.3	LOS A	1.7	11.9	0.43	0.50	0.43	47.5
Approach		316	0.0	0.263	4.9	LOS A	1.7	11.9	0.43	0.50	0.43	47.3
NorthEast: Central Boulevard												
7	L2	266	0.0	0.455	6.5	LOS A	3.4	23.5	0.76	0.78	0.77	45.3
8	T1	54	0.0	0.455	6.5	LOS A	3.4	23.5	0.76	0.78	0.77	46.4
9	R2	92	0.0	0.455	11.0	LOS A	3.4	23.5	0.76	0.78	0.77	46.5
Approach		412	0.0	0.455	7.5	LOS A	3.4	23.5	0.76	0.78	0.77	45.7
NorthWest: Moss Vale Road												
10	L2	65	0.0	0.422	4.6	LOS A	3.0	21.0	0.57	0.54	0.57	46.1
11	T1	374	0.0	0.422	4.5	LOS A	3.0	21.0	0.57	0.54	0.57	47.2
12	R2	38	0.0	0.422	9.0	LOS A	3.0	21.0	0.57	0.54	0.57	47.4
Approach		477	0.0	0.422	4.9	LOS A	3.0	21.0	0.57	0.54	0.57	47.0
SouthWest: South URA Access												
1	L2	115	0.0	0.300	5.1	LOS A	1.9	13.1	0.59	0.65	0.59	45.7
2	T1	85	0.0	0.300	5.1	LOS A	1.9	13.1	0.59	0.65	0.59	46.7
3	R2	105	0.0	0.300	9.6	LOS A	1.9	13.1	0.59	0.65	0.59	46.9
Approach		305	0.0	0.300	6.6	LOS A	1.9	13.1	0.59	0.65	0.59	46.4
All Vehicles		1509	0.0	0.455	6.0	LOS A	3.4	23.5	0.60	0.62	0.60	46.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2036_AAST_WO_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	46	0.0	0.463	4.2	LOS A	3.6	25.3	0.54	0.54	0.54	45.9
5	T1	357	0.0	0.463	4.1	LOS A	3.6	25.3	0.54	0.54	0.54	46.9
6	R2	156	0.0	0.463	8.6	LOS A	3.6	25.3	0.54	0.54	0.54	47.1
Approach		559	0.0	0.463	5.4	LOS A	3.6	25.3	0.54	0.54	0.54	46.9
NorthEast: Central Boulevard												
7	L2	157	0.0	0.381	7.0	LOS A	2.7	18.8	0.79	0.81	0.79	44.9
8	T1	60	0.0	0.381	6.9	LOS A	2.7	18.8	0.79	0.81	0.79	45.9
9	R2	89	0.0	0.381	11.4	LOS A	2.7	18.8	0.79	0.81	0.79	46.1
Approach		306	0.0	0.381	8.3	LOS A	2.7	18.8	0.79	0.81	0.79	45.5
NorthWest: Moss Vale Road												
10	L2	87	0.0	0.551	6.5	LOS A	4.8	33.3	0.76	0.76	0.82	45.4
11	T1	398	0.0	0.551	6.5	LOS A	4.8	33.3	0.76	0.76	0.82	46.4
12	R2	55	0.0	0.551	11.0	LOS A	4.8	33.3	0.76	0.76	0.82	46.6
Approach		540	0.0	0.551	7.0	LOS A	4.8	33.3	0.76	0.76	0.82	46.3
SouthWest: South URA Access												
1	L2	92	0.0	0.421	7.0	LOS A	3.0	20.9	0.78	0.82	0.79	44.5
2	T1	89	0.0	0.421	6.9	LOS A	3.0	20.9	0.78	0.82	0.79	45.5
3	R2	169	0.0	0.421	11.4	LOS A	3.0	20.9	0.78	0.82	0.79	45.6
Approach		351	0.0	0.421	9.1	LOS A	3.0	20.9	0.78	0.82	0.79	45.3
All Vehicles		1756	0.0	0.551	7.1	LOS A	4.8	33.3	0.70	0.71	0.72	46.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2036_100HH_WO_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	20	0.0	0.258	3.7	LOS A	1.7	11.8	0.42	0.48	0.42	46.3
5	T1	217	0.0	0.258	3.7	LOS A	1.7	11.8	0.42	0.48	0.42	47.3
6	R2	77	0.0	0.258	8.2	LOS A	1.7	11.8	0.42	0.48	0.42	47.5
Approach		314	0.0	0.258	4.8	LOS A	1.7	11.8	0.42	0.48	0.42	47.3
NorthEast: Central Boulevard												
7	L2	298	0.0	0.541	9.4	LOS A	4.8	33.7	0.86	0.95	1.02	43.9
8	T1	48	0.0	0.541	9.4	LOS A	4.8	33.7	0.86	0.95	1.02	44.8
9	R2	85	0.0	0.541	13.9	LOS A	4.8	33.7	0.86	0.95	1.02	45.0
Approach		432	0.0	0.541	10.3	LOS A	4.8	33.7	0.86	0.95	1.02	44.2
NorthWest: Moss Vale Road												
10	L2	59	0.0	0.466	5.7	LOS A	3.4	24.0	0.71	0.67	0.71	45.6
11	T1	359	0.0	0.466	5.7	LOS A	3.4	24.0	0.71	0.67	0.71	46.7
12	R2	34	0.0	0.466	10.2	LOS A	3.4	24.0	0.71	0.67	0.71	46.9
Approach		452	0.0	0.466	6.0	LOS A	3.4	24.0	0.71	0.67	0.71	46.5
SouthWest: South URA Access												
1	L2	107	0.0	0.439	5.4	LOS A	3.0	21.3	0.65	0.71	0.65	45.0
2	T1	78	0.0	0.439	5.3	LOS A	3.0	21.3	0.65	0.71	0.65	46.0
3	R2	263	0.0	0.439	9.8	LOS A	3.0	21.3	0.65	0.71	0.65	46.2
Approach		448	0.0	0.439	8.0	LOS A	3.0	21.3	0.65	0.71	0.65	45.9
All Vehicles		1645	0.0	0.541	7.4	LOS A	4.8	33.7	0.68	0.72	0.72	45.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2036_100HH_WO_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	52	0.0	0.569	4.8	LOS A	5.0	35.0	0.67	0.59	0.67	45.5
5	T1	426	0.0	0.569	4.7	LOS A	5.0	35.0	0.67	0.59	0.67	46.5
6	R2	174	0.0	0.569	9.2	LOS A	5.0	35.0	0.67	0.59	0.67	46.7
Approach		652	0.0	0.569	5.9	LOS A	5.0	35.0	0.67	0.59	0.67	46.5
NorthEast: Central Boulevard												
7	L2	193	0.0	0.564	11.5	LOS A	5.4	37.8	0.95	1.05	1.17	42.7
8	T1	72	0.0	0.564	11.4	LOS A	5.4	37.8	0.95	1.05	1.17	43.6
9	R2	111	0.0	0.564	15.9	LOS B	5.4	37.8	0.95	1.05	1.17	43.7
Approach		375	0.0	0.564	12.8	LOS A	5.4	37.8	0.95	1.05	1.17	43.1
NorthWest: Moss Vale Road												
10	L2	111	0.0	0.735	10.7	LOS A	9.6	67.4	0.93	1.02	1.24	43.5
11	T1	496	0.0	0.735	10.7	LOS A	9.6	67.4	0.93	1.02	1.24	44.4
12	R2	72	0.0	0.735	15.2	LOS B	9.6	67.4	0.93	1.02	1.24	44.6
Approach		678	0.0	0.735	11.2	LOS A	9.6	67.4	0.93	1.02	1.24	44.3
SouthWest: South URA Access												
1	L2	117	0.0	0.572	10.8	LOS A	5.5	38.3	0.92	1.03	1.14	42.6
2	T1	107	0.0	0.572	10.8	LOS A	5.5	38.3	0.92	1.03	1.14	43.5
3	R2	193	0.0	0.572	15.3	LOS B	5.5	38.3	0.92	1.03	1.14	43.7
Approach		417	0.0	0.572	12.9	LOS A	5.5	38.3	0.92	1.03	1.14	43.4
All Vehicles		2121	0.0	0.735	10.2	LOS A	9.6	67.4	0.85	0.90	1.04	44.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2041_AAST_WO_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	19	0.0	0.284	4.5	LOS A	1.9	13.0	0.55	0.57	0.55	45.9
5	T1	208	0.0	0.284	4.5	LOS A	1.9	13.0	0.55	0.57	0.55	46.9
6	R2	77	0.0	0.284	9.0	LOS A	1.9	13.0	0.55	0.57	0.55	47.1
Approach		304	0.0	0.284	5.6	LOS A	1.9	13.0	0.55	0.57	0.55	46.9
NorthEast: Central Boulevard												
7	L2	261	0.0	0.528	6.8	LOS A	4.4	31.0	0.77	0.81	0.83	45.0
8	T1	93	0.0	0.528	6.8	LOS A	4.4	31.0	0.77	0.81	0.83	46.0
9	R2	145	0.0	0.528	11.3	LOS A	4.4	31.0	0.77	0.81	0.83	46.2
Approach		499	0.0	0.528	8.1	LOS A	4.4	31.0	0.77	0.81	0.83	45.5
NorthWest: Moss Vale Road												
10	L2	93	0.0	0.427	4.4	LOS A	3.1	21.6	0.54	0.53	0.54	46.2
11	T1	354	0.0	0.427	4.3	LOS A	3.1	21.6	0.54	0.53	0.54	47.2
12	R2	55	0.0	0.427	8.8	LOS A	3.1	21.6	0.54	0.53	0.54	47.4
Approach		501	0.0	0.427	4.8	LOS A	3.1	21.6	0.54	0.53	0.54	47.1
SouthWest: South URA Access												
1	L2	121	0.0	0.286	5.3	LOS A	1.8	12.5	0.62	0.65	0.62	45.9
2	T1	107	0.0	0.286	5.3	LOS A	1.8	12.5	0.62	0.65	0.62	47.0
3	R2	52	0.0	0.286	9.8	LOS A	1.8	12.5	0.62	0.65	0.62	47.1
Approach		280	0.0	0.286	6.1	LOS A	1.8	12.5	0.62	0.65	0.62	46.5
All Vehicles		1584	0.0	0.528	6.2	LOS A	4.4	31.0	0.63	0.65	0.65	46.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2041_AAST_WO_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	42	0.0	0.522	4.7	LOS A	4.3	30.3	0.65	0.60	0.65	45.5
5	T1	356	0.0	0.522	4.6	LOS A	4.3	30.3	0.65	0.60	0.65	46.5
6	R2	195	0.0	0.522	9.1	LOS A	4.3	30.3	0.65	0.60	0.65	46.7
Approach		593	0.0	0.522	6.1	LOS A	4.3	30.3	0.65	0.60	0.65	46.5
NorthEast: Central Boulevard												
7	L2	171	0.0	0.474	7.9	LOS A	3.9	27.0	0.85	0.88	0.91	44.4
8	T1	78	0.0	0.474	7.9	LOS A	3.9	27.0	0.85	0.88	0.91	45.4
9	R2	125	0.0	0.474	12.4	LOS A	3.9	27.0	0.85	0.88	0.91	45.5
Approach		374	0.0	0.474	9.4	LOS A	3.9	27.0	0.85	0.88	0.91	45.0
NorthWest: Moss Vale Road												
10	L2	138	0.0	0.649	8.8	LOS A	7.0	48.9	0.86	0.91	1.05	44.5
11	T1	412	0.0	0.649	8.7	LOS A	7.0	48.9	0.86	0.91	1.05	45.5
12	R2	56	0.0	0.649	13.2	LOS A	7.0	48.9	0.86	0.91	1.05	45.7
Approach		605	0.0	0.649	9.2	LOS A	7.0	48.9	0.86	0.91	1.05	45.3
SouthWest: South URA Access												
1	L2	94	0.0	0.483	8.7	LOS A	4.0	27.8	0.86	0.92	0.95	43.8
2	T1	119	0.0	0.483	8.7	LOS A	4.0	27.8	0.86	0.92	0.95	44.7
3	R2	158	0.0	0.483	13.2	LOS A	4.0	27.8	0.86	0.92	0.95	44.9
Approach		371	0.0	0.483	10.6	LOS A	4.0	27.8	0.86	0.92	0.95	44.6
All Vehicles		1942	0.0	0.649	8.6	LOS A	7.0	48.9	0.79	0.81	0.88	45.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2041_100HH_WO_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	19	0.0	0.276	4.2	LOS A	1.8	12.5	0.50	0.53	0.50	46.0
5	T1	216	0.0	0.276	4.1	LOS A	1.8	12.5	0.50	0.53	0.50	47.1
6	R2	75	0.0	0.276	8.7	LOS A	1.8	12.5	0.50	0.53	0.50	47.3
Approach		309	0.0	0.276	5.2	LOS A	1.8	12.5	0.50	0.53	0.50	47.1
NorthEast: Central Boulevard												
7	L2	252	0.0	0.478	6.1	LOS A	3.6	25.0	0.73	0.75	0.74	45.4
8	T1	77	0.0	0.478	6.0	LOS A	3.6	25.0	0.73	0.75	0.74	46.4
9	R2	129	0.0	0.478	10.5	LOS A	3.6	25.0	0.73	0.75	0.74	46.6
Approach		458	0.0	0.478	7.3	LOS A	3.6	25.0	0.73	0.75	0.74	45.9
NorthWest: Moss Vale Road												
10	L2	81	0.0	0.401	4.2	LOS A	2.8	19.7	0.51	0.50	0.51	46.3
11	T1	360	0.0	0.401	4.2	LOS A	2.8	19.7	0.51	0.50	0.51	47.4
12	R2	37	0.0	0.401	8.7	LOS A	2.8	19.7	0.51	0.50	0.51	47.6
Approach		478	0.0	0.401	4.5	LOS A	2.8	19.7	0.51	0.50	0.51	47.2
SouthWest: South URA Access												
1	L2	112	0.0	0.260	5.2	LOS A	1.6	11.1	0.60	0.64	0.60	46.0
2	T1	96	0.0	0.260	5.2	LOS A	1.6	11.1	0.60	0.64	0.60	47.0
3	R2	49	0.0	0.260	9.7	LOS A	1.6	11.1	0.60	0.64	0.60	47.2
Approach		257	0.0	0.260	6.1	LOS A	1.6	11.1	0.60	0.64	0.60	46.6
All Vehicles		1502	0.0	0.478	5.8	LOS A	3.6	25.0	0.59	0.61	0.59	46.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2041_100HH_WO_PM]

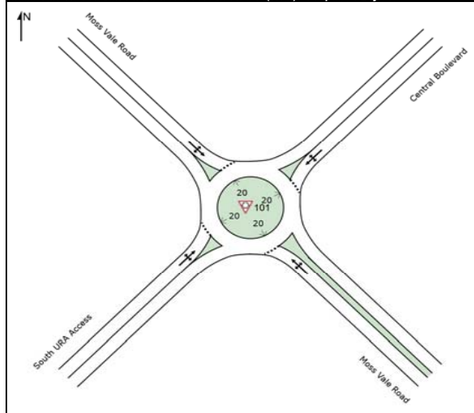
Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	47	0.0	0.612	5.9	LOS A	6.0	42.3	0.77	0.73	0.82	45.1
5	T1	428	0.0	0.612	5.9	LOS A	6.0	42.3	0.77	0.73	0.82	46.1
6	R2	174	0.0	0.612	10.4	LOS A	6.0	42.3	0.77	0.73	0.82	46.3
Approach		649	0.0	0.612	7.1	LOS A	6.0	42.3	0.77	0.73	0.82	46.1
NorthEast: Central Boulevard												
7	L2	164	0.0	0.624	12.8	LOS A	6.6	46.0	0.98	1.11	1.28	41.9
8	T1	93	0.0	0.624	12.7	LOS A	6.6	46.0	0.98	1.11	1.28	42.8
9	R2	155	0.0	0.624	17.2	LOS B	6.6	46.0	0.98	1.11	1.28	42.9
Approach		412	0.0	0.624	14.4	LOS A	6.6	46.0	0.98	1.11	1.28	42.5
NorthWest: Moss Vale Road												
10	L2	171	0.0	0.818	14.3	LOS A	13.6	95.0	1.00	1.18	1.52	41.8
11	T1	498	0.0	0.818	14.2	LOS A	13.6	95.0	1.00	1.18	1.52	42.6
12	R2	72	0.0	0.818	18.7	LOS B	13.6	95.0	1.00	1.18	1.52	42.8
Approach		740	0.0	0.818	14.7	LOS B	13.6	95.0	1.00	1.18	1.52	42.4
SouthWest: South URA Access												
1	L2	120	0.0	0.640	13.4	LOS A	6.9	48.4	0.97	1.13	1.32	41.5
2	T1	137	0.0	0.640	13.3	LOS A	6.9	48.4	0.97	1.13	1.32	42.4
3	R2	181	0.0	0.640	17.8	LOS B	6.9	48.4	0.97	1.13	1.32	42.5
Approach		438	0.0	0.640	15.2	LOS B	6.9	48.4	0.97	1.13	1.32	42.2
All Vehicles		2239	0.0	0.818	12.5	LOS A	13.6	95.0	0.93	1.03	1.23	43.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Appendix C: SIDRA Output Summary

Moss Vale Road / Central Boulevard Roundabout (With) - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model (Node #21593 November 2018 version).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.85 and 1.00; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the Annual Average School Term (AAST).

The median on the south-eastern approach continues from the Moss Vale Road / Bells Lane signal intersection.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The queue length on the Moss Vale Road NW leg reaches a maximum of 40.4m in year 2041 PM peak hour, however the delay remains insignificant at 12.4 seconds.

A Level of Service (LoS) of 'A' is consistent within all scenarios.

Intersection Performance - Annual Average School Term

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	6	0.17	3.1	7.3	LOS A
	Through	243	0.17	3	7.3	LOS A
	Right	1	0.17	7.5	7.3	LOS A
Central Boulevard (NE)	Left	1	0.05	4.7	1.8	LOS A
	Through	9	0.05	4.7	1.8	LOS A
	Right	40	0.05	9.2	1.8	LOS A
Moss Vale Road (NW)	Left	26	0.27	3	12.5	LOS A
	Through	379	0.27	3	12.5	LOS A
	Right	3	0.27	7.5	12.5	LOS A
South URA Access (SW)	Left	63	0.09	4.2	3.4	LOS A
	Through	12	0.09	4.1	3.4	LOS A
	Right	31	0.09	8.6	3.4	LOS A
Intersection	**All**	**815**	**0.27**	**3.7**	**12.5**	**LOS A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	24	0.27	3.1	12.9	LOS A
	Through	377	0.27	3	12.9	LOS A
	Right	1	0.27	7.5	12.9	LOS A
Central Boulevard (NE)	Left	4	0.05	5.3	2.1	LOS A
	Through	13	0.05	5.3	2.1	LOS A
	Right	34	0.05	9.8	2.1	LOS A
Moss Vale Road (NW)	Left	35	0.33	3.4	16.5	LOS A
	Through	414	0.33	3.3	16.5	LOS A
	Right	5	0.33	7.8	16.5	LOS A
South URA Access (SW)	Left	64	0.16	5	6.3	LOS A
	Through	9	0.16	4.9	6.3	LOS A
	Right	92	0.16	9.4	6.3	LOS A
Intersection	**All**	**1072**	**0.334**	**4.1**	**16.5**	**LOS A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	18	0.18	3.2	7.7	LOS A
	Through	233	0.18	3.1	7.7	LOS A
	Right	1	0.18	7.6	7.7	LOS A
Central Boulevard (NE)	Left	13	0.09	4.9	3.3	LOS A
	Through	22	0.09	4.9	3.3	LOS A
	Right	52	0.09	9.4	3.3	LOS A
Moss Vale Road (NW)	Left	40	0.30	3.3	13.9	LOS A
	Through	373	0.30	3.2	13.9	LOS A
	Right	4	0.30	7.7	13.9	LOS A
South URA Access (SW)	Left	61	0.13	4.2	4.7	LOS A
	Through	24	0.13	4.2	4.7	LOS A
	Right	56	0.13	8.7	4.7	LOS A
Intersection	**All**	**896**	**0.297**	**4.1**	**13.9**	**LOS A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	37	0.29	3.3	14	LOS A
	Through	365	0.29	3.2	14	LOS A
	Right	1	0.29	7.7	14	LOS A
Central Boulevard (NE)	Left	20	0.11	5.6	4.4	LOS A
	Through	27	0.11	5.6	4.4	LOS A
	Right	54	0.11	10.1	4.4	LOS A
Moss Vale Road (NW)	Left	46	0.36	3.7	17.7	LOS A
	Through	398	0.36	3.7	17.7	LOS A
	Right	6	0.36	8.2	17.7	LOS A
South URA Access (SW)	Left	64	0.22	5.1	8.9	LOS A
	Through	21	0.22	5.1	8.9	LOS A
	Right	133	0.22	9.6	8.9	LOS A
Intersection	**All**	**1173**	**0.355**	**4.7**	**17.7**	**LOS A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	23	0.23	3.5	10.8	LOS A
	Through	219	0.23	3.5	10.8	LOS A
	Right	53	0.23	8	10.8	LOS A
Central Boulevard (NE)	Left	236	0.45	7.9	23.5	LOS A
	Through	48	0.45	7.8	23.5	LOS A
	Right	79	0.45	12.3	23.5	LOS A
Moss Vale Road (NW)	Left	55	0.43	5.5	21.7	LOS A
	Through	368	0.43	5.4	21.7	LOS A
	Right	6	0.43	9.9	21.7	LOS A
South URA Access (SW)	Left	61	0.38	5.1	17.7	LOS A
	Through	68	0.38	5	17.7	LOS A
	Right	273	0.38	9.5	17.7	LOS A
Intersection	**All**	**1489**	**0.45**	**6.8**	**23.5**	**LOS A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	47	0.39	3.7	20.7	LOS A
	Through	353	0.39	3.6	20.7	LOS A
	Right	105	0.39	8.1	20.7	LOS A
Central Boulevard (NE)	Left	108	0.28	6.3	12.6	LOS A
	Through	54	0.28	6.2	12.6	LOS A
	Right	77	0.28	10.7	12.6	LOS A
Moss Vale Road (NW)	Left	73	0.45	5.2	23	LOS A
	Through	387	0.45	5.2	23	LOS A
	Right	7	0.45	9.7	23	LOS A
South URA Access (SW)	Left	45	0.33	6.2	14.9	LOS A
	Through	72	0.33	6.1	14.9	LOS A
	Right	177	0.33	10.6	14.9	LOS A
Intersection	**All**	**1505**	**0.453**	**6.1**	**23**	**LOS A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	21	0.25	3.6	11.7	LOS A
	Through	216	0.25	3.6	11.7	LOS A
	Right	79	0.25	8.1	11.7	LOS A
Central Boulevard (NE)	Left	266	0.44	6.1	22	LOS A
	Through	54	0.44	6.1	22	LOS A
	Right	92	0.44	10.6	22	LOS A
Moss Vale Road (NW)	Left	65	0.40	4.5	19.1	LOS A
	Through	374	0.40	4.5	19.1	LOS A
	Right	6	0.40	9	19.1	LOS A
South URA Access (SW)	Left	62	0.25	5	10.4	LOS A
	Through	85	0.25	4.9	10.4	LOS A
	Right	105	0.25	9.4	10.4	LOS A
Intersection	**All**	**1425**	**0.443**	**5.7**	**22**	**LOS A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	46	0.44	3.8	24.8	LOS A
	Through	357	0.44	3.8	24.8	LOS A
	Right	156	0.44	8.3	24.8	LOS A
Central Boulevard (NE)	Left	157	0.36	6.5	17.4	LOS A
	Through	60	0.36	6.5	17.4	LOS A
	Right	89	0.36	11	17.4	LOS A
Moss Vale Road (NW)	Left	87	0.50	6	27.3	LOS A
	Through	398	0.50	6	27.3	LOS A
	Right	7	0.50	10.5	27.3	LOS A
South URA Access (SW)	Left	46	0.36	6.8	17.2	LOS A
	Through	89	0.36	6.7	17.2	LOS A
	Right	169	0.36	11.2	17.2	LOS A
Intersection	**All**	**1663**	**0.503**	**6.6**	**27.3**	**LOS A**

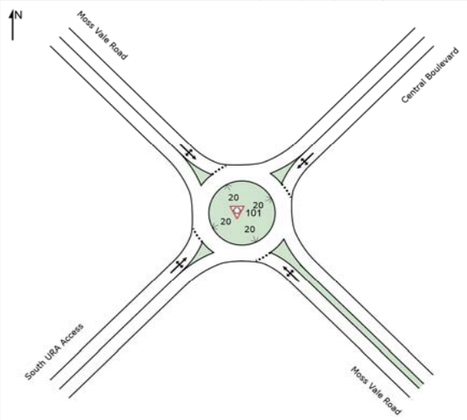
Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	77	0.28	4.3	12.7	LOS A
	Through	208	0.28	4.3	12.7	LOS A
	Right	19	0.28	8.8	12.7	LOS A
Central Boulevard (NE)	Left	261	0.51	6.3	28.2	LOS A
	Through	93	0.51	6.2	28.2	LOS A
	Right	145	0.51	10.7	28.2	LOS A
Moss Vale Road (NW)	Left	93	0.38	3.9	18.8	LOS A
	Through	354	0.38	3.9	18.8	LOS A
	Right	23	0.38	8.4	18.8	LOS A
South URA Access (SW)	Left	68	0.22	4.9	9.1	LOS A
	Through	107	0.22	4.8	9.1	LOS A
	Right	52	0.22	9.3	9.1	LOS A
Intersection	**All**	**1500**	**0.51**	**5.6**	**28.2**	**LOS A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	42	0.50	4.3	29.4	LOS A
	Through	356	0.50	4.2	29.4	LOS A
	Right	195	0.50	8.8	29.4	LOS A
Central Boulevard (NE)	Left	171	0.45	7.1	23.9	LOS A
	Through	78	0.45	7	23.9	LOS A
	Right	125	0.45	11.5	23.9	LOS A
Moss Vale Road (NW)	Left	138	0.60	7.9	40.4	LOS A
	Through	412	0.60	7.9	40.4	LOS A
	Right	8	0.60	12.4	40.4	LOS A
South URA Access (SW)	Left	49	0.42	7.8	21.7	LOS A
	Through	119	0.42	7.7	21.7	LOS A
	Right	158	0.42	12.2	21.7	LOS A
Intersection	**All**	**1851**	**0.599**	**7.7**	**40.4**	**LOS A**

Moss Vale Road / Central Boulevard Roundabout (Without) - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model (Node #21593 November 2018 version).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.85 and 1.00; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the Annual Average School Term (AAST).

The median on the south-eastern continues from the Moss Vale / Bells Lane signal intersection.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The queue length on the Moss Vale Road NW leg reaches a maximum of 48.9m in year 2041 PM peak hour, however the delay remains insignificant at 13.2 seconds.

A Level of Service (LoS) of 'A' is consistent within all scenarios.

Intersection Performance - Annual Average School Term

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	6	0.18	3.1	7.3	LOS A
	Through	243	0.18	3.1	7.3	LOS A
	Right	1	0.18	7.6	7.3	LOS A
Central Boulevard (NE)	Left	1	0.05	4.8	1.8	LOS A
	Through	9	0.05	4.8	1.8	LOS A
	Right	40	0.05	9.3	1.8	LOS A
Moss Vale Road (NW)	Left	26	0.28	3	13.2	LOS A
	Through	379	0.28	3	13.2	LOS A
	Right	20	0.28	7.5	13.2	LOS A
South URA Access (SW)	Left	99	0.13	4.2	4.7	LOS A
	Through	12	0.13	4.2	4.7	LOS A
	Right	31	0.13	8.7	4.7	LOS A
Intersection	**All**	**867**	**0.28**	**3.8**	**13.2**	**LOS A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	24	0.29	3.2	12.9	LOS A
	Through	377	0.29	3.2	12.9	LOS A
	Right	1	0.29	7.7	12.9	LOS A
Central Boulevard (NE)	Left	4	0.06	5.5	2.1	LOS A
	Through	13	0.06	5.4	2.1	LOS A
	Right	34	0.06	9.9	2.1	LOS A
Moss Vale Road (NW)	Left	35	0.35	3.4	17.9	LOS A
	Through	414	0.35	3.4	17.9	LOS A
	Right	34	0.35	7.9	17.9	LOS A
South URA Access (SW)	Left	89	0.19	5	7.5	LOS A
	Through	9	0.19	5	7.5	LOS A
	Right	92	0.19	9.5	7.5	LOS A
Intersection	**All**	**1125**	**0.353**	**4.3**	**17.9**	**LOS A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	18	0.19	3.3	7.8	LOS A
	Through	233	0.19	3.3	7.8	LOS A
	Right	1	0.19	7.8	7.8	LOS A
Central Boulevard (NE)	Left	13	0.09	5.1	3.4	LOS A
	Through	22	0.09	5	3.4	LOS A
	Right	52	0.09	9.5	3.4	LOS A
Moss Vale Road (NW)	Left	40	0.32	3.3	15.1	LOS A
	Through	373	0.32	3.2	15.1	LOS A
	Right	31	0.32	7.7	15.1	LOS A
South URA Access (SW)	Left	104	0.17	4.3	6.4	LOS A
	Through	24	0.17	4.2	6.4	LOS A
	Right	56	0.17	8.7	6.4	LOS A
Intersection	**All**	**965**	**0.315**	**4.2**	**15.1**	**LOS A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	37	0.31	3.5	14.1	LOS A
	Through	365	0.31	3.5	14.1	LOS A
	Right	1	0.31	8	14.1	LOS A
Central Boulevard (NE)	Left	20	0.12	5.9	4.7	LOS A
	Through	27	0.12	5.8	4.7	LOS A
	Right	54	0.12	10.3	4.7	LOS A
Moss Vale Road (NW)	Left	46	0.38	3.8	19.8	LOS A
	Through	398	0.38	3.7	19.8	LOS A
	Right	44	0.38	8.2	19.8	LOS A
South URA Access (SW)	Left	102	0.26	5.2	10.9	LOS A
	Through	21	0.26	5.2	10.9	LOS A
	Right	133	0.26	9.7	10.9	LOS A
Intersection	**All**	**1248**	**0.384**	**4.9**	**19.8**	**LOS A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	23	0.24	3.7	10.8	LOS A
	Through	219	0.24	3.7	10.8	LOS A
	Right	53	0.24	8.2	10.8	LOS A
Central Boulevard (NE)	Left	236	0.47	8.5	25.5	LOS A
	Through	48	0.47	8.5	25.5	LOS A
	Right	79	0.47	13	25.5	LOS A
Moss Vale Road (NW)	Left	55	0.47	5.5	24.2	LOS A
	Through	368	0.47	5.5	24.2	LOS A
	Right	39	0.47	10	24.2	LOS A
South URA Access (SW)	Left	117	0.44	5.2	21.2	LOS A
	Through	68	0.44	5.1	21.2	LOS A
	Right	273	0.44	9.6	21.2	LOS A
Intersection	**All**	**1578**	**0.47**	**7**	**25.5**	**LOS A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	47	0.41	4	21.2	LOS A
	Through	353	0.41	4	21.2	LOS A
	Right	105	0.41	8.5	21.2	LOS A
Central Boulevard (NE)	Left	108	0.29	6.7	13.6	LOS A
	Through	54	0.29	6.7	13.6	LOS A
	Right	77	0.29	11.2	13.6	LOS A
Moss Vale Road (NW)	Left	73	0.50	5.3	26.6	LOS A
	Through	387	0.50	5.3	26.6	LOS A
	Right	57	0.50	9.8	26.6	LOS A
South URA Access (SW)	Left	94	0.38	6.3	18.3	LOS A
	Through	72	0.38	6.3	18.3	LOS A
	Right	177	0.38	10.8	18.3	LOS A
Intersection	**All**	**1603**	**0.5**	**6.5**	**26.6**	**LOS A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	21	0.26	3.8	11.9	LOS A
	Through	216	0.26	3.8	11.9	LOS A
	Right	79	0.26	8.3	11.9	LOS A
Central Boulevard (NE)	Left	266	0.46	6.5	23.5	LOS A
	Through	54	0.46	6.5	23.5	LOS A
	Right	92	0.46	11	23.5	LOS A
Moss Vale Road (NW)	Left	65	0.42	4.6	21	LOS A
	Through	374	0.42	4.5	21	LOS A
	Right	38	0.42	9	21	LOS A
South URA Access (SW)	Left	115	0.30	5.1	13.1	LOS A
	Through	85	0.30	5.1	13.1	LOS A
	Right	105	0.30	9.6	13.1	LOS A
Intersection	**All**	**1509**	**0.455**	**6**	**23.5**	**LOS A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	46	0.46	4.2	25.3	LOS A
	Through	357	0.46	4.1	25.3	LOS A
	Right	156	0.46	8.6	25.3	LOS A
Central Boulevard (NE)	Left	157	0.38	7	18.8	LOS A
	Through	60	0.38	6.9	18.8	LOS A
	Right	89	0.38	11.4	18.8	LOS A
Moss Vale Road (NW)	Left	87	0.55	6.5	33.3	LOS A
	Through	398	0.55	6.5	33.3	LOS A
	Right	55	0.55	11	33.3	LOS A
South URA Access (SW)	Left	92	0.42	7	20.9	LOS A
	Through	89	0.42	6.9	20.9	LOS A
	Right	169	0.42	11.4	20.9	LOS A
Intersection	**All**	**1756**	**0.551**	**7.1**	**33.3**	**LOS A**

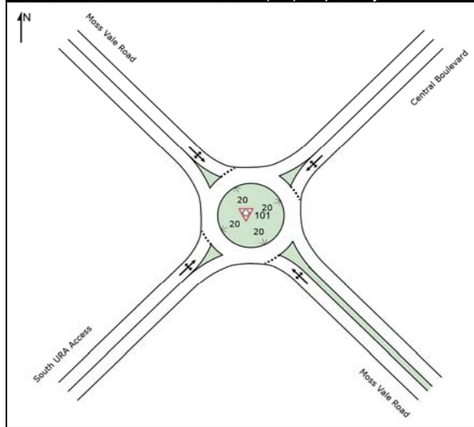
Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	19	0.28	4.5	13	LOS A
	Through	208	0.28	4.5	13	LOS A
	Right	77	0.28	9	13	LOS A
Central Boulevard (NE)	Left	261	0.53	6.8	31	LOS A
	Through	93	0.53	6.8	31	LOS A
	Right	145	0.53	11.3	31	LOS A
Moss Vale Road (NW)	Left	93	0.43	4.4	21.6	LOS A
	Through	354	0.43	4.3	21.6	LOS A
	Right	55	0.43	8.8	21.6	LOS A
South URA Access (SW)	Left	121	0.29	5.3	12.5	LOS A
	Through	107	0.29	5.3	12.5	LOS A
	Right	52	0.29	9.8	12.5	LOS A
Intersection	**All**	**1584**	**0.528**	**6.2**	**31**	**LOS A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	42	0.52	4.7	30.3	LOS A
	Through	356	0.52	4.6	30.3	LOS A
	Right	195	0.52	9.1	30.3	LOS A
Central Boulevard (NE)	Left	171	0.47	7.9	27	LOS A
	Through	78	0.47	7.9	27	LOS A
	Right	125	0.47	12.4	27	LOS A
Moss Vale Road (NW)	Left	138	0.65	8.8	48.9	LOS A
	Through	412	0.65	8.7	48.9	LOS A
	Right	56	0.65	13.2	48.9	LOS A
South URA Access (SW)	Left	94	0.48	8.7	27.8	LOS A
	Through	119	0.48	8.7	27.8	LOS A
	Right	158	0.48	13.2	27.8	LOS A
Intersection	**All**	**1942**	**0.649**	**8.6**	**48.9**	**LOS A**

Moss Vale Road / Central Boulevard Roundabout (With) - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model (Node #21593 November 2018 version).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.85 and 1.00; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the 100th highest hour daily traffic volumes.

The median on the south-eastern continues from the Moss Vale / Bells Lane signal intersection.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The queue length on the Moss Vale Road NW leg reaches a maximum of 71.7m in the PM peak hour of 2041, however the delay remains insignificant at 16 seconds.

The right turn of the NW, NE and SW legs display a Level of Service (LoS) of 'B' in the PM peak hour of 2041. A LoS of 'A is consistent throughout all other scenarios.

Intersection Performance - 100th Highest Hour

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	1	0.16	3	6.5	LOS A
	Through	238	0.16	2.9	6.5	LOS A
	Right	1	0.16	7.4	6.5	LOS A
Central Boulevard (NE)	Left	1	0.03	4.4	0.9	LOS A
	Through	4	0.03	4.3	0.9	LOS A
	Right	23	0.03	8.8	0.9	LOS A
Moss Vale Road (NW)	Left	23	0.23	2.9	9.9	LOS A
	Through	352	0.23	2.8	9.9	LOS A
	Right	3	0.23	7.3	9.9	LOS A
South URA Access (SW)	Left	56	0.06	4	1.9	LOS A
	Through	6	0.06	3.9	1.9	LOS A
	Right	1	0.06	8.5	1.9	LOS A
Intersection	**All**	**709**	**0.23**	**3.2**	**9.9**	**LOS A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	1	0.31	3.1	15.6	LOS A
	Through	465	0.31	3	15.6	LOS A
	Right	1	0.31	7.5	15.6	LOS A
Central Boulevard (NE)	Left	1	0.05	5.8	1.9	LOS A
	Through	7	0.05	5.8	1.9	LOS A
	Right	34	0.05	10.3	1.9	LOS A
Moss Vale Road (NW)	Left	33	0.39	3.3	21.2	LOS A
	Through	514	0.39	3.3	21.2	LOS A
	Right	6	0.39	7.8	21.2	LOS A
South URA Access (SW)	Left	78	0.17	5.5	6.7	LOS A
	Through	7	0.17	5.5	6.7	LOS A
	Right	75	0.17	10	6.7	LOS A
Intersection	**All**	**1222**	**0.391**	**4**	**21.2**	**LOS A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	18	0.18	3.2	7.3	LOS A
	Through	226	0.18	3.1	7.3	LOS A
	Right	1	0.18	7.6	7.3	LOS A
Central Boulevard (NE)	Left	2	0.07	4.7	2.4	LOS A
	Through	20	0.07	4.6	2.4	LOS A
	Right	47	0.07	9.1	2.4	LOS A
Moss Vale Road (NW)	Left	37	0.27	3.1	12.2	LOS A
	Through	347	0.27	3.1	12.2	LOS A
	Right	4	0.27	7.6	12.2	LOS A
South URA Access (SW)	Left	57	0.11	4.1	3.9	LOS A
	Through	22	0.11	4.1	3.9	LOS A
	Right	41	0.11	8.6	3.9	LOS A
Intersection	**All**	**823**	**0.27**	**3.9**	**12.2**	**LOS A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	42	0.36	3.4	18.7	LOS A
	Through	443	0.36	3.4	18.7	LOS A
	Right	1	0.36	7.9	18.7	LOS A
Central Boulevard (NE)	Left	11	0.14	6.5	5.7	LOS A
	Through	32	0.14	6.5	5.7	LOS A
	Right	66	0.14	11	5.7	LOS A
Moss Vale Road (NW)	Left	58	0.45	4	25.1	LOS A
	Through	495	0.45	3.9	25.1	LOS A
	Right	8	0.45	8.5	25.1	LOS A
South URA Access (SW)	Left	74	0.27	5.8	11.7	LOS A
	Through	24	0.27	5.8	11.7	LOS A
	Right	153	0.27	10.3	11.7	LOS A
Intersection	**All**	**1406**	**0.452**	**5**	**25.1**	**LOS A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	21	0.22	3.4	9.8	LOS A
	Through	215	0.22	3.4	9.8	LOS A
	Right	49	0.22	7.9	9.8	LOS A
Central Boulevard (NE)	Left	187	0.31	5.5	13.9	LOS A
	Through	43	0.31	5.4	13.9	LOS A
	Right	74	0.31	9.9	13.9	LOS A
Moss Vale Road (NW)	Left	51	0.33	4	15.3	LOS A
	Through	347	0.33	3.9	15.3	LOS A
	Right	6	0.33	8.4	15.3	LOS A
South URA Access (SW)	Left	58	0.19	4.6	7.6	LOS A
	Through	62	0.19	4.6	7.6	LOS A
	Right	83	0.19	9.1	7.6	LOS A
Intersection	**All**	**1197**	**0.33**	**5.1**	**15.3**	**LOS A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	54	0.51	4	28.2	LOS A
	Through	424	0.51	3.9	28.2	LOS A
	Right	118	0.51	8.4	28.2	LOS A
Central Boulevard (NE)	Left	134	0.43	7.7	19.8	LOS A
	Through	63	0.43	7.6	19.8	LOS A
	Right	95	0.43	12.1	19.8	LOS A
Moss Vale Road (NW)	Left	93	0.66	7	40.1	LOS A
	Through	485	0.66	7	40.1	LOS A
	Right	11	0.66	11.5	40.1	LOS A
South URA Access (SW)	Left	59	0.51	7.4	21.7	LOS A
	Through	84	0.51	7.4	21.7	LOS A
	Right	202	0.51	11.9	21.7	LOS A
Intersection	**All**	**1821**	**0.661**	**7.2**	**40.1**	**LOS A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	20	0.25	3.6	11.8	LOS A
	Through	217	0.25	3.5	11.8	LOS A
	Right	77	0.25	8	11.8	LOS A
Central Boulevard (NE)	Left	298	0.53	8.8	31.5	LOS A
	Through	48	0.53	8.8	31.5	LOS A
	Right	85	0.53	13.3	31.5	LOS A
Moss Vale Road (NW)	Left	59	0.44	5.6	21.9	LOS A
	Through	359	0.44	5.6	21.9	LOS A
	Right	6	0.44	10.1	21.9	LOS A
South URA Access (SW)	Left	59	0.39	5.3	18.2	LOS A
	Through	78	0.39	5.2	18.2	LOS A
	Right	263	0.39	9.7	18.2	LOS A
Intersection	**All**	**1569**	**0.525**	**7.2**	**31.5**	**LOS A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	52	0.54	4.2	33.9	LOS A
	Through	426	0.54	4.2	33.9	LOS A
	Right	174	0.54	8.7	33.9	LOS A
Central Boulevard (NE)	Left	193	0.52	9.5	31.8	LOS A
	Through	72	0.52	9.5	31.8	LOS A
	Right	111	0.52	14	31.8	LOS A
Moss Vale Road (NW)	Left	111	0.67	9.2	52.5	LOS A
	Through	496	0.67	9.1	52.5	LOS A
	Right	11	0.67	13.6	52.5	LOS A
South URA Access (SW)	Left	60	0.49	9.2	28.2	LOS A
	Through	107	0.49	9.2	28.2	LOS A
	Right	193	0.49	13.7	28.2	LOS A
Intersection	**All**	**2003**	**0.669**	**8.7**	**52.5**	**LOS A**

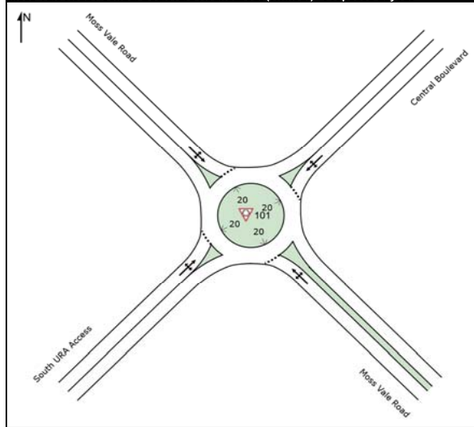
Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	19	0.27	4	12.3	LOS A
	Through	216	0.27	4	12.3	LOS A
	Right	75	0.27	8.5	12.3	LOS A
Central Boulevard (NE)	Left	252	0.47	5.7	23.7	LOS A
	Through	77	0.47	5.7	23.7	LOS A
	Right	129	0.47	10.2	23.7	LOS A
Moss Vale Road (NW)	Left	81	0.38	4.2	18.2	LOS A
	Through	360	0.38	4.1	18.2	LOS A
	Right	9	0.38	8.6	18.2	LOS A
South URA Access (SW)	Left	64	0.21	5.1	8.7	LOS A
	Through	96	0.21	5.1	8.7	LOS A
	Right	49	0.21	9.6	8.7	LOS A
Intersection	**All**	**1427**	**0.467**	**5.6**	**23.7**	**LOS A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	47	0.58	4.8	37	LOS A
	Through	428	0.58	4.7	37	LOS A
	Right	174	0.58	9.2	37	LOS A
Central Boulevard (NE)	Left	164	0.57	10.4	38.5	LOS A
	Through	93	0.57	10.4	38.5	LOS A
	Right	155	0.57	14.9	38.5	LOS B
Moss Vale Road (NW)	Left	171	0.75	11.5	71.7	LOS A
	Through	498	0.75	11.5	71.7	LOS A
	Right	11	0.75	16	71.7	LOS B
South URA Access (SW)	Left	64	0.55	11.1	35.8	LOS A
	Through	137	0.55	11.1	35.8	LOS A
	Right	181	0.55	15.6	35.8	LOS B
Intersection	**All**	**2122**	**0.751**	**10.3**	**71.7**	**LOS A**

Moss Vale Road / Central Boulevard Roundabout (Without) - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model (Node #21593 November 2018 version).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.85 and 1.00; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the 100th highest hour daily traffic volumes.

The median on the south-eastern continues from the Moss Vale / Bells Lane signal intersection.

Key Findings

The intersection remains within Degree of Saturation (DOS) limits in all scenarios.

The queue length on the Moss Vale Road NW leg reaches a maximum of 95m in year 2041 PM peak hour, however the delay remains insignificant at 18.7 seconds.

The right turn of the NW, NE and SW legs display a Level of Service (LoS) of 'B' in the PM peak hour of 2041. A LoS of 'A' is consistent throughout all other scenarios.

Intersection Performance - 100th Highest Hour

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	1	0.17	3	6.5	LOS A
	Through	238	0.17	3	6.5	LOS A
	Right	1	0.17	7.5	6.5	LOS A
Central Boulevard (NE)	Left	1	0.03	4.5	0.9	LOS A
	Through	4	0.03	4.4	0.9	LOS A
	Right	23	0.03	8.9	0.9	LOS A
Moss Vale Road (NW)	Left	23	0.23	2.9	10.3	LOS A
	Through	352	0.23	2.8	10.3	LOS A
	Right	17	0.23	7.3	10.3	LOS A
South URA Access (SW)	Left	76	0.07	4	2.6	LOS A
	Through	6	0.07	4	2.6	LOS A
	Right	1	0.07	8.5	2.6	LOS A
Intersection	**All**	**743**	**0.23**	**3.3**	**10.3**	**LOS A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	1	0.33	3.2	15.5	LOS A
	Through	465	0.33	3.2	15.5	LOS A
	Right	1	0.33	7.7	15.5	LOS A
Central Boulevard (NE)	Left	1	0.05	6	1.9	LOS A
	Through	7	0.05	6	1.9	LOS A
	Right	34	0.05	10.5	1.9	LOS A
Moss Vale Road (NW)	Left	33	0.41	3.3	22.6	LOS A
	Through	514	0.41	3.3	22.6	LOS A
	Right	31	0.41	7.8	22.6	LOS A
South URA Access (SW)	Left	102	0.20	5.6	8	LOS A
	Through	7	0.20	5.5	8	LOS A
	Right	75	0.20	10	8	LOS A
Intersection	**All**	**1271**	**0.408**	**4.2**	**22.6**	**LOS A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	18	0.18	3.3	7.4	LOS A
	Through	226	0.18	3.2	7.4	LOS A
	Right	1	0.18	7.7	7.4	LOS A
Central Boulevard (NE)	Left	2	0.07	4.8	2.5	LOS A
	Through	20	0.07	4.8	2.5	LOS A
	Right	47	0.07	9.3	2.5	LOS A
Moss Vale Road (NW)	Left	37	0.29	3.2	13.3	LOS A
	Through	347	0.29	3.1	13.3	LOS A
	Right	28	0.29	7.6	13.3	LOS A
South URA Access (SW)	Left	97	0.14	4.2	5.4	LOS A
	Through	22	0.14	4.1	5.4	LOS A
	Right	41	0.14	8.6	5.4	LOS A
Intersection	**All**	**887**	**0.286**	**4.1**	**13.3**	**LOS A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	42	0.38	3.8	19	LOS A
	Through	443	0.38	3.7	19	LOS A
	Right	1	0.38	8.2	19	LOS A
Central Boulevard (NE)	Left	11	0.14	7	6.1	LOS A
	Through	32	0.14	6.9	6.1	LOS A
	Right	66	0.14	11.4	6.1	LOS A
Moss Vale Road (NW)	Left	58	0.49	4	28.6	LOS A
	Through	495	0.49	4	28.6	LOS A
	Right	56	0.49	8.5	28.6	LOS A
South URA Access (SW)	Left	119	0.32	6	14.6	LOS A
	Through	24	0.32	5.9	14.6	LOS A
	Right	153	0.32	10.4	14.6	LOS A
Intersection	**All**	**1499**	**0.489**	**5.3**	**28.6**	**LOS A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	21	0.23	3.6	9.9	LOS A
	Through	215	0.23	3.6	9.9	LOS A
	Right	49	0.23	8.1	9.9	LOS A
Central Boulevard (NE)	Left	187	0.32	5.7	14.4	LOS A
	Through	43	0.32	5.6	14.4	LOS A
	Right	74	0.32	10.1	14.4	LOS A
Moss Vale Road (NW)	Left	51	0.36	4	16.9	LOS A
	Through	347	0.36	3.9	16.9	LOS A
	Right	37	0.36	8.4	16.9	LOS A
South URA Access (SW)	Left	109	0.24	4.7	9.9	LOS A
	Through	62	0.24	4.6	9.9	LOS A
	Right	83	0.24	9.1	9.9	LOS A
Intersection	**All**	**1279**	**0.36**	**5.3**	**16.9**	**LOS A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	54	0.51	4.5	29	LOS A
	Through	424	0.51	4.4	29	LOS A
	Right	118	0.51	8.9	29	LOS A
Central Boulevard (NE)	Left	134	0.43	8.9	23.3	LOS A
	Through	63	0.43	8.8	23.3	LOS A
	Right	95	0.43	13.3	23.3	LOS A
Moss Vale Road (NW)	Left	93	0.66	7.9	51.1	LOS A
	Through	485	0.66	7.9	51.1	LOS A
	Right	74	0.66	12.4	51.1	LOS A
South URA Access (SW)	Left	118	0.51	8.6	30	LOS A
	Through	84	0.51	8.6	30	LOS A
	Right	202	0.51	13.1	30	LOS A
Intersection	**All**	**1943**	**0.661**	**8.3**	**51.1**	**LOS A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	20	0.26	3.7	11.8	LOS A
	Through	217	0.26	3.7	11.8	LOS A
	Right	77	0.26	8.2	11.8	LOS A
Central Boulevard (NE)	Left	298	0.54	9.4	33.7	LOS A
	Through	48	0.54	9.4	33.7	LOS A
	Right	85	0.54	13.9	33.7	LOS A
Moss Vale Road (NW)	Left	59	0.47	5.7	24	LOS A
	Through	359	0.47	5.7	24	LOS A
	Right	34	0.47	10.2	24	LOS A
South URA Access (SW)	Left	107	0.44	5.4	21.3	LOS A
	Through	78	0.44	5.3	21.3	LOS A
	Right	263	0.44	9.8	21.3	LOS A
Intersection	**All**	**1645**	**0.541**	**7.4**	**33.7**	**LOS A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	52	0.57	4.8	35	LOS A
	Through	426	0.57	4.7	35	LOS A
	Right	174	0.57	9.2	35	LOS A
Central Boulevard (NE)	Left	193	0.56	11.5	37.8	LOS A
	Through	72	0.56	11.4	37.8	LOS A
	Right	111	0.56	15.9	37.8	LOS A
Moss Vale Road (NW)	Left	111	0.74	10.7	67.4	LOS A
	Through	496	0.74	10.7	67.4	LOS A
	Right	72	0.74	15.2	67.4	LOS A
South URA Access (SW)	Left	117	0.57	10.8	38.3	LOS A
	Through	107	0.57	10.8	38.3	LOS A
	Right	193	0.57	15.3	38.3	LOS A
Intersection	**All**	**2121**	**0.735**	**10.2**	**67.4**	**LOS A**

Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	19	0.28	4.2	12.5	LOS A
	Through	216	0.28	4.1	12.5	LOS A
	Right	75	0.28	8.7	12.5	LOS A
Central Boulevard (NE)	Left	252	0.48	6.1	25	LOS A
	Through	77	0.48	6	25	LOS A
	Right	129	0.48	10.5	25	LOS A
Moss Vale Road (NW)	Left	81	0.40	4.2	19.7	LOS A
	Through	360	0.40	4.2	19.7	LOS A
	Right	37	0.40	8.7	19.7	LOS A
South URA Access (SW)	Left	112	0.26	5.2	11.1	LOS A
	Through	96	0.26	5.2	11.1	LOS A
	Right	49	0.26	9.7	11.1	LOS A
Intersection	**All**	**1502**	**0.478**	**5.8**	**25**	**LOS A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	47	0.61	5.9	42.3	LOS A
	Through	428	0.61	5.9	42.3	LOS A
	Right	174	0.61	10.4	42.3	LOS A
Central Boulevard (NE)	Left	164	0.62	12.8	46	LOS A
	Through	93	0.62	12.7	46	LOS A
	Right	155	0.62	17.2	46	LOS B
Moss Vale Road (NW)	Left	171	0.82	14.3	95	LOS A
	Through	498	0.82	14.2	95	LOS A
	Right	72	0.82	18.7	95	LOS B
South URA Access (SW)	Left	120	0.64	13.4	48.4	LOS A
	Through	137	0.64	13.3	48.4	LOS A
	Right	181	0.64	17.8	48.4	LOS B
Intersection	**All**	**2239**	**0.818**	**12.5**	**95**	**LOS A**

Appendix D: P4516.002R Pestells Lane Interchange SIDRA Assessment Report

(Pestells Lane Interchange & Princes Highway / Boxsells Lane Intersection)

Original Analysis Based on November 2018 TRACKS Models

Pestells Lane Interchange & Boxsells Lane Intersection

SIDRA Assessment Report

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25 March 2020

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CONTENTS

		Page
1.	**INTRODUCTION**	**1**
1.1	Background	1
1.2	Scope of Works	2
2.	Berry to Bomaderry – Princes Highway Upgrade	3
3.	Model Development	4
3.1	Traffic Scenarios	4
3.2	Traffic Redistribution	4
3.3	SIDRA Model Settings	4
3.4	Capacity Mechanisms	5
3.5	Model Outputs	5
4.	**KEY FINDINGS**	**6**
4.1	Intersection Capacity	6
4.1.1	Pestells Lane Interchange Proposed Layout	6
4.1.2	Princes Highway / Boxsells Lane	6
4.2	Recommendations	6
4.3	Results Summary	7
5.	**CONCLUSIONS**	**8**

Tables

Table 3.1: Control Delay for Vehicle LoS Calculations
Table 4.1: Results Summary

Figures

Figure 1.1: Interchange / Intersection Locations
Figure 2.1: Interchange / Intersection Upgrade Form

Appendices

Appendix A: Pestells Lane Interchange Plans
Appendix B: TRACKS Model Data
Appendix C: SIDRA Model Outputs
Appendix D: SIDRA Output Summary

1. INTRODUCTION

1.1 Background

Bitzios Consulting has been engaged by Shoalhaven City Council (Council) to undertake an assessment of the Pestells Lane Interchange and Princes Highway / Boxsells Lane intersection in relation to the Moss Vale Road North (MVRN) Urban Release Area (URA). Both sites are located within Meroo Meadow as shown in Figure 1.1.



SOURCE: Google Maps

Figure 1.1: Interchange / Intersection Locations

The New South Wales (NSW) Government has engaged Downer Seymour Whyte Joint Venture (DSWJV) to construct the Berry to Bomaderry Princes Highway Upgrade. As a part of the upgrade, the existing Princes Highway / Pestells Lane and Princes Highway / Meroo Road intersections are being consolidated into a single grade-separated interchange. The interchange will act as a key access to and from the north for the MVRN URA. Boxsells Lane will also be accessible to the MVRN URA and accordingly has been included in this traffic impact assessment The project is due for completion in 2022.

1.2 Scope of Works

The scope for assessment is detailed below:

- Extract relevant intersection volumes from the Shoalhaven Kiama TRACKS model in five-year intervals from year of completion (2021) to the 20-year design horizon (2041), for both Annual Average School Traffic (AAST) and 100th Highest Hour (100HH)
- Develop SIDRA intersection models for the current concept design layouts approved by Roads and Maritime Services (RMS) (noting the approved design for the Pestells Lane interchange differs from the concept that was placed on public exhibition, the concept plans originally provided roundabouts at both ends of the proposed overbridge which have since been removed)
- Summarise the findings, including year of failure, failure mechanisms and potential future improvements to the layout of the interchange / intersections currently under construction.

2. BERRY TO BOMADERRY – PRINCES HIGHWAY UPGRADE

The geometry and configuration of Meroo Road / Pestells Lane Overpass (Interchange) was obtained from the *Berry to Bomaderry Upgrade Mullers Lane to Cambewarra Road Pavement – Pestells Lane Interchange* drawings prepared by Arcadis (dated 27/06/2017) provided to council by DSWJV. Further details for both the Pestells Lane Interchange and the Princes Highway / Boxsells Lane intersection were obtained from the Berry to Bomaderry Princes Highway Upgrade Detailed Design poster (2017) sourced from RMS project website. Both documents are provided in **Appendix A**.

The detailed design of the two locations is shown in .



SOURCE: RMS

Figure 2.1: Interchange / Intersection Upgrade Form

3. MODEL DEVELOPMENT

3.1 Traffic Scenarios

Future year modelling scenarios were based on those modelled in the Shoalhaven-Kiama TRACKS model, noting the primary purpose of the intersection modelling is to analyse traffic conditions in the medium to long-term. The following future year modelling scenarios were developed:

- 2021 AAST AM and PM peak volumes
- 2021 100HH AM and PM peak volumes
- 2026 AAST AM and PM peak volumes
- 2026 100HH AM and PM peak volumes
- 2031 AAST AM and PM peak volumes
- 2031 100HH AM and PM peak volumes
- 2036 AAST AM and PM peak volumes
- 2036 100HH AM and PM peak volumes
- 2041 AAST AM and PM peak volumes
- 2041 100HH AM and PM peak volumes.

Traffic volumes for each scenario were extracted from Council's Shoalhaven-Kiama 'future links' TRACKS models November 2018 Version.

3.2 Traffic Redistribution

In the process of extracting the traffic volumes for the Pestells Lane / Princes Highway Northbound (NB) Ramps intersection, it was identified that the left turn movement from Pestells Lane westbound approach to the Princes Highway NB On-ramp has no volumes assigned to it. A review of the surrounding road network within the TRACKS model suggested that the subject left turn movement is expected to generate traffic despite the existing TRACKS model outputs however, the TRACKS model was not locally validated specific for this assessment and was indicating that all NB demands would be utilising the alternate route via Boxsells Lane. As such, the outbound traffic distribution routed to Princes Highway via the Pestells Lane Interchange or Princes Highway / Boxsells Lane intersection was reviewed. The review established that the approximately 20% of outbound traffic originates from the MVRN URA and travels north-east toward Princes Highway. This considered the outbound traffic generated by Zones #594 (total) and #199 (to the south).

As part of the current TRACKS model update, underway, NB movements of traffic between Pestells Lane and Boxsells Lane is being reviewing in the model. For this assessment, however, to address this issue, 20% of the left turn movement traffic volume at the Princes Highway / Boxsells Lane intersection was reassigned to the Pestells Lane / Princes Highway NB On-ramp left turn movement.

Diagrams showing the traffic volumes for each scenario are attached at **Appendix B**.

3.3 SIDRA Model Settings

The settings consistent across all models are as follows:

- 'Level of Service Method' was set to 'Delay RTA'
- Extra bunching factors remain as SIDRA default values
- Peak flow period and peak flow factors remain as SIDRA default values
- The base gap acceptance values remain as SIDRA default values

- 60km/h speed limit was applied to Pestells Lane and Meroo Road
- 100km/h speed limit was applied to road lanes of the Princes Highway
- Princes Highway / Boxsells Lane intersection was separated into a two-stage intersection
- 60km/h speed limit was applied to Boxsells Lane and Lamonds Lane
- A heavy vehicle traffic proportion of 5% was applied to all intersection movements.

3.4 Capacity Mechanisms

It is necessary to define intersection capacity and over-capacity mechanisms in order to inform the intersection upgrades required. Intersection modelling is undertaken under Roads and Maritime Services' *Traffic Modelling Guidelines* (2013). Intersection capacity outputs for continuous lanes and sign-controlled are to be consistent with the following conditions:

- Maximum practical Degree of Saturation (DoS) of continuous lanes is 0.98
- Maximum practical DoS of sign-controlled intersections is 0.80.

Table 3.1 is extracted from RMS' *Traffic Modelling Guidelines* (2013) and indicates the control delay for vehicle Level of Service (LoS) calculations.

Table 3.1: Control Delay for Vehicle LoS Calculations

LoS	Control delay per vehicle in seconds (d) (including geometric delay)
	All Intersection Types
A	d < 14
B	d < 15 to 28
C	d < 29 to 42
D	d < 43 to 56
E	d < 57 to 70
F	d > 70

3.5 Model Outputs

Output sheets for each traffic and intersection scenario are provided at **Appendix C**.

4. KEY FINDINGS

4.1 Intersection Capacity

4.1.1 Pestells Lane Interchange Proposed Layout

The intersection remains within acceptable limits of DoS, delay times and LoS outcomes for both AAST and 100HH models.

The overall intersection vehicle demand is at the lowest of 186 veh/h in 2021 100HH for Site 1 and at a maximum of 2059 veh/h in the PM peak hour of 2041 100HH for Site 3. DoS values in 2021 AAST are at the lowest of 0.02 in the AM peak hour of 2021 AAST Site 1 NB Ramp (N) and rise to a maximum of 0.65 in the PM peak hour of 2041 100HH for Site 1 Pestells Lane (W). An LoS of 'A' remains consistent throughout all scenarios except for the 'through' movement of Site 1 Pestells Lane (W) in the PM peak hour of 2041 100HH, where the LoS is 'B'. The 95th percentile queuing length reaches 12.8m in the PM peak hour of 2041 100HH for Site 1 Pestells Lane (W), however the average delay time of 7.5 seconds remains consistent with the RMS' conditions detailed in Table 3.1.

4.1.2 Princes Highway / Boxsells Lane

The majority of the intersection scenarios remains within acceptable limits of DoS, delay times and LoS outcomes for both AAST and 100HH models.

The intersection vehicle demand is at the lowest of 602 veh/h in 2021 100HH AM peak hour and at a maximum of 1756 veh/h in the PM peak hour of 2041 100HH. DoS values are at the lowest of 0.16 in the AM peak hour of 2021 AAST and rise to a maximum of 0.45 in the PM peak hour of 2036 100HH. An LoS of 'A' remains consistent throughout all scenarios in AAST and 100HH. The 95th percentile queuing length reaches 5.2m in the PM peak hour of 2041 100HH for Boxsells Lane western approach, however the average delay time of 2.2 seconds remains consistent with the RMS' conditions detailed in Table 3.1.The LoS reaches 'F' within the through movement from the Lamonds Lane eastern approach and within both the right-turn and through movements from the Median Storage western approach in year 2041 PM peak hour, 100HH. The occurrence of this failure is due to the forecast volumes on Princes Highway regardless of the inclusion of the MVRN URA. Notwithstanding, this occurrence would be easily addressed in future by proposing to close the median break and deny the subject through and right-turn movements by physical restriction, noting these movements could be redirected in future by the adjacent grade separated intersections of the Pestells Lane Interchange to the south and the proposed Devitts Lane / Morschels Lane Interchange to the north.

4.2 Recommendations

The proposed layout is evidently efficient in all scenarios proposed in the SIDRA assessment noting both intersections experience large peak hour traffic volumes. DoS, delay times, 95th percentile queue lengths and LoS values comfortably remain within capacity despite large traffic flow through these intersections. The result shown conclude the proposed layout of the intersection is sufficient for the application of the intersection.

4.3 Results Summary

A summary of the intersection assessment is provided in Table 4.1, with green boxes indicating the intersection is within capacity, yellow boxes indicating is at capacity, and red boxes indicating the intersection is over-capacity. The summary of results is provided at **Appendix D**.

Table 4.1: Results Summary

Intersection Scenario of Pestells Lane Interchange	Model Year				
	2021	2026	2031	2036	2041
Site 1 – Pestells Lane / Princes Highway on-ramp	Under	Under	Under	Under	Under
Site 2 – Princes Highway NB / Princes Highway on-ramp	Under	Under	Under	Under	Under
Site 3 – Princes Highway SB / Princes Highway on-ramp	Under	Under	Under	Under	Under
Site 4 – Pestells Lane / Meroo Road	Under	Under	Under	Under	Under
Intersection Scenario of Princes Highway / Boxsells Lane	**Model Year**				
	2021	2026	2031	2036	2041
Site 1 – Princes Highway / Boxsells Lane NB	Under	Under	Under	Under	Under
Site 2 – Lamonds Lane / Princes Highway SB	Under	Under	Under	Under	Under[1]

Note: Subject intersection performs within acceptable limits with the exception of the Lamonds Lane eastern approach and Median Storage western approach.

5. CONCLUSIONS

The key findings of this SIDRA assessment report for the proposed Pestells Lane Interchange and Princes Highway / Boxsells Lane intersection are as follows:

- The capacity of the Pestells Lane Interchange remains within acceptable limits for all capacity mechanisms in all scenarios
- The capacity of the Princes Highway / Boxsells Lane intersection remains within acceptable limits for majority of capacity mechanisms in all scenarios. The Lamonds Lane eastern approach and Median Storage western approach were noted to fail in year 2041 (it is noted that this represents the maximum growth scenario modelled, not the actual year 2041). This is a result of the forecast traffic volumes on the Princes Highway, not the MVRN URA. Notwithstanding, this occurrence would be easily addressed in future by proposing to close the median break and deny the subject through and right-turn movements by physical restriction, noting these movements could be redirected in future by the adjacent grade separated intersections of Pestells Lane Interchange to the south and the proposed Devitts Lane / Morschels Lane Interchange to the north
- The proposed layout and conditions are deemed sufficient for the application of the approved Pestells Lane Interchange and the approved intersection treatment for the Princes Highway / Boxsells Lane intersection.

Appendix A: Pestells Lane Interchange Plans

SERVICE ROAD (M1P0)

TULLIAN CREEK

TULLIAN CREEK BRIDGE

HW1 PRINCES HIGHWAY (M100)

PESTELLS LANE ACCESS (M1N0)

FROM BERRY

TO BOMADERRY

ADJOINS SHEET PV-0233

ADJOINS SHEET PV-0235

A1-1 A1-4A B1-1 BR-1 B1-1 A1-1 A1-4A

K-FD-34 K-FD-35 K-FD-36 K-FD-37 K-FD-42 K-FD-44

K-SF-144 K-SF-2 K-SF-107

A2-2

27650 27700 27750 27800 27850 27900

LEGEND

EXISTING

- EXISTING ROAD OR PROPERTY ACCESS
- ADJACENT WORKS BY OTHERS

MAIN ALIGNMENT PAVEMENT TYPES

- A1-1 - THICK AC OVER HBM
- A1-4 - THIN AC ON GRANULAR
- A1-4A - RAISED CONCRETE MEDIAN
- M1-1 - AC OVERLAY

LOCAL ROAD PAVEMENT TYPES

- A2-1 - 14/7mm SEAL ON GRANULAR
- A2-2 - FULL DEPTH AC
- A2-3 - FULL DEPTH AC (ROUNDABOUTS)
- A2-3A - SFCP OVER HBM (ROUNDABOUT ANNULUS)
- A2-4 - AC OVER HBM
- A2-6 - 10/7mm SEAL ON GRANULAR
- A2-7 - AC OVER HBM
- A2-8 - FULL DEPTH AC (BOMADERRY STRAIGHT)

OTHER PAVEMENT TYPES

- A2-5 - JOINTED CONCRETE ON GRANULAR - (FOOTPATHS, LAYBACKS, RAISED CONCRETE MEDIANS)
- B1-1 - AC OVER APPROACH SLAB (MAINLINE)
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- BR-1 AC OVERLAY FOR MAINLINE BRIDGES (REFER TO RELEVANT BRIDGE PACKAGE)
- BR-2 AC OVERLAY FOR LOCAL ROAD BRIDGES (REFER TO RELEVANT BRIDGE PACKAGE)
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- A1-1 — PAVEMENT TAG
- KERB EXTENT
- K-SO-24 — KERB TAG - REFER TO KERB SCHEDULE ON PV-0091 TO PV-0095
  - IDENTIFIER
  - KERB TYPE
  - K = KERB
- KERB TYPE TRANSITION

NOTES

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KEY PLAN

CAMBEWARRA RD
DEVITTS LN / MORSCHELS LN INTERCHANGE
PESTELLS LN INTERCHANGE
TURNERS LN
JASPERS BRUSH RD
CROZIERS RD
SCHOFIELDS LN

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C	11/16/2018	FENCING ADJUSTMENT	006	CCD - SY

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DESIGN CHECK	TG	27/06/2017
DESIGN MNGR	FA	27/06/2017
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MULLERS LANE TO CAMBEWARRA ROAD PAVEMENT
STN. 27650 TO STN. 27900

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ADJOINS SHEET PV-0281

PESTELLS LANE (M1M0)

MEROO ROAD (M1K0)

MAINTENANCE FACILITY ACCESS

PESTELLS LANE OVERPASS BRIDGE

TO BOMADERRY

FROM BERRY

ADJOINS SHEET PV-0234

ADJOINS SHEET PV-0236

PESTELLS LANE ACCESS (M1N0)

ADJOINS SHEET PV-0282

HW1 PRINCES HIGHWAY (M100)

SO GUTTER

PESTELLS LANE (M1M0)

LEGEND

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OTHER PAVEMENT TYPES

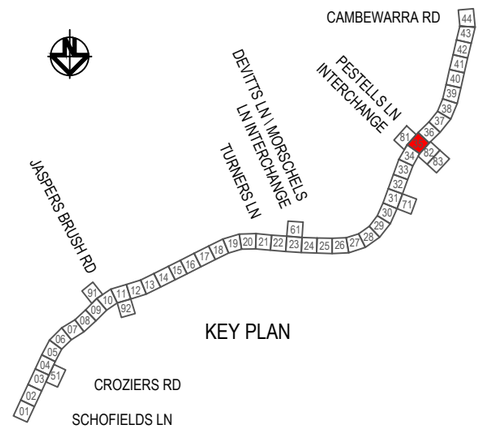
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NOTES

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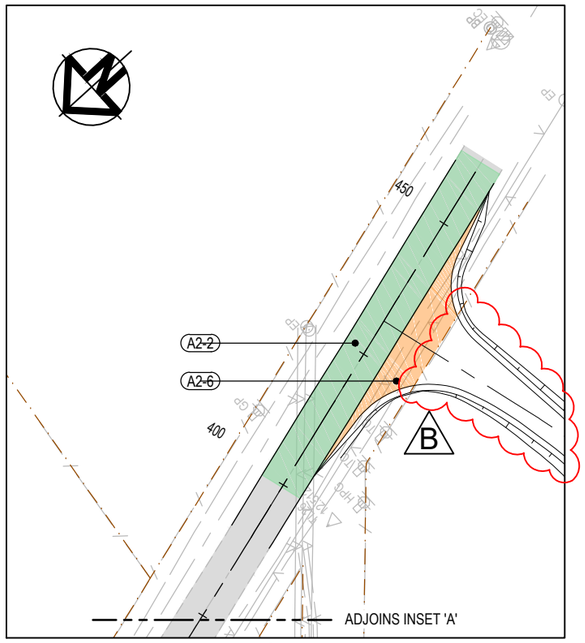
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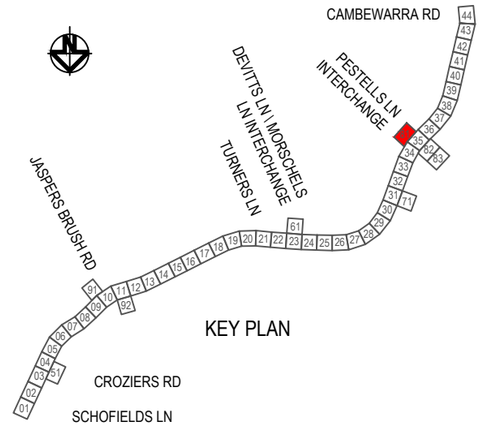
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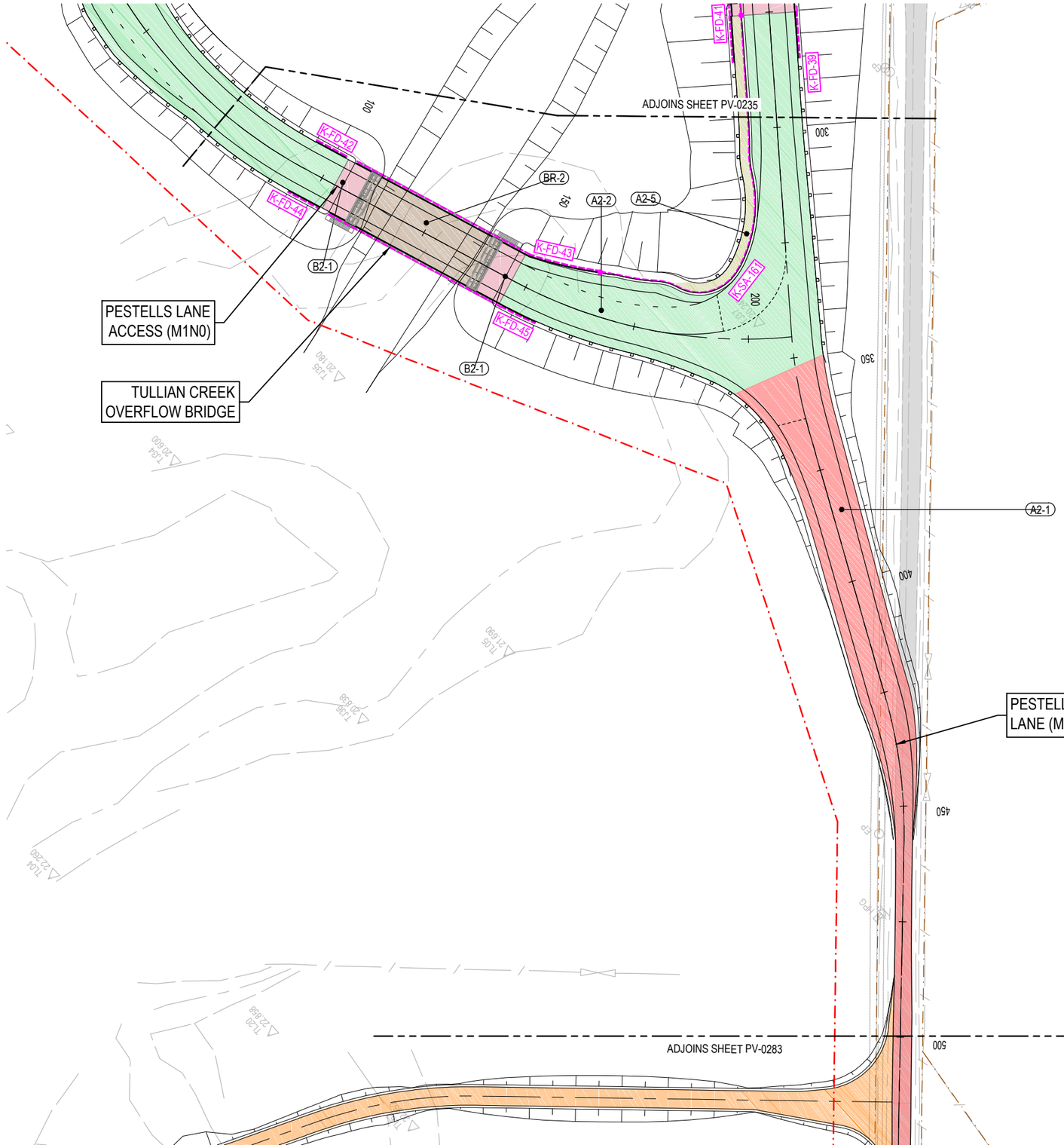
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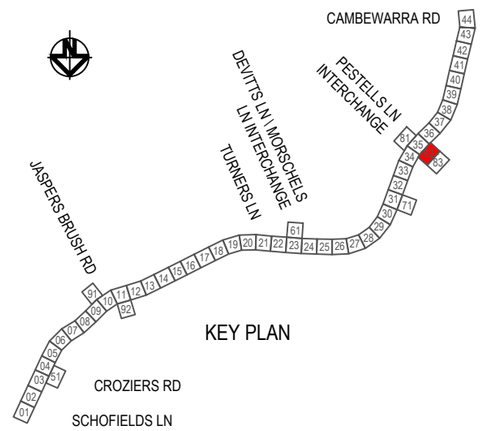
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	NAME	DATE
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BERRY TO BOMADERRY UPGRADE
MULLERS LANE TO CAMBEWARRA ROAD
PAVEMENT
PESTELLS LANE INTERCHANGE — SHEET 82

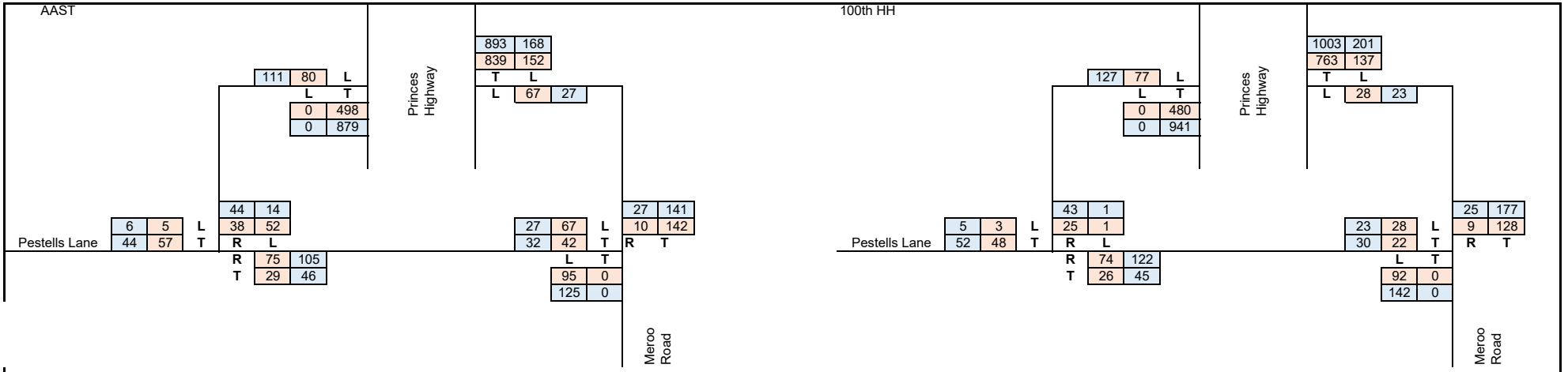
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Appendix B: TRACKS Model Data

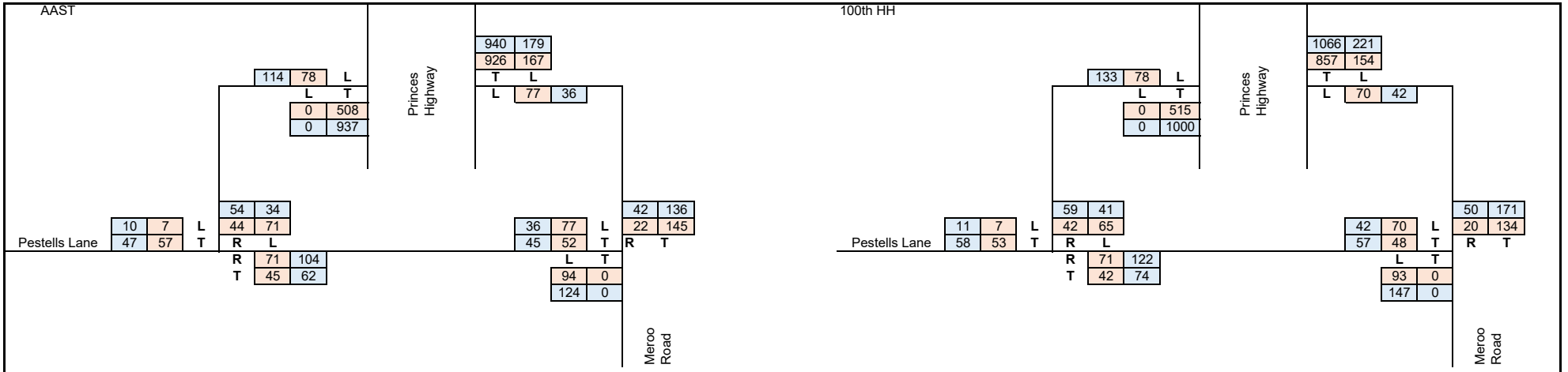


BITZIOS consulting

Sheet: **Year 2021 TRACKS Traffic Volumes - Pestells Lane Interchange**

Project: Pestells Lane Interchange SIDRA Assessment

Project Number: P4516

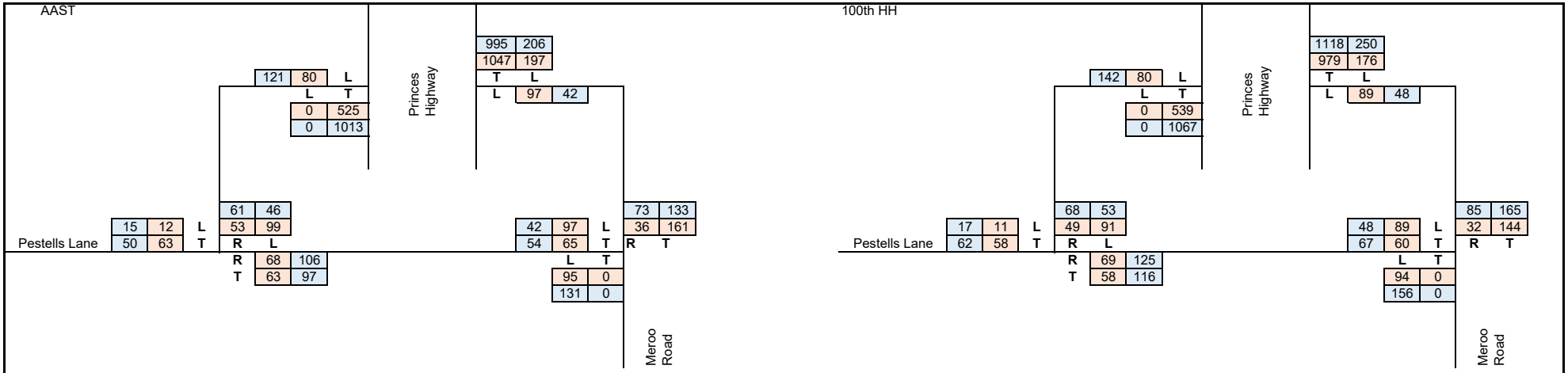


BITZIOS consulting

Sheet: **Year 2026 TRACKS Traffic Volumes - Pestells Lane Interchange**

Project: Pestells Lane Interchange SIDRA Assessment

Project Number: P4516

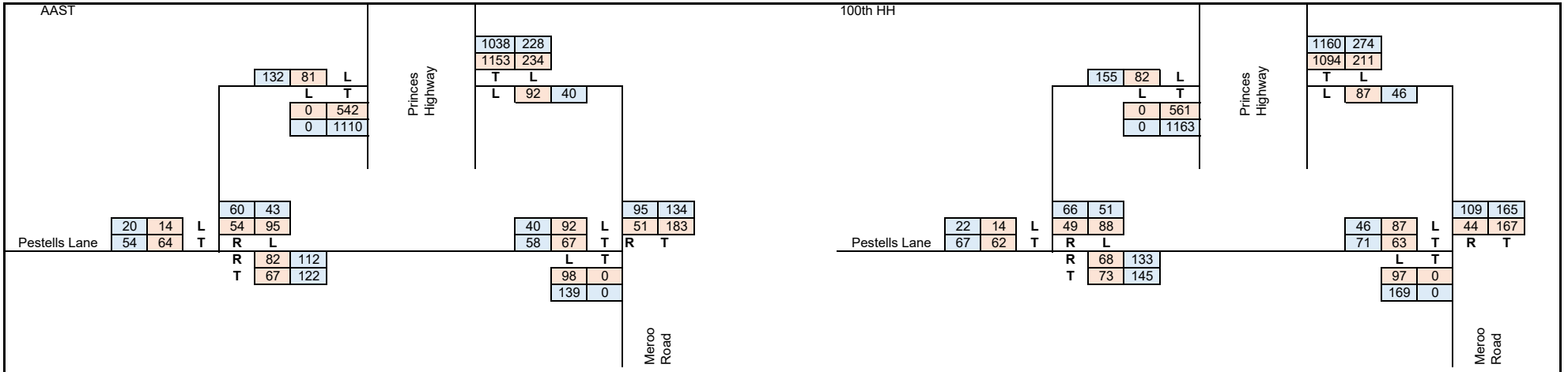


BITZIOS consulting

Sheet: **Year 2031 TRACKS Traffic Volumes - Pestells Lane Interchange**

Project: Pestells Lane Interchange SIDRA Assessment

Project Number: P4516

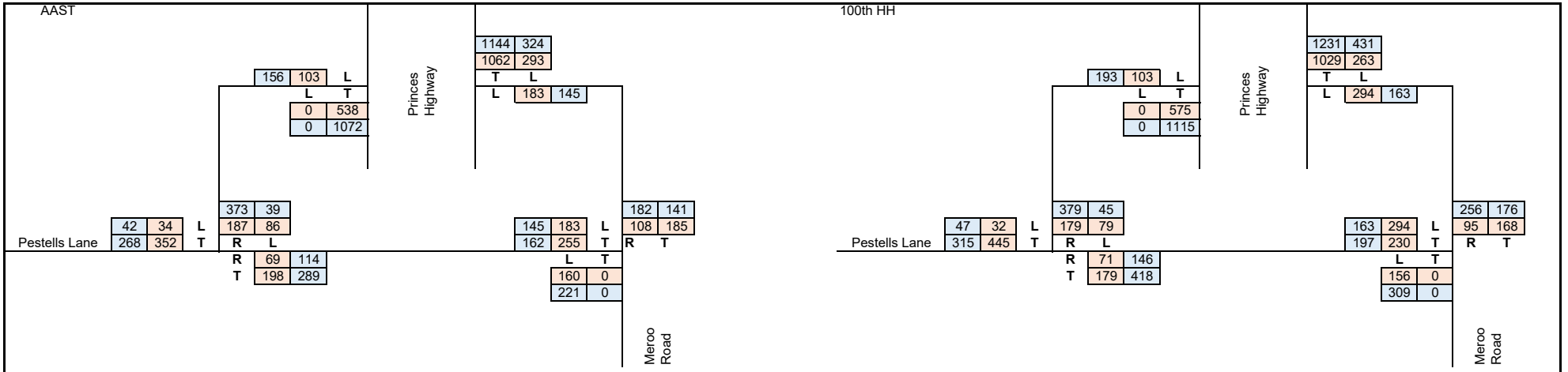


BITZIOS consulting

Sheet: **Year 2036 TRACKS Traffic Volumes - Pestells Lane Interchange**

Project: Pestells Lane Interchange SIDRA Assessment

Project Number: P4516



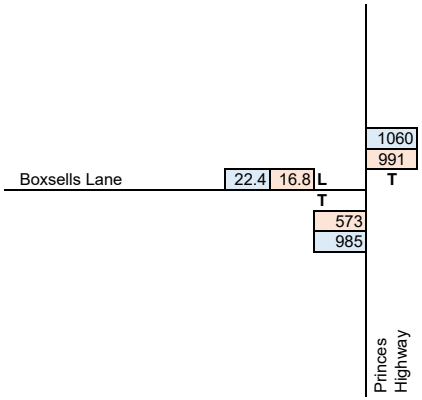
BITZIOS consulting

Sheet: **Year 2041 TRACKS Traffic Volumes - Pestells Lane Interchange**

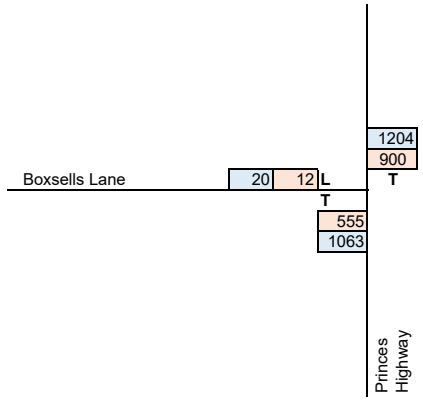
Project: Pestells Lane Interchange SIDRA Assessment

Project Number: P4516

AAST



100th HH



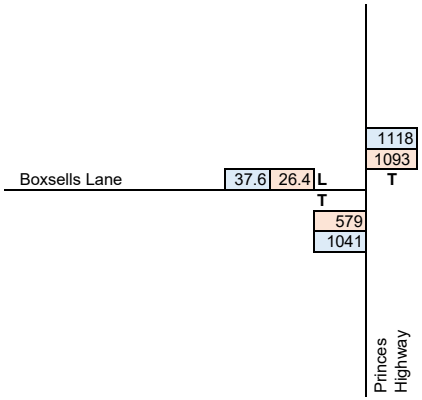
BITZIOS consulting

Sheet: **Year 2021 TRACKS Traffic Volumes - Boxsells Lane**

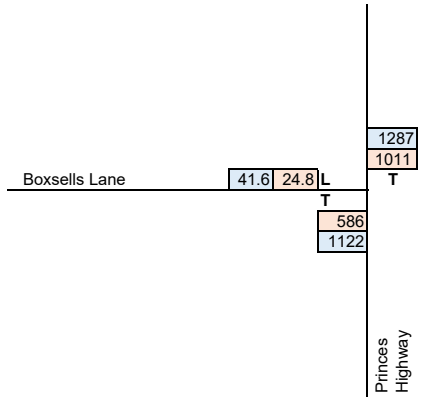
Project: Boxsells lane SIDRA Assessment

Project Number: P4516

AAST



100th HH

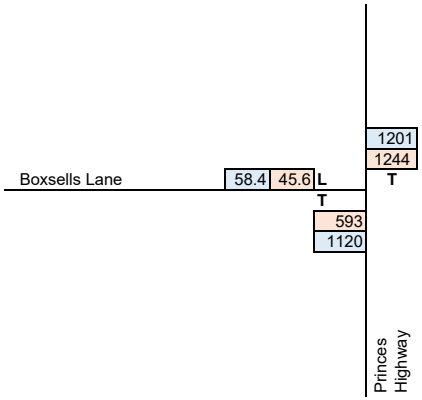


BITZIOS consulting

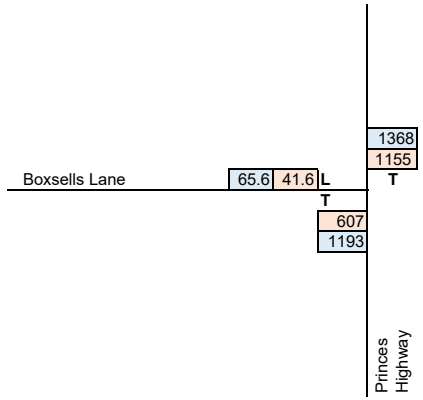
Sheet: **Year 2026 TRACKS Traffic Volumes - Boxsells Lane**

Project: Boxsells lane SIDRA Assessment
Project Number: P4516

AAST



100th HH

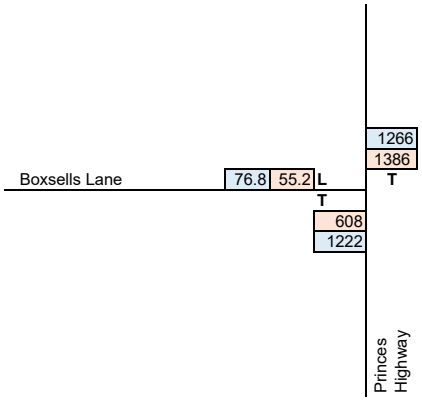


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Sheet: **Year 2031 TRACKS Traffic Volumes - Boxsells Lane**

Project: Boxsells lane SIDRA Assessment
Project Number: P4516

AAST



100th HH

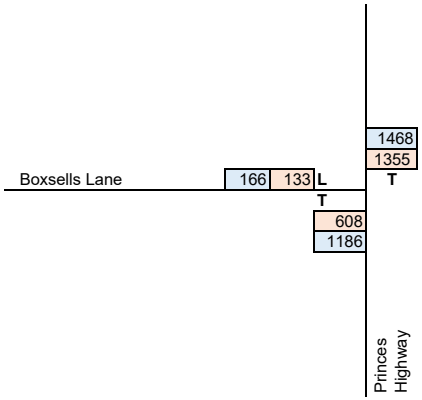


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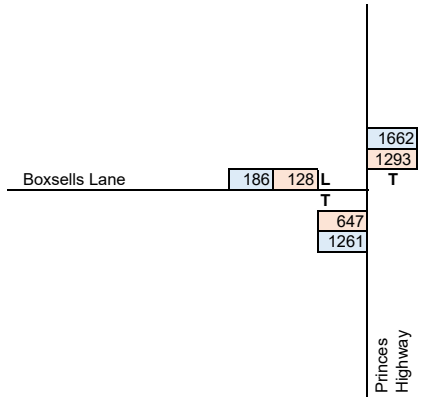
Sheet: **Year 2036 TRACKS Traffic Volumes - Boxsells Lane**

Project: Boxsells lane SIDRA Assessment
Project Number: P4516

AAST



100th HH



BITZIOS consulting

Sheet: **Year 2041 TRACKS Traffic Volumes - Boxsells Lane**

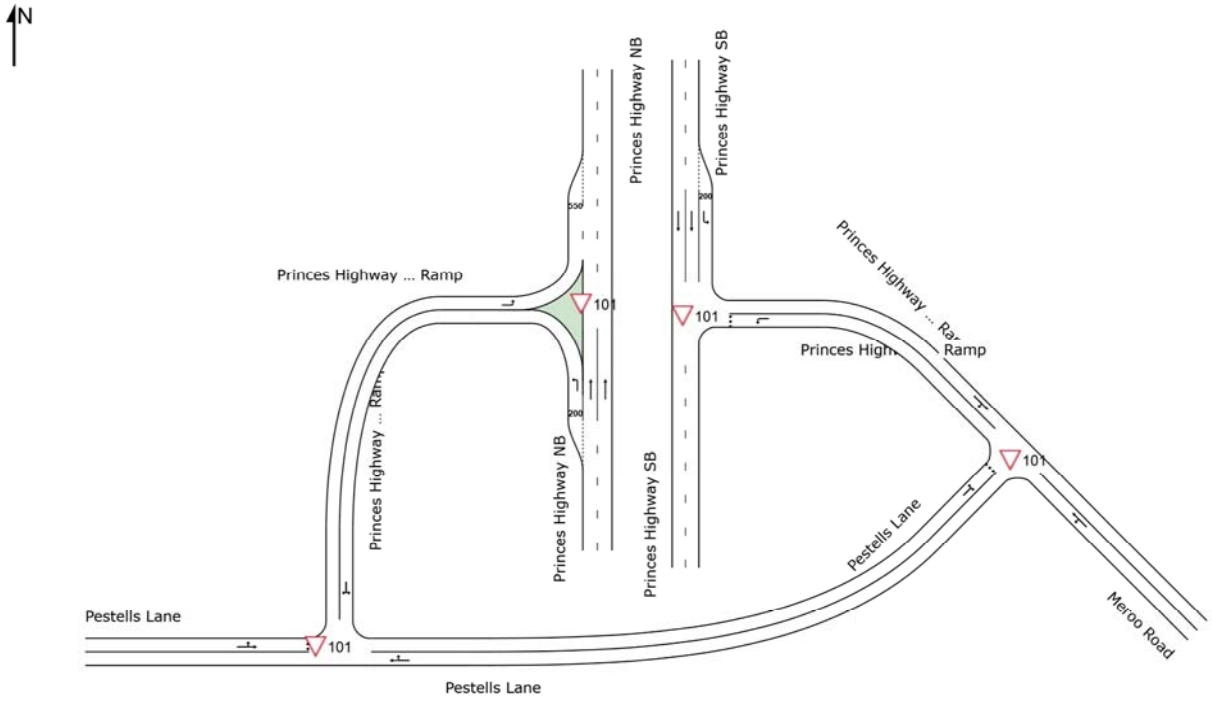
Project: Boxsells lane SIDRA Assessment
Project Number: P4516

Appendix C: SIDRA Model Outputs

NETWORK LAYOUT

Network: N101 [2021_AAST_AM]

New Network
Network Category: (None)



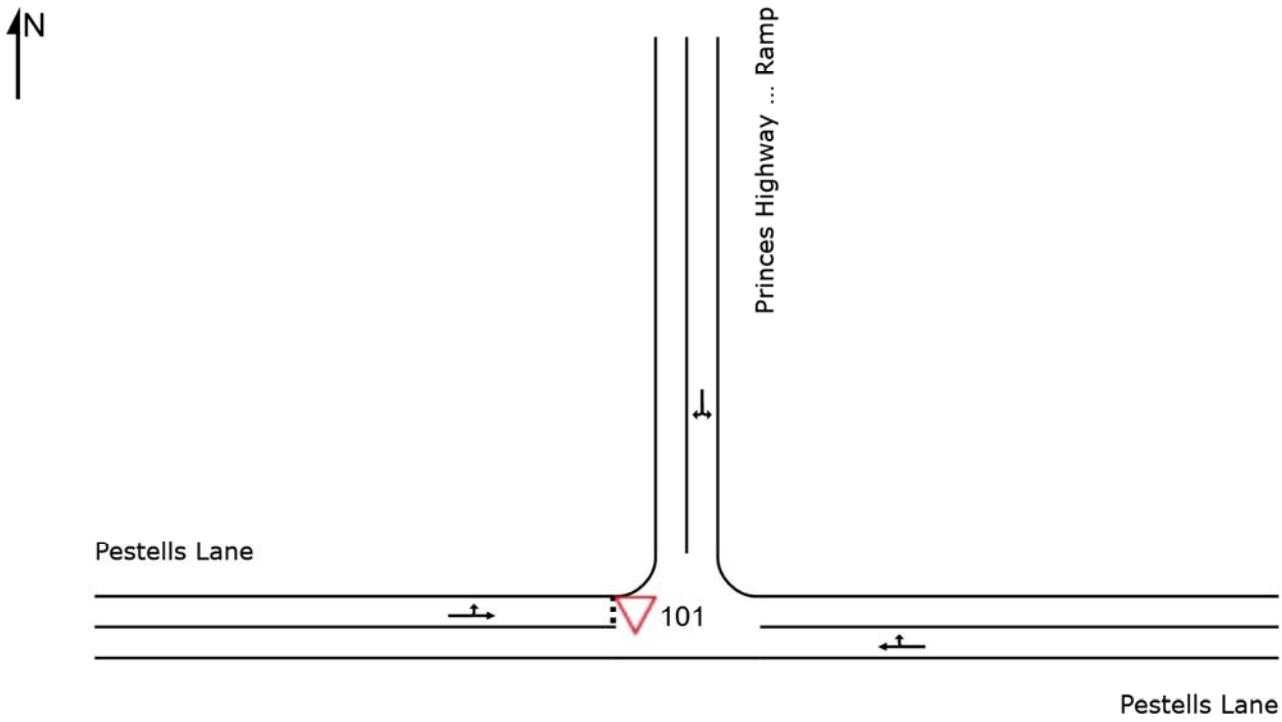
SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
▽101	NA	1 - 2021_AAST_AM
▽101	NA	2 - 2021_AAST_AM
▽101	NA	3 - 2021_AAST_AM
▽101	NA	4 - 2021_AAST_AM

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Organisation: BITZIOS CONSULTING | Created: Friday, 20 March 2020 8:47:53 AM
Project: P:\P4516 Moss Vale Road North URA SIDRA Assessment\Technical Work\Models\SIDRA\Pestells Lane Exchange Intersection\P4516 Pestells Lane Interchange - AAST and 100HH.sip8

SITE LAYOUT

Site: 101 [1 - 2021_AAST_AM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

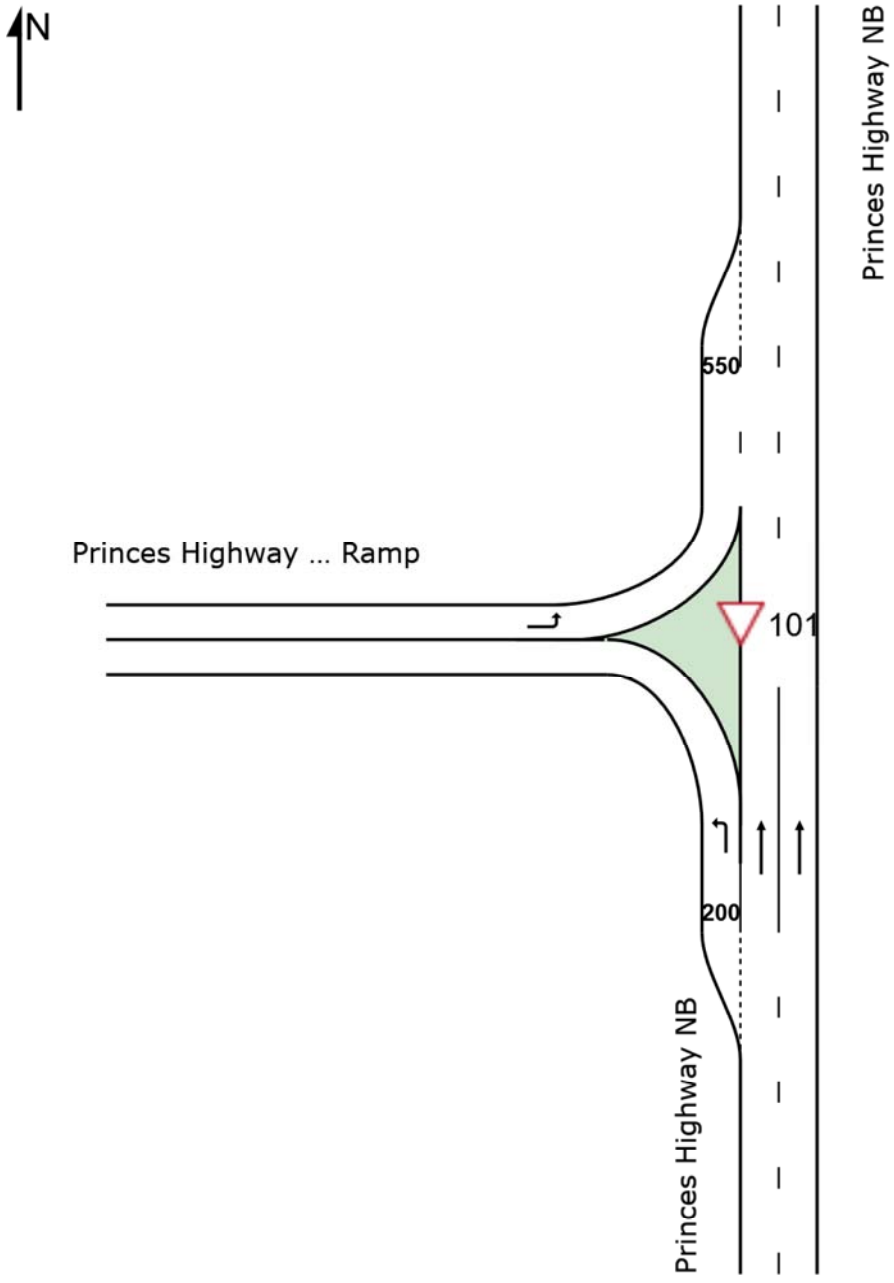


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SITE LAYOUT

Site: 101 [2 - 2021_AAST_AM]

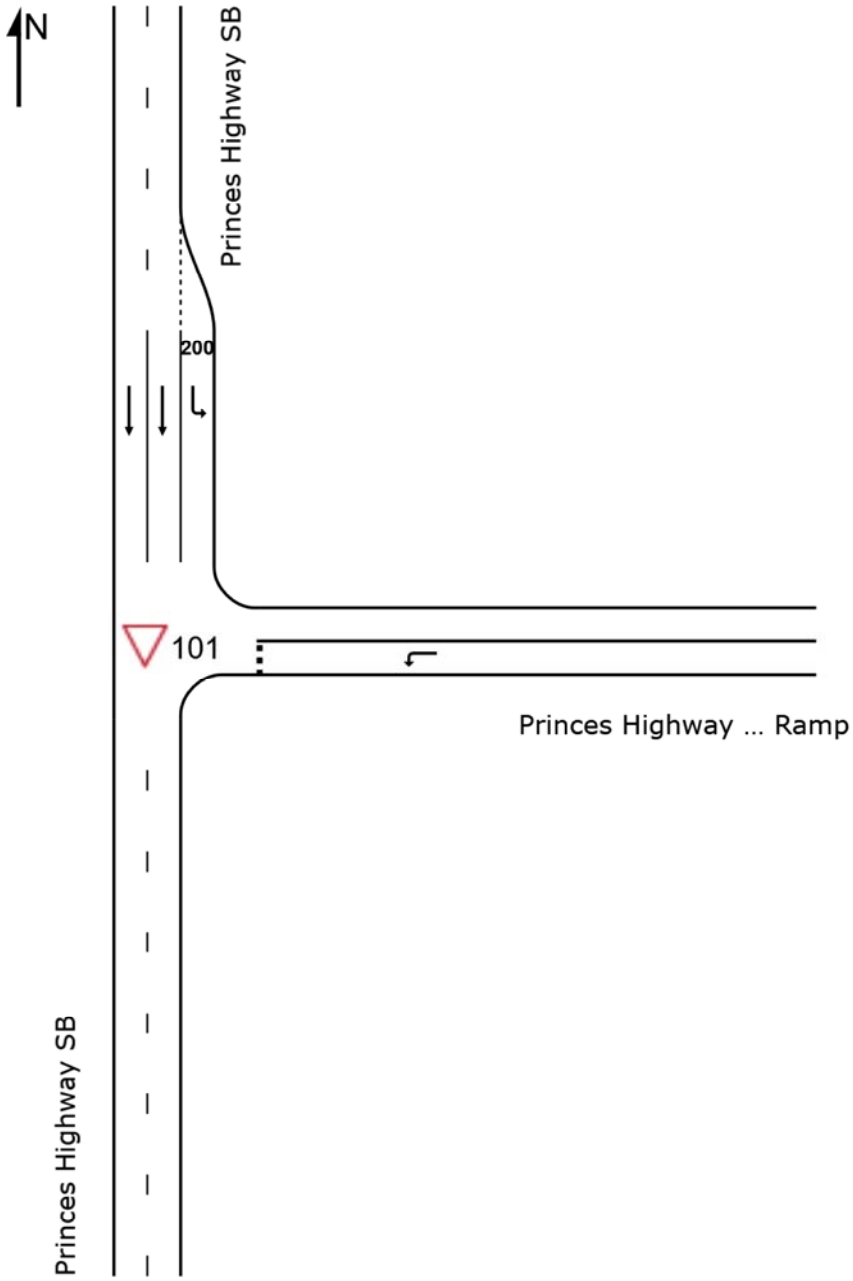
Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)



SITE LAYOUT

Site: 101 [3 - 2021_AAST_AM]

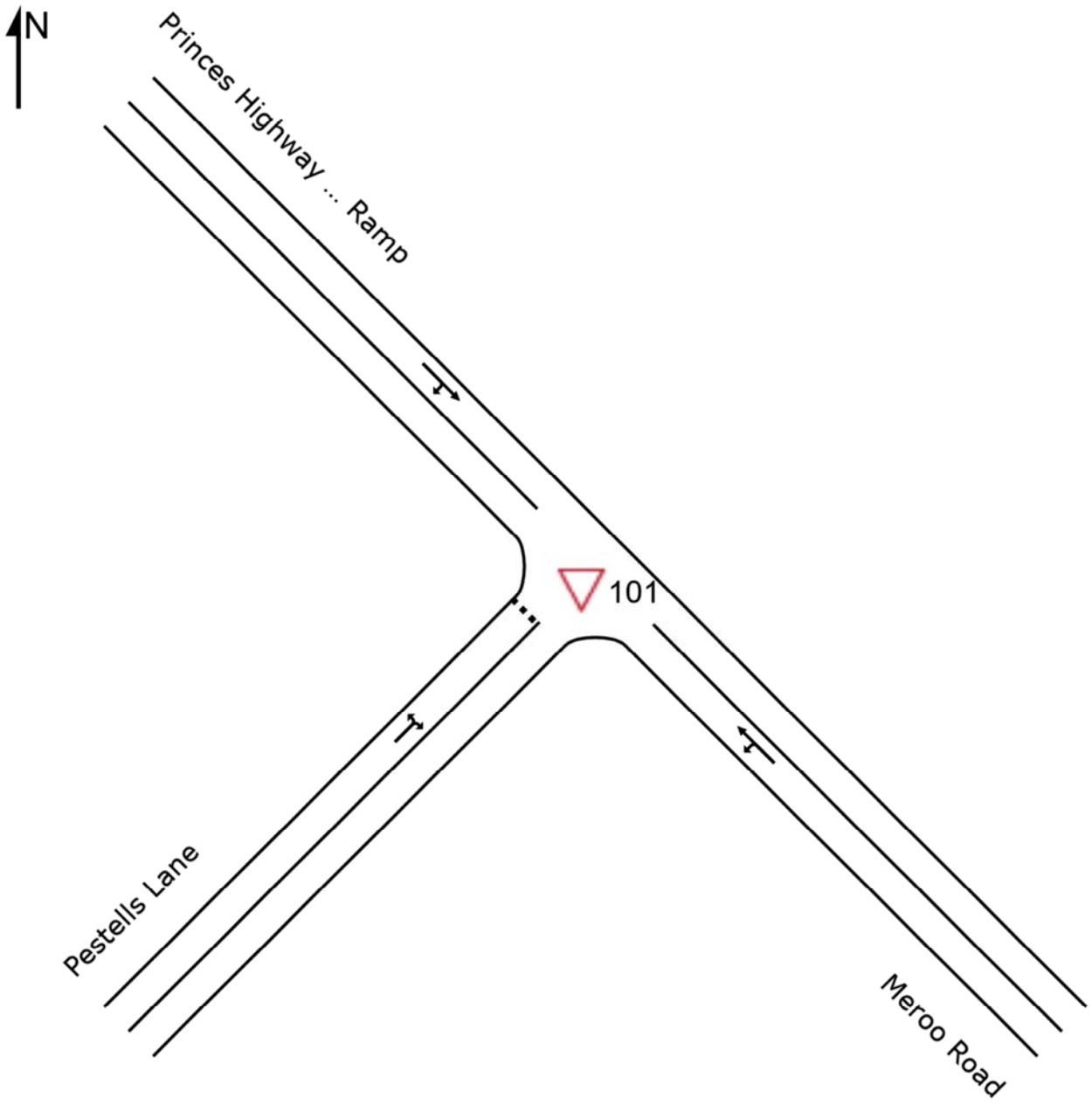
Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)



SITE LAYOUT

Site: 101 [4 - 2021_AAST_AM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)



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Organisation: BITZIOS CONSULTING | Created: Friday, 20 March 2020 8:50:44 AM
Project: P:\P4516 Moss Vale Road North URA SIDRA Assessment\Technical Work\Models\SIDRA\Pestells Lane Exchange Intersection\P4516 Pestells Lane Interchange - AAST and 100HH.sip8

MOVEMENT SUMMARY

Site: 101 [1 - 2021_100HH_AM]

Network: N101 [2021_100HH_AM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	27	0.0	27	0.0	0.056	0.0	LOS A	0.0	0.0	0.00	0.45	0.00	55.6
6	R2	78	0.0	78	0.0	0.056	5.4	LOS A	0.0	0.0	0.00	0.45	0.00	50.2
Approach		105	0.0	105	0.0	0.056	4.0	NA	0.0	0.0	0.00	0.45	0.00	52.6
North: Princes Highway NB Ramp														
7	L2	1	0.0	1	0.0	0.017	5.8	LOS A	0.0	0.2	0.20	0.55	0.20	38.2
9	R2	26	0.0	26	0.0	0.017	5.7	LOS A	0.0	0.2	0.20	0.55	0.20	49.6
Approach		27	0.0	27	0.0	0.017	5.7	NA	0.0	0.2	0.20	0.55	0.20	49.4
West: Pestells Lane														
10	L2	3	0.0	3	0.0	0.044	5.8	LOS A	0.1	0.5	0.21	0.52	0.21	51.6
11	T1	51	0.0	51	0.0	0.044	4.6	LOS A	0.1	0.5	0.21	0.52	0.21	51.6
Approach		54	0.0	54	0.0	0.044	4.6	LOS A	0.1	0.5	0.21	0.52	0.21	51.6
All Vehicles		186	0.0	186	0.0	0.056	4.5	NA	0.1	0.5	0.09	0.48	0.09	51.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2021_100HH_AM]

Network: N101 [2021_100HH_AM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	1	0.0	1	0.0	0.000	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	505	0.0	505	0.0	0.108	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	100.0
Approach		506	0.0	506	0.0	0.108	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.9
West: Princes Highway NB Ramp														
10	L2	81	0.0	81	0.0	0.044	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		81	0.0	81	0.0	0.044	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		587	0.0	587	0.0	0.108	0.8	NA	0.0	0.0	0.00	0.07	0.00	92.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2021_100HH_AM]

Network: N101 [2021_100HH_AM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	29	0.0	29	0.0	0.026	6.9	LOS A	0.0	0.3	0.42	0.61	0.42	53.7
Approach		29	0.0	29	0.0	0.026	6.9	LOS A	0.0	0.3	0.42	0.61	0.42	53.7
North: Princes Highway SB														
7	L2	144	0.0	144	0.0	0.078	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	803	0.0	803	0.0	0.206	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		947	0.0	947	0.0	0.206	0.9	NA	0.0	0.0	0.00	0.09	0.00	94.6
All Vehicles		977	0.0	977	0.0	0.206	1.0	NA	0.0	0.3	0.01	0.10	0.01	92.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2021_100HH_AM]

Network: N101 [2021_100HH_AM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	97	0.0	97	0.0	0.053	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.053	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		98	0.0	98	0.0	0.053	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB Ramp														
28	T1	135	0.0	135	0.0	0.075	0.0	LOS A	0.0	0.2	0.03	0.04	0.03	58.7
29	R2	9	0.0	9	0.0	0.075	5.7	LOS A	0.0	0.2	0.03	0.04	0.03	57.3
Approach		144	0.0	144	0.0	0.075	0.4	NA	0.0	0.2	0.03	0.04	0.03	58.7
SouthWest: Pestells Lane														
30	L2	29	0.0	29	0.0	0.039	5.5	LOS A	0.1	0.4	0.00	0.59	0.00	47.0
32	R2	23	0.0	23	0.0	0.039	6.1	LOS A	0.1	0.4	0.00	0.59	0.00	48.1
Approach		53	0.0	53	0.0	0.039	5.8	LOS A	0.1	0.4	0.00	0.59	0.00	47.6
All Vehicles		295	0.0	295	0.0	0.075	3.1	NA	0.1	0.4	0.02	0.31	0.02	51.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2021_100HH_PM]

Network: N101 [2021_100HH_PM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	47	0.0	47	0.0	0.093	0.0	LOS A	0.0	0.0	0.00	0.44	0.00	55.6
6	R2	128	0.0	128	0.0	0.093	5.5	LOS A	0.0	0.0	0.00	0.44	0.00	50.3
Approach		176	0.0	176	0.0	0.093	4.0	NA	0.0	0.0	0.00	0.44	0.00	52.7
North: Princes Highway NB Ramp														
7	L2	1	0.0	1	0.0	0.030	6.1	LOS A	0.1	0.4	0.28	0.56	0.28	37.6
9	R2	45	0.0	45	0.0	0.030	6.0	LOS A	0.1	0.4	0.28	0.56	0.28	49.3
Approach		46	0.0	46	0.0	0.030	6.0	NA	0.1	0.4	0.28	0.56	0.28	49.2
West: Pestells Lane														
10	L2	5	0.0	5	0.0	0.053	5.9	LOS A	0.1	0.5	0.28	0.54	0.28	51.2
11	T1	55	0.0	55	0.0	0.053	4.9	LOS A	0.1	0.5	0.28	0.54	0.28	51.2
Approach		60	0.0	60	0.0	0.053	5.0	LOS A	0.1	0.5	0.28	0.54	0.28	51.2
All Vehicles		282	0.0	282	0.0	0.093	4.5	NA	0.1	0.5	0.10	0.48	0.10	51.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2021_100HH_PM]

Network: N101 [2021_100HH_PM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	1	0.0	1	0.0	0.000	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	991	0.0	991	0.0	0.212	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		992	0.0	992	0.0	0.212	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.9
West: Princes Highway NB Ramp														
10	L2	134	0.0	134	0.0	0.072	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		134	0.0	134	0.0	0.072	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		1125	0.0	1125	0.0	0.212	0.7	NA	0.0	0.0	0.00	0.06	0.00	93.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2021_100HH_PM]

Network: N101 [2021_100HH_PM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	24	0.0	24	0.0	0.025	7.6	LOS A	0.0	0.3	0.48	0.65	0.48	53.5
Approach		24	0.0	24	0.0	0.025	7.6	LOS A	0.0	0.3	0.48	0.65	0.48	53.5
North: Princes Highway SB														
7	L2	212	0.0	212	0.0	0.114	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1056	0.0	1056	0.0	0.271	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1267	0.0	1267	0.0	0.271	1.0	NA	0.0	0.0	0.00	0.10	0.00	94.0
All Vehicles		1292	0.0	1292	0.0	0.271	1.1	NA	0.0	0.3	0.01	0.11	0.01	92.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2021_100HH_PM]

Network: N101 [2021_100HH_PM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	149	0.0	149	0.0	0.081	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.081	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		151	0.0	151	0.0	0.081	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB Ramp														
28	T1	186	0.0	186	0.0	0.113	0.1	LOS A	0.1	0.5	0.08	0.07	0.08	57.4
29	R2	26	0.0	26	0.0	0.113	5.9	LOS A	0.1	0.5	0.08	0.07	0.08	54.7
Approach		213	0.0	213	0.0	0.113	0.8	NA	0.1	0.5	0.08	0.07	0.08	57.2
SouthWest: Pestells Lane														
30	L2	24	0.0	24	0.0	0.047	5.5	LOS A	0.1	0.5	0.00	0.59	0.00	46.4
32	R2	32	0.0	32	0.0	0.047	6.5	LOS A	0.1	0.5	0.00	0.59	0.00	47.7
Approach		56	0.0	56	0.0	0.047	6.1	LOS A	0.1	0.5	0.00	0.59	0.00	47.3
All Vehicles		419	0.0	419	0.0	0.113	3.2	NA	0.1	0.5	0.04	0.32	0.04	50.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2021_AAST_AM]

Network: N101 [2021_AAST_AM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	31	0.0	31	0.0	0.058	0.0	LOS A	0.0	0.0	0.00	0.44	0.00	55.7
6	R2	79	0.0	79	0.0	0.058	5.4	LOS A	0.0	0.0	0.00	0.44	0.00	50.4
Approach		109	0.0	109	0.0	0.058	3.9	NA	0.0	0.0	0.00	0.44	0.00	52.9
North: Princes Highway NB Ramp														
7	L2	55	0.0	55	0.0	0.054	5.7	LOS A	0.1	0.6	0.17	0.52	0.17	38.5
9	R2	40	0.0	40	0.0	0.054	5.8	LOS A	0.1	0.6	0.17	0.52	0.17	49.7
Approach		95	0.0	95	0.0	0.054	5.8	NA	0.1	0.6	0.17	0.52	0.17	46.1
West: Pestells Lane														
10	L2	5	0.0	5	0.0	0.057	5.8	LOS A	0.1	0.6	0.26	0.54	0.26	51.3
11	T1	60	0.0	60	0.0	0.057	4.9	LOS A	0.1	0.6	0.26	0.54	0.26	51.3
Approach		65	0.0	65	0.0	0.057	4.9	LOS A	0.1	0.6	0.26	0.54	0.26	51.3
All Vehicles		269	0.0	269	0.0	0.058	4.8	NA	0.1	0.6	0.12	0.49	0.12	50.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2021_AAST_AM]

Network: N101 [2021_AAST_AM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	1	0.0	1	0.0	0.000	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	524	0.0	524	0.0	0.112	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	100.0
Approach		525	0.0	525	0.0	0.112	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.9
West: Princes Highway NB Ramp														
10	L2	84	0.0	84	0.0	0.045	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		84	0.0	84	0.0	0.045	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		609	0.0	609	0.0	0.112	0.8	NA	0.0	0.0	0.00	0.07	0.00	92.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2021_AAST_AM]

Network: N101 [2021_AAST_AM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	71	0.0	71	0.0	0.066	7.2	LOS A	0.1	0.7	0.45	0.65	0.45	53.6
Approach		71	0.0	71	0.0	0.066	7.2	LOS A	0.1	0.7	0.45	0.65	0.45	53.6
North: Princes Highway SB														
7	L2	160	0.0	160	0.0	0.086	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	883	0.0	883	0.0	0.226	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		1043	0.0	1043	0.0	0.226	0.9	NA	0.0	0.0	0.00	0.09	0.00	94.6
All Vehicles		1114	0.0	1114	0.0	0.226	1.3	NA	0.1	0.7	0.03	0.12	0.03	90.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2021_AAST_AM]

Network: N101 [2021_AAST_AM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	100	0.0	100	0.0	0.054	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.054	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		101	0.0	101	0.0	0.054	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB Ramp														
28	T1	149	0.0	149	0.0	0.083	0.0	LOS A	0.0	0.2	0.03	0.04	0.03	58.7
29	R2	11	0.0	11	0.0	0.083	5.8	LOS A	0.0	0.2	0.03	0.04	0.03	57.3
Approach		160	0.0	160	0.0	0.083	0.4	NA	0.0	0.2	0.03	0.04	0.03	58.6
SouthWest: Pestells Lane														
30	L2	71	0.0	71	0.0	0.084	5.5	LOS A	0.1	0.9	0.00	0.58	0.00	47.0
32	R2	44	0.0	44	0.0	0.084	6.2	LOS A	0.1	0.9	0.00	0.58	0.00	48.0
Approach		115	0.0	115	0.0	0.084	5.8	LOS A	0.1	0.9	0.00	0.58	0.00	47.5
All Vehicles		376	0.0	376	0.0	0.084	3.4	NA	0.1	0.9	0.01	0.35	0.01	50.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [1 - 2021_AAST_PM]

Network: N101 [2021_AAST_PM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	48	0.0	48	0.0	0.084	0.0	LOS A	0.0	0.0	0.00	0.42	0.00	55.8
6	R2	111	0.0	111	0.0	0.084	5.5	LOS A	0.0	0.0	0.00	0.42	0.00	50.7
Approach		159	0.0	159	0.0	0.084	3.8	NA	0.0	0.0	0.00	0.42	0.00	53.2
North: Princes Highway NB Ramp														
7	L2	15	0.0	15	0.0	0.038	6.0	LOS A	0.1	0.5	0.26	0.53	0.26	37.7
9	R2	46	0.0	46	0.0	0.038	5.9	LOS A	0.1	0.5	0.26	0.53	0.26	49.4
Approach		61	0.0	61	0.0	0.038	5.9	NA	0.1	0.5	0.26	0.53	0.26	48.2
West: Pestells Lane														
10	L2	6	0.0	6	0.0	0.046	5.9	LOS A	0.1	0.5	0.26	0.54	0.26	51.2
11	T1	46	0.0	46	0.0	0.046	4.9	LOS A	0.1	0.5	0.26	0.54	0.26	51.2
Approach		53	0.0	53	0.0	0.046	5.0	LOS A	0.1	0.5	0.26	0.54	0.26	51.2
All Vehicles		273	0.0	273	0.0	0.084	4.5	NA	0.1	0.5	0.11	0.47	0.11	51.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2021_AAST_PM]

Network: N101 [2021_AAST_PM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	1	0.0	1	0.0	0.000	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	925	0.0	925	0.0	0.198	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		926	0.0	926	0.0	0.198	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.9
West: Princes Highway NB Ramp														
10	L2	117	0.0	117	0.0	0.063	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		117	0.0	117	0.0	0.063	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		1043	0.0	1043	0.0	0.198	0.7	NA	0.0	0.0	0.00	0.06	0.00	93.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2021_AAST_PM]

Network: N101 [2021_AAST_PM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	28	0.0	28	0.0	0.027	7.3	LOS A	0.0	0.3	0.45	0.63	0.45	53.6
Approach		28	0.0	28	0.0	0.027	7.3	LOS A	0.0	0.3	0.45	0.63	0.45	53.6
North: Princes Highway SB														
7	L2	177	0.0	177	0.0	0.095	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	940	0.0	940	0.0	0.241	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		1117	0.0	1117	0.0	0.241	0.9	NA	0.0	0.0	0.00	0.09	0.00	94.4
All Vehicles		1145	0.0	1145	0.0	0.241	1.1	NA	0.0	0.3	0.01	0.10	0.01	92.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2021_AAST_PM]

Network: N101 [2021_AAST_PM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	132	0.0	132	0.0	0.071	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.071	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		133	0.0	133	0.0	0.071	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB Ramp														
28	T1	148	0.0	148	0.0	0.094	0.1	LOS A	0.1	0.5	0.09	0.10	0.09	56.8
29	R2	28	0.0	28	0.0	0.094	5.9	LOS A	0.1	0.5	0.09	0.10	0.09	53.6
Approach		177	0.0	177	0.0	0.094	1.0	NA	0.1	0.5	0.09	0.10	0.09	56.5
SouthWest: Pestells Lane														
30	L2	28	0.0	28	0.0	0.050	5.5	LOS A	0.1	0.5	0.00	0.59	0.00	46.6
32	R2	34	0.0	34	0.0	0.050	6.3	LOS A	0.1	0.5	0.00	0.59	0.00	47.8
Approach		62	0.0	62	0.0	0.050	6.0	LOS A	0.1	0.5	0.00	0.59	0.00	47.4
All Vehicles		372	0.0	372	0.0	0.094	3.4	NA	0.1	0.5	0.04	0.35	0.04	50.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2026_100HH_AM]

Network: N101 [2026_100HH_AM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	44	0.0	44	0.0	0.063	0.0	LOS A	0.0	0.0	0.00	0.38	0.00	56.2
6	R2	75	0.0	75	0.0	0.063	5.4	LOS A	0.0	0.0	0.00	0.38	0.00	51.5
Approach		119	0.0	119	0.0	0.063	3.4	NA	0.0	0.0	0.00	0.38	0.00	54.2
North: Princes Highway NB Ramp														
7	L2	68	0.0	68	0.0	0.064	5.7	LOS A	0.1	0.7	0.17	0.51	0.17	38.5
9	R2	44	0.0	44	0.0	0.064	5.8	LOS A	0.1	0.7	0.17	0.51	0.17	49.7
Approach		113	0.0	113	0.0	0.064	5.8	NA	0.1	0.7	0.17	0.51	0.17	45.7
West: Pestells Lane														
10	L2	7	0.0	7	0.0	0.056	5.8	LOS A	0.1	0.6	0.26	0.54	0.26	51.2
11	T1	56	0.0	56	0.0	0.056	5.0	LOS A	0.1	0.6	0.26	0.54	0.26	51.2
Approach		63	0.0	63	0.0	0.056	5.0	LOS A	0.1	0.6	0.26	0.54	0.26	51.2
All Vehicles		295	0.0	295	0.0	0.064	4.7	NA	0.1	0.7	0.12	0.47	0.12	50.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2026_100HH_AM]

Network: N101 [2026_100HH_AM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	1	0.0	1	0.0	0.000	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	542	0.0	542	0.0	0.116	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	100.0
Approach		543	0.0	543	0.0	0.116	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.9
West: Princes Highway NB														
10	L2	82	0.0	82	0.0	0.044	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		82	0.0	82	0.0	0.044	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		625	0.0	625	0.0	0.116	0.8	NA	0.0	0.0	0.00	0.07	0.00	92.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2026_100HH_AM]

Network: N101 [2026_100HH_AM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	74	0.0	74	0.0	0.069	7.2	LOS A	0.1	0.8	0.45	0.66	0.45	53.6
Approach		74	0.0	74	0.0	0.069	7.2	LOS A	0.1	0.8	0.45	0.66	0.45	53.6
North: Princes Highway SB														
7	L2	162	0.0	162	0.0	0.087	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	902	0.0	902	0.0	0.231	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		1064	0.0	1064	0.0	0.231	0.9	NA	0.0	0.0	0.00	0.09	0.00	94.6
All Vehicles		1138	0.0	1138	0.0	0.231	1.3	NA	0.1	0.8	0.03	0.12	0.03	90.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2026_100HH_AM]

Network: N101 [2026_100HH_AM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	98	0.0	98	0.0	0.053	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.053	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		99	0.0	99	0.0	0.053	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB Ramp														
28	T1	141	0.0	141	0.0	0.086	0.1	LOS A	0.1	0.4	0.06	0.08	0.06	57.5
29	R2	21	0.0	21	0.0	0.086	5.7	LOS A	0.1	0.4	0.06	0.08	0.06	54.9
Approach		162	0.0	162	0.0	0.086	0.8	NA	0.1	0.4	0.06	0.08	0.06	57.3
SouthWest: Pestells Lane														
30	L2	74	0.0	74	0.0	0.092	5.5	LOS A	0.1	1.0	0.00	0.58	0.00	46.9
32	R2	51	0.0	51	0.0	0.092	6.3	LOS A	0.1	1.0	0.00	0.58	0.00	48.0
Approach		124	0.0	124	0.0	0.092	5.8	LOS A	0.1	1.0	0.00	0.58	0.00	47.5
All Vehicles		385	0.0	385	0.0	0.092	3.6	NA	0.1	1.0	0.03	0.37	0.03	50.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2026_100HH_PM]

Network: N101 [2026_100HH_PM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	78	0.0	78	0.0	0.109	0.0	LOS A	0.0	0.0	0.00	0.38	0.00	56.2
6	R2	128	0.0	128	0.0	0.109	5.5	LOS A	0.0	0.0	0.00	0.38	0.00	51.5
Approach		206	0.0	206	0.0	0.109	3.4	NA	0.0	0.0	0.00	0.38	0.00	54.2
North: Princes Highway NB Ramp														
7	L2	43	0.0	43	0.0	0.065	6.1	LOS A	0.1	0.8	0.29	0.51	0.29	37.4
9	R2	62	0.0	62	0.0	0.065	6.1	LOS A	0.1	0.8	0.29	0.51	0.29	49.2
Approach		105	0.0	105	0.0	0.065	6.1	NA	0.1	0.8	0.29	0.51	0.29	46.9
West: Pestells Lane														
10	L2	12	0.0	12	0.0	0.067	5.9	LOS A	0.1	0.7	0.31	0.56	0.31	50.9
11	T1	61	0.0	61	0.0	0.067	5.3	LOS A	0.1	0.7	0.31	0.56	0.31	50.9
Approach		73	0.0	73	0.0	0.067	5.4	LOS A	0.1	0.7	0.31	0.56	0.31	50.9
All Vehicles		384	0.0	384	0.0	0.109	4.5	NA	0.1	0.8	0.14	0.45	0.14	51.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2026_100HH_PM]

Network: N101 [2026_100HH_PM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	1	0.0	1	0.0	0.000	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	1053	0.0	1053	0.0	0.225	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		1054	0.0	1054	0.0	0.225	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.9
West: Princes Highway NB Ramp														
10	L2	140	0.0	140	0.0	0.075	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		140	0.0	140	0.0	0.075	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		1194	0.0	1194	0.0	0.225	0.7	NA	0.0	0.0	0.00	0.06	0.00	93.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2026_100HH_PM]

Network: N101 [2026_100HH_PM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	44	0.0	44	0.0	0.047	7.8	LOS A	0.1	0.5	0.50	0.69	0.50	53.3
Approach		44	0.0	44	0.0	0.047	7.8	LOS A	0.1	0.5	0.50	0.69	0.50	53.3
North: Princes Highway SB														
7	L2	233	0.0	233	0.0	0.125	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1122	0.0	1122	0.0	0.288	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1355	0.0	1355	0.0	0.288	1.0	NA	0.0	0.0	0.00	0.10	0.00	93.8
All Vehicles		1399	0.0	1399	0.0	0.288	1.2	NA	0.1	0.5	0.02	0.12	0.02	91.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2026_100HH_PM]

Network: N101 [2026_100HH_PM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	155	0.0	155	0.0	0.084	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.084	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		156	0.0	156	0.0	0.084	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB Ramp														
28	T1	180	0.0	180	0.0	0.127	0.2	LOS A	0.1	1.0	0.14	0.14	0.14	55.5
29	R2	53	0.0	53	0.0	0.127	6.0	LOS A	0.1	1.0	0.14	0.14	0.14	51.1
Approach		233	0.0	233	0.0	0.127	1.5	NA	0.1	1.0	0.14	0.14	0.14	54.9
SouthWest: Pestells Lane														
30	L2	44	0.0	44	0.0	0.089	5.5	LOS A	0.1	0.9	0.00	0.59	0.00	46.2
32	R2	60	0.0	60	0.0	0.089	6.7	LOS A	0.1	0.9	0.00	0.59	0.00	47.6
Approach		104	0.0	104	0.0	0.089	6.2	LOS A	0.1	0.9	0.00	0.59	0.00	47.1
All Vehicles		493	0.0	493	0.0	0.127	3.8	NA	0.1	1.0	0.07	0.37	0.07	49.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2026_AAST_AM]

Network: N101 [2026_AAST_AM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	47	0.0	47	0.0	0.065	0.0	LOS A	0.0	0.0	0.00	0.37	0.00	56.3
6	R2	75	0.0	75	0.0	0.065	5.4	LOS A	0.0	0.0	0.00	0.37	0.00	51.7
Approach		122	0.0	122	0.0	0.065	3.3	NA	0.0	0.0	0.00	0.37	0.00	54.4
North: Princes Highway NB Ramp														
7	L2	75	0.0	75	0.0	0.069	5.8	LOS A	0.1	0.7	0.17	0.51	0.17	38.5
9	R2	46	0.0	46	0.0	0.069	5.8	LOS A	0.1	0.7	0.17	0.51	0.17	49.6
Approach		121	0.0	121	0.0	0.069	5.8	NA	0.1	0.7	0.17	0.51	0.17	45.6
West: Pestells Lane														
10	L2	7	0.0	7	0.0	0.060	5.8	LOS A	0.1	0.6	0.26	0.54	0.26	51.2
11	T1	60	0.0	60	0.0	0.060	5.0	LOS A	0.1	0.6	0.26	0.54	0.26	51.2
Approach		67	0.0	67	0.0	0.060	5.1	LOS A	0.1	0.6	0.26	0.54	0.26	51.2
All Vehicles		311	0.0	311	0.0	0.069	4.7	NA	0.1	0.7	0.12	0.47	0.12	50.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2026_AAST_AM]

Network: N101 [2026_AAST_AM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	1	0.0	1	0.0	0.000	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	535	0.0	535	0.0	0.114	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	100.0
Approach		536	0.0	536	0.0	0.114	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.9
West: Princes Highway NB Ramp														
10	L2	82	0.0	82	0.0	0.044	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		82	0.0	82	0.0	0.044	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		618	0.0	618	0.0	0.114	0.8	NA	0.0	0.0	0.00	0.07	0.00	92.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2026_AAST_AM]

Network: N101 [2026_AAST_AM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	81	0.0	81	0.0	0.080	7.5	LOS A	0.1	0.9	0.47	0.68	0.47	53.5
Approach		81	0.0	81	0.0	0.080	7.5	LOS A	0.1	0.9	0.47	0.68	0.47	53.5
North: Princes Highway SB														
7	L2	176	0.0	176	0.0	0.095	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	975	0.0	975	0.0	0.250	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		1151	0.0	1151	0.0	0.250	0.9	NA	0.0	0.0	0.00	0.09	0.00	94.6
All Vehicles		1232	0.0	1232	0.0	0.250	1.3	NA	0.1	0.9	0.03	0.13	0.03	90.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2026_AAST_AM]

Network: N101 [2026_AAST_AM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	99	0.0	99	0.0	0.054	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.054	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		100	0.0	100	0.0	0.054	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB Ramp														
28	T1	153	0.0	153	0.0	0.093	0.1	LOS A	0.1	0.4	0.06	0.08	0.06	57.5
29	R2	23	0.0	23	0.0	0.093	5.8	LOS A	0.1	0.4	0.06	0.08	0.06	54.8
Approach		176	0.0	176	0.0	0.093	0.8	NA	0.1	0.4	0.06	0.08	0.06	57.3
SouthWest: Pestells Lane														
30	L2	81	0.0	81	0.0	0.101	5.5	LOS A	0.2	1.1	0.00	0.58	0.00	46.9
32	R2	55	0.0	55	0.0	0.101	6.3	LOS A	0.2	1.1	0.00	0.58	0.00	48.0
Approach		136	0.0	136	0.0	0.101	5.9	LOS A	0.2	1.1	0.00	0.58	0.00	47.4
All Vehicles		412	0.0	412	0.0	0.101	3.6	NA	0.2	1.1	0.03	0.37	0.03	50.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2026_AAST_PM]

Network: N101 [2026_AAST_PM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	65	0.0	65	0.0	0.092	0.0	LOS A	0.0	0.0	0.00	0.38	0.00	56.2
6	R2	109	0.0	109	0.0	0.092	5.5	LOS A	0.0	0.0	0.00	0.38	0.00	51.5
Approach		175	0.0	175	0.0	0.092	3.4	NA	0.0	0.0	0.00	0.38	0.00	54.2
North: Princes Highway NB Ramp														
7	L2	36	0.0	36	0.0	0.056	6.0	LOS A	0.1	0.7	0.27	0.51	0.27	37.6
9	R2	57	0.0	57	0.0	0.056	6.0	LOS A	0.1	0.7	0.27	0.51	0.27	49.3
Approach		93	0.0	93	0.0	0.056	6.0	NA	0.1	0.7	0.27	0.51	0.27	47.2
West: Pestells Lane														
10	L2	11	0.0	11	0.0	0.053	5.9	LOS A	0.1	0.5	0.28	0.55	0.28	51.0
11	T1	49	0.0	49	0.0	0.053	5.1	LOS A	0.1	0.5	0.28	0.55	0.28	51.0
Approach		60	0.0	60	0.0	0.053	5.2	LOS A	0.1	0.5	0.28	0.55	0.28	51.0
All Vehicles		327	0.0	327	0.0	0.092	4.5	NA	0.1	0.7	0.13	0.45	0.13	51.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2026_AAST_PM]

Network: N101 [2026_AAST_PM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	1	0.0	1	0.0	0.000	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	986	0.0	986	0.0	0.211	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		987	0.0	987	0.0	0.211	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.9
West: Princes Highway NB Ramp														
10	L2	120	0.0	120	0.0	0.065	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		120	0.0	120	0.0	0.065	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		1107	0.0	1107	0.0	0.211	0.6	NA	0.0	0.0	0.00	0.06	0.00	93.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2026_AAST_PM]

Network: N101 [2026_AAST_PM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	38	0.0	38	0.0	0.037	7.4	LOS A	0.1	0.4	0.47	0.65	0.47	53.5
Approach		38	0.0	38	0.0	0.037	7.4	LOS A	0.1	0.4	0.47	0.65	0.47	53.5
North: Princes Highway SB														
7	L2	188	0.0	188	0.0	0.101	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	989	0.0	989	0.0	0.254	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1178	0.0	1178	0.0	0.254	0.9	NA	0.0	0.0	0.00	0.09	0.00	94.3
All Vehicles		1216	0.0	1216	0.0	0.254	1.1	NA	0.1	0.4	0.01	0.11	0.01	92.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2026_AAST_PM]

Network: N101 [2026_AAST_PM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	131	0.0	131	0.0	0.071	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.071	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		132	0.0	132	0.0	0.071	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB Ramp														
28	T1	143	0.0	143	0.0	0.102	0.1	LOS A	0.1	0.8	0.13	0.14	0.13	55.5
29	R2	44	0.0	44	0.0	0.102	5.9	LOS A	0.1	0.8	0.13	0.14	0.13	51.1
Approach		187	0.0	187	0.0	0.102	1.5	NA	0.1	0.8	0.13	0.14	0.13	54.9
SouthWest: Pestells Lane														
30	L2	38	0.0	38	0.0	0.069	5.5	LOS A	0.1	0.7	0.00	0.59	0.00	46.6
32	R2	47	0.0	47	0.0	0.069	6.4	LOS A	0.1	0.7	0.00	0.59	0.00	47.8
Approach		85	0.0	85	0.0	0.069	6.0	LOS A	0.1	0.7	0.00	0.59	0.00	47.4
All Vehicles		404	0.0	404	0.0	0.102	3.8	NA	0.1	0.8	0.06	0.38	0.06	49.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2031_100HH_AM]

Network: N101 [2031_100HH_AM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	61	0.0	61	0.0	0.070	0.0	LOS A	0.0	0.0	0.00	0.33	0.00	56.7
6	R2	73	0.0	73	0.0	0.070	5.4	LOS A	0.0	0.0	0.00	0.33	0.00	52.5
Approach		134	0.0	134	0.0	0.070	3.0	NA	0.0	0.0	0.00	0.33	0.00	55.2
North: Princes Highway NB Ramp														
7	L2	96	0.0	96	0.0	0.084	5.8	LOS A	0.1	0.8	0.17	0.51	0.17	38.5
9	R2	52	0.0	52	0.0	0.084	5.9	LOS A	0.1	0.8	0.17	0.51	0.17	49.6
Approach		147	0.0	147	0.0	0.084	5.8	NA	0.1	0.8	0.17	0.51	0.17	45.3
West: Pestells Lane														
10	L2	12	0.0	12	0.0	0.065	5.8	LOS A	0.1	0.7	0.26	0.55	0.26	51.1
11	T1	61	0.0	61	0.0	0.065	5.2	LOS A	0.1	0.7	0.26	0.55	0.26	51.1
Approach		73	0.0	73	0.0	0.065	5.2	LOS A	0.1	0.7	0.26	0.55	0.26	51.1
All Vehicles		354	0.0	354	0.0	0.084	4.6	NA	0.1	0.8	0.12	0.45	0.12	50.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2031_100HH_AM]

Network: N101 [2031_100HH_AM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	1	0.0	1	0.0	0.000	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	567	0.0	567	0.0	0.121	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		568	0.0	568	0.0	0.121	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.9
West: Princes Highway NB Ramp														
10	L2	84	0.0	84	0.0	0.045	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		84	0.0	84	0.0	0.045	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		653	0.0	653	0.0	0.121	0.8	NA	0.0	0.0	0.00	0.07	0.00	92.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2031_100HH_AM]

Network: N101 [2031_100HH_AM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	94	0.0	94	0.0	0.095	7.6	LOS A	0.1	1.0	0.49	0.70	0.49	53.4
Approach		94	0.0	94	0.0	0.095	7.6	LOS A	0.1	1.0	0.49	0.70	0.49	53.4
North: Princes Highway SB														
7	L2	185	0.0	185	0.0	0.100	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1031	0.0	1031	0.0	0.264	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1216	0.0	1216	0.0	0.264	0.9	NA	0.0	0.0	0.00	0.09	0.00	94.6
All Vehicles		1309	0.0	1309	0.0	0.264	1.4	NA	0.1	1.0	0.04	0.13	0.04	89.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2031_100HH_AM]

Network: N101 [2031_100HH_AM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	99	0.0	99	0.0	0.054	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.054	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		100	0.0	100	0.0	0.054	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB Ramp														
28	T1	152	0.0	152	0.0	0.099	0.1	LOS A	0.1	0.6	0.08	0.11	0.08	56.6
29	R2	34	0.0	34	0.0	0.099	5.8	LOS A	0.1	0.6	0.08	0.11	0.08	53.1
Approach		185	0.0	185	0.0	0.099	1.1	NA	0.1	0.6	0.08	0.11	0.08	56.2
SouthWest: Pestells Lane														
30	L2	94	0.0	94	0.0	0.118	5.5	LOS A	0.2	1.3	0.00	0.58	0.00	46.8
32	R2	63	0.0	63	0.0	0.118	6.4	LOS A	0.2	1.3	0.00	0.58	0.00	48.0
Approach		157	0.0	157	0.0	0.118	5.9	LOS A	0.2	1.3	0.00	0.58	0.00	47.4
All Vehicles		442	0.0	442	0.0	0.118	3.8	NA	0.2	1.3	0.04	0.38	0.04	49.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2031_100HH_PM]

Network: N101 [2031_100HH_PM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	122	0.0	122	0.0	0.133	0.0	LOS A	0.0	0.0	0.00	0.32	0.00	56.8
6	R2	132	0.0	132	0.0	0.133	5.5	LOS A	0.0	0.0	0.00	0.32	0.00	52.8
Approach		254	0.0	254	0.0	0.133	2.8	NA	0.0	0.0	0.00	0.32	0.00	55.5
North: Princes Highway NB Ramp														
7	L2	56	0.0	56	0.0	0.080	6.2	LOS A	0.1	1.0	0.33	0.51	0.33	37.1
9	R2	72	0.0	72	0.0	0.080	6.3	LOS A	0.1	1.0	0.33	0.51	0.33	49.1
Approach		127	0.0	127	0.0	0.080	6.3	NA	0.1	1.0	0.33	0.51	0.33	46.5
West: Pestells Lane														
10	L2	18	0.0	18	0.0	0.079	5.9	LOS A	0.1	0.8	0.32	0.58	0.32	50.7
11	T1	65	0.0	65	0.0	0.079	5.5	LOS A	0.1	0.8	0.32	0.58	0.32	50.7
Approach		83	0.0	83	0.0	0.079	5.6	LOS A	0.1	0.8	0.32	0.58	0.32	50.7
All Vehicles		464	0.0	464	0.0	0.133	4.3	NA	0.1	1.0	0.15	0.42	0.15	52.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2031_100HH_PM]

Network: N101 [2031_100HH_PM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	1	0.0	1	0.0	0.000	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	1123	0.0	1123	0.0	0.240	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		1124	0.0	1124	0.0	0.240	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.8
West: Princes Highway NB Ramp														
10	L2	149	0.0	149	0.0	0.080	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		149	0.0	149	0.0	0.080	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		1274	0.0	1274	0.0	0.240	0.7	NA	0.0	0.0	0.00	0.06	0.00	93.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2031_100HH_PM]

Network: N101 [2031_100HH_PM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	51	0.0	51	0.0	0.056	8.0	LOS A	0.1	0.6	0.52	0.71	0.52	53.2
Approach		51	0.0	51	0.0	0.056	8.0	LOS A	0.1	0.6	0.52	0.71	0.52	53.2
North: Princes Highway SB														
7	L2	263	0.0	263	0.0	0.142	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1177	0.0	1177	0.0	0.302	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1440	0.0	1440	0.0	0.302	1.0	NA	0.0	0.0	0.00	0.11	0.00	93.4
All Vehicles		1491	0.0	1491	0.0	0.302	1.3	NA	0.1	0.6	0.02	0.13	0.02	91.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2031_100HH_PM]

Network: N101 [2031_100HH_PM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	164	0.0	164	0.0	0.089	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.089	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		165	0.0	165	0.0	0.089	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB Ramp														
28	T1	174	0.0	174	0.0	0.148	0.3	LOS A	0.2	1.6	0.20	0.20	0.20	53.6
29	R2	89	0.0	89	0.0	0.148	6.0	LOS A	0.2	1.6	0.20	0.20	0.20	47.8
Approach		263	0.0	263	0.0	0.148	2.2	NA	0.2	1.6	0.20	0.20	0.20	52.4
SouthWest: Pestells Lane														
30	L2	51	0.0	51	0.0	0.106	5.5	LOS A	0.2	1.1	0.00	0.59	0.00	46.0
32	R2	71	0.0	71	0.0	0.106	6.9	LOS A	0.2	1.1	0.00	0.59	0.00	47.4
Approach		121	0.0	121	0.0	0.106	6.3	LOS A	0.2	1.1	0.00	0.59	0.00	47.0
All Vehicles		549	0.0	549	0.0	0.148	4.1	NA	0.2	1.6	0.10	0.40	0.10	48.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2031_AAST_AM]

Network: N101 [2031_AAST_AM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	66	0.0	66	0.0	0.073	0.0	LOS A	0.0	0.0	0.00	0.32	0.00	56.8
6	R2	72	0.0	72	0.0	0.073	5.4	LOS A	0.0	0.0	0.00	0.32	0.00	52.8
Approach		138	0.0	138	0.0	0.073	2.8	NA	0.0	0.0	0.00	0.32	0.00	55.5
North: Princes Highway NB Ramp														
7	L2	104	0.0	104	0.0	0.091	5.8	LOS A	0.1	0.9	0.18	0.51	0.18	38.4
9	R2	56	0.0	56	0.0	0.091	5.9	LOS A	0.1	0.9	0.18	0.51	0.18	49.6
Approach		160	0.0	160	0.0	0.091	5.8	NA	0.1	0.9	0.18	0.51	0.18	45.2
West: Pestells Lane														
10	L2	13	0.0	13	0.0	0.072	5.7	LOS A	0.1	0.7	0.26	0.56	0.26	51.1
11	T1	66	0.0	66	0.0	0.072	5.2	LOS A	0.1	0.7	0.26	0.56	0.26	51.1
Approach		79	0.0	79	0.0	0.072	5.3	LOS A	0.1	0.7	0.26	0.56	0.26	51.1
All Vehicles		377	0.0	377	0.0	0.091	4.6	NA	0.1	0.9	0.13	0.45	0.13	50.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2031_AAST_AM]

Network: N101 [2031_AAST_AM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	1	0.0	1	0.0	0.000	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	553	0.0	553	0.0	0.118	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		554	0.0	554	0.0	0.118	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.9
West: Princes Highway NB Ramp														
10	L2	84	0.0	84	0.0	0.045	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		84	0.0	84	0.0	0.045	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		638	0.0	638	0.0	0.118	0.8	NA	0.0	0.0	0.00	0.07	0.00	92.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
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Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2031_AAST_AM]

Network: N101 [2031_AAST_AM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	102	0.0	102	0.0	0.108	7.9	LOS A	0.2	1.2	0.51	0.72	0.51	53.3
Approach		102	0.0	102	0.0	0.108	7.9	LOS A	0.2	1.2	0.51	0.72	0.51	53.3
North: Princes Highway SB														
7	L2	207	0.0	207	0.0	0.112	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1102	0.0	1102	0.0	0.283	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1309	0.0	1309	0.0	0.283	0.9	NA	0.0	0.0	0.00	0.09	0.00	94.3
All Vehicles		1412	0.0	1412	0.0	0.283	1.4	NA	0.2	1.2	0.04	0.14	0.04	89.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
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Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
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MOVEMENT SUMMARY

Site: 101 [4 - 2031_AAST_AM]

Network: N101 [2031_AAST_AM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	100	0.0	100	0.0	0.054	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.054	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		101	0.0	101	0.0	0.054	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB Ramp														
28	T1	169	0.0	169	0.0	0.111	0.1	LOS A	0.1	0.7	0.09	0.11	0.09	56.6
29	R2	38	0.0	38	0.0	0.111	5.8	LOS A	0.1	0.7	0.09	0.11	0.09	53.1
Approach		207	0.0	207	0.0	0.111	1.1	NA	0.1	0.7	0.09	0.11	0.09	56.2
SouthWest: Pestells Lane														
30	L2	102	0.0	102	0.0	0.129	5.5	LOS A	0.2	1.4	0.00	0.58	0.00	46.7
32	R2	68	0.0	68	0.0	0.129	6.5	LOS A	0.2	1.4	0.00	0.58	0.00	47.9
Approach		171	0.0	171	0.0	0.129	5.9	LOS A	0.2	1.4	0.00	0.58	0.00	47.3
All Vehicles		479	0.0	479	0.0	0.129	3.8	NA	0.2	1.4	0.04	0.38	0.04	49.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2031_AAST_PM]

Network: N101 [2031_AAST_PM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Aver. Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	102	0.0	102	0.0	0.112	0.0	LOS A	0.0	0.0	0.00	0.32	0.00	56.8
6	R2	112	0.0	112	0.0	0.112	5.5	LOS A	0.0	0.0	0.00	0.32	0.00	52.7
Approach		214	0.0	214	0.0	0.112	2.9	NA	0.0	0.0	0.00	0.32	0.00	55.5
North: Princes Highway NB Ramp														
7	L2	48	0.0	48	0.0	0.069	6.1	LOS A	0.1	0.9	0.30	0.51	0.30	37.4
9	R2	64	0.0	64	0.0	0.069	6.1	LOS A	0.1	0.9	0.30	0.51	0.30	49.2
Approach		113	0.0	113	0.0	0.069	6.1	NA	0.1	0.9	0.30	0.51	0.30	46.7
West: Pestells Lane														
10	L2	16	0.0	16	0.0	0.062	5.9	LOS A	0.1	0.6	0.28	0.56	0.28	50.9
11	T1	53	0.0	53	0.0	0.062	5.3	LOS A	0.1	0.6	0.28	0.56	0.28	50.9
Approach		68	0.0	68	0.0	0.062	5.4	LOS A	0.1	0.6	0.28	0.56	0.28	50.9
All Vehicles		395	0.0	395	0.0	0.112	4.2	NA	0.1	0.9	0.13	0.41	0.13	52.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2031_AAST_PM]

Network: N101 [2031_AAST_PM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	1	0.0	1	0.0	0.000	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	1066	0.0	1066	0.0	0.228	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		1067	0.0	1067	0.0	0.228	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
West: Princes Highway NB Ramp														
10	L2	127	0.0	127	0.0	0.069	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		127	0.0	127	0.0	0.069	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		1195	0.0	1195	0.0	0.228	0.6	NA	0.0	0.0	0.00	0.06	0.00	93.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2031_AAST_PM]

Network: N101 [2031_AAST_PM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	44	0.0	44	0.0	0.045	7.6	LOS A	0.1	0.5	0.48	0.67	0.48	53.5
Approach		44	0.0	44	0.0	0.045	7.6	LOS A	0.1	0.5	0.48	0.67	0.48	53.5
North: Princes Highway SB														
7	L2	217	0.0	217	0.0	0.117	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1047	0.0	1047	0.0	0.269	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1264	0.0	1264	0.0	0.269	1.0	NA	0.0	0.0	0.00	0.10	0.00	93.9
All Vehicles		1308	0.0	1308	0.0	0.269	1.2	NA	0.1	0.5	0.02	0.12	0.02	91.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2031_AAST_PM]

Network: N101 [2031_AAST_PM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	138	0.0	138	0.0	0.075	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.075	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		139	0.0	139	0.0	0.075	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB Ramp														
28	T1	140	0.0	140	0.0	0.121	0.2	LOS A	0.2	1.3	0.18	0.21	0.18	53.6
29	R2	77	0.0	77	0.0	0.121	5.9	LOS A	0.2	1.3	0.18	0.21	0.18	47.8
Approach		217	0.0	217	0.0	0.121	2.3	NA	0.2	1.3	0.18	0.21	0.18	52.3
SouthWest: Pestells Lane														
30	L2	44	0.0	44	0.0	0.084	5.5	LOS A	0.1	0.9	0.00	0.59	0.00	46.4
32	R2	57	0.0	57	0.0	0.084	6.6	LOS A	0.1	0.9	0.00	0.59	0.00	47.7
Approach		101	0.0	101	0.0	0.084	6.1	LOS A	0.1	0.9	0.00	0.59	0.00	47.2
All Vehicles		457	0.0	457	0.0	0.121	4.1	NA	0.2	1.3	0.09	0.40	0.09	48.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2036_100HH_AM]

Network: N101 [2036_100HH_AM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	77	0.0	77	0.0	0.078	0.0	LOS A	0.0	0.0	0.00	0.30	0.00	57.0
6	R2	72	0.0	72	0.0	0.078	5.4	LOS A	0.0	0.0	0.00	0.30	0.00	53.2
Approach		148	0.0	148	0.0	0.078	2.6	NA	0.0	0.0	0.00	0.30	0.00	55.9
North: Princes Highway NB Ramp														
7	L2	93	0.0	93	0.0	0.083	5.8	LOS A	0.1	0.8	0.19	0.51	0.19	38.3
9	R2	52	0.0	52	0.0	0.083	5.9	LOS A	0.1	0.8	0.19	0.51	0.19	49.6
Approach		144	0.0	144	0.0	0.083	5.8	NA	0.1	0.8	0.19	0.51	0.19	45.3
West: Pestells Lane														
10	L2	15	0.0	15	0.0	0.072	5.7	LOS A	0.1	0.7	0.25	0.55	0.25	51.1
11	T1	65	0.0	65	0.0	0.072	5.2	LOS A	0.1	0.7	0.25	0.55	0.25	51.1
Approach		80	0.0	80	0.0	0.072	5.3	LOS A	0.1	0.7	0.25	0.55	0.25	51.1
All Vehicles		373	0.0	373	0.0	0.083	4.4	NA	0.1	0.8	0.13	0.43	0.13	51.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2 - 2036_100HH_AM]

Network: N101 [2036_100HH_AM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	1	0.0	1	0.0	0.000	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	591	0.0	591	0.0	0.126	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		592	0.0	592	0.0	0.126	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.9
West: Princes Highway NB Ramp														
10	L2	86	0.0	86	0.0	0.046	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		86	0.0	86	0.0	0.046	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		678	0.0	678	0.0	0.126	0.7	NA	0.0	0.0	0.00	0.07	0.00	92.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2036_100HH_AM]

Network: N101 [2036_100HH_AM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	92	0.0	92	0.0	0.100	8.0	LOS A	0.2	1.1	0.52	0.73	0.52	53.2
Approach		92	0.0	92	0.0	0.100	8.0	LOS A	0.2	1.1	0.52	0.73	0.52	53.2
North: Princes Highway SB														
7	L2	222	0.0	222	0.0	0.120	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1152	0.0	1152	0.0	0.295	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1374	0.0	1374	0.0	0.295	0.9	NA	0.0	0.0	0.00	0.09	0.00	94.2
All Vehicles		1465	0.0	1465	0.0	0.295	1.4	NA	0.2	1.1	0.03	0.13	0.03	90.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2036_100HH_AM]

Network: N101 [2036_100HH_AM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	102	0.0	102	0.0	0.056	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.056	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		103	0.0	103	0.0	0.056	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB Ramp														
28	T1	176	0.0	176	0.0	0.119	0.1	LOS A	0.1	0.8	0.10	0.12	0.10	56.1
29	R2	46	0.0	46	0.0	0.119	5.8	LOS A	0.1	0.8	0.10	0.12	0.10	52.2
Approach		222	0.0	222	0.0	0.119	1.3	NA	0.1	0.8	0.10	0.12	0.10	55.7
SouthWest: Pestells Lane														
30	L2	92	0.0	92	0.0	0.122	5.5	LOS A	0.2	1.3	0.00	0.59	0.00	46.7
32	R2	66	0.0	66	0.0	0.122	6.6	LOS A	0.2	1.3	0.00	0.59	0.00	47.8
Approach		158	0.0	158	0.0	0.122	6.0	LOS A	0.2	1.3	0.00	0.59	0.00	47.3
All Vehicles		483	0.0	483	0.0	0.122	3.7	NA	0.2	1.3	0.05	0.37	0.05	49.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2036_100HH_PM]

Network: N101 [2036_100HH_PM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	153	0.0	153	0.0	0.154	0.0	LOS A	0.0	0.0	0.00	0.29	0.00	57.0
6	R2	140	0.0	140	0.0	0.154	5.5	LOS A	0.0	0.0	0.00	0.29	0.00	53.3
Approach		293	0.0	293	0.0	0.154	2.6	NA	0.0	0.0	0.00	0.29	0.00	56.0
North: Princes Highway NB Ramp														
7	L2	54	0.0	54	0.0	0.080	6.4	LOS A	0.1	1.0	0.36	0.51	0.36	36.9
9	R2	69	0.0	69	0.0	0.080	6.5	LOS A	0.1	1.0	0.36	0.51	0.36	49.0
Approach		123	0.0	123	0.0	0.080	6.4	NA	0.1	1.0	0.36	0.51	0.36	46.4
West: Pestells Lane														
10	L2	23	0.0	23	0.0	0.089	6.0	LOS A	0.1	0.9	0.33	0.59	0.33	50.5
11	T1	71	0.0	71	0.0	0.089	5.6	LOS A	0.1	0.9	0.33	0.59	0.33	50.5
Approach		94	0.0	94	0.0	0.089	5.7	LOS A	0.1	0.9	0.33	0.59	0.33	50.5
All Vehicles		509	0.0	509	0.0	0.154	4.1	NA	0.1	1.0	0.15	0.40	0.15	52.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2036_100HH_PM]

Network: N101 [2036_100HH_PM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	1	0.0	1	0.0	0.000	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	1224	0.0	1224	0.0	0.262	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		1225	0.0	1225	0.0	0.262	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.8
West: Princes Highway NB Ramp														
10	L2	163	0.0	163	0.0	0.088	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		163	0.0	163	0.0	0.088	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		1388	0.0	1388	0.0	0.262	0.7	NA	0.0	0.0	0.00	0.06	0.00	93.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2036_100HH_PM]

Network: N101 [2036_100HH_PM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	48	0.0	48	0.0	0.055	8.1	LOS A	0.1	0.6	0.52	0.72	0.52	53.1
Approach		48	0.0	48	0.0	0.055	8.1	LOS A	0.1	0.6	0.52	0.72	0.52	53.1
North: Princes Highway SB														
7	L2	286	0.0	286	0.0	0.154	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1221	0.0	1221	0.0	0.313	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1507	0.0	1507	0.0	0.313	1.1	NA	0.0	0.0	0.00	0.11	0.00	93.2
All Vehicles		1556	0.0	1556	0.0	0.313	1.3	NA	0.1	0.6	0.02	0.13	0.02	91.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2036_100HH_PM]

Network: N101 [2036_100HH_PM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	178	0.0	178	0.0	0.096	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.096	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		179	0.0	179	0.0	0.096	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB														
28	T1	174	0.0	174	0.0	0.166	0.4	LOS A	0.3	2.0	0.24	0.24	0.24	52.6
29	R2	115	0.0	115	0.0	0.166	6.1	LOS A	0.3	2.0	0.24	0.24	0.24	46.2
Approach		288	0.0	288	0.0	0.166	2.7	NA	0.3	2.0	0.24	0.24	0.24	51.0
SouthWest: Pestells Lane														
30	L2	48	0.0	48	0.0	0.112	5.5	LOS A	0.2	1.1	0.00	0.59	0.00	45.8
32	R2	75	0.0	75	0.0	0.112	7.1	LOS A	0.2	1.1	0.00	0.59	0.00	47.3
Approach		123	0.0	123	0.0	0.112	6.5	LOS A	0.2	1.1	0.00	0.59	0.00	46.8
All Vehicles		591	0.0	591	0.0	0.166	4.3	NA	0.3	2.0	0.12	0.41	0.12	47.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2036_AAST_AM]

Network: N101 [2036_AAST_AM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	71	0.0	71	0.0	0.083	0.0	LOS A	0.0	0.0	0.00	0.34	0.00	56.6
6	R2	86	0.0	86	0.0	0.083	5.5	LOS A	0.0	0.0	0.00	0.34	0.00	52.4
Approach		157	0.0	157	0.0	0.083	3.0	NA	0.0	0.0	0.00	0.34	0.00	55.2
North: Princes Highway NB Ramp														
7	L2	100	0.0	100	0.0	0.090	5.8	LOS A	0.1	0.9	0.19	0.51	0.19	38.3
9	R2	57	0.0	57	0.0	0.090	5.9	LOS A	0.1	0.9	0.19	0.51	0.19	49.6
Approach		157	0.0	157	0.0	0.090	5.9	NA	0.1	0.9	0.19	0.51	0.19	45.3
West: Pestells Lane														
10	L2	15	0.0	15	0.0	0.075	5.8	LOS A	0.1	0.8	0.28	0.56	0.28	51.0
11	T1	67	0.0	67	0.0	0.075	5.3	LOS A	0.1	0.8	0.28	0.56	0.28	51.0
Approach		82	0.0	82	0.0	0.075	5.4	LOS A	0.1	0.8	0.28	0.56	0.28	51.0
All Vehicles		396	0.0	396	0.0	0.090	4.6	NA	0.1	0.9	0.13	0.45	0.13	50.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2036_AAST_AM]

Network: N101 [2036_AAST_AM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	1	0.0	1	0.0	0.000	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	571	0.0	571	0.0	0.122	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		572	0.0	572	0.0	0.122	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.9
West: Princes Highway NB Ramp														
10	L2	85	0.0	85	0.0	0.046	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		85	0.0	85	0.0	0.046	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		657	0.0	657	0.0	0.122	0.8	NA	0.0	0.0	0.00	0.07	0.00	92.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2036_AAST_AM]

Network: N101 [2036_AAST_AM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	97	0.0	97	0.0	0.110	8.3	LOS A	0.2	1.2	0.54	0.75	0.54	53.0
Approach		97	0.0	97	0.0	0.110	8.3	LOS A	0.2	1.2	0.54	0.75	0.54	53.0
North: Princes Highway SB														
7	L2	246	0.0	246	0.0	0.133	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1214	0.0	1214	0.0	0.311	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1460	0.0	1460	0.0	0.311	1.0	NA	0.0	0.0	0.00	0.10	0.00	93.9
All Vehicles		1557	0.0	1557	0.0	0.311	1.4	NA	0.2	1.2	0.03	0.14	0.03	89.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2036_AAST_AM]

Network: N101 [2036_AAST_AM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	103	0.0	103	0.0	0.056	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.056	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		104	0.0	104	0.0	0.056	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB Ramp														
28	T1	193	0.0	193	0.0	0.133	0.1	LOS A	0.1	1.0	0.11	0.13	0.11	55.9
29	R2	54	0.0	54	0.0	0.133	5.8	LOS A	0.1	1.0	0.11	0.13	0.11	51.9
Approach		246	0.0	246	0.0	0.133	1.3	NA	0.1	1.0	0.11	0.13	0.11	55.4
SouthWest: Pestells Lane														
30	L2	97	0.0	97	0.0	0.131	5.5	LOS A	0.2	1.4	0.00	0.59	0.00	46.6
32	R2	71	0.0	71	0.0	0.131	6.7	LOS A	0.2	1.4	0.00	0.59	0.00	47.8
Approach		167	0.0	167	0.0	0.131	6.0	LOS A	0.2	1.4	0.00	0.59	0.00	47.2
All Vehicles		518	0.0	518	0.0	0.133	3.7	NA	0.2	1.4	0.05	0.37	0.05	49.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2036_AAST_PM]

Network: N101 [2036_AAST_PM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	128	0.0	128	0.0	0.129	0.0	LOS A	0.0	0.0	0.00	0.29	0.00	57.0
6	R2	118	0.0	118	0.0	0.129	5.5	LOS A	0.0	0.0	0.00	0.29	0.00	53.3
Approach		246	0.0	246	0.0	0.129	2.6	NA	0.0	0.0	0.00	0.29	0.00	56.0
North: Princes Highway NB Ramp														
7	L2	45	0.0	45	0.0	0.068	6.2	LOS A	0.1	0.9	0.32	0.51	0.32	37.2
9	R2	63	0.0	63	0.0	0.068	6.3	LOS A	0.1	0.9	0.32	0.51	0.32	49.1
Approach		108	0.0	108	0.0	0.068	6.2	NA	0.1	0.9	0.32	0.51	0.32	46.7
West: Pestells Lane														
10	L2	21	0.0	21	0.0	0.070	5.9	LOS A	0.1	0.7	0.29	0.56	0.29	50.8
11	T1	57	0.0	57	0.0	0.070	5.4	LOS A	0.1	0.7	0.29	0.56	0.29	50.8
Approach		78	0.0	78	0.0	0.070	5.5	LOS A	0.1	0.7	0.29	0.56	0.29	50.8
All Vehicles		433	0.0	433	0.0	0.129	4.0	NA	0.1	0.9	0.13	0.40	0.13	52.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2036_AAST_PM]

Network: N101 [2036_AAST_PM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	1	0.0	1	0.0	0.000	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	1168	0.0	1168	0.0	0.250	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		1169	0.0	1169	0.0	0.250	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.8
West: Princes Highway NB Ramp														
10	L2	139	0.0	139	0.0	0.075	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		139	0.0	139	0.0	0.075	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		1308	0.0	1308	0.0	0.250	0.6	NA	0.0	0.0	0.00	0.06	0.00	93.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2036_AAST_PM]

Network: N101 [2036_AAST_PM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	42	0.0	42	0.0	0.044	7.7	LOS A	0.1	0.5	0.49	0.68	0.49	53.4
Approach		42	0.0	42	0.0	0.044	7.7	LOS A	0.1	0.5	0.49	0.68	0.49	53.4
North: Princes Highway SB														
7	L2	240	0.0	240	0.0	0.129	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1093	0.0	1093	0.0	0.280	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1333	0.0	1333	0.0	0.280	1.0	NA	0.0	0.0	0.00	0.10	0.00	93.5
All Vehicles		1375	0.0	1375	0.0	0.280	1.2	NA	0.1	0.5	0.02	0.12	0.02	91.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2036_AAST_PM]

Network: N101 [2036_AAST_PM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	146	0.0	146	0.0	0.079	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.079	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		147	0.0	147	0.0	0.079	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB Ramp														
28	T1	141	0.0	141	0.0	0.137	0.3	LOS A	0.2	1.6	0.22	0.24	0.22	52.7
29	R2	100	0.0	100	0.0	0.137	5.9	LOS A	0.2	1.6	0.22	0.24	0.22	46.2
Approach		241	0.0	241	0.0	0.137	2.6	NA	0.2	1.6	0.22	0.24	0.22	50.9
SouthWest: Pestells Lane														
30	L2	42	0.0	42	0.0	0.089	5.5	LOS A	0.1	0.9	0.00	0.59	0.00	46.2
32	R2	61	0.0	61	0.0	0.089	6.7	LOS A	0.1	0.9	0.00	0.59	0.00	47.5
Approach		103	0.0	103	0.0	0.089	6.2	LOS A	0.1	0.9	0.00	0.59	0.00	47.1
All Vehicles		492	0.0	492	0.0	0.137	4.3	NA	0.2	1.6	0.11	0.42	0.11	47.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2041_100HH_AM]

Network: N101 [2041_100HH_AM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	188	0.0	188	0.0	0.137	0.0	LOS A	0.0	0.0	0.00	0.17	0.00	58.2
6	R2	75	0.0	75	0.0	0.137	5.5	LOS A	0.0	0.0	0.00	0.17	0.00	55.8
Approach		263	0.0	263	0.0	0.137	1.6	NA	0.0	0.0	0.00	0.17	0.00	57.9
North: Princes Highway NB Ramp														
7	L2	83	0.0	83	0.0	0.178	6.5	LOS A	0.4	2.6	0.38	0.54	0.38	36.7
9	R2	188	0.0	188	0.0	0.178	6.4	LOS A	0.4	2.6	0.38	0.54	0.38	48.9
Approach		272	0.0	272	0.0	0.178	6.4	NA	0.4	2.6	0.38	0.54	0.38	47.2
West: Pestells Lane														
10	L2	34	0.0	34	0.0	0.567	7.3	LOS A	1.8	12.4	0.53	0.86	0.82	46.7
11	T1	468	0.0	468	0.0	0.567	8.9	LOS A	1.8	12.4	0.53	0.86	0.82	46.7
Approach		502	0.0	502	0.0	0.567	8.8	LOS A	1.8	12.4	0.53	0.86	0.82	46.7
All Vehicles		1037	0.0	1037	0.0	0.567	6.3	NA	1.8	12.4	0.36	0.60	0.50	49.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2041_100HH_AM]

Network: N101 [2041_100HH_AM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	1	0.0	1	0.0	0.000	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	605	0.0	605	0.0	0.130	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		606	0.0	606	0.0	0.130	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.9
West: Princes Highway NB Ramp														
10	L2	108	0.0	108	0.0	0.058	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		108	0.0	108	0.0	0.058	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		715	0.0	715	0.0	0.130	0.9	NA	0.0	0.0	0.00	0.08	0.00	91.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2041_100HH_AM]

Network: N101 [2041_100HH_AM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	309	0.0	309	0.0	0.324	8.6	LOS A	0.6	4.5	0.57	0.82	0.65	52.9
Approach		309	0.0	309	0.0	0.324	8.6	LOS A	0.6	4.5	0.57	0.82	0.65	52.9
North: Princes Highway SB														
7	L2	277	0.0	277	0.0	0.149	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1083	0.0	1083	0.0	0.278	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1360	0.0	1360	0.0	0.278	1.2	NA	0.0	0.0	0.00	0.12	0.00	92.7
All Vehicles		1669	0.0	1669	0.0	0.324	2.5	NA	0.6	4.5	0.11	0.25	0.12	81.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2041_100HH_AM]

Network: N101 [2041_100HH_AM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	164	0.0	164	0.0	0.089	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.089	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		165	0.0	165	0.0	0.089	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB Ramp														
28	T1	177	0.0	177	0.0	0.157	0.3	LOS A	0.3	1.8	0.21	0.22	0.21	53.3
29	R2	100	0.0	100	0.0	0.157	6.0	LOS A	0.3	1.8	0.21	0.22	0.21	47.2
Approach		277	0.0	277	0.0	0.157	2.4	NA	0.3	1.8	0.21	0.22	0.21	51.9
SouthWest: Pestells Lane														
30	L2	309	0.0	309	0.0	0.451	5.5	LOS A	0.9	6.6	0.00	0.59	0.00	45.7
32	R2	242	0.0	242	0.0	0.451	7.8	LOS A	0.9	6.6	0.00	0.59	0.00	47.2
Approach		552	0.0	552	0.0	0.451	6.5	LOS A	0.9	6.6	0.00	0.59	0.00	46.5
All Vehicles		994	0.0	994	0.0	0.451	5.2	NA	0.9	6.6	0.06	0.48	0.06	47.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [1 - 2041_100HH_PM]

Network: N101 [2041_100HH_PM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Aver. Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	440	0.0	440	0.0	0.308	0.0	LOS A	0.0	0.0	0.00	0.16	0.00	58.3
6	R2	154	0.0	154	0.0	0.308	5.5	LOS A	0.0	0.0	0.00	0.16	0.00	56.1
Approach		594	0.0	594	0.0	0.308	1.4	NA	0.0	0.0	0.00	0.16	0.00	58.0
North: Princes Highway NB Ramp														
7	L2	47	0.0	47	0.0	0.443	9.9	LOS A	1.2	8.6	0.67	0.88	0.92	31.5
9	R2	399	0.0	399	0.0	0.443	9.8	LOS A	1.2	8.6	0.67	0.88	0.92	46.2
Approach		446	0.0	446	0.0	0.443	9.8	NA	1.2	8.6	0.67	0.88	0.92	45.6
West: Pestells Lane														
10	L2	49	0.0	49	0.0	0.651	9.7	LOS A	1.8	12.8	0.67	1.01	1.29	41.0
11	T1	332	0.0	332	0.0	0.651	14.9	LOS B	1.8	12.8	0.67	1.01	1.29	41.0
Approach		381	0.0	381	0.0	0.651	14.2	LOS A	1.8	12.8	0.67	1.01	1.29	41.0
All Vehicles		1421	0.0	1421	0.0	0.651	7.5	NA	1.8	12.8	0.39	0.61	0.64	49.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2041_100HH_PM]

Network: N101 [2041_100HH_PM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	1	0.0	1	0.0	0.000	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	1174	0.0	1174	0.0	0.251	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		1175	0.0	1175	0.0	0.251	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.8
West: Princes Highway NB Ramp														
10	L2	203	0.0	203	0.0	0.109	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		203	0.0	203	0.0	0.109	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		1378	0.0	1378	0.0	0.251	0.9	NA	0.0	0.0	0.00	0.08	0.00	91.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2041_100HH_PM]

Network: N101 [2041_100HH_PM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	309	0.0	309	0.0	0.372	9.8	LOS A	0.8	5.4	0.63	0.90	0.80	52.1
Approach		309	0.0	309	0.0	0.372	9.8	LOS A	0.8	5.4	0.63	0.90	0.80	52.1
North: Princes Highway SB														
7	L2	454	0.0	454	0.0	0.244	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1296	0.0	1296	0.0	0.332	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1749	0.0	1749	0.0	0.332	1.5	NA	0.0	0.0	0.00	0.15	0.00	90.5
All Vehicles		2059	0.0	2059	0.0	0.372	2.7	NA	0.8	5.4	0.09	0.26	0.12	81.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2041_100HH_PM]

Network: N101 [2041_100HH_PM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	325	0.0	325	0.0	0.176	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.0
22	T1	1	0.0	1	0.0	0.176	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.0
Approach		326	0.0	326	0.0	0.176	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.0
NorthWest: Princes Highway SB Ramp														
28	T1	185	0.0	185	0.0	0.302	1.3	LOS A	0.7	4.9	0.46	0.40	0.46	49.1
29	R2	269	0.0	269	0.0	0.302	6.9	LOS A	0.7	4.9	0.46	0.40	0.46	40.6
Approach		455	0.0	455	0.0	0.302	4.6	NA	0.7	4.9	0.46	0.40	0.46	45.3
SouthWest: Pestells Lane														
30	L2	172	0.0	172	0.0	0.403	6.0	LOS A	0.9	6.1	0.00	0.59	0.01	43.0
32	R2	207	0.0	207	0.0	0.403	10.1	LOS A	0.9	6.1	0.00	0.59	0.01	45.4
Approach		379	0.0	379	0.0	0.403	8.2	LOS A	0.9	6.1	0.00	0.59	0.01	44.5
All Vehicles		1160	0.0	1160	0.0	0.403	6.1	NA	0.9	6.1	0.18	0.51	0.18	44.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2041_AAST_AM]

Network: N101 [2041_AAST_AM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	208	0.0	208	0.0	0.146	0.0	LOS A	0.0	0.0	0.00	0.16	0.00	58.4
6	R2	73	0.0	73	0.0	0.146	5.5	LOS A	0.0	0.0	0.00	0.16	0.00	56.2
Approach		281	0.0	281	0.0	0.146	1.4	NA	0.0	0.0	0.00	0.16	0.00	58.1
North: Princes Highway NB Ramp														
7	L2	91	0.0	91	0.0	0.191	6.5	LOS A	0.4	2.8	0.40	0.54	0.40	36.6
9	R2	197	0.0	197	0.0	0.191	6.5	LOS A	0.4	2.8	0.40	0.54	0.40	48.8
Approach		287	0.0	287	0.0	0.191	6.5	NA	0.4	2.8	0.40	0.54	0.40	47.1
West: Pestells Lane														
10	L2	36	0.0	36	0.0	0.466	6.7	LOS A	1.2	8.2	0.47	0.78	0.64	47.5
11	T1	371	0.0	371	0.0	0.466	8.2	LOS A	1.2	8.2	0.47	0.78	0.64	47.5
Approach		406	0.0	406	0.0	0.466	8.0	LOS A	1.2	8.2	0.47	0.78	0.64	47.5
All Vehicles		975	0.0	975	0.0	0.466	5.7	NA	1.2	8.2	0.31	0.53	0.38	50.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2041_AAST_AM]

Network: N101 [2041_AAST_AM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	1	0.0	1	0.0	0.000	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	566	0.0	566	0.0	0.121	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		567	0.0	567	0.0	0.121	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.9
West: Princes Highway NB Ramp														
10	L2	108	0.0	108	0.0	0.058	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		108	0.0	108	0.0	0.058	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		676	0.0	676	0.0	0.121	0.9	NA	0.0	0.0	0.00	0.09	0.00	91.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2041_AAST_AM]

Network: N101 [2041_AAST_AM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	193	0.0	193	0.0	0.206	8.1	LOS A	0.3	2.4	0.54	0.77	0.54	53.1
Approach		193	0.0	193	0.0	0.206	8.1	LOS A	0.3	2.4	0.54	0.77	0.54	53.1
North: Princes Highway SB														
7	L2	308	0.0	308	0.0	0.166	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1118	0.0	1118	0.0	0.287	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1426	0.0	1426	0.0	0.287	1.2	NA	0.0	0.0	0.00	0.12	0.00	92.2
All Vehicles		1619	0.0	1619	0.0	0.287	2.0	NA	0.3	2.4	0.06	0.20	0.06	84.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2041_AAST_AM]

Network: N101 [2041_AAST_AM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	168	0.0	168	0.0	0.091	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.091	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		169	0.0	169	0.0	0.091	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB Ramp														
28	T1	195	0.0	195	0.0	0.175	0.3	LOS A	0.3	2.0	0.22	0.22	0.22	53.1
29	R2	114	0.0	114	0.0	0.175	6.1	LOS A	0.3	2.0	0.22	0.22	0.22	46.9
Approach		308	0.0	308	0.0	0.175	2.4	NA	0.3	2.0	0.22	0.22	0.22	51.6
SouthWest: Pestells Lane														
30	L2	193	0.0	193	0.0	0.418	5.7	LOS A	0.9	6.3	0.01	0.59	0.01	44.8
32	R2	268	0.0	268	0.0	0.418	8.1	LOS A	0.9	6.3	0.01	0.59	0.01	46.6
Approach		461	0.0	461	0.0	0.418	7.1	LOS A	0.9	6.3	0.01	0.59	0.01	46.0
All Vehicles		939	0.0	939	0.0	0.418	5.3	NA	0.9	6.3	0.08	0.47	0.08	46.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2041_AAST_PM]

Network: N101 [2041_AAST_PM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	304	0.0	304	0.0	0.221	0.0	LOS A	0.0	0.0	0.00	0.17	0.00	58.2
6	R2	120	0.0	120	0.0	0.221	5.5	LOS A	0.0	0.0	0.00	0.17	0.00	55.8
Approach		424	0.0	424	0.0	0.221	1.6	NA	0.0	0.0	0.00	0.17	0.00	57.8
North: Princes Highway NB Ramp														
7	L2	41	0.0	41	0.0	0.353	7.8	LOS A	0.9	6.0	0.56	0.71	0.61	35.0
9	R2	393	0.0	393	0.0	0.353	7.7	LOS A	0.9	6.0	0.56	0.71	0.61	48.1
Approach		434	0.0	434	0.0	0.353	7.7	NA	0.9	6.0	0.56	0.71	0.61	47.6
West: Pestells Lane														
10	L2	44	0.0	44	0.0	0.485	7.4	LOS A	1.1	7.8	0.54	0.84	0.81	44.7
11	T1	282	0.0	282	0.0	0.485	11.0	LOS A	1.1	7.8	0.54	0.84	0.81	44.7
Approach		326	0.0	326	0.0	0.485	10.5	LOS A	1.1	7.8	0.54	0.84	0.81	44.7
All Vehicles		1184	0.0	1184	0.0	0.485	6.3	NA	1.1	7.8	0.35	0.56	0.45	50.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2041_AAST_PM]

Network: N101 [2041_AAST_PM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	1	0.0	1	0.0	0.000	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	1128	0.0	1128	0.0	0.242	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		1129	0.0	1129	0.0	0.242	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.8
West: Princes Highway NB Ramp														
10	L2	164	0.0	164	0.0	0.088	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		164	0.0	164	0.0	0.088	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		1294	0.0	1294	0.0	0.242	0.8	NA	0.0	0.0	0.00	0.07	0.00	92.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2041_AAST_PM]

Network: N101 [2041_AAST_PM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	153	0.0	153	0.0	0.173	8.4	LOS A	0.3	1.9	0.55	0.78	0.55	53.0
Approach		153	0.0	153	0.0	0.173	8.4	LOS A	0.3	1.9	0.55	0.78	0.55	53.0
North: Princes Highway SB														
7	L2	341	0.0	341	0.0	0.184	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1204	0.0	1204	0.0	0.309	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1545	0.0	1545	0.0	0.309	1.3	NA	0.0	0.0	0.00	0.13	0.00	92.0
All Vehicles		1698	0.0	1698	0.0	0.309	1.9	NA	0.3	1.9	0.05	0.19	0.05	86.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2041_AAST_PM]

Network: N101 [2041_AAST_PM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	233	0.0	233	0.0	0.126	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.126	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		234	0.0	234	0.0	0.126	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB Ramp														
28	T1	148	0.0	148	0.0	0.210	0.8	LOS A	0.4	3.1	0.35	0.35	0.35	50.1
29	R2	192	0.0	192	0.0	0.210	6.4	LOS A	0.4	3.1	0.35	0.35	0.35	42.2
Approach		340	0.0	340	0.0	0.210	3.9	NA	0.4	3.1	0.35	0.35	0.35	46.8
SouthWest: Pestells Lane														
30	L2	153	0.0	153	0.0	0.297	5.5	LOS A	0.5	3.5	0.00	0.59	0.00	45.2
32	R2	171	0.0	171	0.0	0.297	8.0	LOS A	0.5	3.5	0.00	0.59	0.00	46.9
Approach		323	0.0	323	0.0	0.297	6.8	LOS A	0.5	3.5	0.00	0.59	0.00	46.2
All Vehicles		897	0.0	897	0.0	0.297	5.4	NA	0.5	3.5	0.13	0.49	0.13	45.6

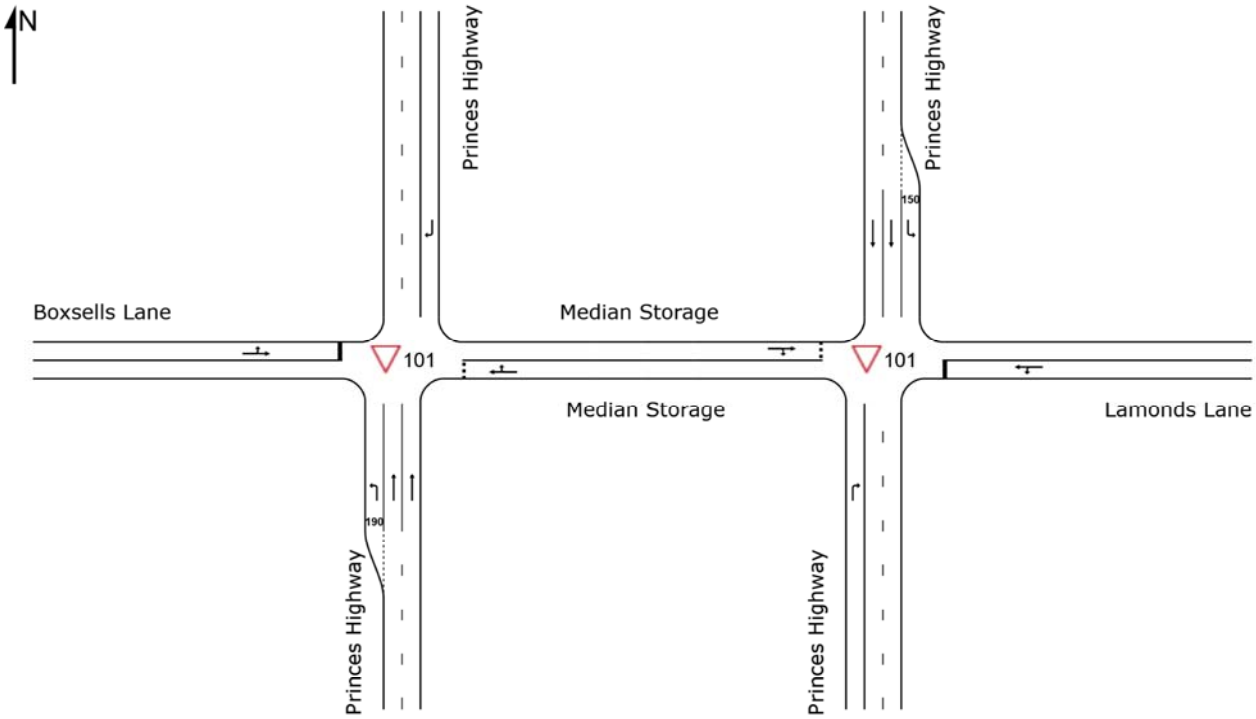
Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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NETWORK LAYOUT

Network: N101 [2021 AAST AM]

New Network
Network Category: (None)



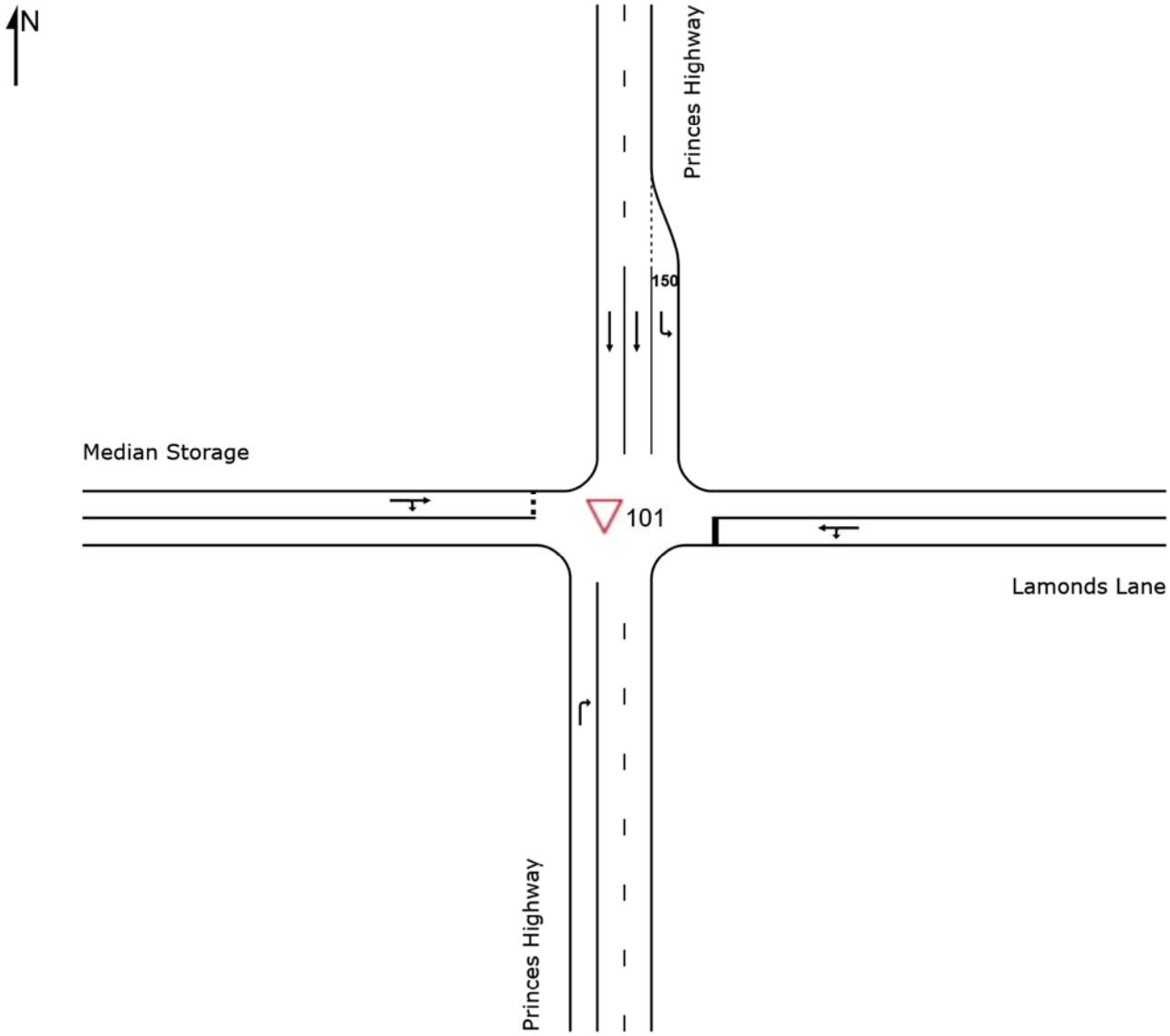
SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
▽101	NA	W - 2021 AAST AM
▽101	NA	E - 2021 AAST AM

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Organisation: BITZIOS CONSULTING | Created: Friday, 20 March 2020 4:59:43 PM
Project: Not Saved

SITE LAYOUT

Site: 101 [E - 2021 AAST AM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

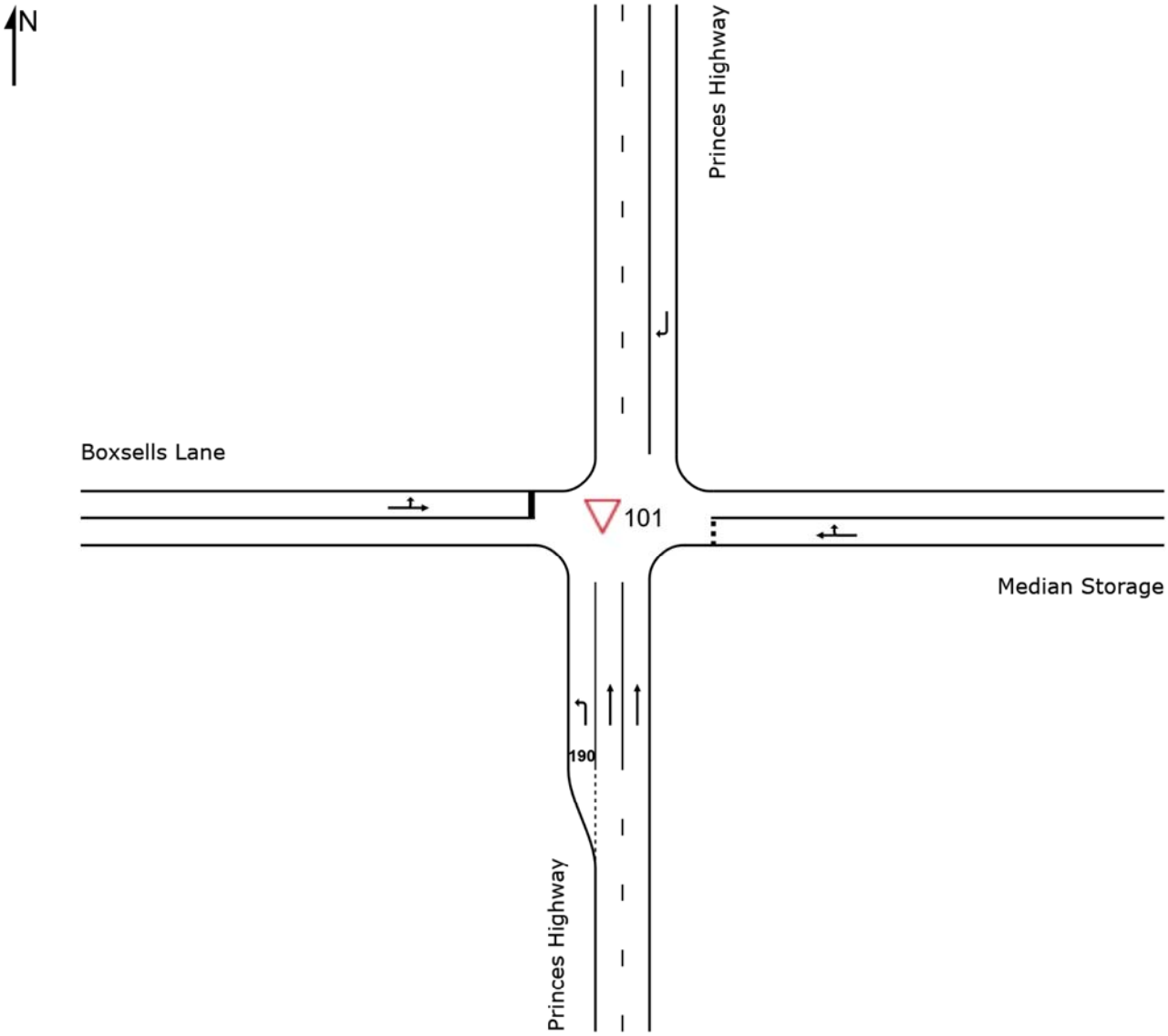


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SITE LAYOUT

Site: 101 [W - 2021 AAST AM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)



MOVEMENT SUMMARY

Site: 101 [E - 2021 AAST AM]

Network: N101 [Network1]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.004	19.7	LOS B	0.0	0.0	0.77	0.82	0.77	44.2
Approach		1	0.0	1	0.0	0.004	19.7	NA	0.0	0.0	0.77	0.82	0.77	44.2
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.008	11.2	LOS A	0.0	0.1	0.72	0.87	0.72	42.6
11	T1	1	0.0	1	0.0	0.008	27.9	LOS B	0.0	0.1	0.72	0.87	0.72	37.9
Approach		2	0.0	2	0.0	0.008	19.5	LOS B	0.0	0.1	0.72	0.87	0.72	40.5
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1043	0.0	1043	0.0	0.267	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1044	0.0	1044	0.0	0.267	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
West:														
5	T1	1	0.0	1	0.0	0.011	17.2	LOS B	0.0	0.1	0.82	0.86	0.82	35.9
6	R2	1	0.0	1	0.0	0.011	22.1	LOS B	0.0	0.1	0.82	0.86	0.82	25.5
Approach		2	0.0	2	0.0	0.011	19.6	LOS B	0.0	0.1	0.82	0.86	0.82	31.7
All Vehicles		1049	0.0	1049	0.0	0.267	0.1	NA	0.0	0.1	0.00	0.00	0.00	99.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [W - 2021 AAST AM]

Network: N101 [Network1]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	603	0.0	603	0.0	0.155	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		604	0.0	604	0.0	0.155	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
East:														
5	T1	1	0.0	1	0.0	0.005	6.8	LOS A	0.0	0.1	0.60	0.62	0.60	46.4
6	R2	1	0.0	1	0.0	0.005	8.8	LOS A	0.0	0.1	0.60	0.62	0.60	41.2
Approach		2	0.0	2	0.0	0.005	7.8	LOS A	0.0	0.1	0.60	0.62	0.60	44.4
North: Princes Highway														
9	R2	1	0.0	1	0.0	0.002	12.0	LOS A	0.0	0.0	0.52	0.67	0.52	51.7
Approach		1	0.0	1	0.0	0.002	12.0	NA	0.0	0.0	0.52	0.67	0.52	51.7
West: Boxsells Lane														
10	L2	18	0.0	18	0.0	0.023	9.6	LOS A	0.0	0.2	0.39	0.87	0.39	50.8
11	T1	1	0.0	1	0.0	0.023	14.8	LOS B	0.0	0.2	0.39	0.87	0.39	46.4
Approach		19	0.0	19	0.0	0.023	9.9	LOS A	0.0	0.2	0.39	0.87	0.39	50.6
All Vehicles		626	0.0	626	0.0	0.155	0.4	NA	0.0	0.2	0.01	0.03	0.01	96.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [E - 2021 AAST PM]

Network: N101 [2021 AAST PM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.005	21.8	LOS B	0.0	0.0	0.80	0.84	0.80	42.8
Approach		1	0.0	1	0.0	0.005	21.8	NA	0.0	0.0	0.80	0.84	0.80	42.8
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.009	11.5	LOS A	0.0	0.1	0.75	0.88	0.75	41.3
11	T1	1	0.0	1	0.0	0.009	31.8	LOS C	0.0	0.1	0.75	0.88	0.75	36.3
Approach		2	0.0	2	0.0	0.009	21.7	LOS B	0.0	0.1	0.75	0.88	0.75	39.1
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1116	0.0	1116	0.0	0.286	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1117	0.0	1117	0.0	0.286	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
West: Median Storage														
5	T1	1	0.0	1	0.0	0.013	20.0	LOS B	0.0	0.1	0.85	0.90	0.85	33.7
6	R2	1	0.0	1	0.0	0.013	26.0	LOS B	0.0	0.1	0.85	0.90	0.85	23.2
Approach		2	0.0	2	0.0	0.013	23.0	LOS B	0.0	0.1	0.85	0.90	0.85	29.4
All Vehicles		1122	0.0	1122	0.0	0.286	0.1	NA	0.0	0.1	0.00	0.00	0.00	99.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [W - 2021 AAST PM]

Network: N101 [2021 AAST PM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1037	0.0	1037	0.0	0.266	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1038	0.0	1038	0.0	0.266	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
East: Median Storage														
5	T1	1	0.0	1	0.0	0.011	16.9	LOS B	0.0	0.1	0.83	0.86	0.83	35.8
6	R2	1	0.0	1	0.0	0.011	22.6	LOS B	0.0	0.1	0.83	0.86	0.83	27.6
Approach		2	0.0	2	0.0	0.011	19.7	LOS B	0.0	0.1	0.83	0.86	0.83	32.4
North: Princes Highway														
9	R2	1	0.0	1	0.0	0.004	19.6	LOS B	0.0	0.0	0.76	0.81	0.76	45.3
Approach		1	0.0	1	0.0	0.004	19.6	NA	0.0	0.0	0.76	0.81	0.76	45.3
West: Boxsells Lane														
10	L2	23	0.0	23	0.0	0.042	11.4	LOS A	0.1	0.4	0.53	0.92	0.53	49.0
11	T1	1	0.0	1	0.0	0.042	28.9	LOS C	0.1	0.4	0.53	0.92	0.53	44.2
Approach		24	0.0	24	0.0	0.042	12.1	LOS A	0.1	0.4	0.53	0.92	0.53	48.8
All Vehicles		1065	0.0	1065	0.0	0.266	0.4	NA	0.1	0.4	0.01	0.02	0.01	97.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [E - 2021 100HH AM]

Network: N101 [2021 100HH AM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.004	17.5	LOS B	0.0	0.0	0.72	0.78	0.72	46.0
Approach		1	0.0	1	0.0	0.004	17.5	NA	0.0	0.0	0.72	0.78	0.72	46.0
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.007	10.7	LOS A	0.0	0.1	0.67	0.85	0.67	44.2
11	T1	1	0.0	1	0.0	0.007	23.7	LOS B	0.0	0.1	0.67	0.85	0.67	39.6
Approach		2	0.0	2	0.0	0.007	17.2	LOS B	0.0	0.1	0.67	0.85	0.67	42.2
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	947	0.0	947	0.0	0.243	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		948	0.0	948	0.0	0.243	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
West: Median Storage														
5	T1	1	0.0	1	0.0	0.009	14.0	LOS A	0.0	0.1	0.79	0.80	0.79	38.6
6	R2	1	0.0	1	0.0	0.009	17.9	LOS B	0.0	0.1	0.79	0.80	0.79	28.5
Approach		2	0.0	2	0.0	0.009	16.0	LOS B	0.0	0.1	0.79	0.80	0.79	34.6
All Vehicles		954	0.0	954	0.0	0.243	0.1	NA	0.0	0.1	0.00	0.01	0.00	99.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [W - 2021 100HH AM]

Network: N101 [2021 100HH AM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	584	0.0	584	0.0	0.150	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		585	0.0	585	0.0	0.150	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
East: Median Storage														
5	T1	1	0.0	1	0.0	0.005	6.6	LOS A	0.0	0.0	0.58	0.61	0.58	46.8
6	R2	1	0.0	1	0.0	0.005	8.4	LOS A	0.0	0.0	0.58	0.61	0.58	41.8
Approach		2	0.0	2	0.0	0.005	7.5	LOS A	0.0	0.0	0.58	0.61	0.58	44.9
North: Princes Highway														
9	R2	1	0.0	1	0.0	0.002	11.8	LOS A	0.0	0.0	0.51	0.66	0.51	51.9
Approach		1	0.0	1	0.0	0.002	11.8	NA	0.0	0.0	0.51	0.66	0.51	51.9
West: Boxsells Lane														
10	L2	13	0.0	13	0.0	0.017	9.5	LOS A	0.0	0.2	0.39	0.86	0.39	50.8
11	T1	1	0.0	1	0.0	0.017	14.4	LOS A	0.0	0.2	0.39	0.86	0.39	46.4
Approach		14	0.0	14	0.0	0.017	9.9	LOS A	0.0	0.2	0.39	0.86	0.39	50.5
All Vehicles		602	0.0	602	0.0	0.150	0.3	NA	0.0	0.2	0.01	0.02	0.01	97.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [E - 2021 100HH PM]

Network: N101 [2021 100HH PM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.007	27.3	LOS B	0.0	0.1	0.85	0.91	0.85	39.3
Approach		1	0.0	1	0.0	0.007	27.3	NA	0.0	0.1	0.85	0.91	0.85	39.3
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.013	12.4	LOS A	0.0	0.1	0.82	0.92	0.82	37.9
11	T1	1	0.0	1	0.0	0.013	42.7	LOS D	0.0	0.1	0.82	0.92	0.82	32.7
Approach		2	0.0	2	0.0	0.013	27.6	LOS B	0.0	0.1	0.82	0.92	0.82	35.6
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1267	0.0	1267	0.0	0.325	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1268	0.0	1268	0.0	0.325	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.7
West: Median Storage														
5	T1	1	0.0	1	0.0	0.019	27.9	LOS B	0.0	0.2	0.89	0.94	0.89	28.8
6	R2	1	0.0	1	0.0	0.019	36.9	LOS C	0.0	0.2	0.89	0.94	0.89	18.7
Approach		2	0.0	2	0.0	0.019	32.4	LOS C	0.0	0.2	0.89	0.94	0.89	24.5
All Vehicles		1274	0.0	1274	0.0	0.325	0.2	NA	0.0	0.2	0.00	0.00	0.00	99.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [W - 2021 100HH PM]

Network: N101 [2021 100HH PM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1119	0.0	1119	0.0	0.287	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1120	0.0	1120	0.0	0.287	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
East: Median Storage														
5	T1	1	0.0	1	0.0	0.014	20.2	LOS B	0.0	0.1	0.85	0.90	0.85	33.3
6	R2	1	0.0	1	0.0	0.014	27.0	LOS B	0.0	0.1	0.85	0.90	0.85	25.0
Approach		2	0.0	2	0.0	0.014	23.6	LOS B	0.0	0.1	0.85	0.90	0.85	29.8
North: Princes Highway														
9	R2	1	0.0	1	0.0	0.005	21.9	LOS B	0.0	0.0	0.80	0.85	0.80	43.7
Approach		1	0.0	1	0.0	0.005	21.9	NA	0.0	0.0	0.80	0.85	0.80	43.7
West: Boxsells Lane														
10	L2	21	0.0	21	0.0	0.042	11.8	LOS A	0.1	0.4	0.56	0.93	0.56	48.5
11	T1	1	0.0	1	0.0	0.042	33.5	LOS C	0.1	0.4	0.56	0.93	0.56	43.6
Approach		22	0.0	22	0.0	0.042	12.8	LOS A	0.1	0.4	0.56	0.93	0.56	48.3
All Vehicles		1145	0.0	1145	0.0	0.287	0.4	NA	0.1	0.4	0.01	0.02	0.01	97.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [E - 2026 AAST AM]

Network: N101 [2026 AAST AM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.005	22.9	LOS B	0.0	0.0	0.81	0.86	0.81	42.0
Approach		1	0.0	1	0.0	0.005	22.9	NA	0.0	0.0	0.81	0.86	0.81	42.0
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.010	11.7	LOS A	0.0	0.1	0.77	0.89	0.77	40.6
11	T1	1	0.0	1	0.0	0.010	33.9	LOS C	0.0	0.1	0.77	0.89	0.77	35.6
Approach		2	0.0	2	0.0	0.010	22.8	LOS B	0.0	0.1	0.77	0.89	0.77	38.4
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1151	0.0	1151	0.0	0.295	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1152	0.0	1152	0.0	0.295	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
West: Median Storage														
5	T1	1	0.0	1	0.0	0.014	21.6	LOS B	0.0	0.1	0.86	0.91	0.86	32.6
6	R2	1	0.0	1	0.0	0.014	28.1	LOS B	0.0	0.1	0.86	0.91	0.86	22.2
Approach		2	0.0	2	0.0	0.014	24.8	LOS B	0.0	0.1	0.86	0.91	0.86	28.3
All Vehicles		1157	0.0	1157	0.0	0.295	0.1	NA	0.0	0.1	0.00	0.00	0.00	99.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
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Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [W - 2026 AAST AM]

Network: N101 [2026 AAST AM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	609	0.0	609	0.0	0.156	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		611	0.0	611	0.0	0.156	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
East: Median Storage														
5	T1	1	0.0	1	0.0	0.005	6.9	LOS A	0.0	0.1	0.60	0.62	0.60	46.2
6	R2	1	0.0	1	0.0	0.005	9.1	LOS A	0.0	0.1	0.60	0.62	0.60	40.9
Approach		2	0.0	2	0.0	0.005	8.0	LOS A	0.0	0.1	0.60	0.62	0.60	44.2
North: Princes Highway														
9	R2	1	0.0	1	0.0	0.002	12.1	LOS A	0.0	0.0	0.53	0.67	0.53	51.6
Approach		1	0.0	1	0.0	0.002	12.1	NA	0.0	0.0	0.53	0.67	0.53	51.6
West: Boxsells Lane														
10	L2	27	0.0	27	0.0	0.035	9.6	LOS A	0.0	0.3	0.39	0.88	0.39	50.8
11	T1	1	0.0	1	0.0	0.035	15.1	LOS B	0.0	0.3	0.39	0.88	0.39	46.5
Approach		28	0.0	28	0.0	0.035	9.8	LOS A	0.0	0.3	0.39	0.88	0.39	50.7
All Vehicles		642	0.0	642	0.0	0.156	0.5	NA	0.0	0.3	0.02	0.04	0.02	95.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
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Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [E - 2026 AAST PM]

Network: N101 [2026 AAST PM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.006	23.8	LOS B	0.0	0.0	0.82	0.87	0.82	41.4
Approach		1	0.0	1	0.0	0.006	23.8	NA	0.0	0.0	0.82	0.87	0.82	41.4
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.010	11.9	LOS A	0.0	0.1	0.78	0.90	0.78	40.0
11	T1	1	0.0	1	0.0	0.010	35.7	LOS C	0.0	0.1	0.78	0.90	0.78	34.9
Approach		2	0.0	2	0.0	0.010	23.8	LOS B	0.0	0.1	0.78	0.90	0.78	37.8
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1177	0.0	1177	0.0	0.302	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1178	0.0	1178	0.0	0.302	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
West: Median Storage														
5	T1	1	0.0	1	0.0	0.015	22.9	LOS B	0.0	0.1	0.87	0.92	0.87	31.7
6	R2	1	0.0	1	0.0	0.015	29.8	LOS C	0.0	0.1	0.87	0.92	0.87	21.4
Approach		2	0.0	2	0.0	0.015	26.4	LOS B	0.0	0.1	0.87	0.92	0.87	27.4
All Vehicles		1183	0.0	1183	0.0	0.302	0.2	NA	0.0	0.1	0.00	0.00	0.00	99.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
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Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [W - 2026 AAST PM]

Network: N101 [2026 AAST PM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1096	0.0	1096	0.0	0.281	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1097	0.0	1097	0.0	0.281	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
East: Median Storage														
5	T1	1	0.0	1	0.0	0.013	19.2	LOS B	0.0	0.1	0.85	0.90	0.85	33.8
6	R2	1	0.0	1	0.0	0.013	26.5	LOS B	0.0	0.1	0.85	0.90	0.85	25.4
Approach		2	0.0	2	0.0	0.013	22.8	LOS B	0.0	0.1	0.85	0.90	0.85	30.3
North: Princes Highway														
9	R2	1	0.0	1	0.0	0.005	21.2	LOS B	0.0	0.0	0.79	0.84	0.79	44.2
Approach		1	0.0	1	0.0	0.005	21.2	NA	0.0	0.0	0.79	0.84	0.79	44.2
West: Boxsells Lane														
10	L2	40	0.0	40	0.0	0.072	11.8	LOS A	0.1	0.7	0.54	0.95	0.54	48.9
11	T1	1	0.0	1	0.0	0.072	32.9	LOS C	0.1	0.7	0.54	0.95	0.54	44.1
Approach		41	0.0	41	0.0	0.072	12.3	LOS A	0.1	0.7	0.54	0.95	0.54	48.8
All Vehicles		1141	0.0	1141	0.0	0.281	0.5	NA	0.1	0.7	0.02	0.04	0.02	95.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [E - 2026 100HH AM]

Network: N101 [2026 100HH AM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.005	20.3	LOS B	0.0	0.0	0.78	0.82	0.78	43.8
Approach		1	0.0	1	0.0	0.005	20.3	NA	0.0	0.0	0.78	0.82	0.78	43.8
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.008	11.3	LOS A	0.0	0.1	0.73	0.87	0.73	42.2
11	T1	1	0.0	1	0.0	0.008	29.0	LOS C	0.0	0.1	0.73	0.87	0.73	37.4
Approach		2	0.0	2	0.0	0.008	20.1	LOS B	0.0	0.1	0.73	0.87	0.73	40.1
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1064	0.0	1064	0.0	0.273	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1065	0.0	1065	0.0	0.273	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
West: Median Storage														
5	T1	1	0.0	1	0.0	0.012	17.9	LOS B	0.0	0.1	0.83	0.87	0.83	35.2
6	R2	1	0.0	1	0.0	0.012	23.1	LOS B	0.0	0.1	0.83	0.87	0.83	24.8
Approach		2	0.0	2	0.0	0.012	20.5	LOS B	0.0	0.1	0.83	0.87	0.83	31.0
All Vehicles		1071	0.0	1071	0.0	0.273	0.1	NA	0.0	0.1	0.00	0.00	0.00	99.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [W - 2026 100HH AM]

Network: N101 [2026 100HH AM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	617	0.0	617	0.0	0.158	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		618	0.0	618	0.0	0.158	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
East: Median Storage														
5	T1	1	0.0	1	0.0	0.005	7.0	LOS A	0.0	0.1	0.61	0.63	0.61	46.0
6	R2	1	0.0	1	0.0	0.005	9.2	LOS A	0.0	0.1	0.61	0.63	0.61	40.7
Approach		2	0.0	2	0.0	0.005	8.1	LOS A	0.0	0.1	0.61	0.63	0.61	44.0
North: Princes Highway														
9	R2	1	0.0	1	0.0	0.002	12.2	LOS A	0.0	0.0	0.53	0.67	0.53	51.5
Approach		1	0.0	1	0.0	0.002	12.2	NA	0.0	0.0	0.53	0.67	0.53	51.5
West: Boxsells Lane														
10	L2	26	0.0	26	0.0	0.033	9.6	LOS A	0.0	0.3	0.40	0.88	0.40	50.8
11	T1	1	0.0	1	0.0	0.033	15.2	LOS B	0.0	0.3	0.40	0.88	0.40	46.5
Approach		27	0.0	27	0.0	0.033	9.8	LOS A	0.0	0.3	0.40	0.88	0.40	50.7
All Vehicles		648	0.0	648	0.0	0.158	0.5	NA	0.0	0.3	0.02	0.04	0.02	95.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [E - 2026 100HH PM]

Network: N101 [2026 100HH PM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.008	31.5	LOS C	0.0	0.1	0.87	0.95	0.87	37.0
Approach		1	0.0	1	0.0	0.008	31.5	NA	0.0	0.1	0.87	0.95	0.87	37.0
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.015	13.0	LOS A	0.0	0.1	0.85	0.94	0.85	35.6
11	T1	1	0.0	1	0.0	0.015	51.4	LOS D	0.0	0.1	0.85	0.94	0.85	30.2
Approach		2	0.0	2	0.0	0.015	32.2	LOS C	0.0	0.1	0.85	0.94	0.85	33.2
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1355	0.0	1355	0.0	0.347	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1356	0.0	1356	0.0	0.347	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.7
West: Median Storage														
5	T1	1	0.0	1	0.0	0.023	34.0	LOS C	0.0	0.2	0.92	0.95	0.92	25.8
6	R2	1	0.0	1	0.0	0.023	45.6	LOS D	0.0	0.2	0.92	0.95	0.92	16.2
Approach		2	0.0	2	0.0	0.023	39.8	LOS C	0.0	0.2	0.92	0.95	0.92	21.6
All Vehicles		1361	0.0	1361	0.0	0.347	0.2	NA	0.0	0.2	0.00	0.00	0.00	99.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [W - 2026 100HH PM]

Network: N101 [2026 100HH PM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1181	0.0	1181	0.0	0.303	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1182	0.0	1182	0.0	0.303	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
East: Median Storage														
5	T1	1	0.0	1	0.0	0.016	23.1	LOS B	0.0	0.1	0.88	0.93	0.88	31.0
6	R2	1	0.0	1	0.0	0.016	32.4	LOS C	0.0	0.1	0.88	0.93	0.88	22.6
Approach		2	0.0	2	0.0	0.016	27.7	LOS B	0.0	0.1	0.88	0.93	0.88	27.5
North: Princes Highway														
9	R2	1	0.0	1	0.0	0.006	23.9	LOS B	0.0	0.0	0.82	0.87	0.82	42.3
Approach		1	0.0	1	0.0	0.006	23.9	NA	0.0	0.0	0.82	0.87	0.82	42.3
West: Boxsells Lane														
10	L2	44	0.0	44	0.0	0.086	12.3	LOS A	0.1	0.8	0.57	0.98	0.57	48.4
11	T1	1	0.0	1	0.0	0.086	38.9	LOS C	0.1	0.8	0.57	0.98	0.57	43.5
Approach		45	0.0	45	0.0	0.086	12.9	LOS A	0.1	0.8	0.57	0.98	0.57	48.3
All Vehicles		1231	0.0	1231	0.0	0.303	0.6	NA	0.1	0.8	0.02	0.04	0.02	95.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [E - 2031 AAST AM]

Network: N101 [2031 AAST AM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.007	29.2	LOS C	0.0	0.1	0.86	0.93	0.86	38.2
Approach		1	0.0	1	0.0	0.007	29.2	NA	0.0	0.1	0.86	0.93	0.86	38.2
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.014	12.7	LOS A	0.0	0.1	0.84	0.93	0.84	36.8
11	T1	1	0.0	1	0.0	0.014	46.6	LOS D	0.0	0.1	0.84	0.93	0.84	31.5
Approach		2	0.0	2	0.0	0.014	29.6	LOS C	0.0	0.1	0.84	0.93	0.84	34.5
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1309	0.0	1309	0.0	0.336	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1311	0.0	1311	0.0	0.336	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.7
West: Median Storage														
5	T1	1	0.0	1	0.0	0.021	30.7	LOS C	0.0	0.2	0.91	0.95	0.91	27.4
6	R2	1	0.0	1	0.0	0.021	40.8	LOS C	0.0	0.2	0.91	0.95	0.91	17.4
Approach		2	0.0	2	0.0	0.021	35.8	LOS C	0.0	0.2	0.91	0.95	0.91	23.1
All Vehicles		1316	0.0	1316	0.0	0.336	0.2	NA	0.0	0.2	0.00	0.00	0.00	99.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [W - 2031 AAST AM]

Network: N101 [2031 AAST AM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	624	0.0	624	0.0	0.160	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		625	0.0	625	0.0	0.160	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
East: Median Storage														
5	T1	1	0.0	1	0.0	0.005	7.1	LOS A	0.0	0.1	0.62	0.64	0.62	45.7
6	R2	1	0.0	1	0.0	0.005	9.8	LOS A	0.0	0.1	0.62	0.64	0.62	40.1
Approach		2	0.0	2	0.0	0.005	8.5	LOS A	0.0	0.1	0.62	0.64	0.62	43.6
North: Princes Highway														
9	R2	1	0.0	1	0.0	0.002	12.3	LOS A	0.0	0.0	0.54	0.67	0.54	51.4
Approach		1	0.0	1	0.0	0.002	12.3	NA	0.0	0.0	0.54	0.67	0.54	51.4
West: Boxsells Lane														
10	L2	48	0.0	48	0.0	0.060	9.7	LOS A	0.1	0.6	0.40	0.89	0.40	50.8
11	T1	1	0.0	1	0.0	0.060	15.6	LOS B	0.1	0.6	0.40	0.89	0.40	46.5
Approach		49	0.0	49	0.0	0.060	9.8	LOS A	0.1	0.6	0.40	0.89	0.40	50.7
All Vehicles		678	0.0	678	0.0	0.160	0.8	NA	0.1	0.6	0.03	0.07	0.03	92.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [E - 2031 AAST PM]

Network: N101 [2031 AAST PM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.007	27.2	LOS B	0.0	0.1	0.85	0.91	0.85	39.4
Approach		1	0.0	1	0.0	0.007	27.2	NA	0.0	0.1	0.85	0.91	0.85	39.4
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.012	12.4	LOS A	0.0	0.1	0.82	0.92	0.82	38.0
11	T1	1	0.0	1	0.0	0.012	42.4	LOS C	0.0	0.1	0.82	0.92	0.82	32.7
Approach		2	0.0	2	0.0	0.012	27.4	LOS B	0.0	0.1	0.82	0.92	0.82	35.7
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1264	0.0	1264	0.0	0.324	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1265	0.0	1265	0.0	0.324	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.7
West: Median Storage														
5	T1	1	0.0	1	0.0	0.019	27.7	LOS B	0.0	0.2	0.89	0.94	0.89	28.9
6	R2	1	0.0	1	0.0	0.019	36.6	LOS C	0.0	0.2	0.89	0.94	0.89	18.8
Approach		2	0.0	2	0.0	0.019	32.2	LOS C	0.0	0.2	0.89	0.94	0.89	24.6
All Vehicles		1271	0.0	1271	0.0	0.324	0.2	NA	0.0	0.2	0.00	0.00	0.00	99.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [W - 2031 AAST PM]

Network: N101 [2031 AAST PM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1179	0.0	1179	0.0	0.302	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1180	0.0	1180	0.0	0.302	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
East: Median Storage														
5	T1	1	0.0	1	0.0	0.016	23.0	LOS B	0.0	0.1	0.88	0.93	0.88	30.8
6	R2	1	0.0	1	0.0	0.016	33.3	LOS C	0.0	0.1	0.88	0.93	0.88	22.4
Approach		2	0.0	2	0.0	0.016	28.1	LOS B	0.0	0.1	0.88	0.93	0.88	27.3
North: Princes Highway														
9	R2	1	0.0	1	0.0	0.006	23.9	LOS B	0.0	0.0	0.82	0.87	0.82	42.4
Approach		1	0.0	1	0.0	0.006	23.9	NA	0.0	0.0	0.82	0.87	0.82	42.4
West: Boxsells Lane														
10	L2	61	0.0	61	0.0	0.115	12.4	LOS A	0.2	1.1	0.57	0.99	0.57	48.4
11	T1	1	0.0	1	0.0	0.115	39.5	LOS C	0.2	1.1	0.57	0.99	0.57	43.6
Approach		62	0.0	62	0.0	0.115	12.9	LOS A	0.2	1.1	0.57	0.99	0.57	48.4
All Vehicles		1245	0.0	1245	0.0	0.302	0.7	NA	0.2	1.1	0.03	0.05	0.03	94.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [E - 2031 100HH AM]

Network: N101 [2031 100HH AM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.006	25.2	LOS B	0.0	0.0	0.83	0.89	0.83	40.6
Approach		1	0.0	1	0.0	0.006	25.2	NA	0.0	0.0	0.83	0.89	0.83	40.6
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.011	12.1	LOS A	0.0	0.1	0.80	0.91	0.80	39.1
11	T1	1	0.0	1	0.0	0.011	38.5	LOS C	0.0	0.1	0.80	0.91	0.80	34.0
Approach		2	0.0	2	0.0	0.011	25.3	LOS B	0.0	0.1	0.80	0.91	0.80	36.9
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1216	0.0	1216	0.0	0.312	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1217	0.0	1217	0.0	0.312	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
West: Median Storage														
5	T1	1	0.0	1	0.0	0.017	24.9	LOS B	0.0	0.1	0.88	0.93	0.88	30.5
6	R2	1	0.0	1	0.0	0.017	32.7	LOS C	0.0	0.1	0.88	0.93	0.88	20.2
Approach		2	0.0	2	0.0	0.017	28.8	LOS C	0.0	0.1	0.88	0.93	0.88	26.2
All Vehicles		1222	0.0	1222	0.0	0.312	0.2	NA	0.0	0.1	0.00	0.00	0.00	99.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [W - 2031 100HH AM]

Network: N101 [2031 100HH AM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	639	0.0	639	0.0	0.164	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		640	0.0	640	0.0	0.164	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
East: Median Storage														
5	T1	1	0.0	1	0.0	0.005	7.4	LOS A	0.0	0.1	0.63	0.64	0.63	45.4
6	R2	1	0.0	1	0.0	0.005	10.0	LOS A	0.0	0.1	0.63	0.64	0.63	39.8
Approach		2	0.0	2	0.0	0.005	8.7	LOS A	0.0	0.1	0.63	0.64	0.63	43.3
North: Princes Highway														
9	R2	1	0.0	1	0.0	0.002	12.5	LOS A	0.0	0.0	0.55	0.68	0.55	51.3
Approach		1	0.0	1	0.0	0.002	12.5	NA	0.0	0.0	0.55	0.68	0.55	51.3
West: Boxsells Lane														
10	L2	44	0.0	44	0.0	0.055	9.8	LOS A	0.1	0.6	0.40	0.89	0.40	50.7
11	T1	1	0.0	1	0.0	0.055	15.9	LOS B	0.1	0.6	0.40	0.89	0.40	46.4
Approach		45	0.0	45	0.0	0.055	9.9	LOS A	0.1	0.6	0.40	0.89	0.40	50.7
All Vehicles		688	0.0	688	0.0	0.164	0.7	NA	0.1	0.6	0.03	0.06	0.03	93.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [E - 2031 100HH PM]

Network: N101 [2031 100HH PM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.010	36.6	LOS C	0.0	0.1	0.90	0.96	0.90	34.6
Approach		1	0.0	1	0.0	0.010	36.6	NA	0.0	0.1	0.90	0.96	0.90	34.6
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.019	13.6	LOS A	0.0	0.2	0.88	0.95	0.88	33.1
11	T1	1	0.0	1	0.0	0.019	62.2	LOS E	0.0	0.2	0.88	0.95	0.88	27.7
Approach		2	0.0	2	0.0	0.019	37.9	LOS C	0.0	0.2	0.88	0.95	0.88	30.6
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1440	0.0	1440	0.0	0.369	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.7
Approach		1441	0.0	1441	0.0	0.369	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.7
West: Median Storage														
5	T1	1	0.0	1	0.0	0.029	41.6	LOS C	0.0	0.2	0.93	0.96	0.93	22.9
6	R2	1	0.0	1	0.0	0.029	56.5	LOS E	0.0	0.2	0.93	0.96	0.93	13.8
Approach		2	0.0	2	0.0	0.029	49.0	LOS D	0.0	0.2	0.93	0.96	0.93	18.9
All Vehicles		1446	0.0	1446	0.0	0.369	0.2	NA	0.0	0.2	0.00	0.00	0.00	99.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [W - 2031 100HH PM]

Network: N101 [2031 100HH PM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1256	0.0	1256	0.0	0.322	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1257	0.0	1257	0.0	0.322	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
East: Median Storage														
5	T1	1	0.0	1	0.0	0.020	27.2	LOS B	0.0	0.2	0.90	0.94	0.90	28.2
6	R2	1	0.0	1	0.0	0.020	40.5	LOS C	0.0	0.2	0.90	0.94	0.90	19.9
Approach		2	0.0	2	0.0	0.020	33.8	LOS C	0.0	0.2	0.90	0.94	0.90	24.6
North: Princes Highway														
9	R2	1	0.0	1	0.0	0.007	26.8	LOS B	0.0	0.1	0.84	0.90	0.84	40.5
Approach		1	0.0	1	0.0	0.007	26.8	NA	0.0	0.1	0.84	0.90	0.84	40.5
West: Boxsells Lane														
10	L2	69	0.0	69	0.0	0.139	13.0	LOS A	0.2	1.4	0.60	1.00	0.60	48.0
11	T1	1	0.0	1	0.0	0.139	46.6	LOS D	0.2	1.4	0.60	1.00	0.60	43.0
Approach		71	0.0	71	0.0	0.139	13.5	LOS A	0.2	1.4	0.60	1.00	0.60	47.9
All Vehicles		1331	0.0	1331	0.0	0.322	0.8	NA	0.2	1.4	0.03	0.06	0.03	94.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [E - 2036 AAST AM]

Network: N101 [2036 AAST AM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.010	37.9	LOS C	0.0	0.1	0.90	0.97	0.90	34.0
Approach		1	0.0	1	0.0	0.010	37.9	NA	0.0	0.1	0.90	0.97	0.90	34.0
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.020	13.8	LOS A	0.0	0.2	0.88	0.95	0.88	32.5
11	T1	1	0.0	1	0.0	0.020	65.1	LOS E	0.0	0.2	0.88	0.95	0.88	27.1
Approach		2	0.0	2	0.0	0.020	39.4	LOS C	0.0	0.2	0.88	0.95	0.88	30.0
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1459	0.0	1459	0.0	0.374	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.7
Approach		1460	0.0	1460	0.0	0.374	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.7
West: Median Storage														
5	T1	1	0.0	1	0.0	0.031	43.5	LOS D	0.0	0.2	0.94	0.96	0.94	22.2
6	R2	1	0.0	1	0.0	0.031	59.3	LOS E	0.0	0.2	0.94	0.96	0.94	13.4
Approach		2	0.0	2	0.0	0.031	51.4	LOS D	0.0	0.2	0.94	0.96	0.94	18.3
All Vehicles		1465	0.0	1465	0.0	0.374	0.2	NA	0.0	0.2	0.00	0.00	0.00	99.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [W - 2036 AAST AM]

Network: N101 [2036 AAST AM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	640	0.0	640	0.0	0.164	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		641	0.0	641	0.0	0.164	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
East: Median Storage														
5	T1	1	0.0	1	0.0	0.006	7.4	LOS A	0.0	0.1	0.63	0.65	0.63	45.2
6	R2	1	0.0	1	0.0	0.006	10.3	LOS A	0.0	0.1	0.63	0.65	0.63	39.5
Approach		2	0.0	2	0.0	0.006	8.8	LOS A	0.0	0.1	0.63	0.65	0.63	43.1
North: Princes Highway														
9	R2	1	0.0	1	0.0	0.002	12.5	LOS A	0.0	0.0	0.55	0.68	0.55	51.3
Approach		1	0.0	1	0.0	0.002	12.5	NA	0.0	0.0	0.55	0.68	0.55	51.3
West: Boxsells Lane														
10	L2	58	0.0	58	0.0	0.072	9.8	LOS A	0.1	0.7	0.41	0.90	0.41	50.7
11	T1	1	0.0	1	0.0	0.072	16.1	LOS B	0.1	0.7	0.41	0.90	0.41	46.4
Approach		59	0.0	59	0.0	0.072	9.9	LOS A	0.1	0.7	0.41	0.90	0.41	50.7
All Vehicles		703	0.0	703	0.0	0.164	0.9	NA	0.1	0.7	0.04	0.08	0.04	92.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [E - 2036 AAST PM]

Network: N101 [2036 AAST PM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.008	30.4	LOS C	0.0	0.1	0.87	0.94	0.87	37.6
Approach		1	0.0	1	0.0	0.008	30.4	NA	0.0	0.1	0.87	0.94	0.87	37.6
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.015	12.8	LOS A	0.0	0.1	0.84	0.93	0.84	36.2
11	T1	1	0.0	1	0.0	0.015	49.0	LOS D	0.0	0.1	0.84	0.93	0.84	30.9
Approach		2	0.0	2	0.0	0.015	30.9	LOS C	0.0	0.1	0.84	0.93	0.84	33.8
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1333	0.0	1333	0.0	0.342	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1334	0.0	1334	0.0	0.342	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.7
West: Median Storage														
5	T1	1	0.0	1	0.0	0.022	32.4	LOS C	0.0	0.2	0.91	0.95	0.91	26.6
6	R2	1	0.0	1	0.0	0.022	43.2	LOS D	0.0	0.2	0.91	0.95	0.91	16.8
Approach		2	0.0	2	0.0	0.022	37.8	LOS C	0.0	0.2	0.91	0.95	0.91	22.3
All Vehicles		1339	0.0	1339	0.0	0.342	0.2	NA	0.0	0.2	0.00	0.00	0.00	99.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [W - 2036 AAST PM]

Network: N101 [2036 AAST PM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1286	0.0	1286	0.0	0.330	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1287	0.0	1287	0.0	0.330	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.7
East: Median Storage														
5	T1	1	0.0	1	0.0	0.022	29.1	LOS C	0.0	0.2	0.91	0.95	0.91	26.9
6	R2	1	0.0	1	0.0	0.022	44.5	LOS D	0.0	0.2	0.91	0.95	0.91	18.8
Approach		2	0.0	2	0.0	0.022	36.8	LOS C	0.0	0.2	0.91	0.95	0.91	23.4
North: Princes Highway														
9	R2	1	0.0	1	0.0	0.007	28.2	LOS B	0.0	0.1	0.85	0.92	0.85	39.8
Approach		1	0.0	1	0.0	0.007	28.2	NA	0.0	0.1	0.85	0.92	0.85	39.8
West: Boxsells Lane														
10	L2	81	0.0	81	0.0	0.166	13.3	LOS A	0.2	1.6	0.62	1.00	0.62	47.8
11	T1	1	0.0	1	0.0	0.166	50.3	LOS D	0.2	1.6	0.62	1.00	0.62	42.8
Approach		82	0.0	82	0.0	0.166	13.7	LOS A	0.2	1.6	0.62	1.00	0.62	47.8
All Vehicles		1373	0.0	1373	0.0	0.330	0.9	NA	0.2	1.6	0.04	0.06	0.04	93.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [E - 2036 100HH AM]

Network: N101 [2036 100HH AM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.008	32.6	LOS C	0.0	0.1	0.88	0.96	0.88	36.5
Approach		1	0.0	1	0.0	0.008	32.6	NA	0.0	0.1	0.88	0.96	0.88	36.5
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.016	13.1	LOS A	0.0	0.1	0.86	0.94	0.86	35.1
11	T1	1	0.0	1	0.0	0.016	53.6	LOS D	0.0	0.1	0.86	0.94	0.86	29.7
Approach		2	0.0	2	0.0	0.016	33.3	LOS C	0.0	0.1	0.86	0.94	0.86	32.6
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1374	0.0	1374	0.0	0.352	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1375	0.0	1375	0.0	0.352	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.7
West: Median Storage														
5	T1	1	0.0	1	0.0	0.025	35.6	LOS C	0.0	0.2	0.92	0.96	0.92	25.2
6	R2	1	0.0	1	0.0	0.025	47.8	LOS D	0.0	0.2	0.92	0.96	0.92	15.6
Approach		2	0.0	2	0.0	0.025	41.7	LOS C	0.0	0.2	0.92	0.96	0.92	21.0
All Vehicles		1380	0.0	1380	0.0	0.352	0.2	NA	0.0	0.2	0.00	0.00	0.00	99.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [W - 2036 100HH AM]

Network: N101 [2036 100HH AM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	662	0.0	662	0.0	0.170	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		663	0.0	663	0.0	0.170	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
East: Median Storage														
5	T1	1	0.0	1	0.0	0.006	7.7	LOS A	0.0	0.1	0.65	0.66	0.65	44.8
6	R2	1	0.0	1	0.0	0.006	10.8	LOS A	0.0	0.1	0.65	0.66	0.65	38.9
Approach		2	0.0	2	0.0	0.006	9.3	LOS A	0.0	0.1	0.65	0.66	0.65	42.5
North: Princes Highway														
9	R2	1	0.0	1	0.0	0.002	12.7	LOS A	0.0	0.0	0.56	0.68	0.56	51.0
Approach		1	0.0	1	0.0	0.002	12.7	NA	0.0	0.0	0.56	0.68	0.56	51.0
West: Boxsells Lane														
10	L2	58	0.0	58	0.0	0.073	9.9	LOS A	0.1	0.7	0.41	0.90	0.41	50.7
11	T1	1	0.0	1	0.0	0.073	16.6	LOS B	0.1	0.7	0.41	0.90	0.41	46.3
Approach		59	0.0	59	0.0	0.073	10.0	LOS A	0.1	0.7	0.41	0.90	0.41	50.6
All Vehicles		725	0.0	725	0.0	0.170	0.9	NA	0.1	0.7	0.04	0.08	0.04	92.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [E - 2036 100HH PM]

Network: N101 [2036 100HH PM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.011	41.7	LOS C	0.0	0.1	0.91	0.97	0.91	32.4
Approach		1	0.0	1	0.0	0.011	41.7	NA	0.0	0.1	0.91	0.97	0.91	32.4
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.023	14.2	LOS A	0.0	0.2	0.90	0.96	0.90	30.9
11	T1	1	0.0	1	0.0	0.023	73.6	LOS F	0.0	0.2	0.90	0.96	0.90	25.4
Approach		2	0.0	2	0.0	0.023	43.9	LOS D	0.0	0.2	0.90	0.96	0.90	28.4
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1511	0.0	1511	0.0	0.387	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	99.7
Approach		1512	0.0	1512	0.0	0.387	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.7
West: Median Storage														
5	T1	1	0.0	1	0.0	0.035	49.3	LOS D	0.0	0.3	0.94	0.97	0.94	20.5
6	R2	1	0.0	1	0.0	0.035	67.9	LOS E	0.0	0.3	0.94	0.97	0.94	12.1
Approach		2	0.0	2	0.0	0.035	58.6	LOS E	0.0	0.3	0.94	0.97	0.94	16.7
All Vehicles		1517	0.0	1517	0.0	0.387	0.2	NA	0.0	0.3	0.00	0.00	0.00	98.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [W - 2036 100HH PM]

Network: N101 [2036 100HH PM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1364	0.0	1364	0.0	0.350	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1365	0.0	1365	0.0	0.350	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.7
East: Median Storage														
5	T1	1	0.0	1	0.0	0.027	34.8	LOS C	0.0	0.2	0.93	0.96	0.93	24.2
6	R2	1	0.0	1	0.0	0.027	54.8	LOS D	0.0	0.2	0.93	0.96	0.93	16.3
Approach		2	0.0	2	0.0	0.027	44.8	LOS D	0.0	0.2	0.93	0.96	0.93	20.7
North: Princes Highway														
9	R2	1	0.0	1	0.0	0.008	32.0	LOS C	0.0	0.1	0.88	0.95	0.88	37.7
Approach		1	0.0	1	0.0	0.008	32.0	NA	0.0	0.1	0.88	0.95	0.88	37.7
West: Boxsells Lane														
10	L2	91	0.0	91	0.0	0.198	13.9	LOS A	0.3	1.9	0.66	1.00	0.66	47.3
11	T1	1	0.0	1	0.0	0.198	60.3	LOS E	0.3	1.9	0.66	1.00	0.66	42.1
Approach		92	0.0	92	0.0	0.198	14.5	LOS A	0.3	1.9	0.66	1.00	0.66	47.2
All Vehicles		1460	0.0	1460	0.0	0.350	1.0	NA	0.3	1.9	0.04	0.07	0.04	92.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [E - 2041 AAST AM]

Network: N101 [2041 AAST AM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.009	35.7	LOS C	0.0	0.1	0.89	0.96	0.89	35.0
Approach		1	0.0	1	0.0	0.009	35.7	NA	0.0	0.1	0.89	0.96	0.89	35.0
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.018	13.5	LOS A	0.0	0.2	0.87	0.95	0.87	33.5
11	T1	1	0.0	1	0.0	0.018	60.3	LOS E	0.0	0.2	0.87	0.95	0.87	28.1
Approach		2	0.0	2	0.0	0.018	36.9	LOS C	0.0	0.2	0.87	0.95	0.87	31.1
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1426	0.0	1426	0.0	0.366	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.7
Approach		1427	0.0	1427	0.0	0.366	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.7
West: Median Storage														
5	T1	1	0.0	1	0.0	0.028	40.2	LOS C	0.0	0.2	0.93	0.96	0.93	23.4
6	R2	1	0.0	1	0.0	0.028	54.6	LOS D	0.0	0.2	0.93	0.96	0.93	14.2
Approach		2	0.0	2	0.0	0.028	47.4	LOS D	0.0	0.2	0.93	0.96	0.93	19.3
All Vehicles		1433	0.0	1433	0.0	0.366	0.2	NA	0.0	0.2	0.00	0.00	0.00	99.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [W - 2041 AAST AM]

Network: N101 [2041 AAST AM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	640	0.0	640	0.0	0.164	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		641	0.0	641	0.0	0.164	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
East: Median Storage														
5	T1	1	0.0	1	0.0	0.006	7.4	LOS A	0.0	0.1	0.66	0.67	0.66	44.3
6	R2	1	0.0	1	0.0	0.006	12.0	LOS A	0.0	0.1	0.66	0.67	0.66	38.2
Approach		2	0.0	2	0.0	0.006	9.7	LOS A	0.0	0.1	0.66	0.67	0.66	42.0
North: Princes Highway														
9	R2	1	0.0	1	0.0	0.002	12.5	LOS A	0.0	0.0	0.55	0.68	0.55	51.3
Approach		1	0.0	1	0.0	0.002	12.5	NA	0.0	0.0	0.55	0.68	0.55	51.3
West: Boxsells Lane														
10	L2	140	0.0	140	0.0	0.169	10.0	LOS A	0.3	1.8	0.43	0.92	0.43	50.7
11	T1	1	0.0	1	0.0	0.169	16.9	LOS B	0.3	1.8	0.43	0.92	0.43	46.3
Approach		141	0.0	141	0.0	0.169	10.0	LOS A	0.3	1.8	0.43	0.92	0.43	50.7
All Vehicles		785	0.0	785	0.0	0.169	1.9	NA	0.3	1.8	0.08	0.17	0.08	84.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [E - 2041 AAST PM]

Network: N101 [2041 AAST PM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.012	44.6	LOS D	0.0	0.1	0.92	0.97	0.92	31.3
Approach		1	0.0	1	0.0	0.012	44.6	NA	0.0	0.1	0.92	0.97	0.92	31.3
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.025	14.5	LOS A	0.0	0.2	0.91	0.97	0.91	29.7
11	T1	1	0.0	1	0.0	0.025	80.2	LOS F	0.0	0.2	0.91	0.97	0.91	24.3
Approach		2	0.0	2	0.0	0.025	47.3	LOS D	0.0	0.2	0.91	0.97	0.91	27.2
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1545	0.0	1545	0.0	0.396	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	99.7
Approach		1546	0.0	1546	0.0	0.396	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.7
West: Median Storage														
5	T1	1	0.0	1	0.0	0.039	53.7	LOS D	0.0	0.3	0.95	0.97	0.95	19.3
6	R2	1	0.0	1	0.0	0.039	74.5	LOS F	0.0	0.3	0.95	0.97	0.95	11.2
Approach		2	0.0	2	0.0	0.039	64.1	LOS E	0.0	0.3	0.95	0.97	0.95	15.7
All Vehicles		1552	0.0	1552	0.0	0.396	0.2	NA	0.0	0.3	0.00	0.00	0.00	98.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [W - 2041 AAST PM]

Network: N101 [2041 AAST PM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1248	0.0	1248	0.0	0.320	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1249	0.0	1249	0.0	0.320	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
East: Median Storage														
5	T1	1	0.0	1	0.0	0.022	26.8	LOS B	0.0	0.2	0.91	0.95	0.91	26.6
6	R2	1	0.0	1	0.0	0.022	48.6	LOS D	0.0	0.2	0.91	0.95	0.91	18.5
Approach		2	0.0	2	0.0	0.022	37.7	LOS C	0.0	0.2	0.91	0.95	0.91	23.1
North: Princes Highway														
9	R2	1	0.0	1	0.0	0.006	26.5	LOS B	0.0	0.1	0.84	0.90	0.84	40.7
Approach		1	0.0	1	0.0	0.006	26.5	NA	0.0	0.1	0.84	0.90	0.84	40.7
West: Boxsells Lane														
10	L2	175	0.0	175	0.0	0.333	14.3	LOS A	0.6	4.1	0.65	1.05	0.81	47.2
11	T1	1	0.0	1	0.0	0.333	51.7	LOS D	0.6	4.1	0.65	1.05	0.81	42.1
Approach		176	0.0	176	0.0	0.333	14.5	LOS B	0.6	4.1	0.65	1.05	0.81	47.2
All Vehicles		1428	0.0	1428	0.0	0.333	1.9	NA	0.6	4.1	0.08	0.13	0.10	87.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [E - 2041 100HH AM]

Network: N101 [2041 100HH AM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.008	31.9	LOS C	0.0	0.1	0.88	0.95	0.88	36.8
Approach		1	0.0	1	0.0	0.008	31.9	NA	0.0	0.1	0.88	0.95	0.88	36.8
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.016	13.0	LOS A	0.0	0.1	0.85	0.94	0.85	35.4
11	T1	1	0.0	1	0.0	0.016	52.1	LOS D	0.0	0.1	0.85	0.94	0.85	30.0
Approach		2	0.0	2	0.0	0.016	32.6	LOS C	0.0	0.1	0.85	0.94	0.85	33.0
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1361	0.0	1361	0.0	0.349	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1362	0.0	1362	0.0	0.349	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.7
West: Median Storage														
5	T1	1	0.0	1	0.0	0.024	34.5	LOS C	0.0	0.2	0.92	0.95	0.92	25.6
6	R2	1	0.0	1	0.0	0.024	46.3	LOS D	0.0	0.2	0.92	0.95	0.92	16.0
Approach		2	0.0	2	0.0	0.024	40.4	LOS C	0.0	0.2	0.92	0.95	0.92	21.4
All Vehicles		1367	0.0	1367	0.0	0.349	0.2	NA	0.0	0.2	0.00	0.00	0.00	99.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [W - 2041 100HH AM]

Network: N101 [2041 100HH AM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	681	0.0	681	0.0	0.175	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		682	0.0	682	0.0	0.175	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
East: Median Storage														
5	T1	1	0.0	1	0.0	0.006	8.1	LOS A	0.0	0.1	0.68	0.69	0.68	43.5
6	R2	1	0.0	1	0.0	0.006	12.9	LOS A	0.0	0.1	0.68	0.69	0.68	37.1
Approach		2	0.0	2	0.0	0.006	10.5	LOS A	0.0	0.1	0.68	0.69	0.68	41.0
North: Princes Highway														
9	R2	1	0.0	1	0.0	0.002	13.0	LOS A	0.0	0.0	0.58	0.69	0.58	50.8
Approach		1	0.0	1	0.0	0.002	13.0	NA	0.0	0.0	0.58	0.69	0.58	50.8
West: Boxsells Lane														
10	L2	135	0.0	135	0.0	0.167	10.1	LOS A	0.3	1.8	0.44	0.92	0.44	50.6
11	T1	1	0.0	1	0.0	0.167	17.9	LOS B	0.3	1.8	0.44	0.92	0.44	46.2
Approach		136	0.0	136	0.0	0.167	10.2	LOS A	0.3	1.8	0.44	0.92	0.44	50.5
All Vehicles		821	0.0	821	0.0	0.175	1.8	NA	0.3	1.8	0.08	0.16	0.08	85.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [E - 2041 100HH PM]

Network: N101 [2041 100HH PM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.020	68.7	LOS E	0.0	0.1	0.95	0.98	0.95	24.4
Approach		1	0.0	1	0.0	0.020	68.7	NA	0.0	0.1	0.95	0.98	0.95	24.4
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.044	16.6	LOS B	0.0	0.3	0.95	1.00	0.95	22.2
11	T1	1	0.0	1	0.0	0.044	138.6	LOS F	0.0	0.3	0.95	1.00	0.95	17.4
Approach		2	0.0	2	0.0	0.044	77.6	LOS F	0.0	0.3	0.95	1.00	0.95	20.0
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1749	0.0	1749	0.0	0.449	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	99.6
Approach		1751	0.0	1751	0.0	0.449	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.6
West: Median Storage														
5	T1	1	0.0	1	0.0	0.070	91.8	LOS F	0.1	0.5	0.97	0.99	0.97	12.9
6	R2	1	0.0	1	0.0	0.070	133.1	LOS F	0.1	0.5	0.97	0.99	0.97	7.0
Approach		2	0.0	2	0.0	0.070	112.5	LOS F	0.1	0.5	0.97	0.99	0.97	10.1
All Vehicles		1756	0.0	1756	0.0	0.449	0.3	NA	0.1	0.5	0.00	0.00	0.00	98.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [W - 2041 100HH PM]

Network: N101 [2041 100HH PM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

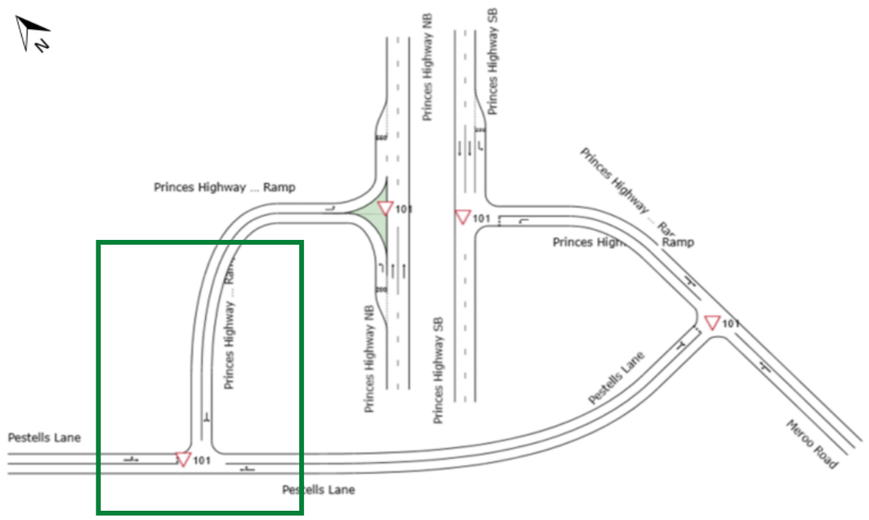
Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1327	0.0	1327	0.0	0.340	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1328	0.0	1328	0.0	0.340	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.7
East: Median Storage														
5	T1	1	0.0	1	0.0	0.028	32.0	LOS C	0.0	0.2	0.93	0.96	0.93	23.6
6	R2	1	0.0	1	0.0	0.028	61.4	LOS E	0.0	0.2	0.93	0.96	0.93	15.8
Approach		2	0.0	2	0.0	0.028	46.7	LOS D	0.0	0.2	0.93	0.96	0.93	20.1
North: Princes Highway														
9	R2	1	0.0	1	0.0	0.008	30.1	LOS C	0.0	0.1	0.87	0.93	0.87	38.7
Approach		1	0.0	1	0.0	0.008	30.1	NA	0.0	0.1	0.87	0.93	0.87	38.7
West: Boxsells Lane														
10	L2	196	0.0	196	0.0	0.399	15.6	LOS B	0.7	5.2	0.70	1.07	0.95	46.2
11	T1	1	0.0	1	0.0	0.399	63.1	LOS E	0.7	5.2	0.70	1.07	0.95	40.9
Approach		197	0.0	197	0.0	0.399	15.9	LOS B	0.7	5.2	0.70	1.07	0.95	46.2
All Vehicles		1528	0.0	1528	0.0	0.399	2.2	NA	0.7	5.2	0.09	0.14	0.12	86.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Appendix D: SIDRA Output Summary

Pestells Lane Interchange - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model November 2018 version (Nodes #21492).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.7 and 0.8; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 0.8; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the Annual Average School Term (AAST).

The Pestells Lane western approach is give-way controlled.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The queue length on the Pestells Lane western approach reaches a maximum of 8.2m in year 2041 PM peak hour, however the delay remains insignificant at 11.0 seconds.

A Level of Service (LoS) of 'A' is consistent within all scenarios.

Intersection Performance - Annual Average School Term (AAST)

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	31	0.06	0	0	LOS A
	Right	79	0.06	5.4	0	LOS A
NB Ramp (N)	Left	55	0.05	5.7	0.6	LOS A
	Right	40	0.05	5.8	0.6	LOS A
Pestells Lane (W)	Left	5	0.06	5.8	0.6	LOS A
	Through	60	0.06	4.9	0.6	LOS A
Intersection	**All**	**269**	**0.06**	**4.8**	**0.6**	**N/A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	48	0.08	0	0	LOS A
	Right	111	0.08	5.5	0	LOS A
NB Ramp (N)	Left	15	0.04	6	0.5	LOS A
	Right	46	0.04	5.9	0.5	LOS A
Pestells Lane (W)	Left	6	0.05	5.9	0.5	LOS A
	Through	46	0.05	4.9	0.5	LOS A
Intersection	**All**	**273**	**0.08**	**4.5**	**0.5**	**N/A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	47	0.07	0	0	LOS A
	Right	75	0.07	5.4	0	LOS A
NB Ramp (N)	Left	75	0.07	5.8	0.7	LOS A
	Right	46	0.07	5.8	0.7	LOS A
Pestells Lane (W)	Left	7	0.06	5.8	0.6	LOS A
	Through	60	0.06	5	0.6	LOS A
Intersection	**All**	**311**	**0.07**	**4.7**	**0.7**	**N/A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	65	0.09	0	0	LOS A
	Right	109	0.09	5.5	0	LOS A
NB Ramp (N)	Left	36	0.06	6	0.7	LOS A
	Right	57	0.06	6	0.7	LOS A
Pestells Lane (W)	Left	11	0.05	5.9	0.5	LOS A
	Through	49	0.05	5.1	0.5	LOS A
Intersection	**All**	**327**	**0.09**	**4.5**	**0.7**	**N/A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	66	0.07	0	0	LOS A
	Right	72	0.07	5.4	0	LOS A
NB Ramp (N)	Left	104	0.09	5.8	0.9	LOS A
	Right	56	0.09	5.9	0.9	LOS A
Pestells Lane (W)	Left	13	0.07	5.7	0.7	LOS A
	Through	66	0.07	5.2	0.7	LOS A
Intersection	**All**	**377**	**0.09**	**4.6**	**0.9**	**N/A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	102	0.11	0	0	LOS A
	Right	112	0.11	5.5	0	LOS A
NB Ramp (N)	Left	48	0.07	6.1	0.9	LOS A
	Right	64	0.07	6.1	0.9	LOS A
Pestells Lane (W)	Left	16	0.06	5.9	0.6	LOS A
	Through	53	0.06	5.3	0.6	LOS A
Intersection	**All**	**395**	**0.11**	**4.2**	**0.9**	**N/A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	71	0.08	0	0	LOS A
	Right	86	0.08	5.5	0	LOS A
NB Ramp (N)	Left	100	0.09	5.8	0.9	LOS A
	Right	57	0.09	5.9	0.9	LOS A
Pestells Lane (W)	Left	15	0.08	5.8	0.8	LOS A
	Through	67	0.08	5.3	0.8	LOS A
Intersection	**All**	**396**	**0.09**	**4.6**	**0.9**	**N/A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	128	0.13	0	0	LOS A
	Right	118	0.13	5.5	0	LOS A
NB Ramp (N)	Left	45	0.07	6.2	0.9	LOS A
	Right	63	0.07	6.3	0.9	LOS A
Pestells Lane (W)	Left	21	0.07	5.9	0.7	LOS A
	Through	57	0.07	5.4	0.7	LOS A
Intersection	**All**	**433**	**0.13**	**4**	**0.9**	**N/A**

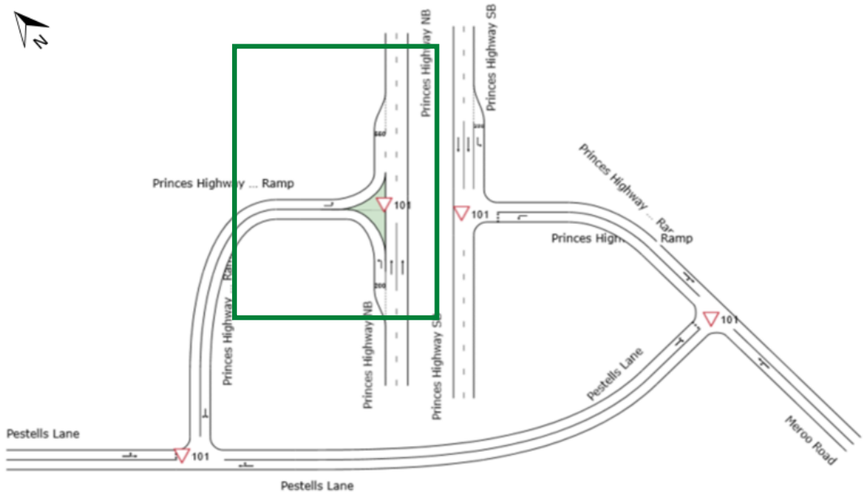
Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	208	0.15	0	0	LOS A
	Right	73	0.15	5.5	0	LOS A
NB Ramp (N)	Left	91	0.19	6.5	2.8	LOS A
	Right	197	0.19	6.5	2.8	LOS A
Pestells Lane (W)	Left	36	0.47	6.7	8.2	LOS A
	Through	371	0.47	8.2	8.2	LOS A
Intersection	**All**	**975**	**0.47**	**5.7**	**8.2**	**N/A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	304	0.22	0	0	LOS A
	Right	120	0.22	5.5	0	LOS A
NB Ramp (N)	Left	41	0.35	7.8	6	LOS A
	Right	393	0.35	7.7	6	LOS A
Pestells Lane (W)	Left	44	0.49	7.4	7.8	LOS A
	Through	282	0.49	11	7.8	LOS A
Intersection	**All**	**1184**	**0.49**	**6.3**	**7.8**	**N/A**

Pestells Lane Interchange - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model November 2018 version (Node #21490).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.95 and 1.10; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the Annual Average School Term (AAST).

The Princes Highway road section is divided into two (2) sites within the SIDRA assessment.

Pestells Lane NB on-ramp onto Princes Highway includes a 550m long acceleration lane.

Princes Highway deceleration lane onto Pestells Lane is 200m in length.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

Queue length is not relevant with this intersection due to Princes Highway.

Delay times reach a maximum of 5.6 seconds within both Princes Highway NB and Pestells Lane NB on-ramp approaches in all scenarios.

A Level of Service (LoS) of 'A' is consistent within all scenarios.

Intersection Performance - Annual Average School Term (AAST)

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	1	0.00	5.6	0	LOS A
	Through	524	0.11	0	0	LOS A
NB Ramp (W)	Left	84	0.05	5.6	0	LOS A
Intersection	**All**	**609**	**0.11**	**0.8**	**0**	**N/A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	1	0.00	5.6	0	LOS A
	Through	925	0.20	0	0	LOS A
NB Ramp (W)	Left	117	0.06	5.6	0	LOS A
Intersection	**All**	**1043**	**0.20**	**0.7**	**0**	**N/A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	1	0.00	5.6	0	LOS A
	Through	535	0.11	0	0	LOS A
NB Ramp (W)	Left	82	0.04	5.6	0	LOS A
Intersection	**All**	**618**	**0.11**	**0.8**	**0**	**N/A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	1	0.00	5.6	0	LOS A
	Through	986	0.21	0	0	LOS A
NB Ramp (W)	Left	120	0.07	5.6	0	LOS A
Intersection	**All**	**1107**	**0.21**	**0.6**	**0**	**N/A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	1	0.00	5.6	0	LOS A
	Through	553	0.12	0	0	LOS A
NB Ramp (W)	Left	84	0.05	5.6	0	LOS A
Intersection	**All**	**638**	**0.12**	**0.8**	**0**	**N/A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	1	0.00	5.6	0	LOS A
	Through	1066	0.23	0	0	LOS A
NB Ramp (W)	Left	127	0.07	5.6	0	LOS A
Intersection	**All**	**1195**	**0.23**	**0.6**	**0**	**N/A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	1	0.00	5.6	0	LOS A
	Through	571	0.12	0	0	LOS A
NB Ramp (W)	Left	85	0.05	5.6	0	LOS A
Intersection	**All**	**657**	**0.12**	**0.8**	**0**	**N/A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	1	0.00	5.6	0	LOS A
	Through	1168	0.25	0	0	LOS A
NB Ramp (W)	Left	139	0.08	5.6	0	LOS A
Intersection	**All**	**1308**	**0.25**	**0.6**	**0**	**N/A**

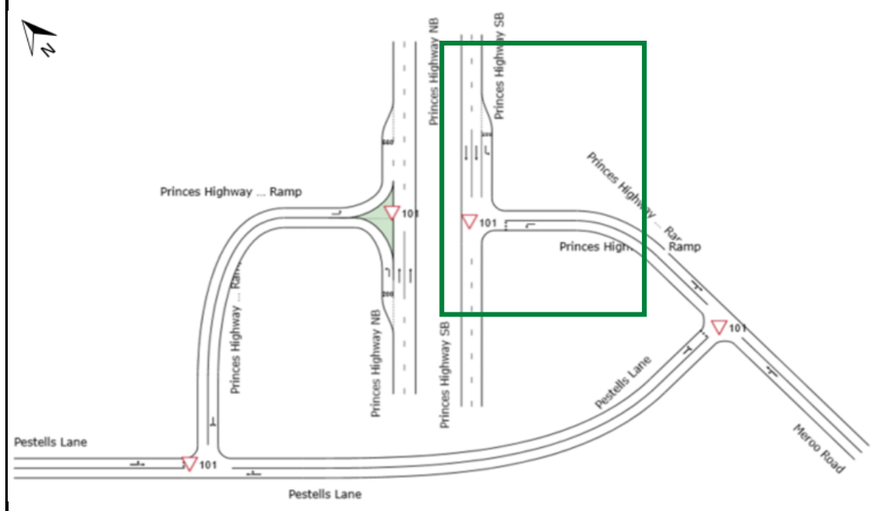
Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	1	0.00	5.6	0	LOS A
	Through	566	0.12	0	0	LOS A
NB Ramp (W)	Left	108	0.06	5.6	0	LOS A
Intersection	**All**	**676**	**0.12**	**0.9**	**0**	**N/A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	1	0.00	5.6	0	LOS A
	Through	1128	0.24	0	0	LOS A
NB Ramp (W)	Left	164	0.09	5.6	0	LOS A
Intersection	**All**	**1294**	**0.24**	**0.8**	**0**	**N/A**

Pestells Lane Interchange - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model November 2018 version (Nodes #20514).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.95 and 1.10; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the Annual Average School Term (AAST).

The Princes Highway road section is divided into two (2) sites within the SIDRA assessment.

Princes Highway deceleration lane onto Meroo Road is 200m in length.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The queue length on the Meroo Road SB ramp reaches a maximum of 2.4m in year 2041 AM peak hour, however the delay remains insignificant at 8.1 seconds.

A Level of Service (LoS) of 'A' is consistent within all scenarios.

Intersection Performance - Annual Average School Term (AAST)

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	71	0.07	7.2	0.7	LOS A
Highway SB (N)	Left	160	0.09	5.5	0	LOS A
	Through	883	0.23	0	0	LOS A
Intersection	**All**	**1114**	**0.23**	**1.3**	**0.7**	**N/A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	28	0.03	7.3	0.3	LOS A
Highway SB (N)	Left	177	0.10	5.5	0	LOS A
	Through	940	0.24	0	0	LOS A
Intersection	**All**	**1145**	**0.24**	**1.1**	**0.3**	**N/A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	81	0.08	7.5	0.9	LOS A
Highway SB (N)	Left	176	0.10	5.5	0	LOS A
	Through	975	0.25	0	0	LOS A
Intersection	**All**	**1232**	**0.25**	**1.3**	**0.9**	**N/A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	38	0.04	7.4	0.4	LOS A
Highway SB (N)	Left	188	0.10	5.6	0	LOS A
	Through	989	0.25	0	0	LOS A
Intersection	**All**	**1216**	**0.25**	**1.1**	**0.4**	**N/A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	102	0.11	7.9	1.2	LOS A
Highway SB (N)	Left	207	0.11	5.6	0	LOS A
	Through	1102	0.28	0	0	LOS A
Intersection	**All**	**1412**	**0.28**	**1.4**	**1.2**	**N/A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	44	0.05	7.6	0.5	LOS A
Highway SB (N)	Left	217	0.12	5.6	0	LOS A
	Through	1047	0.27	0	0	LOS A
Intersection	**All**	**1308**	**0.27**	**1.2**	**0.5**	**N/A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	97	0.11	8.3	1.2	LOS A
Highway SB (N)	Left	246	0.13	5.6	0	LOS A
	Through	1214	0.31	0	0	LOS A
Intersection	**All**	**1557**	**0.31**	**1.4**	**1.2**	**N/A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	42	0.04	7.7	0.5	LOS A
Highway SB (N)	Left	240	0.13	5.6	0	LOS A
	Through	1093	0.28	0	0	LOS A
Intersection	**All**	**1375**	**0.28**	**1.2**	**0.5**	**N/A**

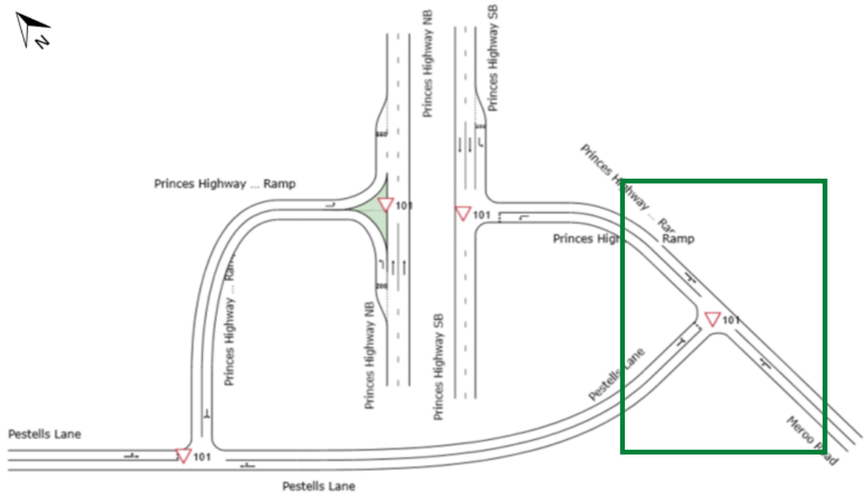
Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	193	0.21	8.1	2.4	LOS A
Highway SB (N)	Left	308	0.17	5.6	0	LOS A
	Through	1118	0.29	0	0	LOS A
Intersection	**All**	**1619**	**0.29**	**2**	**2.4**	**N/A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	153	0.17	8.4	1.9	LOS A
Highway SB (N)	Left	341	0.18	5.6	0	LOS A
	Through	1204	0.31	0	0	LOS A
Intersection	**All**	**1698**	**0.31**	**1.9**	**1.9**	**N/A**

Pestells Lane Interchange - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model November 2018 version (Nodes #21491).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.7 and 0.8; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 0.8; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the Annual Average School Term (AAST).

The Pestells Lane south-western approach is give-way controlled.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The queue length on the Pestells Lane south-western approach reaches a maximum of 6.3m in year 2041 AM peak hour, however the delay remains insignificant at 8.1 seconds.

A Level of Service (LoS) of 'A' is consistent within all scenarios.

Intersection Performance - Annual Average School Term (AAST)

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	100	0.05	5.5	0	LOS A
	Through	1	0.05	0	0	LOS A
SB Ramp (NW)	Through	149	0.08	0	0.2	LOS A
	Right	11	0.08	5.8	0.2	LOS A
Pestells Lane (SW)	Left	71	0.08	5.5	0.9	LOS A
	Right	44	0.08	6.2	0.9	LOS A
Intersection	**All**	**376**	**0.08**	**3.4**	**0.9**	**N/A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	132	0.07	5.5	0	LOS A
	Through	1	0.07	0	0	LOS A
SB Ramp (NW)	Through	148	0.09	0.1	0.5	LOS A
	Right	28	0.09	5.9	0.5	LOS A
Pestells Lane (SW)	Left	28	0.05	5.5	0.5	LOS A
	Right	34	0.05	6.3	0.5	LOS A
Intersection	**All**	**372**	**0.09**	**3.4**	**0.5**	**N/A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	99	0.05	5.5	0	LOS A
	Through	1	0.05	0	0	LOS A
SB Ramp (NW)	Through	153	0.09	0.1	0.4	LOS A
	Right	23	0.09	5.8	0.4	LOS A
Pestells Lane (SW)	Left	81	0.10	5.5	1.1	LOS A
	Right	55	0.10	6.3	1.1	LOS A
Intersection	**All**	**412**	**0.10**	**3.6**	**1.1**	**N/A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	131	0.07	5.5	0	LOS A
	Through	1	0.07	0	0	LOS A
SB Ramp (NW)	Through	143	0.10	0.1	0.8	LOS A
	Right	44	0.10	5.9	0.8	LOS A
Pestells Lane (SW)	Left	38	0.07	5.5	0.7	LOS A
	Right	47	0.07	6.4	0.7	LOS A
Intersection	**All**	**404**	**0.10**	**3.8**	**0.8**	**N/A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	100	0.05	5.5	0	LOS A
	Through	1	0.05	0	0	LOS A
SB Ramp (NW)	Through	169	0.11	0.1	0.7	LOS A
	Right	38	0.11	5.8	0.7	LOS A
Pestells Lane (SW)	Left	102	0.13	5.5	1.4	LOS A
	Right	68	0.13	6.5	1.4	LOS A
Intersection	**All**	**479**	**0.13**	**3.8**	**1.4**	**N/A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	138	0.08	5.5	0	LOS A
	Through	1	0.08	0	0	LOS A
SB Ramp (NW)	Through	140	0.12	0.2	1.3	LOS A
	Right	77	0.12	5.9	1.3	LOS A
Pestells Lane (SW)	Left	44	0.08	5.5	0.9	LOS A
	Right	57	0.08	6.6	0.9	LOS A
Intersection	**All**	**457**	**0.12**	**4.1**	**1.3**	**N/A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	103	0.06	5.5	0	LOS A
	Through	1	0.06	0	0	LOS A
SB Ramp (NW)	Through	193	0.13	0.1	1	LOS A
	Right	54	0.13	5.8	1	LOS A
Pestells Lane (SW)	Left	97	0.13	5.5	1.4	LOS A
	Right	71	0.13	6.7	1.4	LOS A
Intersection	**All**	**518**	**0.13**	**3.7**	**1.4**	**N/A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	146	0.08	5.5	0	LOS A
	Through	1	0.08	0	0	LOS A
SB Ramp (NW)	Through	141	0.14	0.3	1.6	LOS A
	Right	100	0.14	5.9	1.6	LOS A
Pestells Lane (SW)	Left	42	0.09	5.5	0.9	LOS A
	Right	61	0.09	6.7	0.9	LOS A
Intersection	**All**	**492**	**0.14**	**4.3**	**1.6**	**N/A**

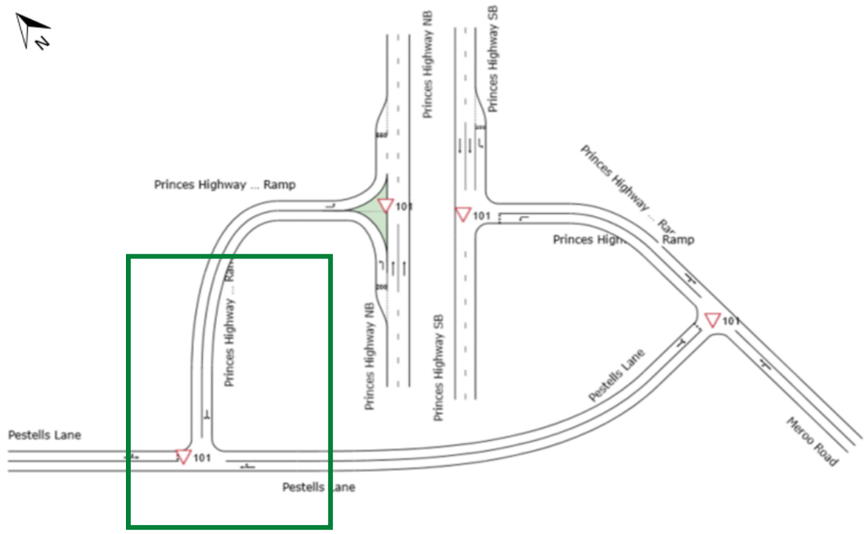
Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	168	0.09	5.5	0	LOS A
	Through	1	0.09	0	0	LOS A
SB Ramp (NW)	Through	195	0.18	0.3	2	LOS A
	Right	114	0.18	6.1	2	LOS A
Pestells Lane (SW)	Left	193	0.42	5.7	6.3	LOS A
	Right	268	0.42	8.1	6.3	LOS A
Intersection	**All**	**939**	**0.42**	**5.3**	**6.3**	**N/A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	233	0.13	5.5	0	LOS A
	Through	1	0.13	0	0	LOS A
SB Ramp (NW)	Through	148	0.21	0.8	3.1	LOS A
	Right	192	0.21	6.4	3.1	LOS A
Pestells Lane (SW)	Left	153	0.30	5.5	3.5	LOS A
	Right	171	0.30	8	3.5	LOS A
Intersection	**All**	**897**	**0.30**	**5.4**	**3.5**	**N/A**

Pestells Lane Interchange - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model November 2018 version (Nodes #21492).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.7 and 0.8; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 0.8; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the 100th Highest Hour (100HH).

The Pestells Lane western approach is give-way controlled.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The queue length on the Pestells Lane western approach reaches a maximum of 12.8m in year 2041 PM peak hour, however the delay remains insignificant at 14.9 seconds.

A Level of Service (LoS) of 'A' is consistent within all scenarios except for Pestells Lane western approach in the PM peak hour of 2041 where LoS is 'B'.

Intersection Performance - 100th Highest Hour (100HH)

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	27	0.06	0	0	LOS A
	Right	78	0.06	5.4	0	LOS A
NB Ramp (N)	Left	1	0.02	5.8	0.2	LOS A
	Right	26	0.02	5.7	0.2	LOS A
Pestells Lane (W)	Left	3	0.04	5.8	0.5	LOS A
	Through	51	0.04	4.6	0.5	LOS A
Intersection	**All**	**186**	**0.06**	**4.5**	**0.5**	**N/A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	47	0.09	0	0	LOS A
	Right	128	0.09	5.5	0	LOS A
NB Ramp (N)	Left	1	0.03	6.1	0.4	LOS A
	Right	45	0.03	6	0.4	LOS A
Pestells Lane (W)	Left	5	0.05	5.9	0.5	LOS A
	Through	55	0.05	4.9	0.5	LOS A
Intersection	**All**	**282**	**0.09**	**4.5**	**0.5**	**N/A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	44	0.06	0	0	LOS A
	Right	75	0.06	5.4	0	LOS A
NB Ramp (N)	Left	68	0.06	5.7	0.7	LOS A
	Right	44	0.06	5.8	0.7	LOS A
Pestells Lane (W)	Left	7	0.06	5.8	0.6	LOS A
	Through	56	0.06	5	0.6	LOS A
Intersection	**All**	**295**	**0.06**	**4.7**	**0.7**	**N/A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	78	0.11	0	0	LOS A
	Right	128	0.11	5.5	0	LOS A
NB Ramp (N)	Left	43	0.07	6.1	0.8	LOS A
	Right	62	0.07	6.1	0.8	LOS A
Pestells Lane (W)	Left	12	0.07	5.9	0.7	LOS A
	Through	61	0.07	5.3	0.7	LOS A
Intersection	**All**	**384**	**0.11**	**4.5**	**0.8**	**N/A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	61	0.07	0	0	LOS A
	Right	73	0.07	5.4	0	LOS A
NB Ramp (N)	Left	96	0.08	5.8	0.8	LOS A
	Right	52	0.08	5.9	0.8	LOS A
Pestells Lane (W)	Left	12	0.07	5.8	0.7	LOS A
	Through	61	0.07	5.2	0.7	LOS A
Intersection	**All**	**354**	**0.08**	**4.6**	**0.8**	**N/A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	122	0.13	0	0	LOS A
	Right	132	0.13	5.5	0	LOS A
NB Ramp (N)	Left	56	0.08	6.2	1	LOS A
	Right	72	0.08	6.3	1	LOS A
Pestells Lane (W)	Left	18	0.08	5.9	0.8	LOS A
	Through	65	0.08	5.5	0.8	LOS A
Intersection	**All**	**464**	**0.13**	**4.3**	**1**	**LOS A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	77	0.08	0	0	LOS A
	Right	72	0.08	5.4	0	LOS A
NB Ramp (N)	Left	93	0.08	5.8	0.8	LOS A
	Right	52	0.08	5.9	0.8	LOS A
Pestells Lane (W)	Left	15	0.07	5.7	0.7	LOS A
	Through	65	0.07	5.2	0.7	LOS A
Intersection	**All**	**373**	**0.08**	**4.4**	**0.8**	**N/A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	153	0.15	0	0	LOS A
	Right	140	0.15	5.5	0	LOS A
NB Ramp (N)	Left	54	0.08	6.4	1	LOS A
	Right	69	0.08	6.5	1	LOS A
Pestells Lane (W)	Left	23	0.09	6	0.9	LOS A
	Through	71	0.09	5.6	0.9	LOS A
Intersection	**All**	**509**	**0.15**	**4.1**	**1**	**N/A**

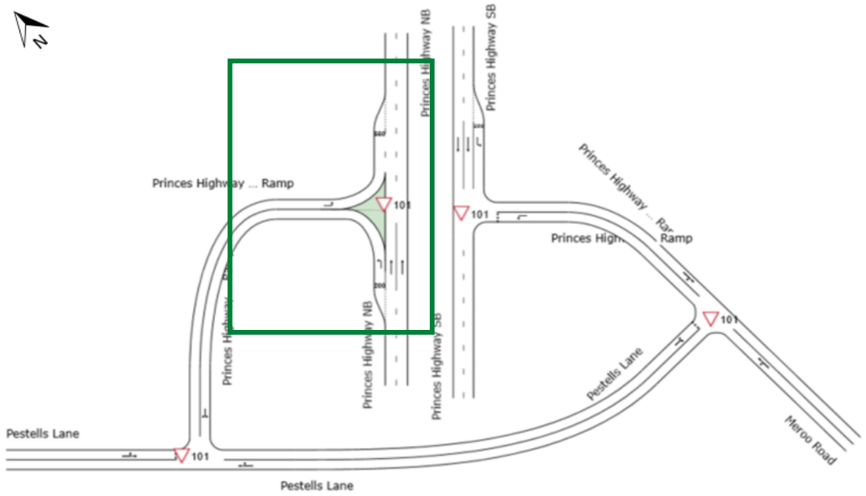
Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	188	0.14	0	0	LOS A
	Right	75	0.14	5.5	0	LOS A
NB Ramp (N)	Left	83	0.18	6.5	2.6	LOS A
	Right	188	0.18	6.4	2.6	LOS A
Pestells Lane (W)	Left	34	0.57	7.3	12.4	LOS A
	Through	468	0.57	8.9	12.4	LOS A
Intersection	**All**	**1037**	**0.57**	**6.3**	**12.4**	**N/A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	440	0.31	0	0	LOS A
	Right	154	0.31	5.5	0	LOS A
NB Ramp (N)	Left	47	0.44	9.9	8.6	LOS A
	Right	399	0.44	9.8	8.6	LOS A
Pestells Lane (W)	Left	49	0.65	9.7	12.8	LOS A
	Through	332	0.65	14.9	12.8	LOS B
Intersection	**All**	**1421**	**0.65**	**7.5**	**12.8**	**N/A**

Pestells Lane Interchange - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model November 2018 version (Node #21490).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.95 and 1.10; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the Annual Average School Term (AAST).

The Princes Highway road section is divided into two (2) sites within the SIDRA assessment.

Pestells Lane NB on-ramp onto Princes Highway includes a 550m long acceleration lane.

Princes Highway deceleration lane onto Pestells Lane is 200m in length.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

Queue length is not relevant with this intersection due to Princes Highway.

Delay times reach a maximum of 5.6 seconds within both Princes Highway NB and Pestells Lane NB on-ramp approaches in all scenarios.

A Level of Service (LoS) of 'A' is consistent within all scenarios.

Intersection Performance - 100th Highest Hour (100HH)

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	1	0.00	5.6	0	LOS A
	Through	505	0.11	0	0	LOS A
NB Ramp (W)	Left	81	0.04	5.6	0	LOS A
Intersection	**All**	**587**	**0.11**	**0.8**	**0**	**N/A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	1	0.00	5.6	0	LOS A
	Through	991	0.21	0	0	LOS A
NB Ramp (W)	Left	134	0.07	5.6	0	LOS A
Intersection	**All**	**1125**	**0.21**	**0.7**	**0**	**N/A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	1	0.00	5.6	0	LOS A
	Through	542	0.12	0	0	LOS A
NB Ramp (W)	Left	82	0.04	5.6	0	LOS A
Intersection	**All**	**625**	**0.12**	**0.8**	**0**	**N/A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	1	0.00	5.6	0	LOS A
	Through	1053	0.23	0	0	LOS A
NB Ramp (W)	Left	140	0.08	5.6	0	LOS A
Intersection	**All**	**1194**	**0.23**	**0.7**	**0**	**N/A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	1	0.00	5.6	0	LOS A
	Through	567	0.12	0	0	LOS A
NB Ramp (W)	Left	84	0.05	5.6	0	LOS A
Intersection	**All**	**653**	**0.12**	**0.8**	**0**	**N/A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	1	0.00	5.6	0	LOS A
	Through	1123	0.24	0	0	LOS A
NB Ramp (W)	Left	149	0.08	5.6	0	LOS A
Intersection	**All**	**1274**	**0.24**	**0.7**	**0**	**N/A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	1	0.00	5.6	0	LOS A
	Through	591	0.13	0	0	LOS A
NB Ramp (W)	Left	86	0.05	5.6	0	LOS A
Intersection	**All**	**678**	**0.13**	**0.7**	**0**	**N/A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	1	0.00	5.6	0	LOS A
	Through	1224	0.26	0.1	0	LOS A
NB Ramp (W)	Left	163	0.09	5.6	0	LOS A
Intersection	**All**	**1388**	**0.26**	**0.7**	**0**	**N/A**

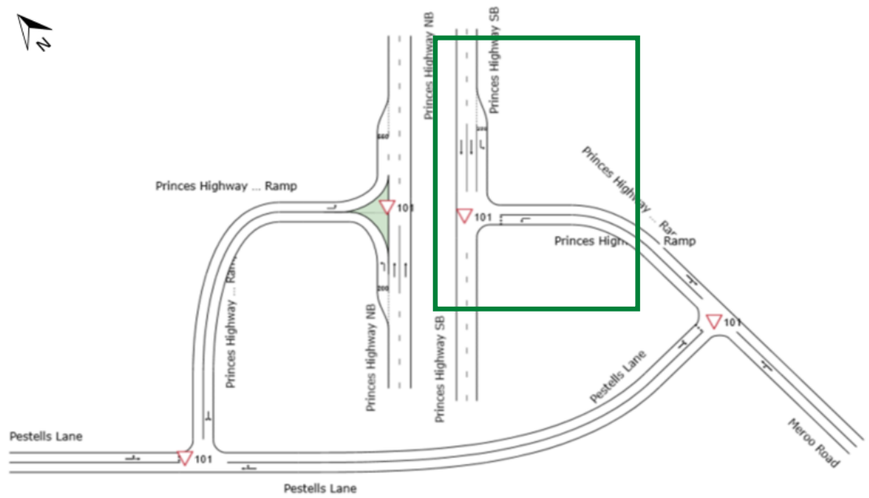
Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	1	0.00	5.6	0	LOS A
	Through	605	0.13	0	0	LOS A
NB Ramp (W)	Left	108	0.06	5.6	0	LOS A
Intersection	**All**	**715**	**0.13**	**0.9**	**0**	**N/A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	1	0.00	5.6	0	LOS A
	Through	1174	0.25	0	0	LOS A
NB Ramp (W)	Left	203	0.11	5.6	0	LOS A
Intersection	**All**	**1378**	**0.25**	**0.9**	**0**	**N/A**

Pestells Lane Interchange - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model November 2018 version (Nodes #20514).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.95 and 1.10; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the Annual Average School Term (AAST).

The Princes Highway road section is divided into two (2) sites within the SIDRA assessment.

Princes Highway deceleration lane onto Meroo Road is 200m in length.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The queue length on the Meroo Road SB ramp reaches a maximum of 5.4m in year 2041 PM peak hour, however the delay remains insignificant at 9.8 seconds.

A Level of Service (LoS) of 'A' is consistent within all scenarios.

Intersection Performance - 100th Highest Hour (100HH)

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	29	0.03	6.9	0.3	LOS A
Highway SB (N)	Left	144	0.08	5.5	0	LOS A
	Through	803	0.21	0	0	LOS A
Intersection	**All**	**977**	**0.21**	**1**	**0.3**	**N/A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	24	0.03	7.6	0.3	LOS A
Highway SB (N)	Left	212	0.11	5.6	0	LOS A
	Through	1056	0.27	0	0	LOS A
Intersection	**All**	**1292**	**0.27**	**1.1**	**0.3**	**N/A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	74	0.07	7.2	0.8	LOS A
Highway SB (N)	Left	162	0.09	5.5	0	LOS A
	Through	902	0.23	0	0	LOS A
Intersection	**All**	**1138**	**0.23**	**1.3**	**0.8**	**N/A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	44	0.05	7.8	0.5	LOS A
Highway SB (N)	Left	233	0.13	5.6	0	LOS A
	Through	1122	0.29	0	0	LOS A
Intersection	**All**	**1399**	**0.29**	**1.2**	**0.5**	**N/A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	94	0.10	7.6	1	LOS A
Highway SB (N)	Left	185	0.10	5.6	0	LOS A
	Through	1031	0.26	0	0	LOS A
Intersection	**All**	**1309**	**0.26**	**1.4**	**1**	**N/A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	51	0.06	8	0.6	LOS A
Highway SB (N)	Left	263	0.14	5.6	0	LOS A
	Through	1177	0.30	0	0	LOS A
Intersection	**All**	**1491**	**0.30**	**1.3**	**0.6**	**N/A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	92	0.10	8	1.1	LOS A
Highway SB (N)	Left	222	0.12	5.6	0	LOS A
	Through	1152	0.30	0	0	LOS A
Intersection	**All**	**1465**	**0.30**	**1.4**	**1.1**	**N/A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	48	0.06	8.1	0.6	LOS A
Highway SB (N)	Left	286	0.15	5.6	0	LOS A
	Through	1221	0.31	0	0	LOS A
Intersection	**All**	**1556**	**0.31**	**1.3**	**0.6**	**N/A**

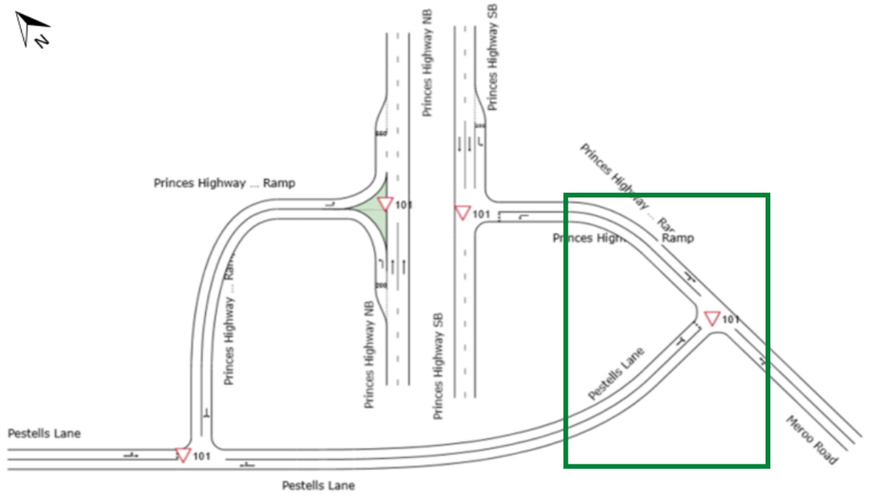
Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	309	0.32	8.6	4.5	LOS A
Highway SB (N)	Left	277	0.15	5.6	0	LOS A
	Through	1083	0.28	0	0	LOS A
Intersection	**All**	**1669**	**0.32**	**2.5**	**4.5**	**N/A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	309	0.37	9.8	5.4	LOS A
Highway SB (N)	Left	454	0.24	5.6	0	LOS A
	Through	1296	0.33	0	0	LOS A
Intersection	**All**	**2059**	**0.37**	**2.7**	**5.4**	**N/A**

Pestells Lane Interchange - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model November 2018 version (Nodes #21491).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.7 and 0.8; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 0.8; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the Annual Average School Term (AAST).

The Pestells Lane south-western approach is give-way controlled.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The queue length on the Pestells Lane south-western approach reaches a maximum of 6.6m in year 2041 AM peak hour, however the delay remains insignificant at seconds.

A Level of Service (LoS) of 'A' is consistent within all scenarios.

Intersection Performance - 100th Highest Hour (100HH)

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	97	0.05	5.5	0	LOS A
	Through	1	0.05	0	0	LOS A
SB Ramp (NW)	Through	135	0.08	0	0.2	LOS A
	Right	9	0.08	5.7	0.2	LOS A
Pestells Lane (SW)	Left	29	0.04	5.5	0.4	LOS A
	Right	23	0.04	6.1	0.4	LOS A
Intersection	**All**	**295**	**0.08**	**3.1**	**0.4**	**N/A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	149	0.08	5.5	0	LOS A
	Through	1	0.08	0	0	LOS A
SB Ramp (NW)	Through	186	0.11	0.1	0.5	LOS A
	Right	26	0.11	5.9	0.5	LOS A
Pestells Lane (SW)	Left	24	0.05	5.5	0.5	LOS A
	Right	32	0.05	6.5	0.5	LOS A
Intersection	**All**	**419**	**0.11**	**3.2**	**0.5**	**N/A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	98	0.05	5.5	0	LOS A
	Through	1	0.05	0	0	LOS A
SB Ramp (NW)	Through	141	0.09	0.1	0.4	LOS A
	Right	21	0.09	5.7	0.4	LOS A
Pestells Lane (SW)	Left	74	0.09	5.5	1	LOS A
	Right	51	0.09	6.3	1	LOS A
Intersection	**All**	**385**	**0.09**	**3.6**	**1**	**N/A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	155	0.08	5.5	0	LOS A
	Through	1	0.08	0	0	LOS A
SB Ramp (NW)	Through	180	0.13	0.2	1	LOS A
	Right	53	0.13	6	1	LOS A
Pestells Lane (SW)	Left	44	0.09	5.5	0.9	LOS A
	Right	60	0.09	6.7	0.9	LOS A
Intersection	**All**	**493**	**0.13**	**3.8**	**1**	**N/A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	99	0.05	5.5	0	LOS A
	Through	1	0.05	0	0	LOS A
SB Ramp (NW)	Through	152	0.10	0.1	0.6	LOS A
	Right	34	0.10	5.8	0.6	LOS A
Pestells Lane (SW)	Left	94	0.12	5.5	1.3	LOS A
	Right	63	0.12	6.4	1.3	LOS A
Intersection	**All**	**442**	**0.12**	**3.8**	**1.3**	**N/A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	164	0.09	5.5	0	LOS A
	Through	1	0.09	0	0	LOS A
SB Ramp (NW)	Through	174	0.15	0.3	1.6	LOS A
	Right	89	0.15	6	1.6	LOS A
Pestells Lane (SW)	Left	51	0.11	5.5	1.1	LOS A
	Right	71	0.11	6.9	1.1	LOS A
Intersection	**All**	**549**	**0.15**	**4.1**	**1.6**	**N/A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	102	0.06	5.5	0	LOS A
	Through	1	0.06	0	0	LOS A
SB Ramp (NW)	Through	176	0.12	0.1	0.8	LOS A
	Right	46	0.12	5.8	0.8	LOS A
Pestells Lane (SW)	Left	92	0.12	5.5	1.3	LOS A
	Right	66	0.12	6.6	1.3	LOS A
Intersection	**All**	**483**	**0.12**	**3.7**	**1.3**	**N/A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	178	0.10	5.5	0	LOS A
	Through	1	0.10	0	0	LOS A
SB Ramp (NW)	Through	174	0.17	0.4	2	LOS A
	Right	115	0.17	6.1	2	LOS A
Pestells Lane (SW)	Left	48	0.11	5.5	1.1	LOS A
	Right	75	0.11	7.1	1.1	LOS A
Intersection	**All**	**591**	**0.17**	**4.3**	**2**	**N/A**

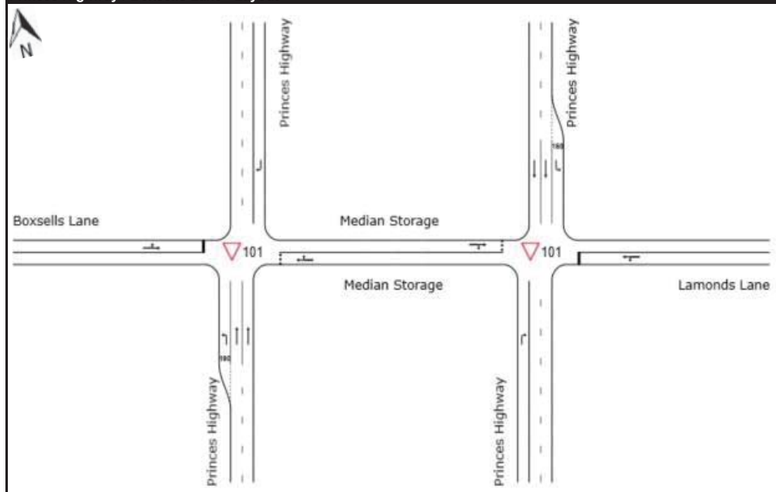
Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	164	0.09	5.5	0	LOS A
	Through	1	0.09	0	0	LOS A
SB Ramp (NW)	Through	177	0.16	0.3	1.8	LOS A
	Right	100	0.16	6	1.8	LOS A
Pestells Lane (SW)	Left	309	0.45	5.5	6.6	LOS A
	Right	242	0.45	7.8	6.6	LOS A
Intersection	**All**	**994**	**0.45**	**5.2**	**6.6**	**N/A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	325	0.18	5.5	0	LOS A
	Through	1	0.18	0	0	LOS A
SB Ramp (NW)	Through	185	0.30	1.3	4.9	LOS A
	Right	269	0.30	6.9	4.9	LOS A
Pestells Lane (SW)	Left	172	0.40	6	6.1	LOS A
	Right	207	0.40	10.1	6.1	LOS A
Intersection	**All**	**1160**	**0.40**	**6.1**	**6.1**	**N/A**

Princes Highway / Boxsells Lane - Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model November 2018 version (Node #20528).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.70 and 0.80; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 0.80; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.
- LOS 'F'

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the Annual Average School Term (AAST).

Boxsells Lane on-ramp to Princes Highway NB as well as the Lamonds Lane on-ramp to Princes Highway SB is stop sign controlled.

Princes Highway NB deceleration lane is 190m in length and Princes Highway SB deceleration lane is 150m.

Median storage length is 6m.

Boxsells Lane and Lamonds Lane is 60km/h, and Princes Highway is 100km/h.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The queue length on the Boxsells Lane western approach reaches a maximum of 1.1m in year 2041 PM peak hour with an average delay time of 0.7 seconds.

A Level of Service (LoS) of 'A' to 'C' is consistent throughout all scenarios.

Intersection Performance - Annual Average School Term (AAST)

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	1	0.00	7.8	0	LOS A
	Through	603	0.16	0	0	LOS A
Median Storage (E)	Through	1	0.01	6.8	0.1	LOS A
	Right	1	0.01	8.8	0.1	LOS A
Princes Highway (N)	Right	1	0.00	12	0	LOS A
Boxsells Lane (W)	Left	18	0.02	9.6	0.2	LOS A
	Through	1	0.02	14.8	0.2	LOS B
East Section						
Princes Highway (S)	Right	1	0.00	19.7	0	LOS B
Lamonds Lane (E)	Left	1	0.01	11.2	0.1	LOS A
	Through	1	0.01	27.9	0.1	LOS B
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1043	0.27	0	0	LOS A
Median Storage (W)	Through	1	0.01	17.2	0.1	LOS B
	Right	1	0.01	22.1	0.1	LOS B
Intersection	**All**	**1049**	**0.27**	**0.1**	**0.2**	**NA**

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	1	0.00	7.8	0	LOS A
	Through	1037	0.27	0	0	LOS A
Median Storage (E)	Through	1	0.01	16.9	0.1	LOS B
	Right	1	0.01	22.6	0.1	LOS B
Princes Highway (N)	Right	1	0.00	19.6	0	LOS B
Boxsells Lane (W)	Left	23	0.04	11.4	0.4	LOS A
	Through	1	0.04	28.9	0.4	LOS C
East Section						
Princes Highway (S)	Right	1	0.01	21.8	0	LOS B
Lamonds Lane (E)	Left	1	0.01	11.5	0.1	LOS A
	Through	1	0.01	31.8	0.1	LOS C
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1116	0.29	0	0	LOS A
Median Storage (W)	Through	1	0.01	20	0.1	LOS B
	Right	1	0.01	26	0.1	LOS B
Intersection	**All**	**1122**	**0.29**	**0.4**	**0.4**	**NA**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	1	0.00	7.8	0	LOS A
	Through	609	0.16	0	0	LOS A
Median Storage (E)	Through	1	0.01	6.9	0.1	LOS A
	Right	1	0.01	9.1	0.1	LOS A
Princes Highway (N)	Right	1	0.00	12.1	0	LOS A
Boxsells Lane (W)	Left	27	0.04	9.6	0.3	LOS A
	Through	1	0.04	15.1	0.3	LOS B
East Section						
Princes Highway (S)	Right	1	0.01	22.9	0	LOS B
Lamonds Lane (E)	Left	1	0.01	11.7	0.1	LOS A
	Through	1	0.01	33.9	0.1	LOS C
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1151	0.30	0	0	LOS A
Median Storage (W)	Through	1	0.01	21.6	0.1	LOS B
	Right	1	0.01	28.1	0.1	LOS B
Intersection	**All**	**1157**	**0.295**	**0.5**	**0.3**	**NA**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	1	0.00	7.8	0	LOS A
	Through	1096	0.28	0	0	LOS A
Median Storage (E)	Through	1	0.01	19.2	0.1	LOS B
	Right	1	0.01	26.5	0.1	LOS B
Princes Highway (N)	Right	1	0.01	21.2	0	LOS B
Boxsells Lane (W)	Left	40	0.07	11.8	0.7	LOS A
	Through	1	0.07	32.9	0.7	LOS C
East Section						
Princes Highway (S)	Right	1	0.01	23.8	0	LOS B
Lamonds Lane (E)	Left	1	0.01	11.9	0.1	LOS A
	Through	1	0.01	35.7	0.1	LOS C
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1177	0.30	0	0	LOS A
Median Storage (W)	Through	1	0.02	22.9	0.1	LOS B
	Right	1	0.02	29.8	0.1	LOS C
Intersection	**All**	**1183**	**0.30**	**0.5**	**0.7**	**NA**

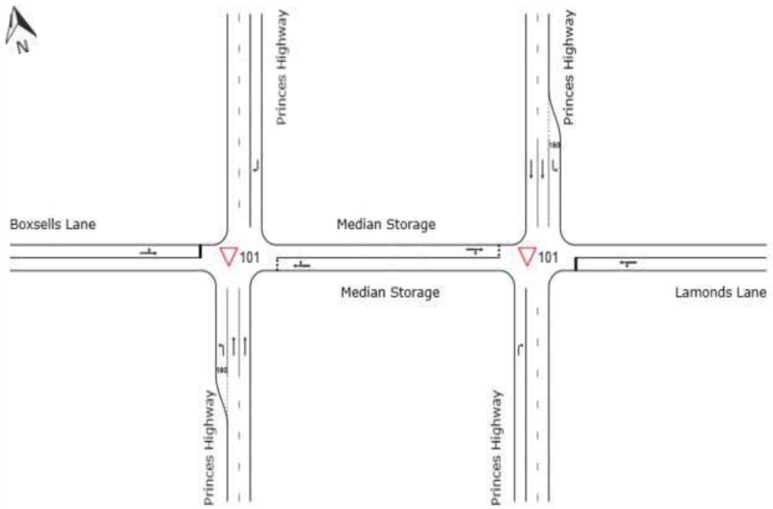
Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	1	0.00	7.8	0	LOS A
	Through	624	0.16	0	0	LOS A
Median Storage (E)	Through	1	0.01	7.1	0.1	LOS A
	Right	1	0.01	9.8	0.1	LOS A
Princes Highway (N)	Right	1	0.00	12.3	0	LOS A
Boxsells Lane (W)	Left	48	0.06	9.7	0.6	LOS A
	Through	1	0.06	15.6	0.6	LOS B
East Section						
Princes Highway (S)	Right	1	0.01	29.2	0.1	LOS C
Lamonds Lane (E)	Left	1	0.01	12.7	0.1	LOS A
	Through	1	0.01	46.6	0.1	LOS D
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1309	0.34	0	0	LOS A
Median Storage (W)	Through	1	0.02	30.7	0.2	LOS C
	Right	1	0.02	40.8	0.2	LOS C
Intersection	**All**	**1316**	**0.34**	**0.8**	**0.6**	**NA**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	1	0.00	7.8	0	LOS A
	Through	1179	0.30	0	0	LOS A
Median Storage (E)	Through	1	0.02	23	0.1	LOS B
	Right	1	0.02	33.3	0.1	LOS C
Princes Highway (N)	Right	1	0.01	23.9	0	LOS B
Boxsells Lane (W)	Left	61	0.12	12.4	1.1	LOS A
	Through	1	0.12	39.5	1.1	LOS C
East Section						
Princes Highway (S)	Right	1	0.01	27.2	0.1	LOS B
Lamonds Lane (E)	Left	1	0.01	12.4	0.1	LOS A
	Through	1	0.01	42.4	0.1	LOS C
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1264	0.32	0	0	LOS A
Median Storage (W)	Through	1	0.02	27.7	0.2	LOS B
	Right	1	0.02	36.6	0.2	LOS C
Intersection	**All**	**1271**	**0.324**	**0.7**	**1.1**	**NA**

Princes Highway / Boxsells Lane - Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model November 2018 version (Node #20528).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.70 and 0.80; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 0.80; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.
- LOS 'F'

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the Annual Average School Term (AAST).

Boxsells Lane on-ramp to Princes Highway NB as well as the Lamonds Lane on-ramp to Princes Highway SB is stop sign controlled.

Princes Highway NB deceleration lane is 190m in length and Princes Highway SB deceleration lane is 150m.

Median storage length is 6m.

Boxsells Lane and Lamonds Lane is 60km/h, and Princes Highway is 100km/h.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The queue length on the Boxsells Lane western approach reaches a maximum of 4.1m in year 2041 PM peak hour with an average delay time of 1.9 seconds.

The Level of Service (LoS) fails within the through movement from the Lamonds Lane eastern approach and within the right-turn movement from the Median Storage western approach in year 2041 PM peak hour. This is a result of high forecasted through traffic volumes on the Princes Highway.

Intersection Performance - Annual Average School Term (AAST)

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	1	0.00	7.8	0	LOS A
	Through	640	0.16	0	0	LOS A
Median Storage (E)	Through	1	0.01	7.4	0.1	LOS A
	Right	1	0.01	10.3	0.1	LOS A
Princes Highway (N)	Right	1	0.00	12.5	0	LOS A
Boxsells Lane (W)	Left	58	0.07	9.8	0.7	LOS A
	Through	1	0.07	16.1	0.7	LOS B
East Section						
Princes Highway (S)	Right	1	0.01	37.9	0.1	LOS C
Lamonds Lane (E)	Left	1	0.02	13.8	0.2	LOS A
	Through	1	0.02	65.1	0.2	LOS E
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1459	0.37	0	0	LOS A
Median Storage (W)	Through	1	0.03	43.5	0.2	LOS D
	Right	1	0.03	59.3	0.2	LOS E
Intersection	**All**	**1465**	**0.37**	**0.9**	**0.7**	**NA**

Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	1	0.00	7.8	0	LOS A
	Through	640	0.16	0	0	LOS A
Median Storage (E)	Through	1	0.01	7.4	0.1	LOS A
	Right	1	0.01	12	0.1	LOS A
Princes Highway (N)	Right	1	0.00	12.5	0	LOS A
Boxsells Lane (W)	Left	140	0.17	10	1.8	LOS A
	Through	1	0.17	16.9	1.8	LOS B
East Section						
Princes Highway (S)	Right	1	0.01	35.7	0.1	LOS C
Lamonds Lane (E)	Left	1	0.02	13.5	0.2	LOS A
	Through	1	0.02	60.3	0.2	LOS E
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1426	0.37	0	0	LOS A
Median Storage (W)	Through	1	0.03	40.2	0.2	LOS C
	Right	1	0.03	54.6	0.2	LOS D
Intersection	**All**	**1433**	**0.366**	**1.9**	**1.8**	**NA**

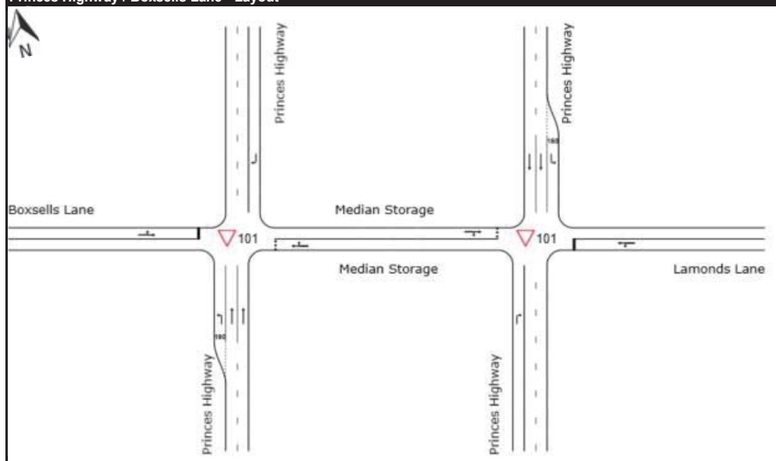
Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	1	0.00	7.8	0	LOS A
	Through	1286	0.33	0	0	LOS A
Median Storage (E)	Through	1	0.02	29.1	0.2	LOS C
	Right	1	0.02	44.5	0.2	LOS D
Princes Highway (N)	Right	1	0.01	28.2	0.1	LOS B
Boxsells Lane (W)	Left	81	0.17	13.3	1.6	LOS A
	Through	1	0.17	50.3	1.6	LOS D
East Section						
Princes Highway (S)	Right	1	0.01	30.4	0.1	LOS C
Lamonds Lane (E)	Left	1	0.02	12.8	0.1	LOS A
	Through	1	0.02	49	0.1	LOS D
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1333	0.34	0	0	LOS A
Median Storage (W)	Through	1	0.02	32.4	0.2	LOS C
	Right	1	0.02	43.2	0.2	LOS D
Intersection	**All**	**1339**	**0.34**	**0.9**	**1.6**	**NA**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	1	0.00	7.8	0	LOS A
	Through	1248	0.32	0	0	LOS A
Median Storage (E)	Through	1	0.02	26.8	0.2	LOS B
	Right	1	0.02	48.6	0.2	LOS D
Princes Highway (N)	Right	1	0.01	26.5	0.1	LOS B
Boxsells Lane (W)	Left	175	0.33	14.3	4.1	LOS A
	Through	1	0.33	51.7	4.1	LOS D
East Section						
Princes Highway (S)	Right	1	0.01	44.6	0.1	LOS D
Lamonds Lane (E)	Left	1	0.03	14.5	0.2	LOS A
	Through	1	0.03	80.2	0.2	LOS F
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1545	0.40	0.1	0	LOS A
Median Storage (W)	Through	1	0.04	53.7	0.3	LOS D
	Right	1	0.04	74.5	0.3	LOS F
Intersection	**All**	**1552**	**0.396**	**1.9**	**4.1**	**NA**

Princes Highway / Boxsells Lane - Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model November 2018 version (Node #20528).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.70 and 0.80; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 0.80; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.
- LOS 'F'

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the 100th Highest Hour (100HH).

Boxsells Lane on-ramp to Princes Highway NB as well as the Lamonds Lane on-ramp to Princes Highway SB is stop sign controlled.

Princes Highway NB deceleration lane is 190m in length and Princes Highway SB deceleration lane is 150m.

Median storage length is 6m.

Boxsells Lane and Lamonds Lane is 60km/h, and Princes Highway is 100km/h.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The queue length on the Boxsells Lane western approach reaches a maximum of 1.4m in year 2041 PM peak hour with an average delay time of 0.8 seconds.

A Level of Service (LoS) of 'A' to 'E' is consistent throughout all scenarios.

Intersection Performance - 100th Highest Hour (100HH)

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	1	0.00	7.8	0	LOS A
	Through	584	0.15	0	0	LOS A
Median Storage (E)	Through	1	0.01	6.6	0	LOS A
	Right	1	0.01	8.4	0	LOS A
Princes Highway (N)	Right	1	0.00	11.8	0	LOS A
Boxsells Lane (W)	Left	13	0.02	9.5	0.2	LOS A
	Through	1	0.02	14.4	0.2	LOS A
East Section						
Princes Highway (S)	Right	1	0.00	17.5	0	LOS B
Lamonds Lane (E)	Left	1	0.01	10.7	0.1	LOS A
	Through	1	0.01	23.7	0.1	LOS B
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	947	0.24	0	0	LOS A
Median Storage (W)	Through	1	0.01	14	0.1	LOS A
	Right	1	0.01	17.9	0.1	LOS B
Intersection	**All**	**954**	**0.24**	**0.1**	**0.1**	**NA**

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	1	0.00	7.8	0	LOS A
	Through	1119	0.29	0	0	LOS A
Median Storage (E)	Through	1	0.01	20.2	0.1	LOS B
	Right	1	0.01	27	0.1	LOS B
Princes Highway (N)	Right	1	0.01	21.9	0	LOS B
Boxsells Lane (W)	Left	21	0.04	11.8	0.4	LOS A
	Through	1	0.04	33.5	0.4	LOS C
East Section						
Princes Highway (S)	Right	1	0.01	27.3	0.1	LOS B
Lamonds Lane (E)	Left	1	0.01	12.4	0.1	LOS A
	Through	1	0.01	42.7	0.1	LOS D
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1267	0.33	0	0	LOS A
Median Storage (W)	Through	1	0.02	27.9	0.2	LOS B
	Right	1	0.02	36.9	0.2	LOS C
Intersection	**All**	**1274**	**0.33**	**0.4**	**0.4**	**NA**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	1	0.00	7.8	0	LOS A
	Through	617	0.16	0	0	LOS A
Median Storage (E)	Through	1	0.01	7	0.1	LOS A
	Right	1	0.01	9.2	0.1	LOS A
Princes Highway (N)	Right	1	0.00	12.2	0	LOS A
Boxsells Lane (W)	Left	26	0.03	9.6	0.3	LOS A
	Through	1	0.03	15.2	0.3	LOS B
East Section						
Princes Highway (S)	Right	1	0.01	20.3	0	LOS B
Lamonds Lane (E)	Left	1	0.01	11.3	0.1	LOS A
	Through	1	0.01	29	0.1	LOS C
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1064	0.27	0	0	LOS A
Median Storage (W)	Through	1	0.01	17.9	0.1	LOS B
	Right	1	0.01	23.1	0.1	LOS B
Intersection	**All**	**1071**	**0.273**	**0.5**	**0.3**	**NA**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	1	0.00	7.8	0	LOS A
	Through	1181	0.30	0	0	LOS A
Median Storage (E)	Through	1	0.02	23.1	0.1	LOS B
	Right	1	0.02	32.4	0.1	LOS C
Princes Highway (N)	Right	1	0.01	23.9	0	LOS B
Boxsells Lane (W)	Left	44	0.09	12.3	0.8	LOS A
	Through	1	0.09	38.9	0.8	LOS C
East Section						
Princes Highway (S)	Right	1	0.01	31.5	0.1	LOS C
Lamonds Lane (E)	Left	1	0.02	13	0.1	LOS A
	Through	1	0.02	51.4	0.1	LOS D
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1355	0.35	0	0	LOS A
Median Storage (W)	Through	1	0.02	34	0.2	LOS C
	Right	1	0.02	45.6	0.2	LOS D
Intersection	**All**	**1361**	**0.35**	**0.6**	**0.8**	**NA**

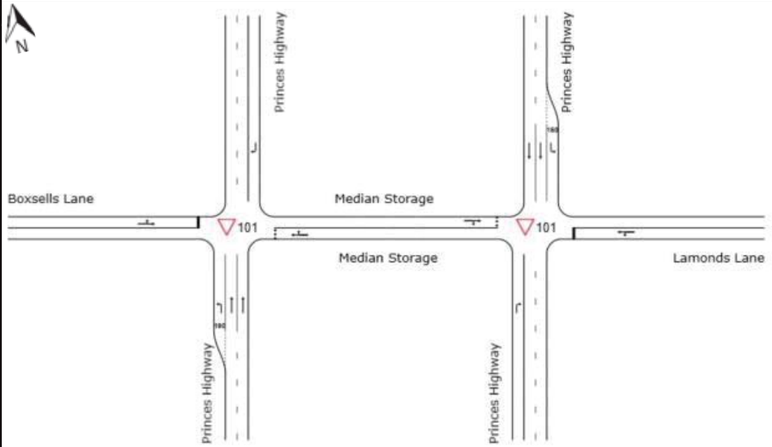
Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	1	0.00	7.8	0	LOS A
	Through	1181	0.30	0	0	LOS A
Median Storage (E)	Through	1	0.02	23.1	0.1	LOS B
	Right	1	0.02	32.4	0.1	LOS C
Princes Highway (N)	Right	1	0.01	23.9	0	LOS B
Boxsells Lane (W)	Left	44	0.09	12.3	0.8	LOS A
	Through	1	0.09	38.9	0.8	LOS C
East Section						
Princes Highway (S)	Right	1	0.01	31.5	0.1	LOS C
Lamonds Lane (E)	Left	1	0.02	13	0.1	LOS A
	Through	1	0.02	51.4	0.1	LOS D
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1355	0.35	0	0	LOS A
Median Storage (W)	Through	1	0.02	34	0.2	LOS C
	Right	1	0.02	45.6	0.2	LOS D
Intersection	**All**	**1361**	**0.35**	**0.6**	**0.8**	**NA**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	1	0.00	7.8	0	LOS A
	Through	1256	0.32	0	0	LOS A
Median Storage (E)	Through	1	0.02	27.2	0.2	LOS B
	Right	1	0.02	40.5	0.2	LOS C
Princes Highway (N)	Right	1	0.01	26.8	0.1	LOS B
Boxsells Lane (W)	Left	69	0.14	13	1.4	LOS A
	Through	1	0.14	46.6	1.4	LOS D
East Section						
Princes Highway (S)	Right	1	0.01	36.6	0.1	LOS C
Lamonds Lane (E)	Left	1	0.02	13.6	0.2	LOS A
	Through	1	0.02	62.2	0.2	LOS E
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1440	0.37	0	0	LOS A
Median Storage (W)	Through	1	0.03	41.6	0.2	LOS C
	Right	1	0.03	56.5	0.2	LOS E
Intersection	**All**	**1446**	**0.369**	**0.8**	**1.4**	**NA**

Princes Highway / Boxsells Lane - Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model November 2018 version (Node #20528).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.70 and 0.80; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 0.80; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.
- LOS 'F'

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the 100th Highest Hour (100HH).

Boxsells Lane on-ramp to Princes Highway NB as well as the Lamonds Lane on-ramp to Princes Highway SB is stop sign controlled.

Princes Highway NB deceleration lane is 190m in length and Princes Highway SB deceleration lane is 150m.

Median storage length is 6m.

Boxsells Lane and Lamonds Lane is 60km/h, and Princes Highway is 100km/h.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The queue length on the Boxsells Lane western approach reaches a maximum of 5.2m in year 2041 PM peak hour with an average delay time of 2.2 seconds.

The Level of Service (LoS) fails within the through movement from the Lamonds Lane eastern approach and within the right-turn and through movements from the Median Storage western approach in year 2041 PM peak hour. This is a result of high forecasted through traffic volumes on the Princes Highway.

Intersection Performance - 100th Highest Hour (100HH)

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	1	0.00	7.8	0	LOS A
	Through	662	0.17	0	0	LOS A
Median Storage (E)	Through	1	0.01	7.7	0.1	LOS A
	Right	1	0.01	10.8	0.1	LOS A
Princes Highway (N)	Right	1	0.00	12.7	0	LOS A
Boxsells Lane (W)	Left	58	0.07	9.9	0.7	LOS A
	Through	1	0.07	16.6	0.7	LOS B
East Section						
Princes Highway (S)	Right	1	0.01	32.6	0.1	LOS C
Lamonds Lane (E)	Left	1	0.02	13.1	0.1	LOS A
	Through	1	0.02	53.6	0.1	LOS D
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1374	0.35	0	0	LOS A
Median Storage (W)	Through	1	0.03	35.6	0.2	LOS C
	Right	1	0.03	47.8	0.2	LOS D
Intersection	**All**	**1380**	**0.35**	**0.9**	**0.7**	**NA**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	1	0.00	7.8	0	LOS A
	Through	1364	0.35	0	0	LOS A
Median Storage (E)	Through	1	0.03	34.8	0.2	LOS C
	Right	1	0.03	54.8	0.2	LOS D
Princes Highway (N)	Right	1	0.01	32	0.1	LOS C
Boxsells Lane (W)	Left	91	0.20	13.9	1.9	LOS A
	Through	1	0.20	60.3	1.9	LOS E
East Section						
Princes Highway (S)	Right	1	0.01	41.7	0.1	LOS C
Lamonds Lane (E)	Left	1	0.02	14.2	0.2	LOS A
	Through	1	0.02	73.6	0.2	LOS F
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1511	0.39	0.1	0	LOS A
Median Storage (W)	Through	1	0.04	49.3	0.3	LOS D
	Right	1	0.04	67.9	0.3	LOS E
Intersection	**All**	**1517**	**0.39**	**1**	**1.9**	**NA**

Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	1	0.00	7.8	0	LOS A
	Through	681	0.18	0	0	LOS A
Median Storage (E)	Through	1	0.01	8.1	0.1	LOS A
	Right	1	0.01	12.9	0.1	LOS A
Princes Highway (N)	Right	1	0.00	13	0	LOS A
Boxsells Lane (W)	Left	135	0.17	10.1	1.8	LOS A
	Through	1	0.17	17.9	1.8	LOS B
East Section						
Princes Highway (S)	Right	1	0.01	31.9	0.1	LOS C
Lamonds Lane (E)	Left	1	0.02	13	0.1	LOS A
	Through	1	0.02	52.1	0.1	LOS D
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1361	0.35	0	0	LOS A
Median Storage (W)	Through	1	0.02	34.5	0.2	LOS C
	Right	1	0.02	46.3	0.2	LOS D
Intersection	**All**	**1367**	**0.349**	**1.8**	**1.8**	**NA**

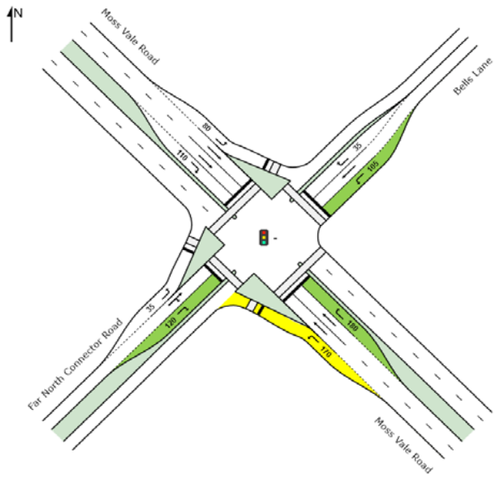
Year 2041 PM Peak Hour

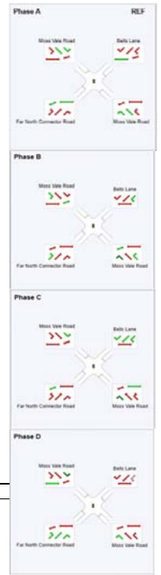
Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	1	0.00	7.8	0	LOS A
	Through	1327	0.34	0	0	LOS A
Median Storage (E)	Through	1	0.03	32	0.2	LOS C
	Right	1	0.03	61.4	0.2	LOS E
Princes Highway (N)	Right	1	0.01	30.1	0.1	LOS C
Boxsells Lane (W)	Left	196	0.40	15.6	5.2	LOS B
	Through	1	0.40	63.1	5.2	LOS E
East Section						
Princes Highway (S)	Right	1	0.02	68.7	0.1	LOS E
Lamonds Lane (E)	Left	1	0.04	16.6	0.3	LOS B
	Through	1	0.04	138.6	0.3	LOS F
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1749	0.45	0.1	0	LOS A
Median Storage (W)	Through	1	0.07	91.8	0.5	LOS F
	Right	1	0.07	133.1	0.5	LOS F
Intersection	**All**	**1756**	**0.449**	**2.2**	**5.2**	**NA**

Appendix E: Moss Vale Road / Bells Lane / Far North Collector Road Detailed SIDRA Summaries

Revised Analysis based on updated May 2020 TRACKS models

Moss Vale Road / Far North Connector Road Signals - Second Iteration





Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model (Node #20725 May 2020 version).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.90 and 1.00; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021 (year of opening), 2026 (5-year design horizon), 2031 (10-year design horizon), 2036 (15-year design horizon), and 2041 (20-year design horizon).

Model Description

The traffic volumes represent the AM and PM peak hour for the average annual daily traffic volumes.

The intersection form is as per the previous assessment with modified turn pocket lengths and a 90km/h posted speed limit on Moss Vale Road

The signal phasing is diamond overlap turn phasing for the Moss Vale Road approaches, and split phasing for the Bells Lane and Far North Collector Road approaches.

Key Findings

The intersection reaches over-capacity in queuing in the ultimate year during AM peak hour in the AAST scenario in the order of one movement. The Bells Lane left-turn movement exceeds the available turn pocket length by 2.5m in the 2041 AM Peak scenario.

The intersection exceeds saturation limits by the year 2041.

Intersection Performance - Average Annual School Term

Year 2021 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	254	0.20	9.1	7.6	A
	Through	266	0.44	21.8	22.9	C
	Right	2	0.01	29.4	0.3	C
Bells Lane (NE)	Left	5	0.01	7.9	0.3	A
	Through	9	0.04	22	1.6	C
	Right	3	0.02	27.4	0.5	C
Moss Vale Road (NW)	Left	3	0.00	12	0.2	B
	Through	356	0.59	22.7	31.8	C
	Right	44	0.21	30.7	7.7	C
Far North Connector Road (SW)	Left	4	0.01	13.8	0.3	B
	Through	8	0.57	24.7	23	C
	Right	239	0.57	30.4	23	C
Intersection	All	1195	0.589	21.4	31.8	C

Year 2021 PM Peak Hour — Cycle Time: 50s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	364	0.30	9.4	13.5	A
	Through	425	0.70	24.2	40.1	C
	Right	4	0.02	29.6	0.7	C
Bells Lane (NE)	Left	2	0.00	7.8	0.1	A
	Through	12	0.05	22.1	1.9	C
	Right	3	0.02	27.4	0.5	C
Moss Vale Road (NW)	Left	3	0.00	12	0.2	B
	Through	354	0.59	22.7	31.6	C
	Right	76	0.35	31.3	13.5	C
Far North Connector Road (SW)	Left	4	0.01	13.8	0.3	B
	Through	9	0.54	24.5	21.5	C
	Right	224	0.54	30.1	21.5	C
Intersection	All	1481	0.704	21.4	40.1	C

Year 2026 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	325	0.25	9.1	11.7	A
	Through	322	0.39	22.5	30.7	C
	Right	42	0.24	36.5	8.9	D
Bells Lane (NE)	Left	61	0.07	9.9	4.8	A
	Through	23	0.12	28.2	4.8	C
	Right	5	0.03	33.2	1.1	C
Moss Vale Road (NW)	Left	5	0.01	11.3	0.4	B
	Through	536	0.66	24.7	55.7	C
	Right	59	0.33	37	12.7	D
Far North Connector Road (SW)	Left	5	0.01	14.5	0.5	A
	Through	19	0.65	26.4	45.4	C
	Right	406	0.65	32.1	45.4	C
Intersection	All	1809	0.655	23.4	55.7	C

Year 2026 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	526	0.42	9.5	25.5	A
	Through	572	0.53	20.2	53.2	C
	Right	55	0.31	36.9	11.7	D
Bells Lane (NE)	Left	22	0.03	8.4	1.3	A
	Through	21	0.11	28.1	4.4	C
	Right	5	0.03	33.2	1.1	C
Moss Vale Road (NW)	Left	5	0.01	11.3	0.4	B
	Through	559	0.52	20.1	51.8	C
	Right	105	0.59	38.3	23.7	D
Far North Connector Road (SW)	Left	5	0.01	16.6	0.6	A
	Through	17	0.53	29	24.1	C
	Right	204	0.53	34.7	24.1	C
Intersection	All	2097	0.587	20.3	53.2	C

Year 2031 AM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	365	0.29	9.5	18.7	A
	Through	312	0.36	25.1	33.6	C
	Right	136	0.66	42.8	35.5	D
Bells Lane (NE)	Left	281	0.36	13	36.9	B
	Through	83	0.51	35.7	21.5	D
	Right	8	0.06	39	2	D
Moss Vale Road (NW)	Left	8	0.01	11.6	0.6	B
	Through	571	0.66	27.8	67.9	C
	Right	62	0.30	40.2	15.1	D
Far North Connector Road (SW)	Left	4	0.01	14.4	0.4	A
	Through	58	0.66	27.9	64.8	C
	Right	483	0.66	33.5	64.8	C
Intersection	All	2372	0.663	25.5	67.9	C

Year 2031 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	624	0.51	10.3	40.4	B
	Through	543	0.54	21	51.4	C
	Right	23	0.13	36	4.8	D
Bells Lane (NE)	Left	115	0.13	9.4	8.7	A
	Through	68	0.36	29.3	14.7	C
	Right	8	0.05	33.4	1.7	C
Moss Vale Road (NW)	Left	8	0.01	11.5	0.6	B
	Through	602	0.60	21.4	58.1	C
	Right	106	0.59	38.4	24	D
Far North Connector Road (SW)	Left	5	0.01	16.1	0.6	A
	Through	61	0.58	28.4	30.9	C
	Right	221	0.58	34.1	30.9	C
Intersection	All	2386	0.598	20.3	58.1	C

Year 2036 AM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	314	0.26	9.5	14.1	A
	Through	314	0.45	24.7	31.3	C
	Right	149	0.71	38.9	34.6	D
Bells Lane (NE)	Left	431	0.51	13.1	55	B
	Through	135	0.71	32	31.4	C
	Right	11	0.06	33.5	2.2	C
Moss Vale Road (NW)	Left	11	0.01	12	0.8	B
	Through	498	0.72	27.7	55	C
	Right	9	0.05	34.2	1.9	C
Far North Connector Road (SW)	Left	5	0.01	13.6	0.4	A
	Through	85	0.80	29.8	68.8	C
	Right	495	0.80	35.5	68.8	D
Intersection	All	2456	0.803	24.9	68.8	C

Year 2036 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	652	0.56	10.4	44.7	B
	Through	529	0.70	26.5	57.3	C
	Right	289	0.88	43.5	75.8	D
Bells Lane (NE)	Left	136	0.14	10.2	11.4	B
	Through	91	0.48	29.8	19.8	C
	Right	11	0.06	33.5	2.2	C
Moss Vale Road (NW)	Left	11	0.01	13.6	0.9	B
	Through	601	0.80	29.3	70	C
	Right	107	0.33	31.7	20.9	C
Far North Connector Road (SW)	Left	5	0.01	14	0.5	A
	Through	93	0.78	32.6	40.1	C
	Right	239	0.78	38.4	40.1	D
Intersection	All	2763	0.881	25.8	75.8	C

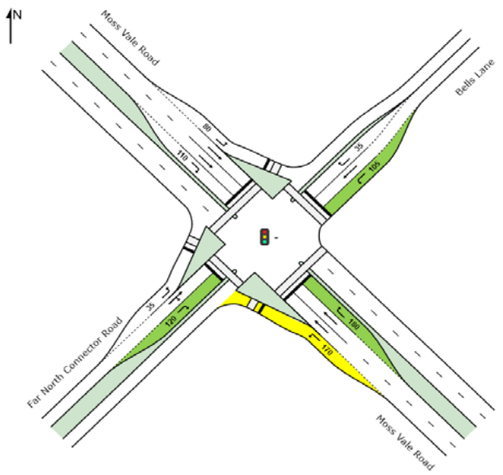
Year 2041 AM Peak Hour — Cycle Time: 90s

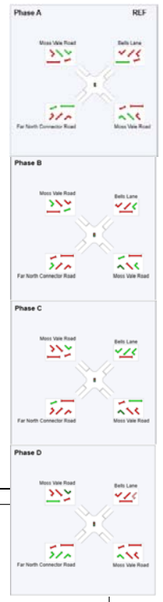
Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	288	0.26	10.6	23	B
	Through	328	0.56	39.2	50.5	D
	Right	285	0.84	53.3	101.1	D
Bells Lane (NE)	Left	605	0.63	19	107.5	B
	Through	260	0.83	45.9	91.1	D
	Right	7	0.03	39.7	2	D
Moss Vale Road (NW)	Left	18	0.02	14.1	1.9	B
	Through	449	0.77	43.3	75.1	D
	Right	6	0.02	39.7	1.7	D
Far North Connector Road (SW)	Left	5	0.01	14.1	0.5	B
	Through	174	0.77	39	102	D
	Right	447	0.77	44.7	102	D
Intersection	All	2875	0.842	35.4	107.5	D

Year 2041 PM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	544	0.50	11.5	53.3	B
	Through	500	0.88	46.4	83.9	C
	Right	434	0.92	56.5	159.2	D
Bells Lane (NE)	Left	338	0.33	12.8	45.6	B
	Through	204	0.87	45.9	67.2	D
	Right	19	0.09	40.1	4.9	D
Moss Vale Road (NW)	Left	8	0.01	16.8	1	B
	Through	497	0.88	45.9	82.7	C
	Right	95	0.20	32.8	21.3	D
Far North Connector Road (SW)	Left	6	0.01	12.8	0.5	A
	Through	194	0.88	46.1	89.4	D
	Right	329	0.88	51.9	89.4	D
Intersection	All	3168	0.921	38.1	159.2	C

Moss Vale Road / Far North Connector Road Signals - Second Iteration





Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model (Node #20725 May 2020 version).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.90 and 1.00; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
- the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021 (year of opening), 2026 (5-year design horizon), 2031 (10-year design horizon), 2036 (15-year design horizon), and 2041 (20-year design horizon).

Model Description

The traffic volumes represent the annual 100th highest hour for each AM and PM peak hour.

The intersection form is as per the previous assessment with modifed turn pokcet lengths and a 90km/h posted speed limit on Moss Vale Road

The signal phasing is diamond overlap turn phasing for the Moss Vale Road approaches, and split phasing for the Bells Lane and Far North Collector Road approaches.

Key Findings

The intersection reaches over-capacity in queuing in the ultimate year during PM peak hour in the AAST scenario in the order of one movement. The Far North Collector road right-turn movement exceeds the available turn pocket length by 29.5m in the 2041 PM Peak scenario.

The intersection remains within acceptable limits for saturation in the ultimate year.

Intersection Performance - 100th Highest Hour

Year 2021 AM Peak Hour — Cycle Time: 50s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	234	0.19	9.1	6.9	A
	Through	248	0.41	21.7	21.2	C
	Right	2	0.01	29.4	0.3	C
Bells Lane (NE)	Left	4	0.00	7.9	0.2	A
	Through	8	0.04	22	1.4	C
	Right	3	0.02	27.4	0.5	C
Moss Vale Road (NW)	Left	3	0.00	12	0.2	B
	Through	334	0.55	22.4	29.4	C
	Right	43	0.20	30.7	7.5	C
Far North Connector Road (SW)	Left	3	0.01	16	0.2	B
	Through	7	0.54	24.4	21.3	C
	Right	224	0.54	30.1	21.3	C
Intersection	All	1115	0.552	21.2	29.4	C

Year 2021 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	502	0.39	9.5	23.6	A
	Through	522	0.52	20.8	49.1	C
	Right	5	0.03	35.2	1.1	D
Bells Lane (NE)	Left	3	0.00	8	0.2	A
	Through	13	0.07	27.8	2.6	C
	Right	3	0.02	33	0.6	C
Moss Vale Road (NW)	Left	3	0.00	11.3	0.2	B
	Through	473	0.47	20.5	43.7	C
	Right	96	0.53	37.9	21.3	D
Far North Connector Road (SW)	Left	4	0.01	16	0.4	B
	Through	11	0.49	27.8	25.2	C
	Right	226	0.49	33.4	25.2	C
Intersection	All	1861	0.534	20.2	49.1	C

Year 2026 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	302	0.25	9.1	9.4	A
	Through	304	0.50	22.1	26.5	C
	Right	40	0.19	30.6	6.9	D
Bells Lane (NE)	Left	56	0.06	9.4	3.7	A
	Through	20	0.09	22.4	3.4	C
	Right	5	0.02	27.6	0.9	C
Moss Vale Road (NW)	Left	5	0.01	12	0.4	B
	Through	501	0.83	27.9	51.8	C
	Right	53	0.25	30.9	9.2	C
Far North Connector Road (SW)	Left	4	0.01	13.8	0.3	B
	Through	17	0.91	35.4	46.2	D
	Right	377	0.91	41.1	46.2	D
Intersection	All	1684	0.913	25.9	51.8	C

Year 2026 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	649	0.52	10	39.1	B
	Through	660	0.62	20.8	63.3	C
	Right	61	0.34	37	13.2	D
Bells Lane (NE)	Left	25	0.03	9.4	1.8	A
	Through	24	0.13	28.2	5	C
	Right	5	0.03	33.2	1.1	C
Moss Vale Road (NW)	Left	5	0.01	11.3	0.4	B
	Through	665	0.62	20.8	64	C
	Right	118	0.66	39.1	27.1	D
Far North Connector Road (SW)	Left	6	0.02	16.7	0.7	A
	Through	20	0.63	30	30	C
	Right	246	0.63	35.7	30	D
Intersection	All	2486	0.657	20.7	64	C

Year 2031 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	345	0.28	9.3	14.3	A
	Through	298	0.39	23.4	28.9	C
	Right	132	0.73	40.2	31	D
Bells Lane (NE)	Left	266	0.32	11.5	27.8	B
	Through	75	0.40	29.4	16.2	C
	Right	8	0.05	33.4	1.7	C
Moss Vale Road (NW)	Left	8	0.01	11.5	0.6	B
	Through	538	0.71	26.7	58.6	C
	Right	57	0.32	36.9	12.2	D
Far North Connector Road (SW)	Left	4	0.01	14	0.4	A
	Through	53	0.71	26.7	56	C
	Right	458	0.71	32.4	56	C
Intersection	All	2242	0.734	24	58.6	C

Year 2031 PM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	642	0.55	10.4	43.4	B
	Through	597	0.73	26.3	65.2	C
	Right	237	0.79	38.5	55.9	D
Bells Lane (NE)	Left	131	0.14	11.1	12	B
	Through	80	0.42	29.5	17.4	C
	Right	8	0.05	33.4	1.7	C
Moss Vale Road (NW)	Left	8	0.01	13.1	0.7	B
	Through	706	0.86	32.8	89.2	C
	Right	116	0.39	33	23.3	C
Far North Connector Road (SW)	Left	6	0.01	14.5	0.6	A
	Through	75	0.80	33.2	41.2	C
	Right	263	0.80	38.9	41.2	D
Intersection	All	2869	0.863	26.3	89.2	C

Year 2036 AM Peak Hour — Cycle Time: 80s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	318	0.25	9.3	15.7	A
	Through	289	0.38	30.7	36.7	C
	Right	149	0.56	43.3	41.4	D
Bells Lane (NE)	Left	412	0.48	14.3	70.2	B
	Through	118	0.56	38.3	33.7	D
	Right	11	0.05	40.9	2.8	D
Moss Vale Road (NW)	Left	11	0.01	12.4	0.9	B
	Through	488	0.65	33	66.6	C
	Right	8	0.03	39.5	2.1	D
Far North Connector Road (SW)	Left	4	0.00	14	0.4	A
	Through	78	0.65	30.8	75	C
	Right	482	0.65	36.4	75	D
Intersection	All	2368	0.654	27.8	75	C

Year 2036 PM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	578	0.49	10.8	46.5	B
	Through	605	0.66	27	71.1	C
	Right	301	0.84	44	84.9	D
Bells Lane (NE)	Left	159	0.18	11.8	17.4	B
	Through	109	0.68	37.2	29.4	D
	Right	11	0.07	39.1	2.6	D
Moss Vale Road (NW)	Left	11	0.01	14.3	1	B
	Through	712	0.78	30.4	91.6	C
	Right	126	0.35	34.6	28.1	C
Far North Connector Road (SW)	Left	7	0.01	14.8	0.8	A
	Through	112	0.84	39.4	57	D
	Right	282	0.84	45.2	57	D
Intersection	All	3013	0.842	28.4	91.6	C

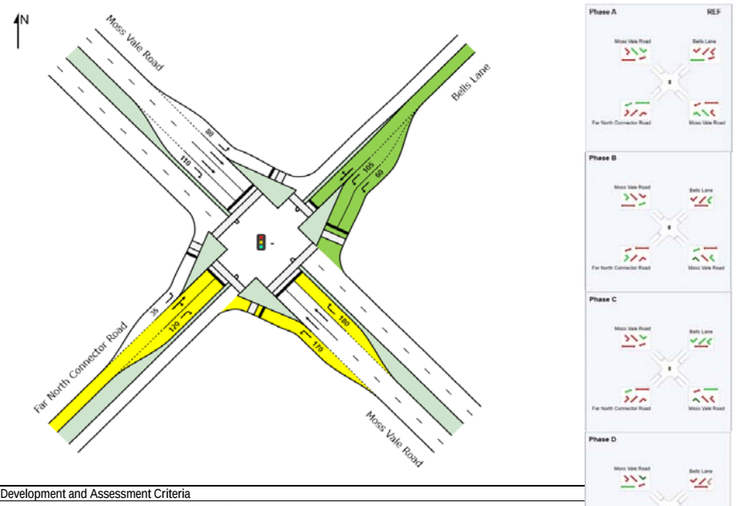
Year 2041 AM Peak Hour — Cycle Time: 80s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	326	0.30	10.8	25.4	B
	Through	273	0.48	35	37.1	C
	Right	295	0.82	47	91.6	D
Bells Lane (NE)	Left	566	0.59	16.8	87.8	B
	Through	226	0.80	40.7	69.7	D
	Right	7	0.03	37.4	1.8	D
Moss Vale Road (NW)	Left	17	0.02	14.4	1.7	B
	Through	457	0.81	41	70.8	D
	Right	53	0.15	36.7	12.6	D
Far North Connector Road (SW)	Left	4	0.01	13.4	0.4	B
	Through	159	0.83	39.4	94.2	D
	Right	440	0.83	45.1	94.2	D
Intersection	All	2823	0.83	32.9	94.2	C

Year 2041 PM Peak Hour — Cycle Time: 90s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	544	0.51	13.2	79.3	B
	Through	551	0.89	60.8	123.8	E
	Right	414	0.88	60.1	171.6	E
Bells Lane (NE)	Left	367	0.37	18.3	75.1	B
	Through	233	0.90	62.7	107.6	E
	Right	24	0.09	50.1	8.3	D
Moss Vale Road (NW)	Left	11	0.01	17.9	1.6	B
	Through	539	0.87	58.4	118.2	E
	Right	120	0.25	41.3	36.7	D
Far North Connector Road (SW)	Left	7	0.01	13.8	0.8	B
	Through	228	0.89	59.7	149.5	E
	Right	423	0.89	65.7	149.5	E
Intersection	All	3466	0.897	47	180.1	D

Moss Vale Road / Far North Connector Road Signals - Ultimate Form



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model (Node #20725 May 2020 version).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.90 and 1.00; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021 (year of opening), 2026 (5-year design horizon), 2031 (10-year design horizon), 2036 (15-year design horizon), and 2041 (20-year design horizon).

Model Description

The traffic volumes represent the AM and PM peak hour for the average annual daily traffic volumes.

The intersection form is as per the previous assessment with modified turn pocket lengths and a posted speed limit of 90km/h on Moss Vale Road.

The signal phasing is diamond overlap turn phasing for the Moss Vale Road approaches, and split phasing for the Bells Lane and Far North Collector Road approaches.

Key Findings

The intersection remains within acceptable limits at the year 2041.

Intersection Performance - Average Annual School Term

Year 2021 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	254	0.20	9.1	7.6	A
	Through	266	0.44	21.8	22.9	C
	Right	2	0.01	29.4	0.3	C
Bells Lane (NE)	Left	5	0.00	16.6	0.3	B
	Through	9	0.06	22.2	2.1	C
	Right	3	0.06	27.8	2.1	C
Moss Vale Road (NW)	Left	3	0.00	12	0.2	B
	Through	356	0.59	22.7	31.8	C
	Right	44	0.21	30.7	7.7	C
Far North Connector Road (SW)	Left	4	0.01	13.8	0.3	B
	Through	8	0.57	24.7	23	C
	Right	239	0.57	30.4	23	C
Intersection	All	1195	0.589	21.4	31.8	C

Year 2021 PM Peak Hour — Cycle Time: 50s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	364	0.30	9.4	13.5	A
	Through	425	0.70	24.2	40.1	C
	Right	4	0.02	29.6	0.7	C
Bells Lane (NE)	Left	2	0.00	16.6	0.1	B
	Through	12	0.07	22.2	2.5	C
	Right	3	0.07	27.9	2.5	C
Moss Vale Road (NW)	Left	3	0.00	12	0.2	B
	Through	354	0.59	22.7	31.6	C
	Right	76	0.35	31.3	13.5	C
Far North Connector Road (SW)	Left	4	0.01	13.8	0.3	B
	Through	9	0.54	24.5	21.5	C
	Right	224	0.54	30.1	21.5	C
Intersection	All	1481	0.704	21.4	40.1	C

Year 2026 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	325	0.25	9.1	11.7	A
	Through	322	0.39	22.5	30.7	C
	Right	42	0.24	36.5	8.9	D
Bells Lane (NE)	Left	61	0.06	21.9	4.7	C
	Through	23	0.15	28.4	5.9	C
	Right	5	0.15	34	5.9	C
Moss Vale Road (NW)	Left	5	0.01	11.3	0.4	B
	Through	536	0.66	24.7	55.7	C
	Right	59	0.33	37	12.7	D
Far North Connector Road (SW)	Left	5	0.01	14.5	0.5	A
	Through	19	0.65	26.4	45.4	C
	Right	406	0.65	32.1	45.4	C
Intersection	All	1809	0.655	23.8	55.7	C

Year 2026 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	526	0.42	9.5	25.5	A
	Through	572	0.53	20.2	53.2	C
	Right	55	0.31	36.9	11.7	D
Bells Lane (NE)	Left	22	0.02	21.6	1.7	C
	Through	21	0.14	28.3	5.5	C
	Right	5	0.14	33.9	5.5	C
Moss Vale Road (NW)	Left	5	0.01	11.3	0.4	B
	Through	559	0.52	20.1	51.8	C
	Right	105	0.59	38.3	23.7	D
Far North Connector Road (SW)	Left	5	0.01	16.6	0.6	A
	Through	17	0.53	29	24.1	C
	Right	204	0.53	34.7	24.1	C
Intersection	All	2097	0.587	20.4	53.2	C

Year 2031 AM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	365	0.29	9.5	18.7	A
	Through	312	0.36	25.1	33.6	C
	Right	136	0.66	42.8	35.5	D
Bells Lane (NE)	Left	281	0.27	26.9	27.7	C
	Through	83	0.57	36.1	23.9	D
	Right	8	0.57	41.7	23.9	D
Moss Vale Road (NW)	Left	8	0.01	11.6	0.6	B
	Through	571	0.66	27.8	67.9	C
	Right	62	0.30	40.2	15.1	D
Far North Connector Road (SW)	Left	4	0.01	14.4	0.4	A
	Through	58	0.66	27.9	64.8	C
	Right	483	0.66	33.5	64.8	C
Intersection	All	2372	0.663	27.2	67.9	C

Year 2031 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	624	0.52	10.3	40.8	B
	Through	543	0.66	24.9	56.8	C
	Right	233	0.71	35.3	51.3	D
Bells Lane (NE)	Left	115	0.08	18.4	7.9	B
	Through	68	0.41	29.5	16.7	C
	Right	8	0.41	35.1	16.7	D
Moss Vale Road (NW)	Left	8	0.01	13.4	0.7	B
	Through	602	0.74	26.5	66.1	C
	Right	106	0.32	31.7	20.7	C
Far North Connector Road (SW)	Left	5	0.01	14.4	0.5	A
	Through	61	0.78	33.4	34.2	C
	Right	221	0.78	39.1	34.2	D
Intersection	All	2596	0.778	24.2	66.1	C

Year 2036 AM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	314	0.26	9.5	14.1	A
	Through	314	0.50	25.8	32.2	C
	Right	149	0.71	38.9	34.6	D
Bells Lane (NE)	Left	431	0.38	23.3	36.7	C
	Through	135	0.77	33.2	34.7	C
	Right	11	0.77	38.8	34.7	D
Moss Vale Road (NW)	Left	11	0.01	12	0.8	B
	Through	498	0.79	30.6	58.4	C
	Right	9	0.05	34.2	1.9	C
Far North Connector Road (SW)	Left	5	0.01	13.1	0.3	B
	Through	85	0.74	26.8	64.6	C
	Right	495	0.74	32.4	64.6	C
Intersection	All	2456	0.791	26.8	64.6	C

Year 2036 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	652	0.56	10.4	44.7	B
	Through	529	0.70	26.5	57.3	C
	Right	289	0.88	43.5	75.8	D
Bells Lane (NE)	Left	136	0.10	18.5	9.4	B
	Through	91	0.54	30.1	22.4	C
	Right	11	0.54	35.8	22.4	D
Moss Vale Road (NW)	Left	11	0.01	13.6	0.9	B
	Through	601	0.80	29.3	70	C
	Right	107	0.33	31.7	20.9	C
Far North Connector Road (SW)	Left	5	0.01	14	0.5	B
	Through	93	0.78	32.6	40.1	C
	Right	239	0.78	38.4	40.1	D
Intersection	All	2763	0.881	26.2	75.8	C

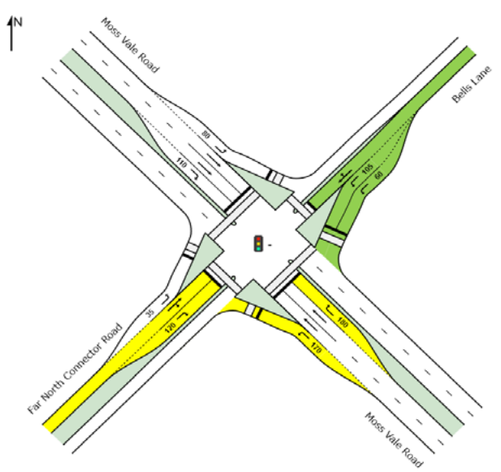
Year 2041 AM Peak Hour — Cycle Time: 80s

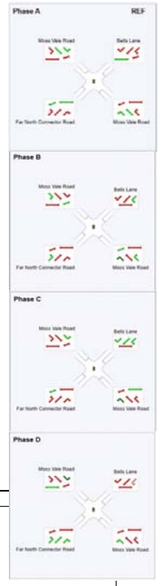
Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	288	0.26	10.4	20.5	B
	Through	328	0.63	37.3	46.9	D
	Right	285	0.85	49.6	91.7	D
Bells Lane (NE)	Left	605	0.40	22.9	59.9	C
	Through	260	0.87	44.9	88.5	D
	Right	7	0.87	50.5	88.5	D
Moss Vale Road (NW)	Left	18	0.02	14	1.8	B
	Through	449	0.87	45.4	73.9	D
	Right	6	0.02	36.4	1.5	D
Far North Connector Road (SW)	Left	5	0.01	13.5	0.5	B
	Through	174	0.81	37.5	95.3	D
	Right	447	0.81	43.2	95.3	D
Intersection	All	2875	0.872	35.5	95.3	D

Year 2041 PM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	544	0.50	11.8	59.6	B
	Through	500	0.85	47.9	89.6	D
	Right	434	0.87	51.2	157.3	D
Bells Lane (NE)	Left	338	0.20	20.1	31	C
	Through	204	0.89	52.9	84.1	D
	Right	19	0.89	58.6	84.1	E
Moss Vale Road (NW)	Left	8	0.01	17.5	1.1	B
	Through	497	0.85	47.5	88.5	D
	Right	95	0.19	34.6	23.3	C
Far North Connector Road (SW)	Left	6	0.01	13.1	0.6	B
	Through	194	0.86	48.4	96.3	D
	Right	329	0.86	54.2	96.3	D
Intersection	All	3168	0.89	39.7	157.3	C

Moss Vale Road / Far North Connector Road Signals - Ultimate Form





Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model (Node #20725 May 2020 version).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.90 and 1.00; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021 (year of opening), 2026 (5-year design horizon), 2031 (10-year design horizon), 2036 (15-year design horizon), and 2041 (20-year design horizon).

Model Description

The traffic volumes represent the annual 100th highest hour for each AM and PM peak hour.

The intersection form is as per the previous asserssment with modified turn pocket lengths and a posted speed limit of 90km/h on Moss Vale Road

The signal phasing is diamond overlap turn phasing for the Moss Vale Road approaches, and split phasing for the Bells Lane and Far North Collector Road approaches.

Key Findings

The intersection reaches over-capacity in queuing in the ultimate year during PM peak hour in the AAST scenario in the order of one movement. The Far North Collector road right-turn movement exceeds the available turn pocket length by 29.6m in the 2041 PM Peak scenario.

The intersection reaches saturation limits by the year 2041.

Intersection Performance - 100th Highest Hour

Year 2021 AM Peak Hour — Cycle Time: 50s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	234	0.19	9.1	6.9	A
	Through	248	0.41	21.7	21.2	C
	Right	2	0.01	29.4	0.3	C
Bells Lane (NE)	Left	4	0.00	16.6	0.2	B
	Through	8	0.05	22.1	1.9	C
	Right	3	0.05	27.8	1.9	C
Moss Vale Road (NW)	Left	3	0.00	12	0.2	B
	Through	334	0.55	22.4	29.4	C
	Right	43	0.20	30.7	7.5	C
Far North Connector Road (SW)	Left	3	0.01	13.8	0.2	A
	Through	7	0.54	24.4	21.3	C
	Right	224	0.54	30.1	21.3	C
Intersection	All	1115	0.552	21.3	29.4	C

Year 2021 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	502	0.39	9.5	23.6	A
	Through	522	0.52	20.8	49.1	C
	Right	5	0.03	35.2	1.1	D
Bells Lane (NE)	Left	3	0.00	21.3	0.2	B
	Through	13	0.08	28	3.2	C
	Right	3	0.08	33.6	3.2	C
Moss Vale Road (NW)	Left	3	0.00	11.3	0.2	B
	Through	473	0.47	20.5	43.7	C
	Right	96	0.53	37.9	21.3	D
Far North Connector Road (SW)	Left	4	0.01	16	0.4	A
	Through	11	0.49	27.8	25.2	C
	Right	226	0.49	33.4	25.2	C
Intersection	All	1861	0.534	20.2	49.1	C

Year 2026 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	302	0.25	9.1	9.4	A
	Through	304	0.50	22.1	26.5	C
	Right	40	0.19	30.6	6.9	C
Bells Lane (NE)	Left	56	0.04	17	3.3	B
	Through	20	0.11	22.5	4.3	C
	Right	5	0.11	28.2	4.3	C
Moss Vale Road (NW)	Left	5	0.01	12	0.4	B
	Through	501	0.83	27.9	51.8	C
	Right	53	0.25	30.9	9.2	C
Far North Connector Road (SW)	Left	4	0.01	13.8	0.3	B
	Through	17	0.91	35.4	46.2	D
	Right	377	0.91	41.1	46.2	D
Intersection	All	1684	0.91	26.2	51.8	C

Year 2026 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	649	0.52	10	39.1	B
	Through	660	0.62	20.8	63.3	C
	Right	61	0.34	37	13.2	D
Bells Lane (NE)	Left	25	0.02	21.7	1.9	C
	Through	24	0.16	28.4	6.2	C
	Right	5	0.16	34	6.2	C
Moss Vale Road (NW)	Left	5	0.01	11.3	0.4	B
	Through	665	0.62	20.8	64	C
	Right	118	0.66	39.1	27.1	D
Far North Connector Road (SW)	Left	6	0.02	16.7	0.7	A
	Through	20	0.63	30	30	C
	Right	246	0.63	35.7	30	D
Intersection	All	2486	0.657	20.9	64	C

Year 2031 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	345	0.28	9.5	15.8	A
	Through	298	0.39	23.4	28.9	C
	Right	132	0.73	40.2	31	D
Bells Lane (NE)	Left	266	0.25	23.2	22.1	C
	Through	75	0.44	29.6	18.1	C
	Right	8	0.44	35.3	18.1	D
Moss Vale Road (NW)	Left	8	0.01	11.5	0.6	B
	Through	538	0.71	26.7	58.6	C
	Right	57	0.32	36.9	12.2	D
Far North Connector Road (SW)	Left	4	0.01	14	0.4	A
	Through	53	0.71	26.7	56	C
	Right	458	0.71	32.4	56	C
Intersection	All	2242	0.73	25.5	58.6	C

Year 2031 PM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	642	0.55	10.4	43.4	B
	Through	597	0.73	26.3	65.2	C
	Right	237	0.79	38.5	55.9	D
Bells Lane (NE)	Left	131	0.10	19.2	9.3	B
	Through	80	0.47	29.7	19.3	C
	Right	8	0.47	35.4	19.3	D
Moss Vale Road (NW)	Left	8	0.01	13.1	0.7	B
	Through	706	0.86	32.8	89.2	C
	Right	116	0.39	33	23.3	C
Far North Connector Road (SW)	Left	6	0.01	14.5	0.6	B
	Through	75	0.80	33.2	41.2	C
	Right	263	0.80	38.9	41.2	D
Intersection	All	2869	0.863	26.7	89.2	C

Year 2036 AM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	318	0.25	9.3	15.7	A
	Through	289	0.36	29.6	36.1	C
	Right	149	0.61	44.8	42.5	D
Bells Lane (NE)	Left	412	0.35	28.1	45.3	C
	Through	118	0.61	38.9	37.2	D
	Right	11	0.61	44.5	37.2	D
Moss Vale Road (NW)	Left	11	0.01	12.1	0.9	B
	Through	488	0.61	31.6	64.9	C
	Right	8	0.03	40.6	2.1	D
Far North Connector Road (SW)	Left	4	0.01	14.4	0.4	A
	Through	78	0.65	30.7	75	C
	Right	482	0.65	36.4	75	D
Intersection	All	2368	0.654	29.9	75	C

Year 2036 PM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	578	0.49	10.8	46.5	C
	Through	605	0.66	27	71.1	C
	Right	301	0.84	44	84.9	D
Bells Lane (NE)	Left	159	0.12	21.3	13.1	C
	Through	109	0.75	38.4	32.9	D
	Right	11	0.75	44	32.9	D
Moss Vale Road (NW)	Left	11	0.01	14.3	1	B
	Through	712	0.78	30.4	91.6	D
	Right	126	0.35	34.6	28.1	C
Far North Connector Road (SW)	Left	7	0.01	14.8	0.8	B
	Through	112	0.84	39.4	57	D
	Right	282	0.84	45.2	57	D
Intersection	All	3013	0.842	29	91.6	C

Year 2041 AM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	326	0.30	10.6	22.5	B
	Through	273	0.51	31.4	33.1	C
	Right	295	0.89	48.7	88.9	D
Bells Lane (NE)	Left	566	0.38	21.2	49.6	C
	Through	226	0.87	40.5	68.3	D
	Right	7	0.87	46.1	68.3	D
Moss Vale Road (NW)	Left	17	0.02	13.9	1.6	B
	Through	457	0.85	39	65.2	D
	Right	53	0.16	34.2	11.4	C
Far North Connector Road (SW)	Left	4	0.01	13.2	0.3	A
	Through	159	0.89	41.2	91.7	D
	Right	440	0.89	47	91.7	D
Intersection	All	2823	0.888	33.6	91.7	C

Year 2041 PM Peak Hour — Cycle Time: 80s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	544	0.51	13.2	79.5	B
	Through	551	0.89	60.8	123.8	E
	Right	414	0.88	60.1	180.1	E
Bells Lane (NE)	Left	367	0.22	23.8	41.7	C
	Through	238	0.90	63.2	120	E
	Right	24	0.90	68.8	120	E
Moss Vale Road (NW)	Left	11	0.01	17.9	1.6	B
	Through	539	0.87	58.4	118.2	E
	Right	120	0.25	42.2	37.2	D
Far North Connector Road (SW)	Left	7	0.01	14.1	0.8	B
	Through	228	0.89	59.7	149.5	E
	Right	423	0.89	65.7	149.5	E
Intersection	All	3466	0.902	48.8	180.1	D

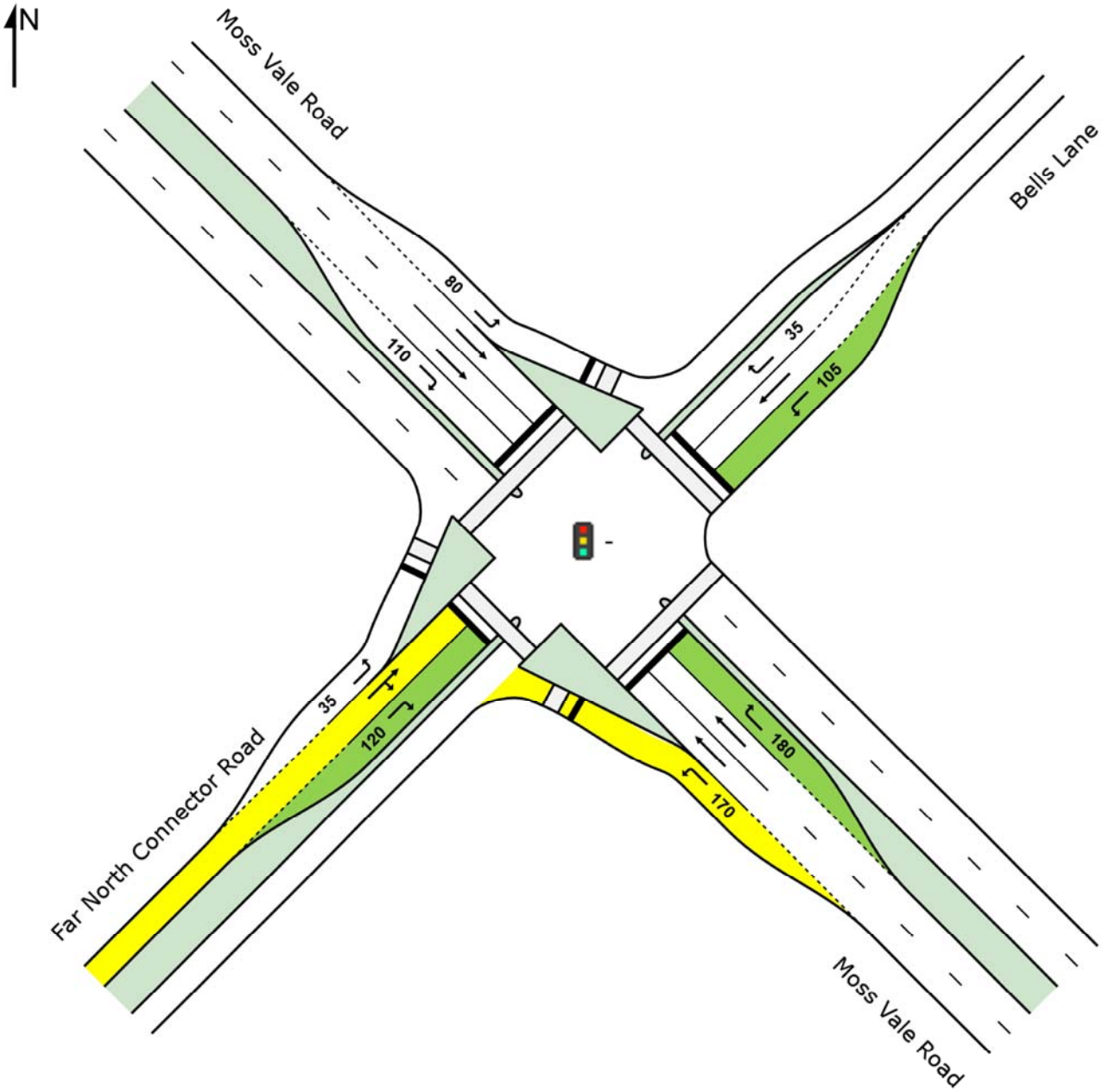
Appendix F: Moss Vale Road / Bells Lane / Far North Collector Road SIDRA Outputs

Revised Analysis based on updated May 2020 TRACKS models

SITE LAYOUT

Site: - [2021_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated



PHASING SUMMARY

Site: - [2021_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

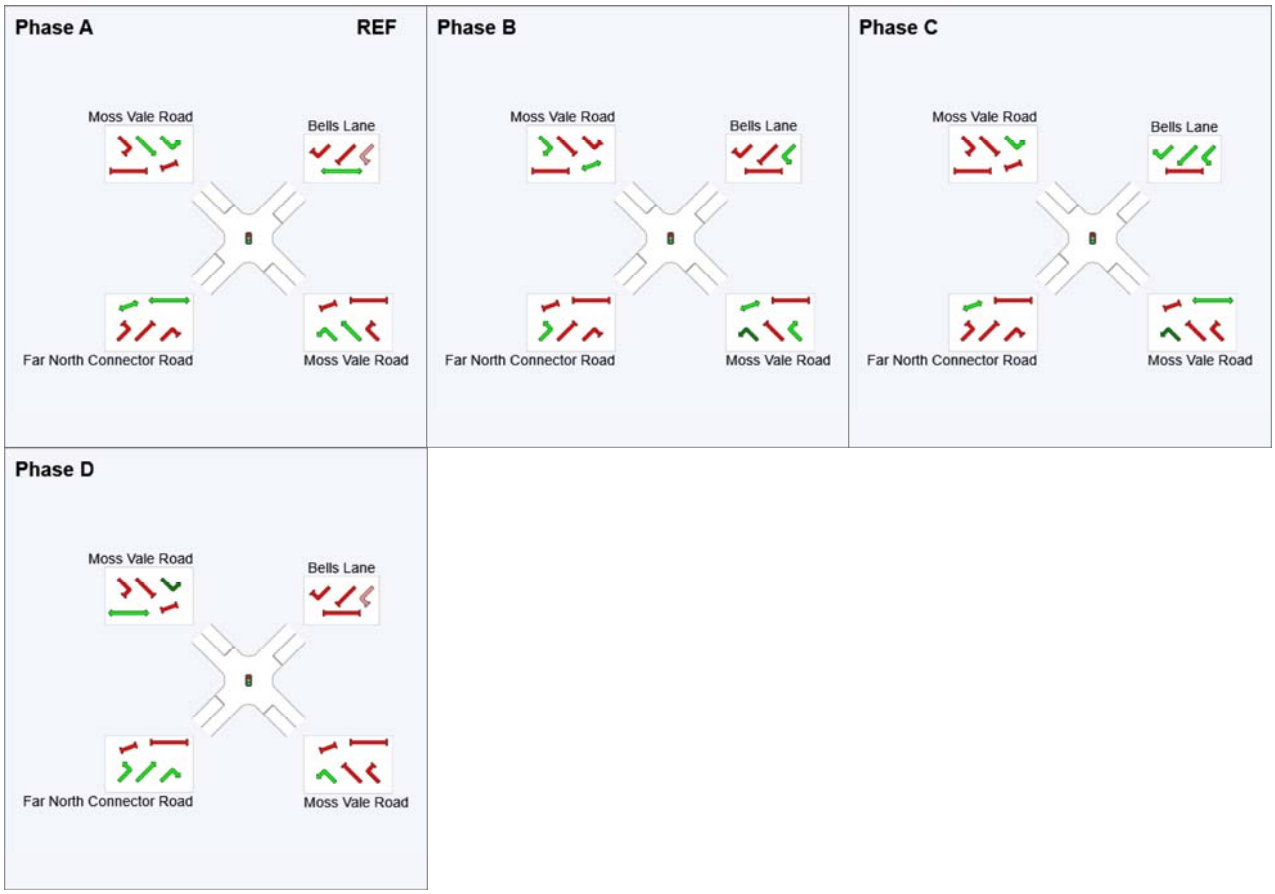
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Sequence1
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	14	26	38
Green Time (sec)	8	6	6	6
Phase Time (sec)	14	12	12	12
Phase Split	28%	24%	24%	24%

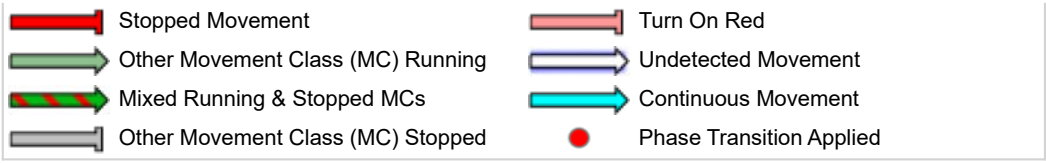
See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency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

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase





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MOVEMENT SUMMARY

Site: - [2021_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	254	5.0	0.204	9.1	LOS A	1.0	7.6	0.32	0.70	0.32	60.0
22	T1	266	5.0	0.441	21.8	LOS C	3.1	22.9	0.95	0.75	0.95	58.6
23	R2	2	5.0	0.010	29.4	LOS C	0.0	0.3	0.90	0.62	0.90	44.9
Approach		522	5.0	0.441	15.7	LOS B	3.1	22.9	0.64	0.72	0.64	59.2
NorthEast: Bells Lane												
24	L2	5	5.0	0.005	7.9	LOS A	0.0	0.3	0.39	0.61	0.39	57.1
25	T1	9	5.0	0.042	22.0	LOS C	0.2	1.6	0.91	0.61	0.91	44.1
26	R2	3	5.0	0.015	27.4	LOS C	0.1	0.5	0.90	0.62	0.90	44.0
Approach		18	5.0	0.042	18.8	LOS B	0.2	1.6	0.76	0.61	0.76	47.3
NorthWest: Moss Vale Road												
27	L2	3	5.0	0.004	12.0	LOS B	0.0	0.2	0.49	0.63	0.49	57.5
28	T1	356	5.0	0.589	22.7	LOS C	4.4	31.8	0.97	0.80	1.02	57.7
29	R2	44	5.0	0.205	30.7	LOS C	1.0	7.7	0.94	0.73	0.94	44.2
Approach		403	5.0	0.589	23.5	LOS C	4.4	31.8	0.97	0.79	1.01	55.8
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.010	13.8	LOS B	0.0	0.3	0.78	0.62	0.78	52.8
31	T1	8	5.0	0.574	24.7	LOS C	3.2	23.0	0.99	0.81	1.06	40.3
32	R2	239	5.0	0.574	30.4	LOS C	3.2	23.0	0.99	0.81	1.06	42.6
Approach		252	5.0	0.574	29.9	LOS C	3.2	23.0	0.98	0.80	1.05	42.7
All Vehicles		1195	5.0	0.589	21.4	LOS C	4.4	31.8	0.83	0.76	0.85	53.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P5B	SouthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6	NorthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7	NorthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7B	NorthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8	SouthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8B	SouthWest Slip/Bypass Lane Crossing	5	7.2	LOS A	0.0	0.0	0.76	0.76

All Pedestrians	37	17.6	LOS B	0.86	0.86

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: - [2021_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	364	5.0	0.299	9.4	LOS A	1.9	13.5	0.38	0.71	0.38	59.8
22	T1	425	5.0	0.704	24.2	LOS C	5.5	40.1	1.00	0.86	1.17	56.4
23	R2	4	5.0	0.020	29.6	LOS C	0.1	0.7	0.90	0.64	0.90	44.8
Approach		794	5.0	0.704	17.5	LOS B	5.5	40.1	0.71	0.79	0.81	57.8
NorthEast: Bells Lane												
24	L2	2	5.0	0.002	7.8	LOS A	0.0	0.1	0.39	0.60	0.39	57.1
25	T1	12	5.0	0.051	22.1	LOS C	0.3	1.9	0.91	0.62	0.91	44.1
26	R2	3	5.0	0.015	27.4	LOS C	0.1	0.5	0.90	0.62	0.90	44.0
Approach		17	5.0	0.051	21.3	LOS C	0.3	1.9	0.84	0.62	0.84	45.4
NorthWest: Moss Vale Road												
27	L2	3	5.0	0.004	12.0	LOS B	0.0	0.2	0.49	0.63	0.49	57.5
28	T1	354	5.0	0.585	22.7	LOS C	4.3	31.6	0.97	0.80	1.02	57.8
29	R2	76	5.0	0.352	31.3	LOS C	1.8	13.5	0.96	0.76	0.96	43.8
Approach		433	5.0	0.585	24.1	LOS C	4.3	31.6	0.97	0.79	1.00	54.7
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.010	13.8	LOS B	0.0	0.3	0.78	0.62	0.78	52.8
31	T1	9	5.0	0.542	24.5	LOS C	3.0	21.5	0.98	0.79	1.02	40.4
32	R2	224	5.0	0.542	30.1	LOS C	3.0	21.5	0.98	0.79	1.02	42.7
Approach		238	5.0	0.542	29.6	LOS C	3.0	21.5	0.98	0.79	1.02	42.8
All Vehicles		1481	5.0	0.704	21.4	LOS C	5.5	40.1	0.83	0.79	0.90	53.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P5B	SouthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6	NorthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7	NorthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7B	NorthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8	SouthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8B	SouthWest Slip/Bypass Lane Crossing	5	7.2	LOS A	0.0	0.0	0.76	0.76

All Pedestrians	37	17.6	LOS B	0.86	0.86

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: - [2021_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	234	5.0	0.187	9.1	LOS A	0.9	6.9	0.32	0.69	0.32	60.1
22	T1	248	5.0	0.411	21.7	LOS C	2.9	21.2	0.94	0.74	0.94	58.7
23	R2	2	5.0	0.010	29.4	LOS C	0.0	0.3	0.90	0.62	0.90	44.9
Approach		484	5.0	0.411	15.6	LOS B	2.9	21.2	0.64	0.72	0.64	59.3
NorthEast: Bells Lane												
24	L2	4	5.0	0.004	7.9	LOS A	0.0	0.2	0.39	0.61	0.39	57.1
25	T1	8	5.0	0.037	22.0	LOS C	0.2	1.4	0.91	0.60	0.91	44.2
26	R2	3	5.0	0.015	27.4	LOS C	0.1	0.5	0.90	0.62	0.90	44.0
Approach		16	5.0	0.037	19.3	LOS B	0.2	1.4	0.77	0.61	0.77	47.0
NorthWest: Moss Vale Road												
27	L2	3	5.0	0.004	12.0	LOS B	0.0	0.2	0.49	0.63	0.49	57.5
28	T1	334	5.0	0.552	22.4	LOS C	4.0	29.4	0.97	0.78	0.98	58.0
29	R2	43	5.0	0.201	30.7	LOS C	1.0	7.5	0.94	0.73	0.94	44.2
Approach		380	5.0	0.552	23.2	LOS C	4.0	29.4	0.96	0.77	0.97	56.0
SouthWest: Far North Connector Road												
30	L2	3	5.0	0.007	13.8	LOS B	0.0	0.2	0.78	0.61	0.78	52.8
31	T1	7	5.0	0.537	24.4	LOS C	2.9	21.3	0.98	0.79	1.02	40.4
32	R2	224	5.0	0.537	30.1	LOS C	2.9	21.3	0.98	0.79	1.02	42.7
Approach		235	5.0	0.537	29.7	LOS C	2.9	21.3	0.98	0.79	1.02	42.8
All Vehicles		1115	5.0	0.552	21.2	LOS C	4.0	29.4	0.82	0.75	0.83	53.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P5B	SouthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6	NorthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7	NorthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7B	NorthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8	SouthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8B	SouthWest Slip/Bypass Lane Crossing	5	7.2	LOS A	0.0	0.0	0.76	0.76

All Pedestrians	37	17.6	LOS B	0.86	0.86

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: - [2021_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	502	5.0	0.394	9.5	LOS A	3.2	23.6	0.38	0.72	0.38	59.8
22	T1	522	5.0	0.518	20.8	LOS C	6.7	49.1	0.90	0.75	0.90	59.5
23	R2	5	5.0	0.029	35.2	LOS D	0.1	1.1	0.92	0.65	0.92	41.9
Approach		1029	5.0	0.518	15.4	LOS B	6.7	49.1	0.65	0.74	0.65	59.5
NorthEast: Bells Lane												
24	L2	3	5.0	0.003	8.0	LOS A	0.0	0.2	0.36	0.60	0.36	57.0
25	T1	13	5.0	0.067	27.8	LOS C	0.4	2.6	0.93	0.64	0.93	41.3
26	R2	3	5.0	0.018	33.0	LOS C	0.1	0.6	0.92	0.62	0.92	41.3
Approach		19	5.0	0.067	25.4	LOS C	0.4	2.6	0.84	0.63	0.84	43.3
NorthWest: Moss Vale Road												
27	L2	3	5.0	0.003	11.3	LOS B	0.0	0.2	0.41	0.63	0.41	58.1
28	T1	473	5.0	0.469	20.5	LOS C	6.0	43.7	0.89	0.73	0.89	59.8
29	R2	96	5.0	0.534	37.9	LOS D	2.9	21.3	0.99	0.78	1.02	40.6
Approach		572	5.0	0.534	23.4	LOS C	6.0	43.7	0.90	0.74	0.91	55.4
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.010	16.0	LOS B	0.1	0.4	0.79	0.62	0.79	51.2
31	T1	11	5.0	0.494	27.8	LOS C	3.5	25.2	0.97	0.78	0.97	39.0
32	R2	226	5.0	0.494	33.4	LOS C	3.5	25.2	0.97	0.78	0.97	41.2
Approach		241	5.0	0.494	32.9	LOS C	3.5	25.2	0.97	0.78	0.97	41.2
All Vehicles		1861	5.0	0.534	20.2	LOS C	6.7	49.1	0.77	0.74	0.77	54.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	10.2	LOS B	0.0	0.0	0.80	0.80

All Pedestrians	37	22.3	LOS C	0.89	0.89

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: - [2026_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	325	5.0	0.254	9.1	LOS A	1.6	11.7	0.31	0.70	0.31	60.1
22	T1	322	5.0	0.394	22.5	LOS C	4.2	30.7	0.90	0.73	0.90	57.9
23	R2	42	5.0	0.235	36.5	LOS D	1.2	8.9	0.96	0.73	0.96	41.3
Approach		689	5.0	0.394	17.1	LOS B	4.2	30.7	0.62	0.71	0.62	57.5
NorthEast: Bells Lane												
24	L2	61	5.0	0.072	9.9	LOS A	0.7	4.8	0.48	0.67	0.48	55.3
25	T1	23	5.0	0.123	28.2	LOS C	0.7	4.8	0.94	0.67	0.94	41.1
26	R2	5	5.0	0.029	33.2	LOS C	0.1	1.1	0.92	0.64	0.92	41.2
Approach		89	5.0	0.123	16.0	LOS B	0.7	4.8	0.62	0.67	0.62	49.9
NorthWest: Moss Vale Road												
27	L2	5	5.0	0.005	11.3	LOS B	0.0	0.4	0.41	0.64	0.41	58.1
28	T1	536	5.0	0.655	24.7	LOS C	7.6	55.7	0.97	0.82	1.02	56.0
29	R2	59	5.0	0.329	37.0	LOS D	1.7	12.7	0.97	0.75	0.97	41.1
Approach		600	5.0	0.655	25.8	LOS C	7.6	55.7	0.96	0.81	1.01	54.1
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.010	14.5	LOS B	0.1	0.5	0.74	0.62	0.74	52.3
31	T1	19	5.0	0.645	26.4	LOS C	6.2	45.4	0.98	0.85	1.05	39.6
32	R2	406	5.0	0.645	32.1	LOS C	6.2	45.4	0.98	0.85	1.05	41.8
Approach		431	5.0	0.645	31.6	LOS C	6.2	45.4	0.97	0.84	1.04	41.8
All Vehicles		1809	5.0	0.655	23.4	LOS C	7.6	55.7	0.82	0.78	0.85	51.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	10.2	LOS B	0.0	0.0	0.80	0.80

All Pedestrians	37	22.3	LOS C	0.89	0.89

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: - [2026_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	526	5.0	0.416	9.5	LOS A	3.5	25.5	0.39	0.73	0.39	59.7
22	T1	572	5.0	0.534	20.2	LOS C	7.3	53.2	0.89	0.75	0.89	60.2
23	R2	55	5.0	0.305	36.9	LOS D	1.6	11.7	0.96	0.74	0.96	41.1
Approach		1153	5.0	0.534	16.1	LOS B	7.3	53.2	0.67	0.74	0.67	58.7
NorthEast: Bells Lane												
24	L2	22	5.0	0.025	8.4	LOS A	0.2	1.3	0.39	0.64	0.39	56.7
25	T1	21	5.0	0.111	28.1	LOS C	0.6	4.4	0.94	0.66	0.94	41.2
26	R2	5	5.0	0.029	33.2	LOS C	0.1	1.1	0.92	0.64	0.92	41.2
Approach		48	5.0	0.111	19.6	LOS B	0.6	4.4	0.69	0.65	0.69	47.0
NorthWest: Moss Vale Road												
27	L2	5	5.0	0.005	11.3	LOS B	0.0	0.4	0.41	0.64	0.41	58.1
28	T1	559	5.0	0.522	20.1	LOS C	7.1	51.8	0.89	0.75	0.89	60.2
29	R2	105	5.0	0.587	38.3	LOS D	3.2	23.7	1.00	0.80	1.08	40.5
Approach		669	5.0	0.587	22.9	LOS C	7.1	51.8	0.90	0.75	0.92	55.9
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.014	16.6	LOS B	0.1	0.6	0.80	0.63	0.80	50.8
31	T1	17	5.0	0.526	29.0	LOS C	3.3	24.1	0.98	0.78	0.99	38.7
32	R2	204	5.0	0.526	34.7	LOS C	3.3	24.1	0.98	0.78	0.99	40.7
Approach		226	5.0	0.526	33.8	LOS C	3.3	24.1	0.98	0.78	0.99	40.7
All Vehicles		2097	5.0	0.587	20.3	LOS C	7.3	53.2	0.78	0.75	0.78	54.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	10.2	LOS B	0.0	0.0	0.80	0.80

All Pedestrians	37	22.3	LOS C	0.89	0.89

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: - [2026_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	302	5.0	0.246	9.1	LOS A	1.3	9.4	0.34	0.70	0.34	60.0
22	T1	304	5.0	0.503	22.1	LOS C	3.6	26.5	0.96	0.76	0.96	58.3
23	R2	40	5.0	0.186	30.6	LOS C	0.9	6.9	0.93	0.73	0.93	44.2
Approach		646	5.0	0.503	16.6	LOS B	3.6	26.5	0.67	0.73	0.67	57.9
NorthEast: Bells Lane												
24	L2	56	5.0	0.060	9.4	LOS A	0.5	3.7	0.50	0.67	0.50	55.7
25	T1	20	5.0	0.088	22.4	LOS C	0.5	3.4	0.92	0.64	0.92	44.0
26	R2	5	5.0	0.024	27.6	LOS C	0.1	0.9	0.90	0.64	0.90	43.9
Approach		81	5.0	0.088	13.8	LOS B	0.5	3.7	0.63	0.66	0.63	51.4
NorthWest: Moss Vale Road												
27	L2	5	5.0	0.006	12.0	LOS B	0.0	0.4	0.49	0.64	0.49	57.5
28	T1	501	5.0	0.829	27.9	LOS C	7.1	51.8	1.00	0.95	1.42	53.4
29	R2	53	5.0	0.245	30.9	LOS C	1.3	9.2	0.94	0.74	0.94	44.1
Approach		559	5.0	0.829	28.0	LOS C	7.1	51.8	0.99	0.93	1.37	52.4
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.010	13.8	LOS B	0.0	0.3	0.78	0.62	0.78	52.8
31	T1	17	5.0	0.913	35.4	LOS D	6.3	46.2	1.00	1.13	1.86	36.1
32	R2	377	5.0	0.913	41.1	LOS D	6.3	46.2	1.00	1.13	1.86	37.9
Approach		398	5.0	0.913	40.6	LOS D	6.3	46.2	1.00	1.12	1.85	37.9
All Vehicles		1684	5.0	0.913	25.9	LOS C	7.1	51.8	0.85	0.89	1.18	49.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P5B	SouthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6	NorthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7	NorthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7B	NorthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8	SouthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8B	SouthWest Slip/Bypass Lane Crossing	5	7.2	LOS A	0.0	0.0	0.76	0.76

All Pedestrians	37	17.6	LOS B	0.86	0.86

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: - [2026_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	649	5.0	0.519	10.0	LOS B	5.4	39.1	0.46	0.75	0.46	59.3
22	T1	660	5.0	0.617	20.8	LOS C	8.7	63.3	0.92	0.78	0.92	59.6
23	R2	61	5.0	0.340	37.0	LOS D	1.8	13.2	0.97	0.75	0.97	41.1
Approach		1371	5.0	0.617	16.4	LOS B	8.7	63.3	0.71	0.76	0.71	58.3
NorthEast: Bells Lane												
24	L2	25	5.0	0.030	9.4	LOS A	0.2	1.8	0.44	0.65	0.44	55.8
25	T1	24	5.0	0.128	28.2	LOS C	0.7	5.0	0.94	0.67	0.94	41.1
26	R2	5	5.0	0.029	33.2	LOS C	0.1	1.1	0.92	0.64	0.92	41.2
Approach		55	5.0	0.128	20.0	LOS B	0.7	5.0	0.71	0.66	0.71	46.8
NorthWest: Moss Vale Road												
27	L2	5	5.0	0.005	11.3	LOS B	0.0	0.4	0.41	0.64	0.41	58.1
28	T1	665	5.0	0.622	20.8	LOS C	8.8	64.0	0.92	0.78	0.92	59.5
29	R2	118	5.0	0.657	39.1	LOS D	3.7	27.1	1.00	0.82	1.16	40.1
Approach		788	5.0	0.657	23.5	LOS C	8.8	64.0	0.93	0.79	0.96	55.5
SouthWest: Far North Connector Road												
30	L2	6	5.0	0.016	16.7	LOS B	0.1	0.7	0.81	0.64	0.81	50.7
31	T1	20	5.0	0.634	30.0	LOS C	4.1	30.0	1.00	0.83	1.11	38.3
32	R2	246	5.0	0.634	35.7	LOS D	4.1	30.0	1.00	0.83	1.11	40.2
Approach		273	5.0	0.634	34.8	LOS C	4.1	30.0	0.99	0.83	1.10	40.3
All Vehicles		2486	5.0	0.657	20.7	LOS C	8.8	64.0	0.81	0.78	0.83	54.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	10.2	LOS B	0.0	0.0	0.80	0.80

All Pedestrians	37	22.3	LOS C	0.89	0.89

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: - [2031_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	365	5.0	0.291	9.5	LOS A	2.6	18.7	0.33	0.71	0.33	59.8
22	T1	312	5.0	0.361	25.1	LOS C	4.6	33.6	0.88	0.72	0.88	55.6
23	R2	136	5.0	0.663	42.8	LOS D	4.9	35.5	1.00	0.83	1.12	38.5
Approach		813	5.0	0.663	21.1	LOS C	4.9	35.5	0.66	0.73	0.68	53.3
NorthEast: Bells Lane												
24	L2	281	5.0	0.355	13.0	LOS B	5.0	36.9	0.63	0.75	0.63	52.9
25	T1	83	5.0	0.514	35.7	LOS D	2.9	21.5	1.00	0.76	1.01	37.9
26	R2	8	5.0	0.055	39.0	LOS D	0.3	2.0	0.94	0.66	0.94	38.6
Approach		373	5.0	0.514	18.7	LOS B	5.0	36.9	0.72	0.75	0.72	48.2
NorthWest: Moss Vale Road												
27	L2	8	5.0	0.009	11.6	LOS B	0.1	0.6	0.40	0.65	0.40	57.9
28	T1	571	5.0	0.661	27.8	LOS C	9.3	67.9	0.96	0.82	1.00	53.4
29	R2	62	5.0	0.303	40.2	LOS D	2.1	15.1	0.96	0.75	0.96	39.6
Approach		641	5.0	0.661	28.8	LOS C	9.3	67.9	0.95	0.81	0.99	51.7
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.007	14.4	LOS B	0.1	0.4	0.67	0.61	0.67	52.4
31	T1	58	5.0	0.656	27.9	LOS C	8.9	64.8	0.96	0.84	1.00	39.3
32	R2	483	5.0	0.656	33.5	LOS C	8.9	64.8	0.96	0.84	1.00	41.3
Approach		545	5.0	0.656	32.8	LOS C	8.9	64.8	0.96	0.84	1.00	41.1
All Vehicles		2372	5.0	0.663	25.5	LOS C	9.3	67.9	0.82	0.78	0.84	48.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P5B	SouthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6	NorthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7	NorthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7B	NorthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8	SouthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8B	SouthWest Slip/Bypass Lane Crossing	5	13.2	LOS B	0.0	0.0	0.83	0.83

All Pedestrians	37	27.0	LOS C	0.90	0.90

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: - [2031_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	624	5.0	0.512	10.3	LOS B	5.5	40.4	0.48	0.75	0.48	59.0
22	T1	543	5.0	0.539	21.0	LOS C	7.0	51.4	0.91	0.76	0.91	59.4
23	R2	23	5.0	0.129	36.0	LOS D	0.7	4.8	0.94	0.70	0.94	41.5
Approach		1191	5.0	0.539	15.7	LOS B	7.0	51.4	0.68	0.76	0.68	58.7
NorthEast: Bells Lane												
24	L2	115	5.0	0.133	9.4	LOS A	1.2	8.7	0.47	0.68	0.47	55.8
25	T1	68	5.0	0.362	29.3	LOS C	2.0	14.7	0.97	0.73	0.97	40.6
26	R2	8	5.0	0.047	33.4	LOS C	0.2	1.7	0.93	0.66	0.93	41.1
Approach		192	5.0	0.362	17.5	LOS B	2.0	14.7	0.67	0.70	0.67	48.5
NorthWest: Moss Vale Road												
27	L2	8	5.0	0.009	11.5	LOS B	0.1	0.6	0.43	0.65	0.43	58.0
28	T1	602	5.0	0.598	21.4	LOS C	8.0	58.1	0.92	0.78	0.92	59.0
29	R2	106	5.0	0.593	38.4	LOS D	3.3	24.0	1.00	0.80	1.09	40.4
Approach		717	5.0	0.598	23.8	LOS C	8.0	58.1	0.93	0.78	0.94	55.2
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.013	16.1	LOS B	0.1	0.6	0.79	0.63	0.79	51.2
31	T1	61	5.0	0.583	28.4	LOS C	4.2	30.9	0.99	0.81	1.03	39.6
32	R2	221	5.0	0.583	34.1	LOS C	4.2	30.9	0.99	0.81	1.03	41.2
Approach		287	5.0	0.583	32.6	LOS C	4.2	30.9	0.98	0.81	1.03	41.0
All Vehicles		2386	5.0	0.598	20.3	LOS C	8.0	58.1	0.79	0.76	0.80	53.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	10.2	LOS B	0.0	0.0	0.80	0.80

All Pedestrians	37	22.3	LOS C	0.89	0.89

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: - [2031_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	345	5.0	0.281	9.3	LOS A	2.0	14.3	0.34	0.71	0.34	60.0
22	T1	298	5.0	0.394	23.4	LOS C	4.0	28.9	0.91	0.73	0.91	57.1
23	R2	132	5.0	0.734	40.2	LOS D	4.3	31.0	1.00	0.86	1.26	39.6
Approach		775	5.0	0.734	20.0	LOS B	4.3	31.0	0.67	0.74	0.72	54.2
NorthEast: Bells Lane												
24	L2	266	5.0	0.322	11.5	LOS B	3.8	27.8	0.61	0.74	0.61	54.0
25	T1	75	5.0	0.396	29.4	LOS C	2.2	16.2	0.98	0.74	0.98	40.6
26	R2	8	5.0	0.047	33.4	LOS C	0.2	1.7	0.93	0.66	0.93	41.1
Approach		349	5.0	0.396	15.9	LOS B	3.8	27.8	0.69	0.74	0.69	50.1
NorthWest: Moss Vale Road												
27	L2	8	5.0	0.009	11.5	LOS B	0.1	0.6	0.43	0.65	0.43	58.0
28	T1	538	5.0	0.712	26.7	LOS C	8.0	58.6	0.99	0.87	1.11	54.3
29	R2	57	5.0	0.317	36.9	LOS D	1.7	12.2	0.97	0.74	0.97	41.1
Approach		603	5.0	0.712	27.4	LOS C	8.0	58.6	0.98	0.85	1.09	52.8
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.008	14.0	LOS B	0.1	0.4	0.72	0.62	0.72	52.6
31	T1	53	5.0	0.708	26.7	LOS C	7.7	56.0	0.98	0.89	1.11	39.8
32	R2	458	5.0	0.708	32.4	LOS C	7.7	56.0	0.98	0.88	1.11	41.8
Approach		515	5.0	0.708	31.7	LOS C	7.7	56.0	0.98	0.88	1.11	41.6
All Vehicles		2242	5.0	0.734	24.0	LOS C	8.0	58.6	0.83	0.80	0.90	49.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	10.2	LOS B	0.0	0.0	0.80	0.80

All Pedestrians	37	22.3	LOS C	0.89	0.89

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: - [2031_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	642	5.0	0.545	10.4	LOS B	5.9	43.4	0.50	0.76	0.50	58.9
22	T1	597	5.0	0.729	26.3	LOS C	8.9	65.2	0.98	0.88	1.12	54.6
23	R2	237	5.0	0.792	38.5	LOS D	7.7	55.9	1.00	0.91	1.29	40.4
Approach		1476	5.0	0.792	21.3	LOS C	8.9	65.2	0.78	0.83	0.88	53.3
NorthEast: Bells Lane												
24	L2	131	5.0	0.144	11.1	LOS B	1.6	12.0	0.54	0.70	0.54	54.4
25	T1	80	5.0	0.424	29.5	LOS C	2.4	17.4	0.98	0.75	0.98	40.5
26	R2	8	5.0	0.047	33.4	LOS C	0.2	1.7	0.93	0.66	0.93	41.1
Approach		219	5.0	0.424	18.7	LOS B	2.4	17.4	0.71	0.71	0.71	47.8
NorthWest: Moss Vale Road												
27	L2	8	5.0	0.010	13.1	LOS B	0.1	0.7	0.52	0.65	0.52	56.6
28	T1	706	5.0	0.863	32.8	LOS C	12.2	89.2	1.00	1.00	1.40	49.8
29	R2	116	5.0	0.387	33.0	LOS C	3.2	23.3	0.93	0.78	0.93	43.0
Approach		831	5.0	0.863	32.7	LOS C	12.2	89.2	0.99	0.96	1.32	48.8
SouthWest: Far North Connector Road												
30	L2	6	5.0	0.012	14.5	LOS B	0.1	0.6	0.74	0.63	0.74	52.3
31	T1	75	5.0	0.799	33.2	LOS C	5.6	41.2	1.00	0.95	1.36	37.7
32	R2	263	5.0	0.799	38.9	LOS D	5.6	41.2	1.00	0.95	1.36	39.1
Approach		344	5.0	0.799	37.2	LOS D	5.6	41.2	1.00	0.94	1.35	38.9
All Vehicles		2869	5.0	0.863	26.3	LOS C	12.2	89.2	0.86	0.87	1.05	49.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	9.7	LOS A	0.0	0.0	0.80	0.80

All Pedestrians	37	22.2	LOS C	0.89	0.89

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: - [2036_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	314	5.0	0.260	9.5	LOS A	1.9	14.1	0.35	0.71	0.35	59.8
22	T1	314	5.0	0.453	24.7	LOS C	4.3	31.3	0.94	0.75	0.94	56.0
23	R2	149	5.0	0.714	38.9	LOS D	4.7	34.6	1.00	0.86	1.21	40.2
Approach		777	5.0	0.714	21.3	LOS C	4.7	34.6	0.71	0.75	0.75	53.4
NorthEast: Bells Lane												
24	L2	431	5.0	0.509	13.1	LOS B	7.5	55.0	0.73	0.79	0.73	52.8
25	T1	135	5.0	0.713	32.0	LOS C	4.3	31.4	1.00	0.87	1.22	39.4
26	R2	11	5.0	0.059	33.5	LOS C	0.3	2.2	0.93	0.67	0.93	41.0
Approach		576	5.0	0.713	17.9	LOS B	7.5	55.0	0.80	0.81	0.85	48.6
NorthWest: Moss Vale Road												
27	L2	11	5.0	0.012	12.0	LOS B	0.1	0.8	0.47	0.65	0.47	57.6
28	T1	498	5.0	0.719	27.7	LOS C	7.5	55.0	0.99	0.87	1.14	53.5
29	R2	9	5.0	0.045	34.2	LOS C	0.3	1.9	0.91	0.67	0.91	42.4
Approach		518	5.0	0.719	27.5	LOS C	7.5	55.0	0.98	0.86	1.12	53.4
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.009	13.6	LOS B	0.1	0.4	0.70	0.62	0.70	53.0
31	T1	85	5.0	0.803	29.8	LOS C	9.4	68.8	1.00	0.97	1.27	38.7
32	R2	495	5.0	0.803	35.5	LOS D	9.4	68.8	1.00	0.96	1.27	40.4
Approach		585	5.0	0.803	34.4	LOS C	9.4	68.8	1.00	0.96	1.27	40.3
All Vehicles		2456	5.0	0.803	24.9	LOS C	9.4	68.8	0.86	0.84	0.98	48.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	10.0	LOS B	0.0	0.0	0.80	0.80

All Pedestrians	37	22.3	LOS C	0.89	0.89

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: - [2036_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	652	5.0	0.558	10.4	LOS B	6.1	44.7	0.51	0.76	0.51	58.9
22	T1	529	5.0	0.701	26.5	LOS C	7.8	57.3	0.98	0.86	1.10	54.5
23	R2	289	5.0	0.881	43.5	LOS D	10.4	75.8	1.00	0.99	1.51	38.3
Approach		1471	5.0	0.881	22.7	LOS C	10.4	75.8	0.78	0.84	0.92	51.9
NorthEast: Bells Lane												
24	L2	136	5.0	0.143	10.2	LOS B	1.6	11.4	0.50	0.69	0.50	55.1
25	T1	91	5.0	0.479	29.8	LOS C	2.7	19.8	0.99	0.76	0.99	40.4
26	R2	11	5.0	0.059	33.5	LOS C	0.3	2.2	0.93	0.67	0.93	41.0
Approach		237	5.0	0.479	18.7	LOS B	2.7	19.8	0.71	0.71	0.71	47.7
NorthWest: Moss Vale Road												
27	L2	11	5.0	0.013	13.6	LOS B	0.1	0.9	0.53	0.66	0.53	56.2
28	T1	601	5.0	0.796	29.3	LOS C	9.6	70.0	1.00	0.93	1.25	52.3
29	R2	107	5.0	0.327	31.7	LOS C	2.9	20.9	0.91	0.77	0.91	43.6
Approach		719	5.0	0.796	29.5	LOS C	9.6	70.0	0.98	0.90	1.19	50.8
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.010	14.0	LOS B	0.1	0.5	0.72	0.62	0.72	52.7
31	T1	93	5.0	0.781	32.6	LOS C	5.5	40.1	1.00	0.93	1.32	38.1
32	R2	239	5.0	0.781	38.4	LOS D	5.5	40.1	1.00	0.93	1.33	39.3
Approach		337	5.0	0.781	36.4	LOS D	5.5	40.1	1.00	0.92	1.31	39.1
All Vehicles		2763	5.0	0.881	25.8	LOS C	10.4	75.8	0.85	0.86	1.02	49.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	9.6	LOS A	0.0	0.0	0.80	0.80

All Pedestrians	37	22.2	LOS C	0.89	0.89

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: - [2036_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	318	5.0	0.250	9.3	LOS A	2.1	15.7	0.28	0.70	0.28	60.0
22	T1	289	5.0	0.383	30.7	LOS C	5.0	36.7	0.91	0.73	0.91	51.3
23	R2	149	5.0	0.556	43.3	LOS D	5.7	41.4	0.97	0.80	0.97	38.4
Approach		757	5.0	0.556	24.2	LOS C	5.7	41.4	0.66	0.73	0.66	51.0
NorthEast: Bells Lane												
24	L2	412	5.0	0.477	14.3	LOS B	9.6	70.2	0.70	0.79	0.70	51.9
25	T1	118	5.0	0.555	38.3	LOS D	4.6	33.7	0.99	0.78	1.00	36.9
26	R2	11	5.0	0.052	40.9	LOS D	0.4	2.8	0.92	0.67	0.92	37.9
Approach		540	5.0	0.555	20.1	LOS C	9.6	70.2	0.77	0.79	0.77	47.4
NorthWest: Moss Vale Road												
27	L2	11	5.0	0.011	12.4	LOS B	0.1	0.9	0.41	0.65	0.41	57.2
28	T1	488	5.0	0.647	33.0	LOS C	9.1	66.6	0.97	0.82	1.00	49.7
29	R2	8	5.0	0.031	39.5	LOS D	0.3	2.1	0.88	0.67	0.88	39.9
Approach		507	5.0	0.647	32.7	LOS C	9.1	66.6	0.96	0.81	0.98	49.6
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.006	14.0	LOS B	0.1	0.4	0.63	0.61	0.63	52.7
31	T1	78	5.0	0.654	30.8	LOS C	10.3	75.0	0.96	0.83	0.98	38.3
32	R2	482	5.0	0.654	36.4	LOS D	10.3	75.0	0.96	0.84	0.98	40.0
Approach		564	5.0	0.654	35.5	LOS D	10.3	75.0	0.95	0.83	0.97	39.8
All Vehicles		2368	5.0	0.654	27.8	LOS C	10.3	75.0	0.82	0.79	0.83	46.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P5B	SouthEast Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P6	NorthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7	NorthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7B	NorthWest Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8	SouthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8B	SouthWest Slip/Bypass Lane Crossing	5	15.1	LOS B	0.0	0.0	0.85	0.85

All Pedestrians	37	31.5	LOS D	0.91	0.91

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: - [2036_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	578	5.0	0.492	10.8	LOS B	6.4	46.5	0.48	0.75	0.48	58.5
22	T1	605	5.0	0.660	27.0	LOS C	9.7	71.1	0.96	0.82	0.99	54.1
23	R2	301	5.0	0.839	44.0	LOS D	11.6	84.9	1.00	0.94	1.32	38.1
Approach		1484	5.0	0.839	24.1	LOS C	11.6	84.9	0.78	0.82	0.85	51.3
NorthEast: Bells Lane												
24	L2	159	5.0	0.177	11.8	LOS B	2.4	17.4	0.53	0.70	0.53	53.8
25	T1	109	5.0	0.676	37.2	LOS D	4.0	29.4	1.00	0.84	1.17	37.4
26	R2	11	5.0	0.068	39.1	LOS D	0.3	2.6	0.95	0.67	0.95	38.6
Approach		279	5.0	0.676	22.8	LOS C	4.0	29.4	0.73	0.76	0.80	45.3
NorthWest: Moss Vale Road												
27	L2	11	5.0	0.013	14.3	LOS B	0.1	1.0	0.53	0.66	0.53	55.7
28	T1	712	5.0	0.776	30.4	LOS C	12.6	91.6	0.99	0.91	1.15	51.5
29	R2	126	5.0	0.352	34.6	LOS C	3.9	28.1	0.90	0.78	0.90	42.2
Approach		848	5.0	0.776	30.8	LOS C	12.6	91.6	0.97	0.89	1.10	49.9
SouthWest: Far North Connector Road												
30	L2	7	5.0	0.013	14.8	LOS B	0.1	0.8	0.69	0.63	0.69	52.1
31	T1	112	5.0	0.842	39.4	LOS D	7.8	57.0	1.00	0.99	1.40	35.6
32	R2	282	5.0	0.842	45.2	LOS D	7.8	57.0	1.00	0.99	1.41	36.7
Approach		401	5.0	0.842	43.0	LOS D	7.8	57.0	0.99	0.98	1.39	36.6
All Vehicles		3013	5.0	0.842	28.4	LOS C	12.6	91.6	0.86	0.85	0.99	47.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P5B	SouthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6	NorthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7	NorthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7B	NorthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8	SouthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8B	SouthWest Slip/Bypass Lane Crossing	5	12.1	LOS B	0.0	0.0	0.83	0.83

All Pedestrians	37	26.8	LOS C	0.90	0.90

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: - [2041_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 90 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	288	5.0	0.256	10.6	LOS B	3.1	23.0	0.35	0.71	0.35	58.8
22	T1	328	5.0	0.559	39.2	LOS D	6.9	50.5	0.97	0.79	0.97	45.8
23	R2	285	5.0	0.842	53.3	LOS D	13.8	101.1	1.00	0.92	1.27	34.7
Approach		902	5.0	0.842	34.5	LOS C	13.8	101.1	0.78	0.81	0.87	44.5
NorthEast: Bells Lane												
24	L2	605	5.0	0.631	19.0	LOS B	14.7	107.5	0.75	0.89	0.93	48.7
25	T1	260	5.0	0.832	45.9	LOS D	12.5	91.1	1.00	0.98	1.26	34.3
26	R2	7	5.0	0.025	39.7	LOS D	0.3	2.0	0.86	0.66	0.86	38.4
Approach		873	5.0	0.832	27.2	LOS C	14.7	107.5	0.83	0.91	1.03	43.2
NorthWest: Moss Vale Road												
27	L2	18	5.0	0.021	14.1	LOS B	0.3	1.9	0.49	0.67	0.49	55.8
28	T1	449	5.0	0.765	43.3	LOS D	10.3	75.1	1.00	0.89	1.16	43.6
29	R2	6	5.0	0.019	39.7	LOS D	0.2	1.7	0.84	0.66	0.84	39.8
Approach		474	5.0	0.765	42.2	LOS D	10.3	75.1	0.98	0.88	1.13	43.9
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.007	14.1	LOS B	0.1	0.5	0.61	0.62	0.61	52.6
31	T1	174	5.0	0.771	39.0	LOS D	14.0	102.0	1.00	0.92	1.12	35.8
32	R2	447	5.0	0.771	44.7	LOS D	14.0	102.0	1.00	0.91	1.12	36.8
Approach		626	5.0	0.771	42.9	LOS D	14.0	102.0	0.99	0.91	1.12	36.6
All Vehicles		2875	5.0	0.842	35.4	LOS D	14.7	107.5	0.87	0.87	1.01	42.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P5B	SouthEast Slip/Bypass Lane Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P6	NorthEast Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P7	NorthWest Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P7B	NorthWest Slip/Bypass Lane Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P8	SouthWest Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P8B	SouthWest Slip/Bypass Lane Crossing	5	16.9	LOS B	0.0	0.0	0.87	0.87

All Pedestrians	37	36.0	LOS D	0.92	0.92

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: - [2041_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	544	5.0	0.504	11.5	LOS B	7.3	53.3	0.48	0.76	0.48	58.0
22	T1	500	5.0	0.882	46.4	LOS D	11.5	83.9	1.00	0.99	1.44	42.0
23	R2	434	5.0	0.921	56.5	LOS E	21.8	159.2	1.00	1.01	1.46	33.7
Approach		1478	5.0	0.921	36.5	LOS D	21.8	159.2	0.81	0.91	1.09	43.3
NorthEast: Bells Lane												
24	L2	338	5.0	0.332	12.8	LOS B	6.2	45.6	0.56	0.73	0.56	53.1
25	T1	204	5.0	0.865	45.9	LOS D	9.2	67.2	1.00	1.01	1.42	34.3
26	R2	19	5.0	0.085	40.1	LOS D	0.7	4.9	0.91	0.69	0.91	38.2
Approach		561	5.0	0.865	25.8	LOS C	9.2	67.2	0.73	0.83	0.89	43.7
NorthWest: Moss Vale Road												
27	L2	8	5.0	0.012	16.8	LOS B	0.1	1.0	0.61	0.66	0.61	53.6
28	T1	497	5.0	0.877	45.9	LOS D	11.3	82.7	1.00	0.98	1.42	42.3
29	R2	95	5.0	0.201	32.8	LOS C	2.9	21.3	0.82	0.76	0.82	43.1
Approach		600	5.0	0.877	43.4	LOS D	11.3	82.7	0.97	0.94	1.31	42.5
SouthWest: Far North Connector Road												
30	L2	6	5.0	0.008	12.8	LOS B	0.1	0.5	0.59	0.62	0.59	53.6
31	T1	194	5.0	0.883	46.1	LOS D	12.2	89.4	1.00	1.05	1.43	33.8
32	R2	329	5.0	0.883	51.9	LOS D	12.2	89.4	1.00	1.03	1.43	34.3
Approach		529	5.0	0.883	49.3	LOS D	12.2	89.4	1.00	1.03	1.42	34.3
All Vehicles		3168	5.0	0.921	38.1	LOS D	21.8	159.2	0.86	0.92	1.15	41.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P5B	SouthEast Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P6	NorthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7	NorthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7B	NorthWest Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8	SouthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8B	SouthWest Slip/Bypass Lane Crossing	5	14.6	LOS B	0.0	0.0	0.85	0.85

All Pedestrians	37	31.4	LOS D	0.91	0.91

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: - [2041_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	326	5.0	0.295	10.8	LOS B	3.5	25.4	0.39	0.72	0.39	58.6
22	T1	273	5.0	0.481	35.0	LOS C	5.1	37.1	0.96	0.77	0.96	48.4
23	R2	295	5.0	0.822	47.0	LOS D	12.6	91.6	1.00	0.92	1.24	36.9
Approach		894	5.0	0.822	30.1	LOS C	12.6	91.6	0.76	0.80	0.85	46.6
NorthEast: Bells Lane												
24	L2	566	5.0	0.585	16.8	LOS B	12.0	87.8	0.72	0.85	0.86	50.2
25	T1	226	5.0	0.799	40.7	LOS D	9.6	69.7	1.00	0.94	1.24	36.1
26	R2	7	5.0	0.027	37.4	LOS D	0.2	1.8	0.88	0.66	0.88	39.3
Approach		800	5.0	0.799	23.7	LOS C	12.0	87.8	0.80	0.88	0.97	45.1
NorthWest: Moss Vale Road												
27	L2	17	5.0	0.021	14.4	LOS B	0.2	1.7	0.52	0.67	0.52	55.6
28	T1	457	5.0	0.806	41.0	LOS D	9.7	70.8	1.00	0.92	1.25	44.8
29	R2	53	5.0	0.147	36.7	LOS D	1.7	12.6	0.86	0.74	0.86	41.2
Approach		526	5.0	0.806	39.7	LOS D	9.7	70.8	0.97	0.89	1.19	44.7
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.006	13.4	LOS B	0.0	0.4	0.62	0.61	0.62	53.1
31	T1	159	5.0	0.825	39.4	LOS D	12.9	94.2	1.00	0.98	1.25	35.6
32	R2	440	5.0	0.825	45.1	LOS D	12.9	94.2	1.00	0.96	1.25	36.7
Approach		603	5.0	0.825	43.4	LOS D	12.9	94.2	1.00	0.96	1.24	36.5
All Vehicles		2823	5.0	0.825	32.9	LOS C	12.9	94.2	0.86	0.87	1.03	43.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P5B	SouthEast Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P6	NorthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7	NorthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7B	NorthWest Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8	SouthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8B	SouthWest Slip/Bypass Lane Crossing	5	14.5	LOS B	0.0	0.0	0.85	0.85

All Pedestrians	37	31.4	LOS D	0.91	0.91

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: - [2041_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 110 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	544	5.0	0.511	13.2	LOS B	10.9	79.5	0.49	0.76	0.49	56.4
22	T1	551	5.0	0.891	60.8	LOS E	17.0	123.8	1.00	0.99	1.34	36.1
23	R2	414	5.0	0.846	55.9	LOS E	23.5	171.6	1.00	0.92	1.17	33.9
Approach		1508	5.0	0.891	42.3	LOS D	23.5	171.6	0.81	0.89	0.98	40.7
NorthEast: Bells Lane												
24	L2	367	5.0	0.370	18.1	LOS B	10.1	73.8	0.60	0.78	0.68	49.3
25	T1	238	5.0	0.897	62.7	LOS E	14.7	107.6	1.00	1.05	1.38	29.7
26	R2	24	5.0	0.093	50.1	LOS D	1.1	8.3	0.90	0.71	0.90	34.6
Approach		629	5.0	0.897	36.2	LOS D	14.7	107.6	0.76	0.88	0.95	38.9
NorthWest: Moss Vale Road												
27	L2	11	5.0	0.015	18.3	LOS B	0.2	1.6	0.57	0.67	0.57	52.5
28	T1	539	5.0	0.872	58.4	LOS E	16.2	118.2	1.00	0.97	1.29	36.9
29	R2	120	5.0	0.245	41.3	LOS D	5.0	36.7	0.82	0.78	0.82	39.2
Approach		669	5.0	0.872	54.7	LOS D	16.2	118.2	0.96	0.93	1.20	37.5
SouthWest: Far North Connector Road												
30	L2	7	5.0	0.009	13.8	LOS B	0.1	0.8	0.55	0.62	0.55	52.8
31	T1	228	5.0	0.898	59.7	LOS E	20.5	149.5	1.00	1.06	1.32	30.0
32	R2	423	5.0	0.898	65.7	LOS E	20.5	149.5	1.00	1.01	1.33	30.4
Approach		659	5.0	0.898	63.0	LOS E	20.5	149.5	0.99	1.03	1.32	30.4
All Vehicles		3466	5.0	0.898	47.5	LOS D	23.5	171.6	0.87	0.92	1.08	37.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P5B	SouthEast Slip/Bypass Lane Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P6	NorthEast Full Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P7	NorthWest Full Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P7B	NorthWest Slip/Bypass Lane Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P8	SouthWest Full Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P8B	SouthWest Slip/Bypass Lane Crossing	5	21.9	LOS C	0.0	0.0	0.89	0.89

All Pedestrians	37	45.3	LOS E	0.94	0.94

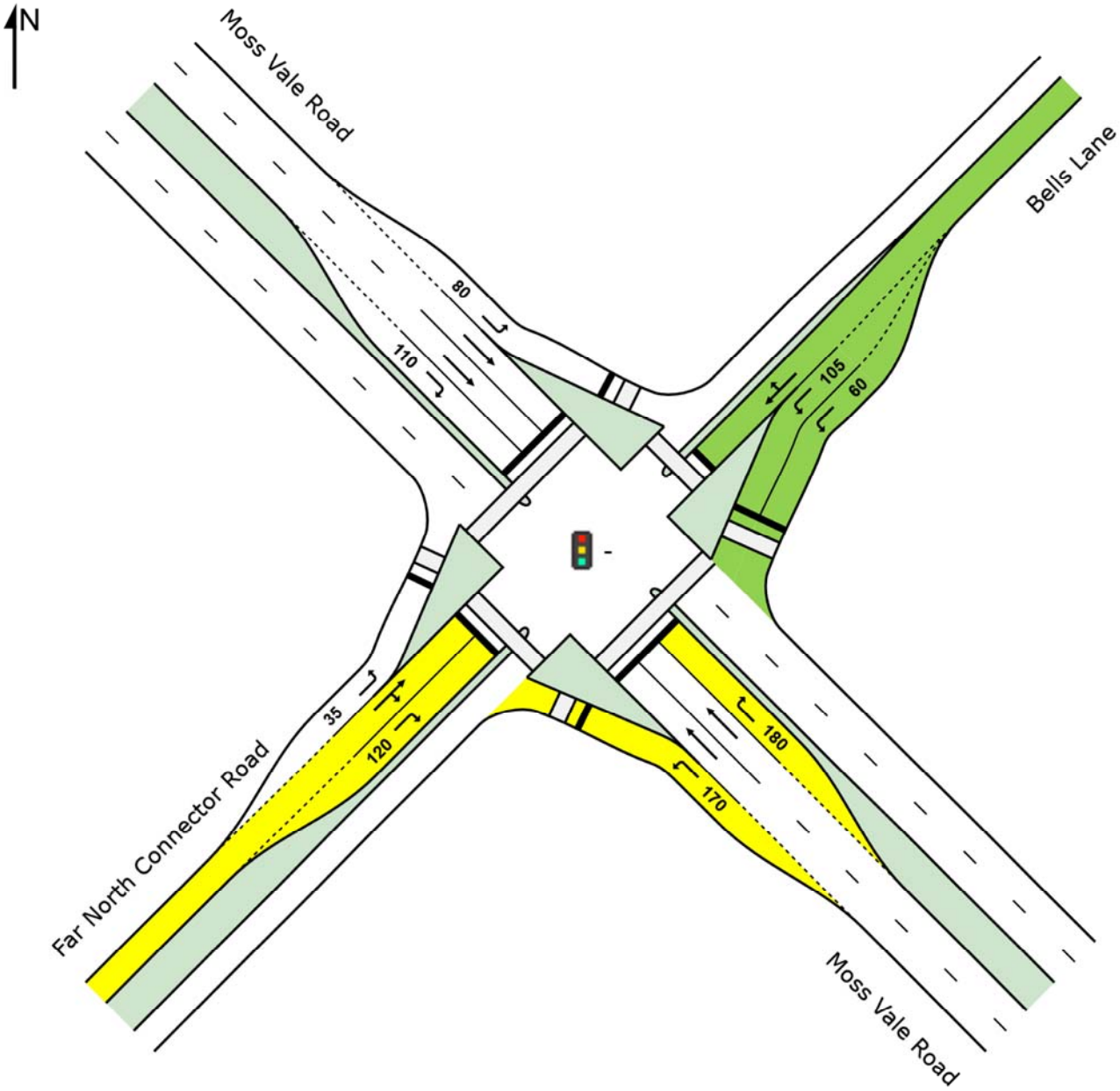
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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SITE LAYOUT

Site: - [2021_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated



PHASING SUMMARY

Site: - [2021_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

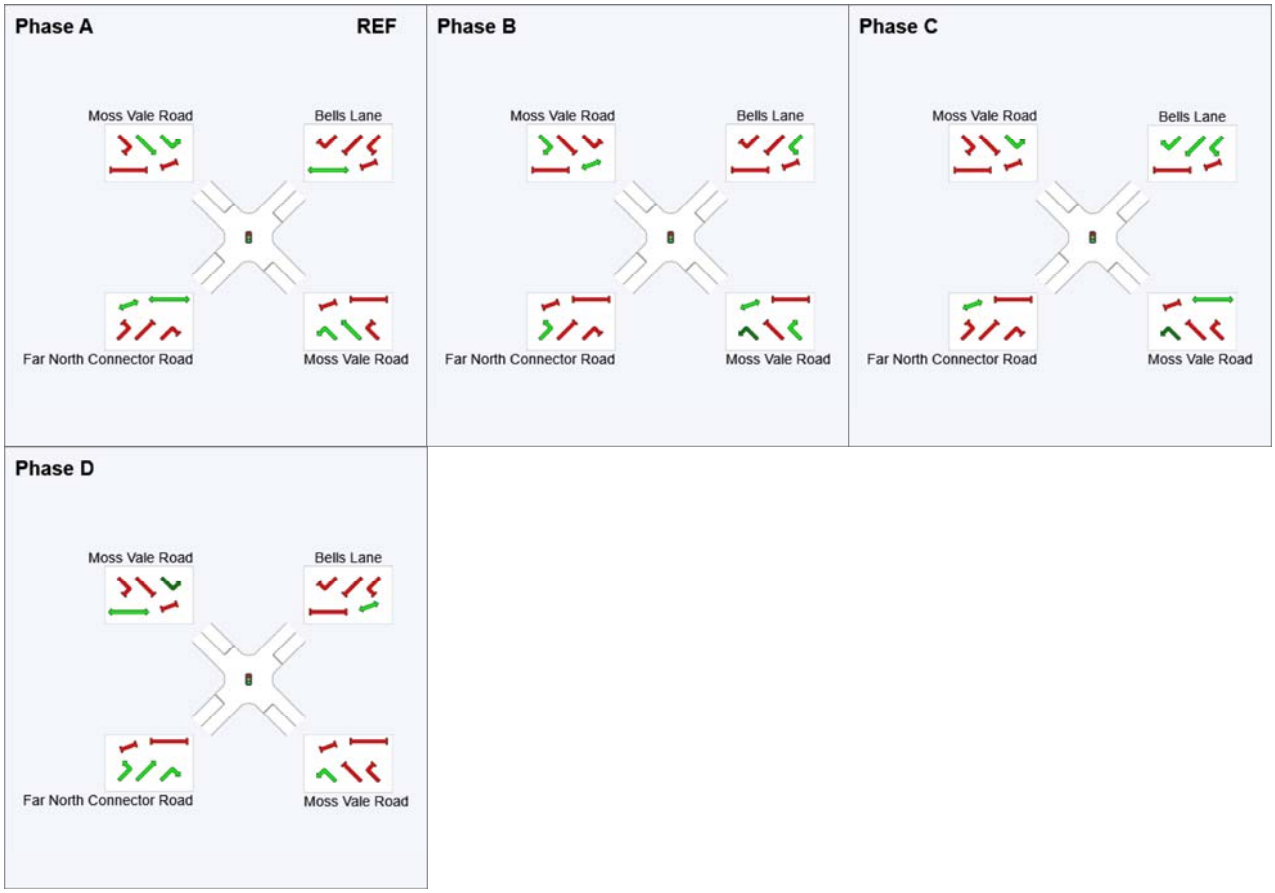
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Sequence1
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	14	26	38
Green Time (sec)	8	6	6	6
Phase Time (sec)	14	12	12	12
Phase Split	28%	24%	24%	24%

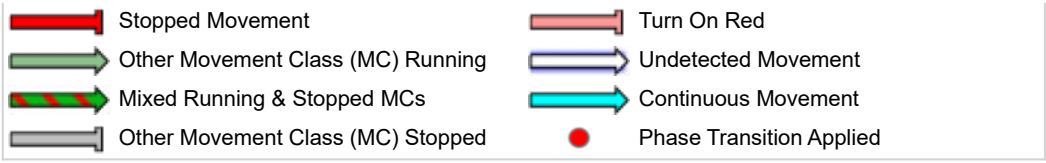
See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency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

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase





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MOVEMENT SUMMARY

Site: - [2021_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	254	5.0	0.204	9.1	LOS A	1.0	7.6	0.32	0.70	0.32	60.0
22	T1	266	5.0	0.441	21.8	LOS C	3.1	22.9	0.95	0.75	0.95	58.6
23	R2	2	5.0	0.010	29.4	LOS C	0.0	0.3	0.90	0.62	0.90	44.9
Approach		522	5.0	0.441	15.7	LOS B	3.1	22.9	0.64	0.72	0.64	59.2
NorthEast: Bells Lane												
24	L2	5	5.0	0.004	16.6	LOS B	0.0	0.3	0.66	0.61	0.66	50.8
25	T1	9	5.0	0.056	22.2	LOS C	0.3	2.1	0.91	0.63	0.91	43.3
26	R2	3	5.0	0.056	27.8	LOS C	0.3	2.1	0.91	0.63	0.91	46.1
Approach		18	5.0	0.056	21.5	LOS C	0.3	2.1	0.84	0.63	0.84	45.8
NorthWest: Moss Vale Road												
27	L2	3	5.0	0.004	12.0	LOS B	0.0	0.2	0.49	0.63	0.49	57.5
28	T1	356	5.0	0.589	22.7	LOS C	4.4	31.8	0.97	0.80	1.02	57.7
29	R2	44	5.0	0.205	30.7	LOS C	1.0	7.7	0.94	0.73	0.94	44.2
Approach		403	5.0	0.589	23.5	LOS C	4.4	31.8	0.97	0.79	1.01	55.8
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.010	13.8	LOS B	0.0	0.3	0.78	0.62	0.78	52.8
31	T1	8	5.0	0.574	24.7	LOS C	3.2	23.0	0.99	0.81	1.06	40.3
32	R2	239	5.0	0.574	30.4	LOS C	3.2	23.0	0.99	0.81	1.06	42.6
Approach		252	5.0	0.574	29.9	LOS C	3.2	23.0	0.98	0.80	1.05	42.7
All Vehicles		1195	5.0	0.589	21.4	LOS C	4.4	31.8	0.83	0.76	0.86	53.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P5B	SouthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6	NorthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6B	NorthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7	NorthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7B	NorthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8	SouthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8B	SouthWest Slip/Bypass Lane	5	7.2	LOS A	0.0	0.0	0.76	0.76

Crossing					
All Pedestrians	42	17.8	LOS B	0.87	0.87

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: - [2021_AADT PM -Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	364	5.0	0.299	9.4	LOS A	1.9	13.5	0.38	0.71	0.38	59.8
22	T1	425	5.0	0.704	24.2	LOS C	5.5	40.1	1.00	0.86	1.17	56.4
23	R2	4	5.0	0.020	29.6	LOS C	0.1	0.7	0.90	0.64	0.90	44.8
Approach		794	5.0	0.704	17.5	LOS B	5.5	40.1	0.71	0.79	0.81	57.8
NorthEast: Bells Lane												
24	L2	2	5.0	0.002	16.6	LOS B	0.0	0.1	0.65	0.58	0.65	50.8
25	T1	12	5.0	0.066	22.2	LOS C	0.3	2.5	0.91	0.64	0.91	43.4
26	R2	3	5.0	0.066	27.9	LOS C	0.3	2.5	0.91	0.64	0.91	46.2
Approach		17	5.0	0.066	22.6	LOS C	0.3	2.5	0.88	0.63	0.88	44.7
NorthWest: Moss Vale Road												
27	L2	3	5.0	0.004	12.0	LOS B	0.0	0.2	0.49	0.63	0.49	57.5
28	T1	354	5.0	0.585	22.7	LOS C	4.3	31.6	0.97	0.80	1.02	57.8
29	R2	76	5.0	0.352	31.3	LOS C	1.8	13.5	0.96	0.76	0.96	43.8
Approach		433	5.0	0.585	24.1	LOS C	4.3	31.6	0.97	0.79	1.00	54.7
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.010	13.8	LOS B	0.0	0.3	0.78	0.62	0.78	52.8
31	T1	9	5.0	0.542	24.5	LOS C	3.0	21.5	0.98	0.79	1.02	40.4
32	R2	224	5.0	0.542	30.1	LOS C	3.0	21.5	0.98	0.79	1.02	42.7
Approach		238	5.0	0.542	29.6	LOS C	3.0	21.5	0.98	0.79	1.02	42.8
All Vehicles		1481	5.0	0.704	21.4	LOS C	5.5	40.1	0.83	0.79	0.90	53.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P5B	SouthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6	NorthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6B	NorthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7	NorthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7B	NorthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8	SouthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8B	SouthWest Slip/Bypass Lane	5	7.2	LOS A	0.0	0.0	0.76	0.76

Crossing					
All Pedestrians	42	17.8	LOS B	0.87	0.87

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: - [2021_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	234	5.0	0.187	9.1	LOS A	0.9	6.9	0.32	0.69	0.32	60.1
22	T1	248	5.0	0.411	21.7	LOS C	2.9	21.2	0.94	0.74	0.94	58.7
23	R2	2	5.0	0.010	29.4	LOS C	0.0	0.3	0.90	0.62	0.90	44.9
Approach		484	5.0	0.411	15.6	LOS B	2.9	21.2	0.64	0.72	0.64	59.3
NorthEast: Bells Lane												
24	L2	4	5.0	0.003	16.6	LOS B	0.0	0.2	0.66	0.60	0.66	50.8
25	T1	8	5.0	0.052	22.1	LOS C	0.3	1.9	0.91	0.63	0.91	43.3
26	R2	3	5.0	0.052	27.8	LOS C	0.3	1.9	0.91	0.63	0.91	46.1
Approach		16	5.0	0.052	21.8	LOS C	0.3	1.9	0.84	0.62	0.84	45.6
NorthWest: Moss Vale Road												
27	L2	3	5.0	0.004	12.0	LOS B	0.0	0.2	0.49	0.63	0.49	57.5
28	T1	334	5.0	0.552	22.4	LOS C	4.0	29.4	0.97	0.78	0.98	58.0
29	R2	43	5.0	0.201	30.7	LOS C	1.0	7.5	0.94	0.73	0.94	44.2
Approach		380	5.0	0.552	23.2	LOS C	4.0	29.4	0.96	0.77	0.97	56.0
SouthWest: Far North Connector Road												
30	L2	3	5.0	0.007	13.8	LOS B	0.0	0.2	0.78	0.61	0.78	52.8
31	T1	7	5.0	0.537	24.4	LOS C	2.9	21.3	0.98	0.79	1.02	40.4
32	R2	224	5.0	0.537	30.1	LOS C	2.9	21.3	0.98	0.79	1.02	42.7
Approach		235	5.0	0.537	29.7	LOS C	2.9	21.3	0.98	0.79	1.02	42.8
All Vehicles		1115	5.0	0.552	21.3	LOS C	4.0	29.4	0.82	0.75	0.84	53.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P5B	SouthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6	NorthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6B	NorthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7	NorthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7B	NorthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8	SouthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8B	SouthWest Slip/Bypass Lane	5	7.2	LOS A	0.0	0.0	0.76	0.76

Crossing					
All Pedestrians	42	17.8	LOS B	0.87	0.87

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: - [2021_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	502	5.0	0.394	9.5	LOS A	3.2	23.6	0.38	0.72	0.38	59.8
22	T1	522	5.0	0.518	20.8	LOS C	6.7	49.1	0.90	0.75	0.90	59.5
23	R2	5	5.0	0.029	35.2	LOS D	0.1	1.1	0.92	0.65	0.92	41.9
Approach		1029	5.0	0.518	15.4	LOS B	6.7	49.1	0.65	0.74	0.65	59.5
NorthEast: Bells Lane												
24	L2	3	5.0	0.003	21.3	LOS C	0.0	0.2	0.72	0.60	0.72	47.7
25	T1	13	5.0	0.084	28.0	LOS C	0.4	3.2	0.94	0.65	0.94	40.7
26	R2	3	5.0	0.084	33.6	LOS C	0.4	3.2	0.94	0.65	0.94	43.2
Approach		19	5.0	0.084	27.8	LOS C	0.4	3.2	0.90	0.64	0.90	42.1
NorthWest: Moss Vale Road												
27	L2	3	5.0	0.003	11.3	LOS B	0.0	0.2	0.41	0.63	0.41	58.1
28	T1	473	5.0	0.469	20.5	LOS C	6.0	43.7	0.89	0.73	0.89	59.8
29	R2	96	5.0	0.534	37.9	LOS D	2.9	21.3	0.99	0.78	1.02	40.6
Approach		572	5.0	0.534	23.4	LOS C	6.0	43.7	0.90	0.74	0.91	55.4
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.010	16.0	LOS B	0.1	0.4	0.79	0.62	0.79	51.2
31	T1	11	5.0	0.494	27.8	LOS C	3.5	25.2	0.97	0.78	0.97	39.0
32	R2	226	5.0	0.494	33.4	LOS C	3.5	25.2	0.97	0.78	0.97	41.2
Approach		241	5.0	0.494	32.9	LOS C	3.5	25.2	0.97	0.78	0.97	41.2
All Vehicles		1861	5.0	0.534	20.2	LOS C	6.7	49.1	0.77	0.74	0.77	54.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	10.2	LOS B	0.0	0.0	0.80	0.80

Crossing					
All Pedestrians	42	22.5	LOS C	0.89	0.89

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: - [2026_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	325	5.0	0.254	9.1	LOS A	1.6	11.7	0.31	0.70	0.31	60.1
22	T1	322	5.0	0.394	22.5	LOS C	4.2	30.7	0.90	0.73	0.90	57.9
23	R2	42	5.0	0.235	36.5	LOS D	1.2	8.9	0.96	0.73	0.96	41.3
Approach		689	5.0	0.394	17.1	LOS B	4.2	30.7	0.62	0.71	0.62	57.5
NorthEast: Bells Lane												
24	L2	61	5.0	0.057	21.9	LOS C	0.6	4.7	0.74	0.69	0.74	47.3
25	T1	23	5.0	0.152	28.4	LOS C	0.8	5.9	0.94	0.68	0.94	40.6
26	R2	5	5.0	0.152	34.0	LOS C	0.8	5.9	0.94	0.68	0.94	43.0
Approach		89	5.0	0.152	24.3	LOS C	0.8	5.9	0.80	0.69	0.80	45.1
NorthWest: Moss Vale Road												
27	L2	5	5.0	0.005	11.3	LOS B	0.0	0.4	0.41	0.64	0.41	58.1
28	T1	536	5.0	0.655	24.7	LOS C	7.6	55.7	0.97	0.82	1.02	56.0
29	R2	59	5.0	0.329	37.0	LOS D	1.7	12.7	0.97	0.75	0.97	41.1
Approach		600	5.0	0.655	25.8	LOS C	7.6	55.7	0.96	0.81	1.01	54.1
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.010	14.5	LOS B	0.1	0.5	0.74	0.62	0.74	52.3
31	T1	19	5.0	0.645	26.4	LOS C	6.2	45.4	0.98	0.85	1.05	39.6
32	R2	406	5.0	0.645	32.1	LOS C	6.2	45.4	0.98	0.85	1.05	41.8
Approach		431	5.0	0.645	31.6	LOS C	6.2	45.4	0.97	0.84	1.04	41.8
All Vehicles		1809	5.0	0.655	23.8	LOS C	7.6	55.7	0.83	0.78	0.86	51.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	10.2	LOS B	0.0	0.0	0.80	0.80

Crossing					
All Pedestrians	42	22.5	LOS C	0.89	0.89

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: - [2026_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	526	5.0	0.416	9.5	LOS A	3.5	25.5	0.39	0.73	0.39	59.7
22	T1	572	5.0	0.534	20.2	LOS C	7.3	53.2	0.89	0.75	0.89	60.2
23	R2	55	5.0	0.305	36.9	LOS D	1.6	11.7	0.96	0.74	0.96	41.1
Approach		1153	5.0	0.534	16.1	LOS B	7.3	53.2	0.67	0.74	0.67	58.7
NorthEast: Bells Lane												
24	L2	22	5.0	0.021	21.6	LOS C	0.2	1.7	0.73	0.65	0.73	47.5
25	T1	21	5.0	0.141	28.3	LOS C	0.8	5.5	0.94	0.68	0.94	40.6
26	R2	5	5.0	0.141	33.9	LOS C	0.8	5.5	0.94	0.68	0.94	43.0
Approach		48	5.0	0.141	25.9	LOS C	0.8	5.5	0.84	0.67	0.84	43.7
NorthWest: Moss Vale Road												
27	L2	5	5.0	0.005	11.3	LOS B	0.0	0.4	0.41	0.64	0.41	58.1
28	T1	559	5.0	0.522	20.1	LOS C	7.1	51.8	0.89	0.75	0.89	60.2
29	R2	105	5.0	0.587	38.3	LOS D	3.2	23.7	1.00	0.80	1.08	40.5
Approach		669	5.0	0.587	22.9	LOS C	7.1	51.8	0.90	0.75	0.92	55.9
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.014	16.6	LOS B	0.1	0.6	0.80	0.63	0.80	50.8
31	T1	17	5.0	0.526	29.0	LOS C	3.3	24.1	0.98	0.78	0.99	38.7
32	R2	204	5.0	0.526	34.7	LOS C	3.3	24.1	0.98	0.78	0.99	40.7
Approach		226	5.0	0.526	33.8	LOS C	3.3	24.1	0.98	0.78	0.99	40.7
All Vehicles		2097	5.0	0.587	20.4	LOS C	7.3	53.2	0.78	0.75	0.79	54.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	10.2	LOS B	0.0	0.0	0.80	0.80

Crossing					
All Pedestrians	42	22.5	LOS C	0.89	0.89

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: - [2026_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	302	5.0	0.246	9.1	LOS A	1.3	9.4	0.34	0.70	0.34	60.0
22	T1	304	5.0	0.503	22.1	LOS C	3.6	26.5	0.96	0.76	0.96	58.3
23	R2	40	5.0	0.186	30.6	LOS C	0.9	6.9	0.93	0.73	0.93	44.2
Approach		646	5.0	0.503	16.6	LOS B	3.6	26.5	0.67	0.73	0.67	57.9
NorthEast: Bells Lane												
24	L2	56	5.0	0.043	17.0	LOS B	0.4	3.3	0.67	0.67	0.67	50.5
25	T1	20	5.0	0.113	22.5	LOS C	0.6	4.3	0.92	0.66	0.92	43.3
26	R2	5	5.0	0.113	28.2	LOS C	0.6	4.3	0.92	0.66	0.92	46.1
Approach		81	5.0	0.113	19.1	LOS B	0.6	4.3	0.75	0.67	0.75	48.2
NorthWest: Moss Vale Road												
27	L2	5	5.0	0.006	12.0	LOS B	0.0	0.4	0.49	0.64	0.49	57.5
28	T1	501	5.0	0.829	27.9	LOS C	7.1	51.8	1.00	0.95	1.42	53.4
29	R2	53	5.0	0.245	30.9	LOS C	1.3	9.2	0.94	0.74	0.94	44.1
Approach		559	5.0	0.829	28.0	LOS C	7.1	51.8	0.99	0.93	1.37	52.4
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.010	13.8	LOS B	0.0	0.3	0.78	0.62	0.78	52.8
31	T1	17	5.0	0.913	35.4	LOS D	6.3	46.2	1.00	1.13	1.86	36.1
32	R2	377	5.0	0.913	41.1	LOS D	6.3	46.2	1.00	1.13	1.86	37.9
Approach		398	5.0	0.913	40.6	LOS D	6.3	46.2	1.00	1.12	1.85	37.9
All Vehicles		1684	5.0	0.913	26.2	LOS C	7.1	51.8	0.86	0.89	1.18	49.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P5B	SouthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6	NorthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6B	NorthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7	NorthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7B	NorthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8	SouthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8B	SouthWest Slip/Bypass Lane	5	7.2	LOS A	0.0	0.0	0.76	0.76

Crossing					
All Pedestrians	42	17.8	LOS B	0.87	0.87

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: - [2026_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	649	5.0	0.519	10.0	LOS B	5.4	39.1	0.46	0.75	0.46	59.3
22	T1	660	5.0	0.617	20.8	LOS C	8.7	63.3	0.92	0.78	0.92	59.6
23	R2	61	5.0	0.340	37.0	LOS D	1.8	13.2	0.97	0.75	0.97	41.1
Approach		1371	5.0	0.617	16.4	LOS B	8.7	63.3	0.71	0.76	0.71	58.3
NorthEast: Bells Lane												
24	L2	25	5.0	0.023	21.7	LOS C	0.3	1.9	0.73	0.66	0.73	47.5
25	T1	24	5.0	0.158	28.4	LOS C	0.8	6.2	0.95	0.68	0.95	40.6
26	R2	5	5.0	0.158	34.0	LOS C	0.8	6.2	0.95	0.68	0.95	43.0
Approach		55	5.0	0.158	25.8	LOS C	0.8	6.2	0.85	0.67	0.85	43.7
NorthWest: Moss Vale Road												
27	L2	5	5.0	0.005	11.3	LOS B	0.0	0.4	0.41	0.64	0.41	58.1
28	T1	665	5.0	0.622	20.8	LOS C	8.8	64.0	0.92	0.78	0.92	59.5
29	R2	118	5.0	0.657	39.1	LOS D	3.7	27.1	1.00	0.82	1.16	40.1
Approach		788	5.0	0.657	23.5	LOS C	8.8	64.0	0.93	0.79	0.96	55.5
SouthWest: Far North Connector Road												
30	L2	6	5.0	0.016	16.7	LOS B	0.1	0.7	0.81	0.64	0.81	50.7
31	T1	20	5.0	0.634	30.0	LOS C	4.1	30.0	1.00	0.83	1.11	38.3
32	R2	246	5.0	0.634	35.7	LOS D	4.1	30.0	1.00	0.83	1.11	40.2
Approach		273	5.0	0.634	34.8	LOS C	4.1	30.0	0.99	0.83	1.10	40.3
All Vehicles		2486	5.0	0.657	20.9	LOS C	8.8	64.0	0.81	0.78	0.83	54.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	10.2	LOS B	0.0	0.0	0.80	0.80

Crossing					
All Pedestrians	42	22.5	LOS C	0.89	0.89

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: - [2031_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	365	5.0	0.291	9.5	LOS A	2.6	18.7	0.33	0.71	0.33	59.8
22	T1	312	5.0	0.361	25.1	LOS C	4.6	33.6	0.88	0.72	0.88	55.6
23	R2	136	5.0	0.663	42.8	LOS D	4.9	35.5	1.00	0.83	1.12	38.5
Approach		813	5.0	0.663	21.1	LOS C	4.9	35.5	0.66	0.73	0.68	53.3
NorthEast: Bells Lane												
24	L2	281	5.0	0.274	26.9	LOS C	3.8	27.7	0.82	0.76	0.82	44.4
25	T1	83	5.0	0.568	36.1	LOS D	3.3	23.9	1.00	0.79	1.06	37.6
26	R2	8	5.0	0.568	41.7	LOS D	3.3	23.9	1.00	0.79	1.06	39.7
Approach		373	5.0	0.568	29.3	LOS C	3.8	27.7	0.86	0.77	0.87	42.6
NorthWest: Moss Vale Road												
27	L2	8	5.0	0.009	11.6	LOS B	0.1	0.6	0.40	0.65	0.40	57.9
28	T1	571	5.0	0.661	27.8	LOS C	9.3	67.9	0.96	0.82	1.00	53.4
29	R2	62	5.0	0.303	40.2	LOS D	2.1	15.1	0.96	0.75	0.96	39.6
Approach		641	5.0	0.661	28.8	LOS C	9.3	67.9	0.95	0.81	0.99	51.7
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.007	14.4	LOS B	0.1	0.4	0.67	0.61	0.67	52.4
31	T1	58	5.0	0.656	27.9	LOS C	8.9	64.8	0.96	0.84	1.00	39.3
32	R2	483	5.0	0.656	33.5	LOS C	8.9	64.8	0.96	0.84	1.00	41.3
Approach		545	5.0	0.656	32.8	LOS C	8.9	64.8	0.96	0.84	1.00	41.1
All Vehicles		2372	5.0	0.663	27.2	LOS C	9.3	67.9	0.84	0.78	0.87	47.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P5B	SouthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6	NorthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6B	NorthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7	NorthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7B	NorthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8	SouthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8B	SouthWest Slip/Bypass Lane	5	13.2	LOS B	0.0	0.0	0.83	0.83

Crossing					
All Pedestrians	42	27.3	LOS C	0.90	0.90

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: - [2031_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	624	5.0	0.523	10.3	LOS B	5.6	40.8	0.49	0.76	0.49	59.0
22	T1	543	5.0	0.664	24.9	LOS C	7.8	56.8	0.97	0.83	1.03	55.8
23	R2	233	5.0	0.708	35.3	LOS D	7.0	51.3	0.99	0.87	1.13	41.9
Approach		1400	5.0	0.708	20.1	LOS C	7.8	56.8	0.76	0.80	0.80	54.1
NorthEast: Bells Lane												
24	L2	115	5.0	0.083	18.4	LOS B	1.1	7.9	0.67	0.69	0.67	49.5
25	T1	68	5.0	0.409	29.5	LOS C	2.3	16.7	0.98	0.74	0.98	40.2
26	R2	8	5.0	0.409	35.1	LOS D	2.3	16.7	0.98	0.74	0.98	42.6
Approach		192	5.0	0.409	23.1	LOS C	2.3	16.7	0.79	0.71	0.79	45.5
NorthWest: Moss Vale Road												
27	L2	8	5.0	0.010	13.4	LOS B	0.1	0.7	0.52	0.65	0.52	56.3
28	T1	602	5.0	0.736	26.5	LOS C	9.1	66.1	0.99	0.88	1.13	54.5
29	R2	106	5.0	0.323	31.7	LOS C	2.8	20.7	0.91	0.77	0.91	43.6
Approach		717	5.0	0.736	27.1	LOS C	9.1	66.1	0.97	0.86	1.09	52.6
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.010	14.4	LOS B	0.1	0.5	0.74	0.63	0.74	52.3
31	T1	61	5.0	0.778	33.4	LOS C	4.7	34.2	1.00	0.92	1.34	37.6
32	R2	221	5.0	0.778	39.1	LOS D	4.7	34.2	1.00	0.92	1.35	39.0
Approach		287	5.0	0.778	37.5	LOS D	4.7	34.2	1.00	0.91	1.33	38.8
All Vehicles		2596	5.0	0.778	24.2	LOS C	9.1	66.1	0.84	0.83	0.94	50.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	9.6	LOS A	0.0	0.0	0.80	0.80

Crossing					
All Pedestrians	42	22.5	LOS C	0.89	0.89

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: - [2031_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	345	5.0	0.281	9.5	LOS A	2.2	15.8	0.36	0.71	0.36	59.8
22	T1	298	5.0	0.394	23.4	LOS C	4.0	28.9	0.91	0.73	0.91	57.1
23	R2	132	5.0	0.734	40.2	LOS D	4.3	31.0	1.00	0.86	1.26	39.6
Approach		775	5.0	0.734	20.1	LOS C	4.3	31.0	0.68	0.74	0.72	54.1
NorthEast: Bells Lane												
24	L2	266	5.0	0.248	23.2	LOS C	3.0	22.1	0.80	0.75	0.80	46.6
25	T1	75	5.0	0.443	29.6	LOS C	2.5	18.1	0.98	0.75	0.98	40.2
26	R2	8	5.0	0.443	35.3	LOS D	2.5	18.1	0.98	0.75	0.98	42.6
Approach		349	5.0	0.443	24.8	LOS C	3.0	22.1	0.84	0.75	0.84	44.9
NorthWest: Moss Vale Road												
27	L2	8	5.0	0.009	11.5	LOS B	0.1	0.6	0.43	0.65	0.43	58.0
28	T1	538	5.0	0.712	26.7	LOS C	8.0	58.6	0.99	0.87	1.11	54.3
29	R2	57	5.0	0.317	36.9	LOS D	1.7	12.2	0.97	0.74	0.97	41.1
Approach		603	5.0	0.712	27.4	LOS C	8.0	58.6	0.98	0.85	1.09	52.8
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.008	14.0	LOS B	0.1	0.4	0.72	0.62	0.72	52.6
31	T1	53	5.0	0.708	26.7	LOS C	7.7	56.0	0.98	0.89	1.11	39.8
32	R2	458	5.0	0.708	32.4	LOS C	7.7	56.0	0.98	0.88	1.11	41.8
Approach		515	5.0	0.708	31.7	LOS C	7.7	56.0	0.98	0.88	1.11	41.6
All Vehicles		2242	5.0	0.734	25.5	LOS C	8.0	58.6	0.85	0.81	0.93	48.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	10.2	LOS B	0.0	0.0	0.80	0.80

Crossing					
All Pedestrians	42	22.5	LOS C	0.89	0.89

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: - [2031_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	642	5.0	0.546	10.4	LOS B	5.9	43.4	0.50	0.76	0.50	58.9
22	T1	597	5.0	0.729	26.3	LOS C	8.9	65.2	0.98	0.88	1.12	54.6
23	R2	237	5.0	0.792	38.5	LOS D	7.7	55.9	1.00	0.91	1.29	40.4
Approach		1476	5.0	0.792	21.3	LOS C	8.9	65.2	0.78	0.83	0.88	53.3
NorthEast: Bells Lane												
24	L2	131	5.0	0.099	19.2	LOS B	1.3	9.3	0.69	0.70	0.69	49.0
25	T1	80	5.0	0.471	29.7	LOS C	2.6	19.3	0.98	0.76	0.98	40.2
26	R2	8	5.0	0.471	35.4	LOS D	2.6	19.3	0.98	0.76	0.98	42.6
Approach		219	5.0	0.471	23.7	LOS C	2.6	19.3	0.81	0.72	0.81	45.1
NorthWest: Moss Vale Road												
27	L2	8	5.0	0.010	13.1	LOS B	0.1	0.7	0.52	0.65	0.52	56.6
28	T1	706	5.0	0.863	32.8	LOS C	12.2	89.2	1.00	1.00	1.40	49.8
29	R2	116	5.0	0.387	33.0	LOS C	3.2	23.3	0.93	0.78	0.93	43.0
Approach		831	5.0	0.863	32.7	LOS C	12.2	89.2	0.99	0.96	1.32	48.8
SouthWest: Far North Connector Road												
30	L2	6	5.0	0.012	14.5	LOS B	0.1	0.6	0.74	0.63	0.74	52.3
31	T1	75	5.0	0.799	33.2	LOS C	5.6	41.2	1.00	0.95	1.36	37.7
32	R2	263	5.0	0.799	38.9	LOS D	5.6	41.2	1.00	0.95	1.36	39.1
Approach		344	5.0	0.799	37.2	LOS D	5.6	41.2	1.00	0.94	1.35	38.9
All Vehicles		2869	5.0	0.863	26.7	LOS C	12.2	89.2	0.87	0.87	1.06	49.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	9.7	LOS A	0.0	0.0	0.80	0.80

Crossing					
All Pedestrians	42	22.5	LOS C	0.89	0.89

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: - [2036_AADT AM -Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	314	5.0	0.261	9.5	LOS A	1.9	14.1	0.35	0.71	0.35	59.8
22	T1	314	5.0	0.498	25.8	LOS C	4.4	32.2	0.95	0.76	0.95	55.1
23	R2	149	5.0	0.714	38.9	LOS D	4.7	34.6	1.00	0.86	1.21	40.2
Approach		777	5.0	0.714	21.8	LOS C	4.7	34.6	0.72	0.76	0.76	53.0
NorthEast: Bells Lane												
24	L2	431	5.0	0.379	23.3	LOS C	5.0	36.7	0.82	0.78	0.82	46.5
25	T1	135	5.0	0.772	33.2	LOS C	4.8	34.7	1.00	0.91	1.32	38.8
26	R2	11	5.0	0.772	38.8	LOS D	4.8	34.7	1.00	0.91	1.32	41.0
Approach		576	5.0	0.772	25.9	LOS C	5.0	36.7	0.87	0.81	0.95	44.3
NorthWest: Moss Vale Road												
27	L2	11	5.0	0.012	12.0	LOS B	0.1	0.8	0.47	0.65	0.47	57.6
28	T1	498	5.0	0.791	30.6	LOS C	8.0	58.4	1.00	0.92	1.27	51.4
29	R2	9	5.0	0.045	34.2	LOS C	0.3	1.9	0.91	0.67	0.91	42.4
Approach		518	5.0	0.791	30.3	LOS C	8.0	58.4	0.99	0.91	1.25	51.3
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.009	13.1	LOS B	0.1	0.4	0.69	0.62	0.69	53.3
31	T1	85	5.0	0.741	26.8	LOS C	8.9	64.6	0.99	0.91	1.14	40.0
32	R2	495	5.0	0.741	32.4	LOS C	8.9	64.6	0.99	0.91	1.15	41.8
Approach		585	5.0	0.741	31.4	LOS C	8.9	64.6	0.99	0.91	1.14	41.6
All Vehicles		2456	5.0	0.791	26.8	LOS C	8.9	64.6	0.87	0.84	1.00	47.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	10.0	LOS B	0.0	0.0	0.80	0.80

Crossing					
All Pedestrians	42	22.5	LOS C	0.89	0.89

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: - [2036_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	652	5.0	0.559	10.4	LOS B	6.1	44.7	0.51	0.76	0.51	58.9
22	T1	529	5.0	0.701	26.5	LOS C	7.8	57.3	0.98	0.86	1.10	54.5
23	R2	289	5.0	0.881	43.5	LOS D	10.4	75.8	1.00	0.99	1.51	38.3
Approach		1471	5.0	0.881	22.7	LOS C	10.4	75.8	0.78	0.84	0.92	51.9
NorthEast: Bells Lane												
24	L2	136	5.0	0.099	18.5	LOS B	1.3	9.4	0.67	0.70	0.67	49.5
25	T1	91	5.0	0.538	30.1	LOS C	3.1	22.4	0.99	0.78	1.02	40.0
26	R2	11	5.0	0.538	35.8	LOS D	3.1	22.4	0.99	0.78	1.02	42.4
Approach		237	5.0	0.538	23.7	LOS C	3.1	22.4	0.81	0.73	0.82	45.1
NorthWest: Moss Vale Road												
27	L2	11	5.0	0.013	13.6	LOS B	0.1	0.9	0.53	0.66	0.53	56.2
28	T1	601	5.0	0.796	29.3	LOS C	9.6	70.0	1.00	0.93	1.25	52.3
29	R2	107	5.0	0.327	31.7	LOS C	2.9	20.9	0.91	0.77	0.91	43.6
Approach		719	5.0	0.796	29.5	LOS C	9.6	70.0	0.98	0.90	1.19	50.8
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.010	14.0	LOS B	0.1	0.5	0.72	0.62	0.72	52.7
31	T1	93	5.0	0.781	32.6	LOS C	5.5	40.1	1.00	0.93	1.32	38.1
32	R2	239	5.0	0.781	38.4	LOS D	5.5	40.1	1.00	0.93	1.33	39.3
Approach		337	5.0	0.781	36.4	LOS D	5.5	40.1	1.00	0.92	1.31	39.1
All Vehicles		2763	5.0	0.881	26.2	LOS C	10.4	75.8	0.86	0.86	1.03	49.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	9.6	LOS A	0.0	0.0	0.80	0.80

Crossing					
All Pedestrians	42	22.5	LOS C	0.89	0.89

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: - [2036_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	318	5.0	0.249	9.3	LOS A	2.1	15.7	0.28	0.70	0.28	60.0
22	T1	289	5.0	0.361	29.6	LOS C	4.9	36.1	0.90	0.72	0.90	52.0
23	R2	149	5.0	0.606	44.8	LOS D	5.8	42.5	0.99	0.81	1.02	37.8
Approach		757	5.0	0.606	24.1	LOS C	5.8	42.5	0.66	0.73	0.66	51.1
NorthEast: Bells Lane												
24	L2	412	5.0	0.353	28.1	LOS C	6.2	45.3	0.81	0.78	0.81	43.8
25	T1	118	5.0	0.607	38.9	LOS D	5.1	37.2	1.00	0.81	1.05	36.6
26	R2	11	5.0	0.607	44.5	LOS D	5.1	37.2	1.00	0.81	1.05	38.5
Approach		540	5.0	0.607	30.8	LOS C	6.2	45.3	0.85	0.79	0.86	41.9
NorthWest: Moss Vale Road												
27	L2	11	5.0	0.011	12.1	LOS B	0.1	0.9	0.40	0.65	0.40	57.5
28	T1	488	5.0	0.609	31.6	LOS C	8.9	64.9	0.96	0.80	0.96	50.6
29	R2	8	5.0	0.034	40.6	LOS D	0.3	2.1	0.89	0.67	0.89	39.5
Approach		507	5.0	0.609	31.3	LOS C	8.9	64.9	0.94	0.79	0.94	50.5
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.006	14.4	LOS B	0.1	0.4	0.64	0.61	0.64	52.4
31	T1	78	5.0	0.654	30.8	LOS C	10.3	75.0	0.96	0.83	0.98	38.3
32	R2	482	5.0	0.654	36.4	LOS D	10.3	75.0	0.96	0.84	0.98	40.0
Approach		564	5.0	0.654	35.5	LOS D	10.3	75.0	0.95	0.83	0.97	39.8
All Vehicles		2368	5.0	0.654	29.9	LOS C	10.3	75.0	0.83	0.78	0.84	45.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P5B	SouthEast Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P6	NorthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P6B	NorthEast Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7	NorthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7B	NorthWest Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8	SouthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8B	SouthWest Slip/Bypass Lane	5	15.3	LOS B	0.0	0.0	0.85	0.85

Crossing					
All Pedestrians	42	31.9	LOS D	0.92	0.92

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: - [2036_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	578	5.0	0.493	10.8	LOS B	6.4	46.5	0.48	0.75	0.48	58.5
22	T1	605	5.0	0.660	27.0	LOS C	9.7	71.1	0.96	0.82	0.99	54.1
23	R2	301	5.0	0.839	44.0	LOS D	11.6	84.9	1.00	0.94	1.32	38.1
Approach		1484	5.0	0.839	24.1	LOS C	11.6	84.9	0.78	0.82	0.85	51.3
NorthEast: Bells Lane												
24	L2	159	5.0	0.119	21.3	LOS C	1.8	13.1	0.69	0.71	0.69	47.7
25	T1	109	5.0	0.745	38.4	LOS D	4.5	32.9	1.00	0.88	1.26	36.7
26	R2	11	5.0	0.745	44.0	LOS D	4.5	32.9	1.00	0.88	1.26	38.7
Approach		279	5.0	0.745	28.9	LOS C	4.5	32.9	0.82	0.78	0.94	42.4
NorthWest: Moss Vale Road												
27	L2	11	5.0	0.013	14.3	LOS B	0.1	1.0	0.53	0.66	0.53	55.7
28	T1	712	5.0	0.776	30.4	LOS C	12.6	91.6	0.99	0.91	1.15	51.5
29	R2	126	5.0	0.352	34.6	LOS C	3.9	28.1	0.90	0.78	0.90	42.2
Approach		848	5.0	0.776	30.8	LOS C	12.6	91.6	0.97	0.89	1.10	49.9
SouthWest: Far North Connector Road												
30	L2	7	5.0	0.013	14.8	LOS B	0.1	0.8	0.69	0.63	0.69	52.1
31	T1	112	5.0	0.842	39.4	LOS D	7.8	57.0	1.00	0.99	1.40	35.6
32	R2	282	5.0	0.842	45.2	LOS D	7.8	57.0	1.00	0.99	1.41	36.7
Approach		401	5.0	0.842	43.0	LOS D	7.8	57.0	0.99	0.98	1.39	36.6
All Vehicles		3013	5.0	0.842	29.0	LOS C	12.6	91.6	0.87	0.86	1.00	47.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P5B	SouthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6	NorthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6B	NorthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7	NorthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7B	NorthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8	SouthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8B	SouthWest Slip/Bypass Lane	5	12.1	LOS B	0.0	0.0	0.83	0.83

Crossing					
All Pedestrians	42	27.1	LOS C	0.90	0.90

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: - [2041_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	288	5.0	0.261	10.4	LOS B	2.8	20.5	0.36	0.71	0.36	59.0
22	T1	328	5.0	0.632	37.3	LOS D	6.4	46.9	0.99	0.82	1.04	47.0
23	R2	285	5.0	0.848	49.6	LOS D	12.6	91.7	1.00	0.94	1.31	36.0
Approach		902	5.0	0.848	32.6	LOS C	12.6	91.7	0.79	0.82	0.91	45.5
NorthEast: Bells Lane												
24	L2	605	5.0	0.397	22.9	LOS C	8.2	59.9	0.74	0.77	0.74	46.7
25	T1	260	5.0	0.872	44.9	LOS D	12.1	88.5	1.00	1.04	1.39	34.6
26	R2	7	5.0	0.872	50.5	LOS D	12.1	88.5	1.00	1.04	1.39	36.4
Approach		873	5.0	0.872	29.7	LOS C	12.1	88.5	0.82	0.86	0.94	42.2
NorthWest: Moss Vale Road												
27	L2	18	5.0	0.022	14.0	LOS B	0.2	1.8	0.51	0.67	0.51	55.9
28	T1	449	5.0	0.865	45.4	LOS D	10.1	73.9	1.00	0.96	1.40	42.5
29	R2	6	5.0	0.019	36.4	LOS D	0.2	1.5	0.84	0.66	0.84	41.3
Approach		474	5.0	0.865	44.1	LOS D	10.1	73.9	0.98	0.95	1.36	42.9
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.007	13.5	LOS B	0.1	0.5	0.62	0.62	0.62	53.1
31	T1	174	5.0	0.805	37.5	LOS D	13.1	95.3	1.00	0.96	1.20	36.3
32	R2	447	5.0	0.805	43.2	LOS D	13.1	95.3	1.00	0.94	1.20	37.4
Approach		626	5.0	0.805	41.4	LOS D	13.1	95.3	1.00	0.95	1.20	37.2
All Vehicles		2875	5.0	0.872	35.5	LOS D	13.1	95.3	0.88	0.88	1.06	42.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P5B	SouthEast Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P6	NorthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P6B	NorthEast Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7	NorthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7B	NorthWest Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8	SouthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8B	SouthWest Slip/Bypass Lane	5	14.5	LOS B	0.0	0.0	0.85	0.85

Crossing					
All Pedestrians	42	31.8	LOS D	0.92	0.92

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: - [2041_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	544	5.0	0.499	11.8	LOS B	8.2	59.6	0.47	0.75	0.47	57.7
22	T1	500	5.0	0.851	47.9	LOS D	12.3	89.6	1.00	0.95	1.31	41.3
23	R2	434	5.0	0.871	51.2	LOS D	21.5	157.3	1.00	0.95	1.26	35.4
Approach		1478	5.0	0.871	35.6	LOS D	21.5	157.3	0.80	0.88	0.98	43.8
NorthEast: Bells Lane												
24	L2	338	5.0	0.197	20.1	LOS C	4.2	31.0	0.61	0.72	0.61	48.4
25	T1	204	5.0	0.890	52.9	LOS D	11.5	84.1	1.00	1.05	1.44	32.1
26	R2	19	5.0	0.890	58.6	LOS E	11.5	84.1	1.00	1.05	1.44	33.6
Approach		561	5.0	0.890	33.4	LOS C	11.5	84.1	0.77	0.85	0.94	40.3
NorthWest: Moss Vale Road												
27	L2	8	5.0	0.012	17.5	LOS B	0.2	1.1	0.59	0.66	0.59	53.1
28	T1	497	5.0	0.846	47.5	LOS D	12.1	88.5	1.00	0.95	1.30	41.5
29	R2	95	5.0	0.190	34.6	LOS C	3.2	23.3	0.80	0.76	0.80	42.2
Approach		600	5.0	0.846	45.1	LOS D	12.1	88.5	0.96	0.91	1.21	41.7
SouthWest: Far North Connector Road												
30	L2	6	5.0	0.008	13.1	LOS B	0.1	0.6	0.57	0.62	0.57	53.3
31	T1	194	5.0	0.862	48.3	LOS D	13.2	96.3	1.00	1.01	1.33	33.1
32	R2	329	5.0	0.862	54.2	LOS D	13.2	96.3	1.00	0.99	1.33	33.6
Approach		529	5.0	0.862	51.5	LOS D	13.2	96.3	0.99	0.99	1.32	33.6
All Vehicles		3168	5.0	0.890	39.7	LOS D	21.5	157.3	0.86	0.90	1.08	40.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P5B	SouthEast Slip/Bypass Lane Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P6	NorthEast Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P6B	NorthEast Slip/Bypass Lane Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P7	NorthWest Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P7B	NorthWest Slip/Bypass Lane Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P8	SouthWest Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P8B	SouthWest Slip/Bypass Lane	5	17.1	LOS B	0.0	0.0	0.87	0.87

Crossing					
All Pedestrians	42	36.4	LOS D	0.93	0.93

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: - [2041_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	326	5.0	0.300	10.6	LOS B	3.1	22.5	0.40	0.72	0.40	58.8
22	T1	273	5.0	0.505	31.4	LOS C	4.5	33.1	0.97	0.77	0.97	50.8
23	R2	295	5.0	0.885	48.7	LOS D	12.2	88.9	1.00	0.98	1.46	36.3
Approach		894	5.0	0.885	29.5	LOS C	12.2	88.9	0.77	0.82	0.93	47.0
NorthEast: Bells Lane												
24	L2	566	5.0	0.381	21.2	LOS C	6.8	49.6	0.74	0.77	0.74	47.8
25	T1	226	5.0	0.868	40.5	LOS D	9.4	68.3	1.00	1.03	1.45	36.1
26	R2	7	5.0	0.868	46.1	LOS D	9.4	68.3	1.00	1.03	1.45	38.0
Approach		800	5.0	0.868	26.9	LOS C	9.4	68.3	0.82	0.85	0.95	43.7
NorthWest: Moss Vale Road												
27	L2	17	5.0	0.021	13.9	LOS B	0.2	1.6	0.54	0.67	0.54	56.0
28	T1	457	5.0	0.847	39.0	LOS D	8.9	65.2	1.00	0.95	1.39	46.0
29	R2	53	5.0	0.158	34.2	LOS C	1.6	11.4	0.87	0.74	0.87	42.4
Approach		526	5.0	0.847	37.7	LOS D	8.9	65.2	0.97	0.92	1.31	45.8
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.006	13.2	LOS B	0.0	0.3	0.65	0.61	0.65	53.3
31	T1	159	5.0	0.888	41.2	LOS D	12.6	91.7	1.00	1.08	1.47	35.0
32	R2	440	5.0	0.888	47.0	LOS D	12.6	91.7	1.00	1.06	1.47	36.0
Approach		603	5.0	0.888	45.2	LOS D	12.6	91.7	1.00	1.06	1.46	35.8
All Vehicles		2823	5.0	0.888	33.6	LOS C	12.6	91.7	0.87	0.90	1.12	43.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P5B	SouthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6	NorthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6B	NorthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7	NorthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7B	NorthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8	SouthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8B	SouthWest Slip/Bypass Lane	5	12.0	LOS B	0.0	0.0	0.83	0.83

Crossing					
All Pedestrians	42	27.1	LOS C	0.90	0.90

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: - [2041_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 110 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	544	5.0	0.511	13.2	LOS B	10.9	79.5	0.49	0.76	0.49	56.4
22	T1	551	5.0	0.891	60.8	LOS E	17.0	123.8	1.00	0.99	1.34	36.1
23	R2	414	5.0	0.875	60.1	LOS E	24.7	180.1	1.00	0.94	1.23	32.6
Approach		1508	5.0	0.891	43.5	LOS D	24.7	180.1	0.81	0.89	1.00	40.2
NorthEast: Bells Lane												
24	L2	367	5.0	0.217	23.8	LOS C	5.7	41.7	0.62	0.73	0.62	46.2
25	T1	238	5.0	0.902	63.2	LOS E	16.4	120.0	1.00	1.06	1.38	29.4
26	R2	24	5.0	0.902	68.8	LOS E	16.4	120.0	1.00	1.06	1.38	30.7
Approach		629	5.0	0.902	40.4	LOS D	16.4	120.0	0.78	0.87	0.94	37.4
NorthWest: Moss Vale Road												
27	L2	11	5.0	0.014	17.9	LOS B	0.2	1.6	0.56	0.67	0.56	52.8
28	T1	539	5.0	0.872	58.4	LOS E	16.2	118.2	1.00	0.97	1.29	36.9
29	R2	120	5.0	0.254	42.2	LOS D	5.1	37.2	0.83	0.78	0.83	38.8
Approach		669	5.0	0.872	54.9	LOS D	16.2	118.2	0.96	0.93	1.20	37.4
SouthWest: Far North Connector Road												
30	L2	7	5.0	0.009	14.1	LOS B	0.1	0.8	0.55	0.62	0.55	52.6
31	T1	228	5.0	0.898	59.7	LOS E	20.5	149.5	1.00	1.06	1.32	30.0
32	R2	423	5.0	0.898	65.7	LOS E	20.5	149.5	1.00	1.01	1.33	30.4
Approach		659	5.0	0.898	63.0	LOS E	20.5	149.5	1.00	1.03	1.32	30.4
All Vehicles		3466	5.0	0.902	48.8	LOS D	24.7	180.1	0.87	0.92	1.09	36.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P5B	SouthEast Slip/Bypass Lane Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P6	NorthEast Full Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P6B	NorthEast Slip/Bypass Lane Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P7	NorthWest Full Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P7B	NorthWest Slip/Bypass Lane Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P8	SouthWest Full Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P8B	SouthWest Slip/Bypass Lane	5	21.9	LOS C	0.0	0.0	0.89	0.89

Crossing					
All Pedestrians	42	45.8	LOS E	0.94	0.94

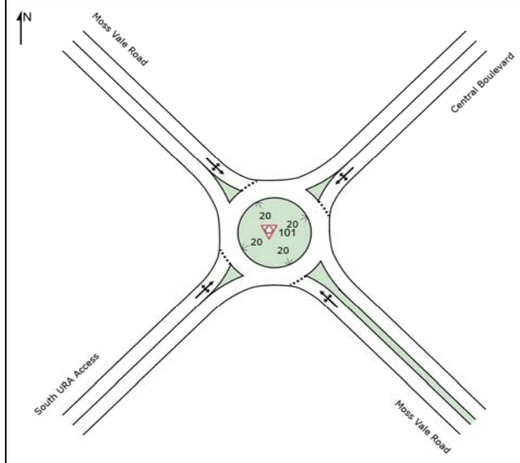
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Appendix G: Moss Vale Road / MVRS URA Access / Central Boulevard Roundabout SIDRA Summaries

Revised Analysis based on updated May 2020 TRACKS models

Moss Vale Road / Central Boulevard Roundabout (With) - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model (Node #21593 May 2020 version).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.85 and 1.00; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the Annual Average School Term (AAST).

The median on the south-eastern approach continues from the Moss Vale Road / Bells Lane signal intersection.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The queue length on the Moss Vale Road NW leg reaches a maximum of 25.9m in year 2041 PM peak hour, however the delay remains insignificant at 9.4 seconds.

A Level of Service (LoS) of 'A' is consistent within all scenarios.

Intersection Performance - Annual Average School Term

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	1	0.16	2.9	6.8	LOS A
	Through	269	0.16	2.8	6.8	LOS A
	Right	1	0.16	7.3	6.8	LOS A
Central Boulevard (NE)	Left	1	0.01	4.6	0.2	LOS A
	Through	1	0.01	4.5	0.2	LOS A
	Right	5	0.01	9	0.2	LOS A
Moss Vale Road (NW)	Left	5	0.24	2.8	10.1	LOS A
	Through	400	0.24	2.8	10.1	LOS A
	Right	1	0.24	7.3	10.1	LOS A
South URA Access (SW)	Left	56	0.05	4.1	1.7	LOS A
	Through	1	0.05	4	1.7	LOS A
	Right	1	0.05	8.5	1.7	LOS A
Intersection	**All**	**743**	**0.24**	**3**	**10.1**	**LOS A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	1	0.26	2.9	12	LOS A
	Through	429	0.26	2.8	12	LOS A
	Right	1	0.26	7.3	12	LOS A
Central Boulevard (NE)	Left	1	0.01	4.7	0.3	LOS A
	Through	1	0.01	4.7	0.3	LOS A
	Right	6	0.01	9.2	0.3	LOS A
Moss Vale Road (NW)	Left	6	0.25	2.8	11.3	LOS A
	Through	429	0.25	2.8	11.3	LOS A
	Right	1	0.25	7.3	11.3	LOS A
South URA Access (SW)	Left	57	0.06	4.9	2.1	LOS A
	Through	1	0.06	4.8	2.1	LOS A
	Right	1	0.06	9.4	2.1	LOS A
Intersection	**All**	**936**	**0.258**	**3**	**12**	**LOS A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	18	0.23	3.1	10.4	LOS A
	Through	247	0.23	3.1	10.4	LOS A
	Right	62	0.23	7.6	10.4	LOS A
Central Boulevard (NE)	Left	189	0.25	5.1	10.3	LOS A
	Through	16	0.25	5.1	10.3	LOS A
	Right	41	0.25	9.6	10.3	LOS A
Moss Vale Road (NW)	Left	29	0.31	3.6	13.6	LOS A
	Through	367	0.31	3.5	13.6	LOS A
	Right	2	0.31	8	13.6	LOS A
South URA Access (SW)	Left	56	0.12	4.6	4.6	LOS A
	Through	38	0.12	4.5	4.6	LOS A
	Right	38	0.12	9	4.6	LOS A
Intersection	**All**	**1104**	**0.306**	**4.5**	**13.6**	**LOS A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	35	0.39	3.1	21.7	LOS A
	Through	411	0.39	3.1	21.7	LOS A
	Right	132	0.39	7.6	21.7	LOS A
Central Boulevard (NE)	Left	129	0.21	5.9	8.9	LOS A
	Through	17	0.21	5.8	8.9	LOS A
	Right	37	0.21	10.3	8.9	LOS A
Moss Vale Road (NW)	Left	38	0.41	4.8	20	LOS A
	Through	412	0.41	4.7	20	LOS A
	Right	3	0.41	9.2	20	LOS A
South URA Access (SW)	Left	56	0.25	6.3	10.7	LOS A
	Through	43	0.25	6.2	10.7	LOS A
	Right	122	0.25	10.7	10.7	LOS A
Intersection	**All**	**1434**	**0.412**	**5.4**	**21.7**	**LOS A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	22	0.24	3.4	10.9	LOS A
	Through	231	0.24	3.4	10.9	LOS A
	Right	62	0.24	7.9	10.9	LOS A
Central Boulevard (NE)	Left	203	0.32	5.4	14.6	LOS A
	Through	39	0.32	5.4	14.6	LOS A
	Right	74	0.32	9.9	14.6	LOS A
Moss Vale Road (NW)	Left	49	0.34	4	15.7	LOS A
	Through	362	0.34	3.9	15.7	LOS A
	Right	3	0.34	8.4	15.7	LOS A
South URA Access (SW)	Left	55	0.18	4.7	7	LOS A
	Through	64	0.18	4.7	7	LOS A
	Right	66	0.18	9.2	7	LOS A
Intersection	**All**	**1231**	**0.34**	**5**	**15.7**	**LOS A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	44	0.41	3.5	22.6	LOS A
	Through	379	0.41	3.5	22.6	LOS A
	Right	124	0.41	8	22.6	LOS A
Central Boulevard (NE)	Left	151	0.30	6.3	14	LOS A
	Through	44	0.30	6.2	14	LOS A
	Right	67	0.30	10.8	14	LOS A
Moss Vale Road (NW)	Left	72	0.46	5.3	23.3	LOS A
	Through	394	0.46	5.2	23.3	LOS A
	Right	5	0.46	9.7	23.3	LOS A
South URA Access (SW)	Left	39	0.32	6.4	14.3	LOS A
	Through	72	0.32	6.4	14.3	LOS A
	Right	164	0.32	10.9	14.3	LOS A
Intersection	**All**	**1555**	**0.458**	**6**	**23.3**	**LOS A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	53	0.27	3.9	12.1	LOS A
	Through	209	0.27	3.9	12.1	LOS A
	Right	57	0.27	8.4	12.1	LOS A
Central Boulevard (NE)	Left	142	0.32	5.2	14.1	LOS A
	Through	81	0.32	5.1	14.1	LOS A
	Right	97	0.32	9.6	14.1	LOS A
Moss Vale Road (NW)	Left	63	0.33	3.8	14.9	LOS A
	Through	317	0.33	3.8	14.9	LOS A
	Right	24	0.33	8.3	14.9	LOS A
South URA Access (SW)	Left	59	0.17	4.7	6.9	LOS A
	Through	72	0.17	4.7	6.9	LOS A
	Right	48	0.17	9.2	6.9	LOS A
Intersection	**All**	**1222**	**0.326**	**5.1**	**14.9**	**LOS A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	42	0.42	3.7	22.9	LOS A
	Through	361	0.42	3.7	22.9	LOS A
	Right	133	0.42	8.2	22.9	LOS A
Central Boulevard (NE)	Left	172	0.36	6.3	16.9	LOS A
	Through	55	0.36	6.2	16.9	LOS A
	Right	85	0.36	10.7	16.9	LOS A
Moss Vale Road (NW)	Left	94	0.48	5.5	24.5	LOS A
	Through	382	0.48	5.4	24.5	LOS A
	Right	5	0.48	9.9	24.5	LOS A
South URA Access (SW)	Left	42	0.33	6.5	15.4	LOS A
	Through	91	0.33	6.5	15.4	LOS A
	Right	155	0.33	11	15.4	LOS A
Intersection	**All**	**1616**	**0.476**	**6.2**	**24.5**	**LOS A**

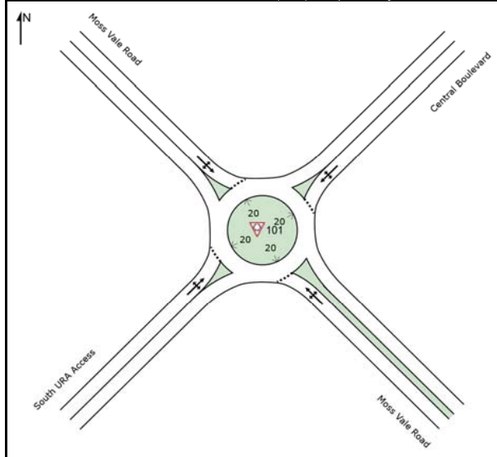
Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	71	0.31	4.5	14.5	LOS A
	Through	211	0.31	4.4	14.5	LOS A
	Right	60	0.31	8.9	14.5	LOS A
Central Boulevard (NE)	Left	124	0.37	5.2	17.5	LOS A
	Through	108	0.37	5.2	17.5	LOS A
	Right	147	0.37	9.7	17.5	LOS A
Moss Vale Road (NW)	Left	87	0.35	4	16.2	LOS A
	Through	306	0.35	3.9	16.2	LOS A
	Right	26	0.35	8.4	16.2	LOS A
South URA Access (SW)	Left	61	0.20	5.1	8.2	LOS A
	Through	93	0.20	5	8.2	LOS A
	Right	44	0.20	9.5	8.2	LOS A
Intersection	**All**	**1339**	**0.374**	**5.5**	**17.5**	**LOS A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	40	0.44	4.1	23.7	LOS A
	Through	366	0.44	4.1	23.7	LOS A
	Right	119	0.44	8.6	23.7	LOS A
Central Boulevard (NE)	Left	126	0.35	5.8	16.4	LOS A
	Through	73	0.35	5.8	16.4	LOS A
	Right	121	0.35	10.3	16.4	LOS A
Moss Vale Road (NW)	Left	138	0.49	5	25.9	LOS A
	Through	389	0.49	4.9	25.9	LOS A
	Right	6	0.49	9.4	25.9	LOS A
South URA Access (SW)	Left	46	0.28	6.6	12.8	LOS A
	Through	105	0.28	6.5	12.8	LOS A
	Right	84	0.28	11	12.8	LOS A
Intersection	**All**	**1615**	**0.49**	**6**	**25.9**	**LOS A**

Moss Vale Road / Central Boulevard Roundabout (With) - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model (Node #21593 May 2020 version).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.85 and 1.00; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the 100th highest hour daily traffic volumes.

The median on the south-eastern continues from the Moss Vale / Bells Lane signal intersection.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The queue length on the Moss Vale Road NW leg reaches a maximum of 38.5m in the PM peak hour of 2041, however the delay remains insignificant at 10.1 seconds.

A LoS of 'A' is consistent throughout all other scenarios.

Intersection Performance - 100th Highest Hour

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	1	0.15	2.9	6.2	LOS A
	Through	252	0.15	2.8	6.2	LOS A
	Right	1	0.15	7.3	6.2	LOS A
Central Boulevard (NE)	Left	1	0.01	4.4	0.2	LOS A
	Through	1	0.01	4.4	0.2	LOS A
	Right	4	0.01	8.9	0.2	LOS A
Moss Vale Road (NW)	Left	4	0.22	2.8	9.3	LOS A
	Through	376	0.22	2.8	9.3	LOS A
	Right	1	0.22	7.3	9.3	LOS A
South URA Access (SW)	Left	53	0.05	4	1.6	LOS A
	Through	1	0.05	3.9	1.6	LOS A
	Right	1	0.05	8.4	1.6	LOS A
Intersection	**All**	**696**	**0.22**	**3**	**9.3**	**LOS A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	1	0.32	2.9	16.1	LOS A
	Through	526	0.32	2.8	16.1	LOS A
	Right	1	0.32	7.3	16.1	LOS A
Central Boulevard (NE)	Left	1	0.01	5.5	0.4	LOS A
	Through	1	0.01	5.5	0.4	LOS A
	Right	7	0.01	10	0.4	LOS A
Moss Vale Road (NW)	Left	7	0.35	3	18.6	LOS A
	Through	541	0.35	2.9	18.6	LOS A
	Right	1	0.35	7.4	18.6	LOS A
South URA Access (SW)	Left	69	0.10	5.6	3.9	LOS A
	Through	1	0.10	5.6	3.9	LOS A
	Right	27	0.10	10.1	3.9	LOS A
Intersection	**All**	**1185**	**0.35**	**3.3**	**18.6**	**LOS A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	17	0.21	3.1	9.5	LOS A
	Through	233	0.21	3	9.5	LOS A
	Right	59	0.21	7.5	9.5	LOS A
Central Boulevard (NE)	Left	174	0.22	4.9	9	LOS A
	Through	14	0.22	4.9	9	LOS A
	Right	38	0.22	9.4	9	LOS A
Moss Vale Road (NW)	Left	26	0.28	3.5	12.3	LOS A
	Through	345	0.28	3.5	12.3	LOS A
	Right	2	0.28	8	12.3	LOS A
South URA Access (SW)	Left	52	0.11	4.4	4.1	LOS A
	Through	33	0.11	4.4	4.1	LOS A
	Right	36	0.11	8.9	4.1	LOS A
Intersection	**All**	**1027**	**0.284**	**4.4**	**12.3**	**LOS A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	38	0.46	3.3	28.4	LOS A
	Through	482	0.46	3.2	28.4	LOS A
	Right	146	0.46	7.7	28.4	LOS A
Central Boulevard (NE)	Left	151	0.27	6.8	12.7	LOS A
	Through	21	0.27	6.7	12.7	LOS A
	Right	46	0.27	11.2	12.7	LOS A
Moss Vale Road (NW)	Left	49	0.51	5.3	27.5	LOS A
	Through	492	0.51	5.2	27.5	LOS A
	Right	4	0.51	9.7	27.5	LOS A
South URA Access (SW)	Left	51	0.30	7.2	13.8	LOS A
	Through	52	0.30	7.2	13.8	LOS A
	Right	141	0.30	11.7	13.8	LOS A
Intersection	**All**	**1673**	**0.514**	**5.8**	**28.4**	**LOS A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	21	0.23	3.4	10.1	LOS A
	Through	220	0.23	3.3	10.1	LOS A
	Right	60	0.23	7.8	10.1	LOS A
Central Boulevard (NE)	Left	188	0.29	5.2	12.8	LOS A
	Through	35	0.29	5.2	12.8	LOS A
	Right	67	0.29	9.7	12.8	LOS A
Moss Vale Road (NW)	Left	45	0.32	3.8	14.3	LOS A
	Through	345	0.32	3.8	14.3	LOS A
	Right	3	0.32	8.3	14.3	LOS A
South URA Access (SW)	Left	52	0.16	4.6	6.3	LOS A
	Through	58	0.16	4.6	6.3	LOS A
	Right	61	0.16	9.1	6.3	LOS A
Intersection	**All**	**1156**	**0.32**	**4.9**	**14.3**	**LOS A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	47	0.47	3.8	28	LOS A
	Through	426	0.47	3.8	28	LOS A
	Right	129	0.47	8.3	28	LOS A
Central Boulevard (NE)	Left	172	0.40	7.3	20.3	LOS A
	Through	56	0.40	7.3	20.3	LOS A
	Right	86	0.40	11.8	20.3	LOS A
Moss Vale Road (NW)	Left	94	0.57	6.7	36.2	LOS A
	Through	464	0.57	6.6	36.2	LOS A
	Right	6	0.57	11.1	36.2	LOS A
South URA Access (SW)	Left	54	0.41	7.2	19.9	LOS A
	Through	89	0.41	7.2	19.9	LOS A
	Right	185	0.41	11.7	19.9	LOS A
Intersection	**All**	**1809**	**0.572**	**6.9**	**36.2**	**LOS A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	34	0.24	3.8	10.6	LOS A
	Through	205	0.24	3.7	10.6	LOS A
	Right	56	0.24	8.2	10.6	LOS A
Central Boulevard (NE)	Left	138	0.29	5	12.6	LOS A
	Through	71	0.29	5	12.6	LOS A
	Right	87	0.29	9.5	12.6	LOS A
Moss Vale Road (NW)	Left	56	0.31	3.8	14	LOS A
	Through	313	0.31	3.7	14	LOS A
	Right	22	0.31	8.2	14	LOS A
South URA Access (SW)	Left	56	0.16	4.6	6.2	LOS A
	Through	64	0.16	4.6	6.2	LOS A
	Right	46	0.16	9.1	6.2	LOS A
Intersection	**All**	**1147**	**0.311**	**5**	**14**	**LOS A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	46	0.49	4.1	30	LOS A
	Through	423	0.49	4	30	LOS A
	Right	142	0.49	8.5	30	LOS A
Central Boulevard (NE)	Left	192	0.47	8.2	26.5	LOS A
	Through	65	0.47	8.1	26.5	LOS A
	Right	106	0.47	12.6	26.5	LOS A
Moss Vale Road (NW)	Left	120	0.62	7.6	43.1	LOS A
	Through	469	0.62	7.5	43.1	LOS A
	Right	6	0.62	12	43.1	LOS A
South URA Access (SW)	Left	57	0.44	8	23	LOS A
	Through	107	0.44	7.9	23	LOS A
	Right	177	0.44	12.4	23	LOS A
Intersection	**All**	**1912**	**0.616**	**7.6**	**43.1**	**LOS A**

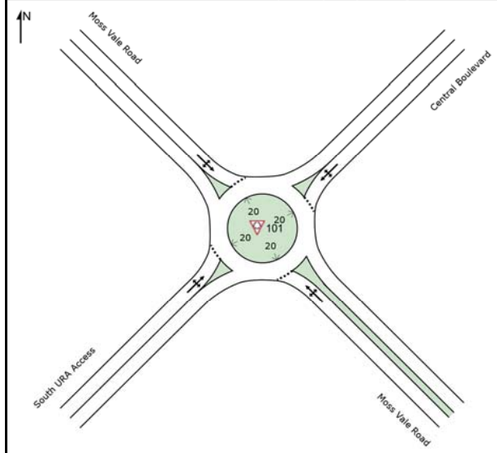
Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	24	0.25	4	10.8	LOS A
	Through	208	0.25	3.9	10.8	LOS A
	Right	52	0.25	8.4	10.8	LOS A
Central Boulevard (NE)	Left	169	0.36	5.1	16.8	LOS A
	Through	71	0.36	5.1	16.8	LOS A
	Right	134	0.36	9.6	16.8	LOS A
Moss Vale Road (NW)	Left	80	0.33	3.8	15	LOS A
	Through	315	0.33	3.8	15	LOS A
	Right	9	0.33	8.3	15	LOS A
South URA Access (SW)	Left	58	0.18	4.9	7.2	LOS A
	Through	84	0.18	4.9	7.2	LOS A
	Right	42	0.18	9.4	7.2	LOS A
Intersection	**All**	**1246**	**0.362**	**5.2**	**16.8**	**LOS A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	43	0.51	4.6	29.9	LOS A
	Through	415	0.51	4.5	29.9	LOS A
	Right	124	0.51	9	29.9	LOS A
Central Boulevard (NE)	Left	140	0.45	6.6	23.3	LOS A
	Through	88	0.45	6.5	23.3	LOS A
	Right	154	0.45	11	23.3	LOS A
Moss Vale Road (NW)	Left	179	0.60	5.6	38.5	LOS A
	Through	478	0.60	5.6	38.5	LOS A
	Right	7	0.60	10.1	38.5	LOS A
South URA Access (SW)	Left	63	0.32	7.4	15.3	LOS A
	Through	127	0.32	7.3	15.3	LOS A
	Right	52	0.32	11.9	15.3	LOS A
Intersection	**All**	**1871**	**0.6**	**6.5**	**38.5**	**LOS A**

Moss Vale Road / Central Boulevard Roundabout (Without) - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model (Node #21593 May 2020 version).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.85 and 1.00; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the Annual Average School Term (AAST).

The median on the south-eastern continues from the Moss Vale / Bells Lane signal intersection.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The queue length on the Moss Vale Road NW leg reaches a maximum of 29.4m in year 2041 PM peak hour, however the delay remains insignificant at 9.5 seconds.

A Level of Service (LoS) of 'A' is consistent within all scenarios.

Intersection Performance - Annual Average School Term

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	1	0.17	2.9	6.6	LOS A
	Through	269	0.17	2.8	6.6	LOS A
	Right	1	0.17	7.3	6.6	LOS A
Central Boulevard (NE)	Left	1	0.01	4.6	0.2	LOS A
	Through	1	0.01	4.5	0.2	LOS A
	Right	5	0.01	9	0.2	LOS A
Moss Vale Road (NW)	Left	5	0.24	2.8	10.3	LOS A
	Through	400	0.24	2.8	10.3	LOS A
	Right	6	0.24	7.3	10.3	LOS A
South URA Access (SW)	Left	63	0.06	4.1	2	LOS A
	Through	1	0.06	4	2	LOS A
	Right	1	0.06	8.5	2	LOS A
Intersection	**All**	**756**	**0.24**	**3**	**10.3**	**LOS A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	1	0.26	2.9	11.6	LOS A
	Through	429	0.26	2.8	11.6	LOS A
	Right	1	0.26	7.3	11.6	LOS A
Central Boulevard (NE)	Left	1	0.01	4.7	0.3	LOS A
	Through	1	0.01	4.7	0.3	LOS A
	Right	6	0.01	9.2	0.3	LOS A
Moss Vale Road (NW)	Left	6	0.26	2.8	11.5	LOS A
	Through	429	0.26	2.8	11.5	LOS A
	Right	6	0.26	7.3	11.5	LOS A
South URA Access (SW)	Left	65	0.07	4.9	2.4	LOS A
	Through	1	0.07	4.9	2.4	LOS A
	Right	1	0.07	9.4	2.4	LOS A
Intersection	**All**	**949**	**0.264**	**3.1**	**11.6**	**LOS A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	18	0.24	3.2	10.3	LOS A
	Through	247	0.24	3.2	10.3	LOS A
	Right	62	0.24	7.7	10.3	LOS A
Central Boulevard (NE)	Left	189	0.25	5.3	10.7	LOS A
	Through	16	0.25	5.2	10.7	LOS A
	Right	41	0.25	9.7	10.7	LOS A
Moss Vale Road (NW)	Left	29	0.33	3.6	14.7	LOS A
	Through	367	0.33	3.6	14.7	LOS A
	Right	28	0.33	8.1	14.7	LOS A
South URA Access (SW)	Left	97	0.16	4.6	6.3	LOS A
	Through	38	0.16	4.6	6.3	LOS A
	Right	38	0.16	9.1	6.3	LOS A
Intersection	**All**	**1172**	**0.326**	**4.6**	**14.7**	**LOS A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	35	0.41	3.4	21.6	LOS A
	Through	411	0.41	3.3	21.6	LOS A
	Right	132	0.41	7.8	21.6	LOS A
Central Boulevard (NE)	Left	129	0.21	6.1	9.4	LOS A
	Through	17	0.21	6.1	9.4	LOS A
	Right	37	0.21	10.6	9.4	LOS A
Moss Vale Road (NW)	Left	38	0.44	4.8	22.2	LOS A
	Through	412	0.44	4.8	22.2	LOS A
	Right	39	0.44	9.3	22.2	LOS A
South URA Access (SW)	Left	92	0.30	6.4	13.1	LOS A
	Through	43	0.30	6.4	13.1	LOS A
	Right	122	0.30	10.9	13.1	LOS A
Intersection	**All**	**1505**	**0.444**	**5.6**	**22.2**	**LOS A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	22	0.25	3.6	11	LOS A
	Through	231	0.25	3.6	11	LOS A
	Right	62	0.25	8.1	11	LOS A
Central Boulevard (NE)	Left	203	0.33	5.7	15.2	LOS A
	Through	39	0.33	5.6	15.2	LOS A
	Right	74	0.33	10.1	15.2	LOS A
Moss Vale Road (NW)	Left	49	0.37	4	17.4	LOS A
	Through	362	0.37	3.9	17.4	LOS A
	Right	37	0.37	8.4	17.4	LOS A
South URA Access (SW)	Left	111	0.23	4.8	9.6	LOS A
	Through	64	0.23	4.8	9.6	LOS A
	Right	66	0.23	9.3	9.6	LOS A
Intersection	**All**	**1320**	**0.37**	**5.2**	**17.4**	**LOS A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	44	0.43	3.9	23	LOS A
	Through	379	0.43	3.8	23	LOS A
	Right	124	0.43	8.4	23	LOS A
Central Boulevard (NE)	Left	151	0.32	6.7	15.1	LOS A
	Through	44	0.32	6.7	15.1	LOS A
	Right	67	0.32	11.2	15.1	LOS A
Moss Vale Road (NW)	Left	72	0.50	5.4	26.9	LOS A
	Through	394	0.50	5.4	26.9	LOS A
	Right	55	0.50	9.9	26.9	LOS A
South URA Access (SW)	Left	86	0.37	6.6	17.7	LOS A
	Through	72	0.37	6.5	17.7	LOS A
	Right	164	0.37	11	17.7	LOS A
Intersection	**All**	**1652**	**0.504**	**6.4**	**26.9**	**LOS A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	53	0.28	4.2	12.4	LOS A
	Through	209	0.28	4.1	12.4	LOS A
	Right	57	0.28	8.6	12.4	LOS A
Central Boulevard (NE)	Left	142	0.33	5.4	14.7	LOS A
	Through	81	0.33	5.3	14.7	LOS A
	Right	97	0.33	9.8	14.7	LOS A
Moss Vale Road (NW)	Left	63	0.35	3.9	16.6	LOS A
	Through	317	0.35	3.8	16.6	LOS A
	Right	58	0.35	8.3	16.6	LOS A
South URA Access (SW)	Left	114	0.23	4.8	9.4	LOS A
	Through	72	0.23	4.8	9.4	LOS A
	Right	48	0.23	9.3	9.4	LOS A
Intersection	**All**	**1311**	**0.352**	**5.3**	**16.6**	**LOS A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	42	0.44	4.1	23.4	LOS A
	Through	361	0.44	4	23.4	LOS A
	Right	133	0.44	8.5	23.4	LOS A
Central Boulevard (NE)	Left	172	0.37	6.7	18.1	LOS A
	Through	55	0.37	6.7	18.1	LOS A
	Right	85	0.37	11.2	18.1	LOS A
Moss Vale Road (NW)	Left	94	0.51	5.4	27.5	LOS A
	Through	382	0.51	5.4	27.5	LOS A
	Right	54	0.51	9.9	27.5	LOS A
South URA Access (SW)	Left	88	0.37	6.6	17.5	LOS A
	Through	72	0.37	6.6	17.5	LOS A
	Right	155	0.37	11.1	17.5	LOS A
Intersection	**All**	**1692**	**0.512**	**6.6**	**27.5**	**LOS A**

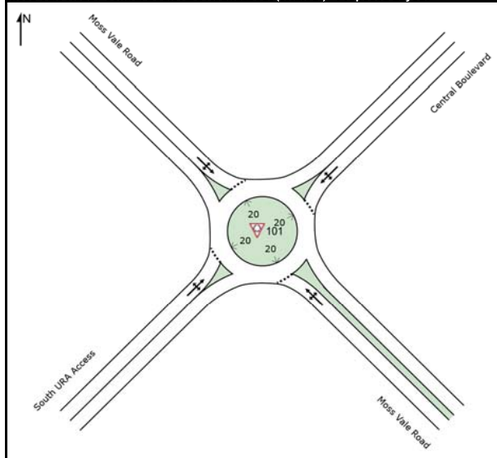
Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	71	0.32	4.7	14.9	LOS A
	Through	211	0.32	4.7	14.9	LOS A
	Right	60	0.32	9.2	14.9	LOS A
Central Boulevard (NE)	Left	124	0.38	5.5	18.2	LOS A
	Through	108	0.38	5.4	18.2	LOS A
	Right	147	0.38	9.9	18.2	LOS A
Moss Vale Road (NW)	Left	87	0.37	4	18	LOS A
	Through	306	0.37	4	18	LOS A
	Right	60	0.37	8.5	18	LOS A
South URA Access (SW)	Left	116	0.26	5.2	10.9	LOS A
	Through	93	0.26	5.2	10.9	LOS A
	Right	44	0.26	9.7	10.9	LOS A
Intersection	**All**	**1427**	**0.384**	**5.7**	**18.2**	**LOS A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	40	0.46	4.5	24.4	LOS A
	Through	366	0.46	4.4	24.4	LOS A
	Right	119	0.46	8.9	24.4	LOS A
Central Boulevard (NE)	Left	126	0.37	6.2	17.6	LOS A
	Through	73	0.37	6.1	17.6	LOS A
	Right	121	0.37	10.6	17.6	LOS A
Moss Vale Road (NW)	Left	138	0.53	5.1	29.4	LOS A
	Through	389	0.53	5	29.4	LOS A
	Right	54	0.53	9.5	29.4	LOS A
South URA Access (SW)	Left	91	0.34	6.7	15.9	LOS A
	Through	105	0.34	6.7	15.9	LOS A
	Right	84	0.34	11.2	15.9	LOS A
Intersection	**All**	**1706**	**0.531**	**6.3**	**29.4**	**LOS A**

Moss Vale Road / Central Boulevard Roundabout (Without) - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model (Node #21593 November 2018 version).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.85 and 1.00; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the 100th highest hour daily traffic volumes.

The median on the south-eastern continues from the Moss Vale / Bells Lane signal intersection.

Key Findings

The intersection remains within Degree of Saturation (DOS) limits in all scenarios.

The queue length on the Moss Vale Road NW leg reaches a maximum of 48m in year 2041 PM peak hour, however the delay remains insignificant at 10.7 seconds.

A LoS of 'A' is consistent throughout all other scenarios.

Intersection Performance - 100th Highest Hour

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	1	0.16	2.9	6	LOS A
	Through	252	0.16	2.8	6	LOS A
	Right	1	0.16	7.3	6	LOS A
Central Boulevard (NE)	Left	1	0.01	4.4	0.2	LOS A
	Through	1	0.01	4.4	0.2	LOS A
	Right	4	0.01	8.9	0.2	LOS A
Moss Vale Road (NW)	Left	4	0.22	2.8	9.4	LOS A
	Through	376	0.22	2.8	9.4	LOS A
	Right	5	0.22	7.3	9.4	LOS A
South URA Access (SW)	Left	59	0.05	4	1.8	LOS A
	Through	1	0.05	3.9	1.8	LOS A
	Right	1	0.05	8.4	1.8	LOS A
Intersection	**All**	**706**	**0.22**	**3**	**9.4**	**LOS A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	1	0.32	2.9	15.4	LOS A
	Through	526	0.32	2.9	15.4	LOS A
	Right	1	0.32	7.4	15.4	LOS A
Central Boulevard (NE)	Left	1	0.01	5.6	0.4	LOS A
	Through	1	0.01	5.5	0.4	LOS A
	Right	7	0.01	10	0.4	LOS A
Moss Vale Road (NW)	Left	7	0.35	3	19	LOS A
	Through	541	0.35	2.9	19	LOS A
	Right	8	0.35	7.4	19	LOS A
South URA Access (SW)	Left	78	0.11	5.6	4.3	LOS A
	Through	1	0.11	5.6	4.3	LOS A
	Right	27	0.11	10.1	4.3	LOS A
Intersection	**All**	**1201**	**0.354**	**3.3**	**19**	**LOS A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	17	0.22	3.2	9.4	LOS A
	Through	233	0.22	3.2	9.4	LOS A
	Right	59	0.22	7.7	9.4	LOS A
Central Boulevard (NE)	Left	174	0.22	5.1	9.3	LOS A
	Through	14	0.22	5	9.3	LOS A
	Right	38	0.22	9.5	9.3	LOS A
Moss Vale Road (NW)	Left	26	0.30	3.5	13.3	LOS A
	Through	345	0.30	3.5	13.3	LOS A
	Right	26	0.30	8	13.3	LOS A
South URA Access (SW)	Left	88	0.15	4.5	5.5	LOS A
	Through	33	0.15	4.4	5.5	LOS A
	Right	36	0.15	8.9	5.5	LOS A
Intersection	**All**	**1088**	**0.302**	**4.5**	**13.3**	**LOS A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	38	0.49	3.6	28.4	LOS A
	Through	482	0.49	3.6	28.4	LOS A
	Right	146	0.49	8.1	28.4	LOS A
Central Boulevard (NE)	Left	151	0.29	7.2	13.7	LOS A
	Through	21	0.29	7.1	13.7	LOS A
	Right	46	0.29	11.7	13.7	LOS A
Moss Vale Road (NW)	Left	49	0.56	5.6	32.6	LOS A
	Through	492	0.56	5.6	32.6	LOS A
	Right	49	0.56	10.1	32.6	LOS A
South URA Access (SW)	Left	95	0.36	7.4	17.4	LOS A
	Through	52	0.36	7.4	17.4	LOS A
	Right	141	0.36	11.9	17.4	LOS A
Intersection	**All**	**1762**	**0.555**	**6.3**	**32.6**	**LOS A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	21	0.24	3.5	10.2	LOS A
	Through	220	0.24	3.5	10.2	LOS A
	Right	60	0.24	8	10.2	LOS A
Central Boulevard (NE)	Left	188	0.30	5.4	13.2	LOS A
	Through	35	0.30	5.4	13.2	LOS A
	Right	67	0.30	9.9	13.2	LOS A
Moss Vale Road (NW)	Left	45	0.34	3.9	15.8	LOS A
	Through	345	0.34	3.8	15.8	LOS A
	Right	34	0.34	8.3	15.8	LOS A
South URA Access (SW)	Left	102	0.21	4.7	8.5	LOS A
	Through	58	0.21	4.6	8.5	LOS A
	Right	61	0.21	9.1	8.5	LOS A
Intersection	**All**	**1237**	**0.34**	**5.1**	**15.8**	**LOS A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	47	0.50	4.3	28.7	LOS A
	Through	426	0.50	4.3	28.7	LOS A
	Right	129	0.50	8.8	28.7	LOS A
Central Boulevard (NE)	Left	172	0.44	8.5	24	LOS A
	Through	56	0.44	8.5	24	LOS A
	Right	86	0.44	13	24	LOS A
Moss Vale Road (NW)	Left	94	0.64	7.6	46.5	LOS A
	Through	464	0.64	7.5	46.5	LOS A
	Right	71	0.64	12	46.5	LOS A
South URA Access (SW)	Left	115	0.49	8.4	28.1	LOS A
	Through	89	0.49	8.4	28.1	LOS A
	Right	185	0.49	12.9	28.1	LOS A
Intersection	**All**	**1935**	**0.637**	**7.9**	**46.5**	**LOS A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	34	0.25	4	10.9	LOS A
	Through	205	0.25	3.9	10.9	LOS A
	Right	56	0.25	8.4	10.9	LOS A
Central Boulevard (NE)	Left	138	0.30	5.2	13.1	LOS A
	Through	71	0.30	5.2	13.1	LOS A
	Right	87	0.30	9.7	13.1	LOS A
Moss Vale Road (NW)	Left	56	0.33	3.8	15.4	LOS A
	Through	313	0.33	3.7	15.4	LOS A
	Right	52	0.33	8.2	15.4	LOS A
South URA Access (SW)	Left	105	0.21	4.7	8.4	LOS A
	Through	64	0.21	4.6	8.4	LOS A
	Right	46	0.21	9.1	8.4	LOS A
Intersection	**All**	**1226**	**0.334**	**5.2**	**15.4**	**LOS A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	46	0.53	4.6	30.9	LOS A
	Through	423	0.53	4.5	30.9	LOS A
	Right	142	0.53	9	30.9	LOS A
Central Boulevard (NE)	Left	192	0.51	9.7	31.4	LOS A
	Through	65	0.51	9.6	31.4	LOS A
	Right	106	0.51	14.1	31.4	LOS A
Moss Vale Road (NW)	Left	120	0.68	8.7	55	LOS A
	Through	469	0.68	8.6	55	LOS A
	Right	68	0.68	13.1	55	LOS A
South URA Access (SW)	Left	115	0.52	9.3	31.7	LOS A
	Through	107	0.52	9.2	31.7	LOS A
	Right	177	0.52	13.7	31.7	LOS A
Intersection	**All**	**2032**	**0.681**	**8.8**	**55**	**LOS A**

Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	24	0.25	4.2	11	LOS A
	Through	208	0.25	4.1	11	LOS A
	Right	52	0.25	8.6	11	LOS A
Central Boulevard (NE)	Left	169	0.37	5.3	17.4	LOS A
	Through	71	0.37	5.3	17.4	LOS A
	Right	134	0.37	9.8	17.4	LOS A
Moss Vale Road (NW)	Left	80	0.35	3.9	16.5	LOS A
	Through	315	0.35	3.8	16.5	LOS A
	Right	39	0.35	8.3	16.5	LOS A
South URA Access (SW)	Left	107	0.23	5	9.6	LOS A
	Through	84	0.23	5	9.6	LOS A
	Right	42	0.23	9.5	9.6	LOS A
Intersection	**All**	**1325**	**0.372**	**5.4**	**17.4**	**LOS A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	43	0.54	5.1	31.3	LOS A
	Through	415	0.54	5.1	31.3	LOS A
	Right	124	0.54	9.6	31.3	LOS A
Central Boulevard (NE)	Left	140	0.48	7.6	27.2	LOS A
	Through	88	0.48	7.6	27.2	LOS A
	Right	154	0.48	12.1	27.2	LOS B
Moss Vale Road (NW)	Left	179	0.65	6.3	48	LOS A
	Through	478	0.65	6.2	48	LOS A
	Right	68	0.65	10.7	48	LOS B
South URA Access (SW)	Left	120	0.40	7.6	20	LOS A
	Through	127	0.40	7.6	20	LOS A
	Right	52	0.40	12.1	20	LOS B
Intersection	**All**	**1988**	**0.653**	**7.3**	**48**	**LOS A**

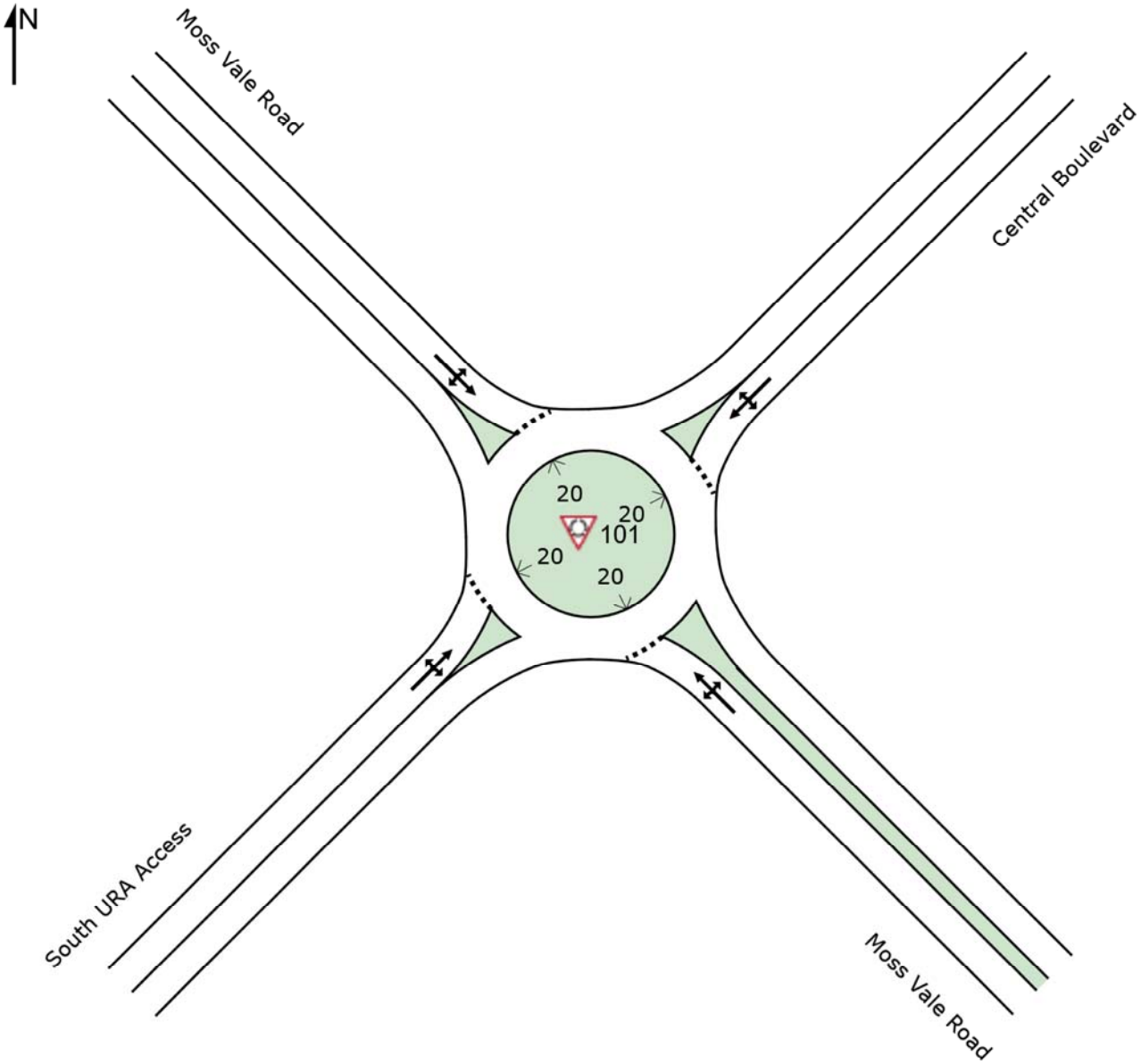
Appendix H: Moss Vale Road / MVRS URA Access / Central Boulevard Roundabout SIDRA Outputs

Revised Analysis based on updated May 2020 TRACKS models

SITE LAYOUT

Site: 101 [2021_AAST_W_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout



MOVEMENT SUMMARY

Site: 101 [2021_AAST_W_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	1	0.0	0.164	2.9	LOS A	1.0	6.8	0.06	0.31	0.06	48.0
5	T1	269	0.0	0.164	2.8	LOS A	1.0	6.8	0.06	0.31	0.06	49.1
6	R2	1	0.0	0.164	7.3	LOS A	1.0	6.8	0.06	0.31	0.06	49.3
Approach		272	0.0	0.164	2.8	LOS A	1.0	6.8	0.06	0.31	0.06	49.1
NorthEast: Central Boulevard												
7	L2	1	0.0	0.007	4.6	LOS A	0.0	0.2	0.47	0.56	0.47	45.2
8	T1	1	0.0	0.007	4.5	LOS A	0.0	0.2	0.47	0.56	0.47	46.2
9	R2	5	0.0	0.007	9.0	LOS A	0.0	0.2	0.47	0.56	0.47	46.4
Approach		7	0.0	0.007	7.7	LOS A	0.0	0.2	0.47	0.56	0.47	46.2
NorthWest: Moss Vale Road												
10	L2	5	0.0	0.236	2.8	LOS A	1.4	10.1	0.04	0.31	0.04	48.1
11	T1	400	0.0	0.236	2.8	LOS A	1.4	10.1	0.04	0.31	0.04	49.2
12	R2	1	0.0	0.236	7.3	LOS A	1.4	10.1	0.04	0.31	0.04	49.4
Approach		406	0.0	0.236	2.8	LOS A	1.4	10.1	0.04	0.31	0.04	49.2
SouthWest: South URA Access												
1	L2	56	0.0	0.051	4.1	LOS A	0.2	1.7	0.40	0.48	0.40	47.1
2	T1	1	0.0	0.051	4.0	LOS A	0.2	1.7	0.40	0.48	0.40	48.2
3	R2	1	0.0	0.051	8.5	LOS A	0.2	1.7	0.40	0.48	0.40	48.4
Approach		58	0.0	0.051	4.1	LOS A	0.2	1.7	0.40	0.48	0.40	47.1
All Vehicles		743	0.0	0.236	3.0	LOS A	1.4	10.1	0.08	0.33	0.08	49.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2021_AAST_W_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	1	0.0	0.258	2.9	LOS A	1.7	12.0	0.07	0.31	0.07	47.9
5	T1	429	0.0	0.258	2.8	LOS A	1.7	12.0	0.07	0.31	0.07	49.1
6	R2	1	0.0	0.258	7.3	LOS A	1.7	12.0	0.07	0.31	0.07	49.3
Approach		432	0.0	0.258	2.8	LOS A	1.7	12.0	0.07	0.31	0.07	49.1
NorthEast: Central Boulevard												
7	L2	1	0.0	0.008	4.7	LOS A	0.0	0.3	0.48	0.57	0.48	45.1
8	T1	1	0.0	0.008	4.7	LOS A	0.0	0.3	0.48	0.57	0.48	46.1
9	R2	6	0.0	0.008	9.2	LOS A	0.0	0.3	0.48	0.57	0.48	46.3
Approach		8	0.0	0.008	8.0	LOS A	0.0	0.3	0.48	0.57	0.48	46.1
NorthWest: Moss Vale Road												
10	L2	6	0.0	0.253	2.8	LOS A	1.6	11.3	0.04	0.31	0.04	48.1
11	T1	429	0.0	0.253	2.8	LOS A	1.6	11.3	0.04	0.31	0.04	49.2
12	R2	1	0.0	0.253	7.3	LOS A	1.6	11.3	0.04	0.31	0.04	49.4
Approach		437	0.0	0.253	2.8	LOS A	1.6	11.3	0.04	0.31	0.04	49.2
SouthWest: South URA Access												
1	L2	57	0.0	0.059	4.9	LOS A	0.3	2.1	0.50	0.55	0.50	46.8
2	T1	1	0.0	0.059	4.8	LOS A	0.3	2.1	0.50	0.55	0.50	47.9
3	R2	1	0.0	0.059	9.4	LOS A	0.3	2.1	0.50	0.55	0.50	48.1
Approach		59	0.0	0.059	5.0	LOS A	0.3	2.1	0.50	0.55	0.50	46.8
All Vehicles		936	0.0	0.258	3.0	LOS A	1.7	12.0	0.09	0.33	0.09	49.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2021_100HH_W_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	1	0.0	0.152	2.9	LOS A	0.9	6.2	0.05	0.31	0.05	48.0
5	T1	252	0.0	0.152	2.8	LOS A	0.9	6.2	0.05	0.31	0.05	49.1
6	R2	1	0.0	0.152	7.3	LOS A	0.9	6.2	0.05	0.31	0.05	49.3
Approach		254	0.0	0.152	2.8	LOS A	0.9	6.2	0.05	0.31	0.05	49.1
NorthEast: Central Boulevard												
7	L2	1	0.0	0.006	4.4	LOS A	0.0	0.2	0.45	0.54	0.45	45.4
8	T1	1	0.0	0.006	4.4	LOS A	0.0	0.2	0.45	0.54	0.45	46.4
9	R2	4	0.0	0.006	8.9	LOS A	0.0	0.2	0.45	0.54	0.45	46.6
Approach		6	0.0	0.006	7.4	LOS A	0.0	0.2	0.45	0.54	0.45	46.3
NorthWest: Moss Vale Road												
10	L2	4	0.0	0.221	2.8	LOS A	1.3	9.3	0.04	0.31	0.04	48.1
11	T1	376	0.0	0.221	2.8	LOS A	1.3	9.3	0.04	0.31	0.04	49.2
12	R2	1	0.0	0.221	7.3	LOS A	1.3	9.3	0.04	0.31	0.04	49.4
Approach		381	0.0	0.221	2.8	LOS A	1.3	9.3	0.04	0.31	0.04	49.2
SouthWest: South URA Access												
1	L2	53	0.0	0.048	4.0	LOS A	0.2	1.6	0.38	0.47	0.38	47.1
2	T1	1	0.0	0.048	3.9	LOS A	0.2	1.6	0.38	0.47	0.38	48.2
3	R2	1	0.0	0.048	8.4	LOS A	0.2	1.6	0.38	0.47	0.38	48.4
Approach		55	0.0	0.048	4.0	LOS A	0.2	1.6	0.38	0.47	0.38	47.1
All Vehicles		696	0.0	0.221	3.0	LOS A	1.3	9.3	0.07	0.33	0.07	49.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2021_100HH_W_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	1	0.0	0.315	2.9	LOS A	2.3	16.1	0.08	0.31	0.08	47.9
5	T1	526	0.0	0.315	2.8	LOS A	2.3	16.1	0.08	0.31	0.08	49.0
6	R2	1	0.0	0.315	7.3	LOS A	2.3	16.1	0.08	0.31	0.08	49.2
Approach		528	0.0	0.315	2.8	LOS A	2.3	16.1	0.08	0.31	0.08	49.0
NorthEast: Central Boulevard												
7	L2	1	0.0	0.010	5.5	LOS A	0.1	0.4	0.57	0.60	0.57	44.6
8	T1	1	0.0	0.010	5.5	LOS A	0.1	0.4	0.57	0.60	0.57	45.6
9	R2	7	0.0	0.010	10.0	LOS A	0.1	0.4	0.57	0.60	0.57	45.8
Approach		9	0.0	0.010	9.0	LOS A	0.1	0.4	0.57	0.60	0.57	45.6
NorthWest: Moss Vale Road												
10	L2	7	0.0	0.350	3.0	LOS A	2.7	18.6	0.17	0.32	0.17	47.6
11	T1	541	0.0	0.350	2.9	LOS A	2.7	18.6	0.17	0.32	0.17	48.7
12	R2	1	0.0	0.350	7.4	LOS A	2.7	18.6	0.17	0.32	0.17	48.9
Approach		549	0.0	0.350	2.9	LOS A	2.7	18.6	0.17	0.32	0.17	48.7
SouthWest: South URA Access												
1	L2	69	0.0	0.104	5.6	LOS A	0.6	3.9	0.57	0.64	0.57	45.8
2	T1	1	0.0	0.104	5.6	LOS A	0.6	3.9	0.57	0.64	0.57	46.8
3	R2	27	0.0	0.104	10.1	LOS A	0.6	3.9	0.57	0.64	0.57	47.0
Approach		98	0.0	0.104	6.8	LOS A	0.6	3.9	0.57	0.64	0.57	46.1
All Vehicles		1185	0.0	0.350	3.3	LOS A	2.7	18.6	0.17	0.34	0.17	48.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2026_AAST_W_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	18	0.0	0.228	3.1	LOS A	1.5	10.4	0.23	0.40	0.23	47.0
5	T1	247	0.0	0.228	3.1	LOS A	1.5	10.4	0.23	0.40	0.23	48.0
6	R2	62	0.0	0.228	7.6	LOS A	1.5	10.4	0.23	0.40	0.23	48.2
Approach		327	0.0	0.228	3.9	LOS A	1.5	10.4	0.23	0.40	0.23	48.0
NorthEast: Central Boulevard												
7	L2	189	0.0	0.245	5.1	LOS A	1.5	10.3	0.58	0.64	0.58	46.2
8	T1	16	0.0	0.245	5.1	LOS A	1.5	10.3	0.58	0.64	0.58	47.3
9	R2	41	0.0	0.245	9.6	LOS A	1.5	10.3	0.58	0.64	0.58	47.5
Approach		246	0.0	0.245	5.9	LOS A	1.5	10.3	0.58	0.64	0.58	46.5
NorthWest: Moss Vale Road												
10	L2	29	0.0	0.306	3.6	LOS A	1.9	13.6	0.36	0.41	0.36	46.9
11	T1	367	0.0	0.306	3.5	LOS A	1.9	13.6	0.36	0.41	0.36	48.0
12	R2	2	0.0	0.306	8.0	LOS A	1.9	13.6	0.36	0.41	0.36	48.2
Approach		399	0.0	0.306	3.6	LOS A	1.9	13.6	0.36	0.41	0.36	47.9
SouthWest: South URA Access												
1	L2	56	0.0	0.124	4.6	LOS A	0.7	4.6	0.49	0.58	0.49	46.1
2	T1	38	0.0	0.124	4.5	LOS A	0.7	4.6	0.49	0.58	0.49	47.2
3	R2	38	0.0	0.124	9.0	LOS A	0.7	4.6	0.49	0.58	0.49	47.3
Approach		132	0.0	0.124	5.8	LOS A	0.7	4.6	0.49	0.58	0.49	46.8
All Vehicles		1104	0.0	0.306	4.5	LOS A	1.9	13.6	0.39	0.48	0.39	47.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2026_AAST_W_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	35	0.0	0.390	3.1	LOS A	3.1	21.7	0.27	0.41	0.27	46.8
5	T1	411	0.0	0.390	3.1	LOS A	3.1	21.7	0.27	0.41	0.27	47.8
6	R2	132	0.0	0.390	7.6	LOS A	3.1	21.7	0.27	0.41	0.27	48.0
Approach		577	0.0	0.390	4.1	LOS A	3.1	21.7	0.27	0.41	0.27	47.8
NorthEast: Central Boulevard												
7	L2	129	0.0	0.206	5.9	LOS A	1.3	8.9	0.66	0.69	0.66	45.8
8	T1	17	0.0	0.206	5.8	LOS A	1.3	8.9	0.66	0.69	0.66	46.8
9	R2	37	0.0	0.206	10.3	LOS A	1.3	8.9	0.66	0.69	0.66	47.0
Approach		183	0.0	0.206	6.7	LOS A	1.3	8.9	0.66	0.69	0.66	46.1
NorthWest: Moss Vale Road												
10	L2	38	0.0	0.412	4.8	LOS A	2.9	20.0	0.58	0.54	0.58	46.2
11	T1	412	0.0	0.412	4.7	LOS A	2.9	20.0	0.58	0.54	0.58	47.2
12	R2	3	0.0	0.412	9.2	LOS A	2.9	20.0	0.58	0.54	0.58	47.4
Approach		453	0.0	0.412	4.7	LOS A	2.9	20.0	0.58	0.54	0.58	47.1
SouthWest: South URA Access												
1	L2	56	0.0	0.250	6.3	LOS A	1.5	10.7	0.67	0.74	0.67	44.7
2	T1	43	0.0	0.250	6.2	LOS A	1.5	10.7	0.67	0.74	0.67	45.7
3	R2	122	0.0	0.250	10.7	LOS A	1.5	10.7	0.67	0.74	0.67	45.9
Approach		221	0.0	0.250	8.7	LOS A	1.5	10.7	0.67	0.74	0.67	45.5
All Vehicles		1434	0.0	0.412	5.4	LOS A	3.1	21.7	0.48	0.54	0.48	47.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2026_100HH_W_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	17	0.0	0.213	3.1	LOS A	1.4	9.5	0.21	0.40	0.21	47.0
5	T1	233	0.0	0.213	3.0	LOS A	1.4	9.5	0.21	0.40	0.21	48.1
6	R2	59	0.0	0.213	7.5	LOS A	1.4	9.5	0.21	0.40	0.21	48.3
Approach		308	0.0	0.213	3.9	LOS A	1.4	9.5	0.21	0.40	0.21	48.1
NorthEast: Central Boulevard												
7	L2	174	0.0	0.220	4.9	LOS A	1.3	9.0	0.55	0.62	0.55	46.3
8	T1	14	0.0	0.220	4.9	LOS A	1.3	9.0	0.55	0.62	0.55	47.4
9	R2	38	0.0	0.220	9.4	LOS A	1.3	9.0	0.55	0.62	0.55	47.6
Approach		225	0.0	0.220	5.7	LOS A	1.3	9.0	0.55	0.62	0.55	46.6
NorthWest: Moss Vale Road												
10	L2	26	0.0	0.284	3.5	LOS A	1.8	12.3	0.34	0.40	0.34	47.0
11	T1	345	0.0	0.284	3.5	LOS A	1.8	12.3	0.34	0.40	0.34	48.1
12	R2	2	0.0	0.284	8.0	LOS A	1.8	12.3	0.34	0.40	0.34	48.3
Approach		374	0.0	0.284	3.5	LOS A	1.8	12.3	0.34	0.40	0.34	48.0
SouthWest: South URA Access												
1	L2	52	0.0	0.112	4.4	LOS A	0.6	4.1	0.47	0.57	0.47	46.1
2	T1	33	0.0	0.112	4.4	LOS A	0.6	4.1	0.47	0.57	0.47	47.2
3	R2	36	0.0	0.112	8.9	LOS A	0.6	4.1	0.47	0.57	0.47	47.4
Approach		120	0.0	0.112	5.7	LOS A	0.6	4.1	0.47	0.57	0.47	46.8
All Vehicles		1027	0.0	0.284	4.4	LOS A	1.8	12.3	0.36	0.47	0.36	47.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2026_100HH_W_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	38	0.0	0.460	3.3	LOS A	4.1	28.4	0.34	0.42	0.34	46.6
5	T1	482	0.0	0.460	3.2	LOS A	4.1	28.4	0.34	0.42	0.34	47.6
6	R2	146	0.0	0.460	7.7	LOS A	4.1	28.4	0.34	0.42	0.34	47.8
Approach		666	0.0	0.460	4.2	LOS A	4.1	28.4	0.34	0.42	0.34	47.6
NorthEast: Central Boulevard												
7	L2	151	0.0	0.274	6.8	LOS A	1.8	12.7	0.75	0.77	0.75	45.2
8	T1	21	0.0	0.274	6.7	LOS A	1.8	12.7	0.75	0.77	0.75	46.3
9	R2	46	0.0	0.274	11.2	LOS A	1.8	12.7	0.75	0.77	0.75	46.4
Approach		218	0.0	0.274	7.7	LOS A	1.8	12.7	0.75	0.77	0.75	45.6
NorthWest: Moss Vale Road												
10	L2	49	0.0	0.514	5.3	LOS A	3.9	27.5	0.68	0.61	0.68	45.8
11	T1	492	0.0	0.514	5.2	LOS A	3.9	27.5	0.68	0.61	0.68	46.9
12	R2	4	0.0	0.514	9.7	LOS A	3.9	27.5	0.68	0.61	0.68	47.1
Approach		545	0.0	0.514	5.3	LOS A	3.9	27.5	0.68	0.61	0.68	46.8
SouthWest: South URA Access												
1	L2	51	0.0	0.303	7.2	LOS A	2.0	13.8	0.75	0.80	0.75	44.2
2	T1	52	0.0	0.303	7.2	LOS A	2.0	13.8	0.75	0.80	0.75	45.2
3	R2	141	0.0	0.303	11.7	LOS A	2.0	13.8	0.75	0.80	0.75	45.3
Approach		243	0.0	0.303	9.8	LOS A	2.0	13.8	0.75	0.80	0.75	45.1
All Vehicles		1673	0.0	0.514	5.8	LOS A	4.1	28.4	0.56	0.58	0.56	46.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2031_AAST_W_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	22	0.0	0.241	3.4	LOS A	1.6	10.9	0.34	0.44	0.34	46.6
5	T1	231	0.0	0.241	3.4	LOS A	1.6	10.9	0.34	0.44	0.34	47.7
6	R2	62	0.0	0.241	7.9	LOS A	1.6	10.9	0.34	0.44	0.34	47.9
Approach		315	0.0	0.241	4.3	LOS A	1.6	10.9	0.34	0.44	0.34	47.6
NorthEast: Central Boulevard												
7	L2	203	0.0	0.323	5.4	LOS A	2.1	14.6	0.63	0.68	0.63	45.9
8	T1	39	0.0	0.323	5.4	LOS A	2.1	14.6	0.63	0.68	0.63	46.9
9	R2	74	0.0	0.323	9.9	LOS A	2.1	14.6	0.63	0.68	0.63	47.1
Approach		316	0.0	0.323	6.5	LOS A	2.1	14.6	0.63	0.68	0.63	46.3
NorthWest: Moss Vale Road												
10	L2	49	0.0	0.340	4.0	LOS A	2.2	15.7	0.45	0.46	0.45	46.6
11	T1	362	0.0	0.340	3.9	LOS A	2.2	15.7	0.45	0.46	0.45	47.7
12	R2	3	0.0	0.340	8.4	LOS A	2.2	15.7	0.45	0.46	0.45	47.9
Approach		415	0.0	0.340	3.9	LOS A	2.2	15.7	0.45	0.46	0.45	47.6
SouthWest: South URA Access												
1	L2	55	0.0	0.179	4.7	LOS A	1.0	7.0	0.52	0.61	0.52	45.8
2	T1	64	0.0	0.179	4.7	LOS A	1.0	7.0	0.52	0.61	0.52	46.9
3	R2	66	0.0	0.179	9.2	LOS A	1.0	7.0	0.52	0.61	0.52	47.0
Approach		185	0.0	0.179	6.3	LOS A	1.0	7.0	0.52	0.61	0.52	46.6
All Vehicles		1231	0.0	0.340	5.0	LOS A	2.2	15.7	0.48	0.53	0.48	47.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2031_AAST_W_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	44	0.0	0.409	3.5	LOS A	3.2	22.6	0.41	0.46	0.41	46.3
5	T1	379	0.0	0.409	3.5	LOS A	3.2	22.6	0.41	0.46	0.41	47.4
6	R2	124	0.0	0.409	8.0	LOS A	3.2	22.6	0.41	0.46	0.41	47.6
Approach		547	0.0	0.409	4.5	LOS A	3.2	22.6	0.41	0.46	0.41	47.4
NorthEast: Central Boulevard												
7	L2	151	0.0	0.304	6.3	LOS A	2.0	14.0	0.71	0.75	0.71	45.4
8	T1	44	0.0	0.304	6.2	LOS A	2.0	14.0	0.71	0.75	0.71	46.4
9	R2	67	0.0	0.304	10.8	LOS A	2.0	14.0	0.71	0.75	0.71	46.6
Approach		262	0.0	0.304	7.4	LOS A	2.0	14.0	0.71	0.75	0.71	45.8
NorthWest: Moss Vale Road												
10	L2	72	0.0	0.458	5.3	LOS A	3.3	23.3	0.66	0.61	0.66	45.9
11	T1	394	0.0	0.458	5.2	LOS A	3.3	23.3	0.66	0.61	0.66	47.0
12	R2	5	0.0	0.458	9.7	LOS A	3.3	23.3	0.66	0.61	0.66	47.2
Approach		471	0.0	0.458	5.3	LOS A	3.3	23.3	0.66	0.61	0.66	46.8
SouthWest: South URA Access												
1	L2	39	0.0	0.315	6.4	LOS A	2.0	14.3	0.71	0.77	0.71	44.5
2	T1	72	0.0	0.315	6.4	LOS A	2.0	14.3	0.71	0.77	0.71	45.5
3	R2	164	0.0	0.315	10.9	LOS A	2.0	14.3	0.71	0.77	0.71	45.7
Approach		275	0.0	0.315	9.0	LOS A	2.0	14.3	0.71	0.77	0.71	45.5
All Vehicles		1555	0.0	0.458	6.0	LOS A	3.3	23.3	0.59	0.61	0.59	46.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2031_100HH_W_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	21	0.0	0.227	3.4	LOS A	1.4	10.1	0.32	0.43	0.32	46.7
5	T1	220	0.0	0.227	3.3	LOS A	1.4	10.1	0.32	0.43	0.32	47.7
6	R2	60	0.0	0.227	7.8	LOS A	1.4	10.1	0.32	0.43	0.32	47.9
Approach		301	0.0	0.227	4.2	LOS A	1.4	10.1	0.32	0.43	0.32	47.7
NorthEast: Central Boulevard												
7	L2	188	0.0	0.292	5.2	LOS A	1.8	12.8	0.60	0.66	0.60	46.0
8	T1	35	0.0	0.292	5.2	LOS A	1.8	12.8	0.60	0.66	0.60	47.0
9	R2	67	0.0	0.292	9.7	LOS A	1.8	12.8	0.60	0.66	0.60	47.2
Approach		291	0.0	0.292	6.3	LOS A	1.8	12.8	0.60	0.66	0.60	46.4
NorthWest: Moss Vale Road												
10	L2	45	0.0	0.319	3.8	LOS A	2.0	14.3	0.42	0.44	0.42	46.7
11	T1	345	0.0	0.319	3.8	LOS A	2.0	14.3	0.42	0.44	0.42	47.8
12	R2	3	0.0	0.319	8.3	LOS A	2.0	14.3	0.42	0.44	0.42	48.0
Approach		394	0.0	0.319	3.8	LOS A	2.0	14.3	0.42	0.44	0.42	47.7
SouthWest: South URA Access												
1	L2	52	0.0	0.162	4.6	LOS A	0.9	6.3	0.50	0.60	0.50	45.9
2	T1	58	0.0	0.162	4.6	LOS A	0.9	6.3	0.50	0.60	0.50	46.9
3	R2	61	0.0	0.162	9.1	LOS A	0.9	6.3	0.50	0.60	0.50	47.1
Approach		171	0.0	0.162	6.2	LOS A	0.9	6.3	0.50	0.60	0.50	46.7
All Vehicles		1156	0.0	0.319	4.9	LOS A	2.0	14.3	0.45	0.52	0.45	47.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2031_100HH_W_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	47	0.0	0.469	3.8	LOS A	4.0	28.0	0.50	0.48	0.50	46.1
5	T1	426	0.0	0.469	3.8	LOS A	4.0	28.0	0.50	0.48	0.50	47.2
6	R2	129	0.0	0.469	8.3	LOS A	4.0	28.0	0.50	0.48	0.50	47.3
Approach		603	0.0	0.469	4.7	LOS A	4.0	28.0	0.50	0.48	0.50	47.1
NorthEast: Central Boulevard												
7	L2	172	0.0	0.403	7.3	LOS A	2.9	20.3	0.82	0.83	0.82	44.8
8	T1	56	0.0	0.403	7.3	LOS A	2.9	20.3	0.82	0.83	0.82	45.8
9	R2	86	0.0	0.403	11.8	LOS A	2.9	20.3	0.82	0.83	0.82	46.0
Approach		314	0.0	0.403	8.5	LOS A	2.9	20.3	0.82	0.83	0.82	45.3
NorthWest: Moss Vale Road												
10	L2	94	0.0	0.572	6.7	LOS A	5.2	36.2	0.77	0.76	0.84	45.5
11	T1	464	0.0	0.572	6.6	LOS A	5.2	36.2	0.77	0.76	0.84	46.6
12	R2	6	0.0	0.572	11.1	LOS A	5.2	36.2	0.77	0.76	0.84	46.7
Approach		564	0.0	0.572	6.7	LOS A	5.2	36.2	0.77	0.76	0.84	46.4
SouthWest: South URA Access												
1	L2	54	0.0	0.406	7.2	LOS A	2.8	19.9	0.79	0.83	0.79	44.2
2	T1	89	0.0	0.406	7.2	LOS A	2.8	19.9	0.79	0.83	0.79	45.2
3	R2	185	0.0	0.406	11.7	LOS A	2.8	19.9	0.79	0.83	0.79	45.3
Approach		328	0.0	0.406	9.7	LOS A	2.8	19.9	0.79	0.83	0.79	45.1
All Vehicles		1809	0.0	0.572	6.9	LOS A	5.2	36.2	0.69	0.69	0.71	46.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2036_AAST_W_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	53	0.0	0.270	3.9	LOS A	1.7	12.1	0.45	0.50	0.45	46.3
5	T1	209	0.0	0.270	3.9	LOS A	1.7	12.1	0.45	0.50	0.45	47.4
6	R2	57	0.0	0.270	8.4	LOS A	1.7	12.1	0.45	0.50	0.45	47.6
Approach		319	0.0	0.270	4.7	LOS A	1.7	12.1	0.45	0.50	0.45	47.3
NorthEast: Central Boulevard												
7	L2	142	0.0	0.317	5.2	LOS A	2.0	14.1	0.60	0.66	0.60	45.8
8	T1	81	0.0	0.317	5.1	LOS A	2.0	14.1	0.60	0.66	0.60	46.8
9	R2	97	0.0	0.317	9.6	LOS A	2.0	14.1	0.60	0.66	0.60	47.0
Approach		320	0.0	0.317	6.5	LOS A	2.0	14.1	0.60	0.66	0.60	46.4
NorthWest: Moss Vale Road												
10	L2	63	0.0	0.326	3.8	LOS A	2.1	14.9	0.43	0.46	0.43	46.6
11	T1	317	0.0	0.326	3.8	LOS A	2.1	14.9	0.43	0.46	0.43	47.7
12	R2	24	0.0	0.326	8.3	LOS A	2.1	14.9	0.43	0.46	0.43	47.9
Approach		404	0.0	0.326	4.1	LOS A	2.1	14.9	0.43	0.46	0.43	47.5
SouthWest: South URA Access												
1	L2	59	0.0	0.173	4.7	LOS A	1.0	6.9	0.53	0.60	0.53	46.0
2	T1	72	0.0	0.173	4.7	LOS A	1.0	6.9	0.53	0.60	0.53	47.0
3	R2	48	0.0	0.173	9.2	LOS A	1.0	6.9	0.53	0.60	0.53	47.2
Approach		179	0.0	0.173	5.9	LOS A	1.0	6.9	0.53	0.60	0.53	46.7
All Vehicles		1222	0.0	0.326	5.1	LOS A	2.1	14.9	0.49	0.54	0.49	47.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2036_AAST_W_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	42	0.0	0.417	3.7	LOS A	3.3	22.9	0.46	0.48	0.46	46.2
5	T1	361	0.0	0.417	3.7	LOS A	3.3	22.9	0.46	0.48	0.46	47.2
6	R2	133	0.0	0.417	8.2	LOS A	3.3	22.9	0.46	0.48	0.46	47.4
Approach		536	0.0	0.417	4.8	LOS A	3.3	22.9	0.46	0.48	0.46	47.2
NorthEast: Central Boulevard												
7	L2	172	0.0	0.356	6.3	LOS A	2.4	16.9	0.73	0.76	0.73	45.3
8	T1	55	0.0	0.356	6.2	LOS A	2.4	16.9	0.73	0.76	0.73	46.3
9	R2	85	0.0	0.356	10.7	LOS A	2.4	16.9	0.73	0.76	0.73	46.5
Approach		312	0.0	0.356	7.5	LOS A	2.4	16.9	0.73	0.76	0.73	45.8
NorthWest: Moss Vale Road												
10	L2	94	0.0	0.476	5.5	LOS A	3.5	24.5	0.69	0.63	0.69	45.9
11	T1	382	0.0	0.476	5.4	LOS A	3.5	24.5	0.69	0.63	0.69	46.9
12	R2	5	0.0	0.476	9.9	LOS A	3.5	24.5	0.69	0.63	0.69	47.1
Approach		481	0.0	0.476	5.5	LOS A	3.5	24.5	0.69	0.63	0.69	46.7
SouthWest: South URA Access												
1	L2	42	0.0	0.334	6.5	LOS A	2.2	15.4	0.72	0.78	0.72	44.6
2	T1	91	0.0	0.334	6.5	LOS A	2.2	15.4	0.72	0.78	0.72	45.6
3	R2	155	0.0	0.334	11.0	LOS A	2.2	15.4	0.72	0.78	0.72	45.7
Approach		287	0.0	0.334	8.9	LOS A	2.2	15.4	0.72	0.78	0.72	45.5
All Vehicles		1616	0.0	0.476	6.2	LOS A	3.5	24.5	0.63	0.63	0.63	46.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2036_100HH_W_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	34	0.0	0.244	3.8	LOS A	1.5	10.6	0.41	0.48	0.41	46.4
5	T1	205	0.0	0.244	3.7	LOS A	1.5	10.6	0.41	0.48	0.41	47.5
6	R2	56	0.0	0.244	8.2	LOS A	1.5	10.6	0.41	0.48	0.41	47.7
Approach		295	0.0	0.244	4.6	LOS A	1.5	10.6	0.41	0.48	0.41	47.4
NorthEast: Central Boulevard												
7	L2	138	0.0	0.289	5.0	LOS A	1.8	12.6	0.59	0.64	0.59	45.8
8	T1	71	0.0	0.289	5.0	LOS A	1.8	12.6	0.59	0.64	0.59	46.9
9	R2	87	0.0	0.289	9.5	LOS A	1.8	12.6	0.59	0.64	0.59	47.1
Approach		296	0.0	0.289	6.4	LOS A	1.8	12.6	0.59	0.64	0.59	46.4
NorthWest: Moss Vale Road												
10	L2	56	0.0	0.311	3.8	LOS A	2.0	14.0	0.41	0.45	0.41	46.7
11	T1	313	0.0	0.311	3.7	LOS A	2.0	14.0	0.41	0.45	0.41	47.8
12	R2	22	0.0	0.311	8.2	LOS A	2.0	14.0	0.41	0.45	0.41	48.0
Approach		391	0.0	0.311	4.0	LOS A	2.0	14.0	0.41	0.45	0.41	47.6
SouthWest: South URA Access												
1	L2	56	0.0	0.158	4.6	LOS A	0.9	6.2	0.51	0.59	0.51	46.0
2	T1	64	0.0	0.158	4.6	LOS A	0.9	6.2	0.51	0.59	0.51	47.1
3	R2	46	0.0	0.158	9.1	LOS A	0.9	6.2	0.51	0.59	0.51	47.3
Approach		166	0.0	0.158	5.8	LOS A	0.9	6.2	0.51	0.59	0.51	46.8
All Vehicles		1147	0.0	0.311	5.0	LOS A	2.0	14.0	0.47	0.53	0.47	47.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2036_100HH_W_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	46	0.0	0.494	4.1	LOS A	4.3	30.0	0.56	0.51	0.56	45.9
5	T1	423	0.0	0.494	4.0	LOS A	4.3	30.0	0.56	0.51	0.56	46.9
6	R2	142	0.0	0.494	8.5	LOS A	4.3	30.0	0.56	0.51	0.56	47.1
Approach		612	0.0	0.494	5.1	LOS A	4.3	30.0	0.56	0.51	0.56	46.9
NorthEast: Central Boulevard												
7	L2	192	0.0	0.470	8.2	LOS A	3.8	26.5	0.85	0.89	0.92	44.3
8	T1	65	0.0	0.470	8.1	LOS A	3.8	26.5	0.85	0.89	0.92	45.3
9	R2	106	0.0	0.470	12.6	LOS A	3.8	26.5	0.85	0.89	0.92	45.5
Approach		363	0.0	0.470	9.5	LOS A	3.8	26.5	0.85	0.89	0.92	44.8
NorthWest: Moss Vale Road												
10	L2	120	0.0	0.616	7.6	LOS A	6.2	43.1	0.82	0.83	0.94	45.3
11	T1	469	0.0	0.616	7.5	LOS A	6.2	43.1	0.82	0.83	0.94	46.3
12	R2	6	0.0	0.616	12.0	LOS A	6.2	43.1	0.82	0.83	0.94	46.5
Approach		596	0.0	0.616	7.6	LOS A	6.2	43.1	0.82	0.83	0.94	46.1
SouthWest: South URA Access												
1	L2	57	0.0	0.437	8.0	LOS A	3.3	23.0	0.83	0.87	0.87	44.0
2	T1	107	0.0	0.437	7.9	LOS A	3.3	23.0	0.83	0.87	0.87	44.9
3	R2	177	0.0	0.437	12.4	LOS A	3.3	23.0	0.83	0.87	0.87	45.1
Approach		341	0.0	0.437	10.3	LOS A	3.3	23.0	0.83	0.87	0.87	44.9
All Vehicles		1912	0.0	0.616	7.6	LOS A	6.2	43.1	0.74	0.75	0.80	45.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2041_AAST_W_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	71	0.0	0.314	4.5	LOS A	2.1	14.5	0.55	0.56	0.55	46.1
5	T1	211	0.0	0.314	4.4	LOS A	2.1	14.5	0.55	0.56	0.55	47.1
6	R2	60	0.0	0.314	8.9	LOS A	2.1	14.5	0.55	0.56	0.55	47.3
Approach		341	0.0	0.314	5.2	LOS A	2.1	14.5	0.55	0.56	0.55	46.9
NorthEast: Central Boulevard												
7	L2	124	0.0	0.374	5.2	LOS A	2.5	17.5	0.63	0.67	0.63	45.5
8	T1	108	0.0	0.374	5.2	LOS A	2.5	17.5	0.63	0.67	0.63	46.5
9	R2	147	0.0	0.374	9.7	LOS A	2.5	17.5	0.63	0.67	0.63	46.7
Approach		380	0.0	0.374	6.9	LOS A	2.5	17.5	0.63	0.67	0.63	46.3
NorthWest: Moss Vale Road												
10	L2	87	0.0	0.346	4.0	LOS A	2.3	16.2	0.46	0.48	0.46	46.5
11	T1	306	0.0	0.346	3.9	LOS A	2.3	16.2	0.46	0.48	0.46	47.6
12	R2	26	0.0	0.346	8.4	LOS A	2.3	16.2	0.46	0.48	0.46	47.8
Approach		420	0.0	0.346	4.2	LOS A	2.3	16.2	0.46	0.48	0.46	47.4
SouthWest: South URA Access												
1	L2	61	0.0	0.200	5.1	LOS A	1.2	8.2	0.57	0.62	0.57	45.9
2	T1	93	0.0	0.200	5.0	LOS A	1.2	8.2	0.57	0.62	0.57	47.0
3	R2	44	0.0	0.200	9.5	LOS A	1.2	8.2	0.57	0.62	0.57	47.1
Approach		198	0.0	0.200	6.1	LOS A	1.2	8.2	0.57	0.62	0.57	46.7
All Vehicles		1339	0.0	0.374	5.5	LOS A	2.5	17.5	0.55	0.58	0.55	46.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2041_AAST_W_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	40	0.0	0.436	4.1	LOS A	3.4	23.7	0.53	0.52	0.53	46.0
5	T1	366	0.0	0.436	4.1	LOS A	3.4	23.7	0.53	0.52	0.53	47.0
6	R2	119	0.0	0.436	8.6	LOS A	3.4	23.7	0.53	0.52	0.53	47.2
Approach		525	0.0	0.436	5.1	LOS A	3.4	23.7	0.53	0.52	0.53	47.0
NorthEast: Central Boulevard												
7	L2	126	0.0	0.348	5.8	LOS A	2.3	16.4	0.69	0.73	0.69	45.3
8	T1	73	0.0	0.348	5.8	LOS A	2.3	16.4	0.69	0.73	0.69	46.3
9	R2	121	0.0	0.348	10.3	LOS A	2.3	16.4	0.69	0.73	0.69	46.5
Approach		320	0.0	0.348	7.5	LOS A	2.3	16.4	0.69	0.73	0.69	46.0
NorthWest: Moss Vale Road												
10	L2	138	0.0	0.490	5.0	LOS A	3.7	25.9	0.64	0.59	0.64	46.1
11	T1	389	0.0	0.490	4.9	LOS A	3.7	25.9	0.64	0.59	0.64	47.1
12	R2	6	0.0	0.490	9.4	LOS A	3.7	25.9	0.64	0.59	0.64	47.3
Approach		534	0.0	0.490	5.0	LOS A	3.7	25.9	0.64	0.59	0.64	46.8
SouthWest: South URA Access												
1	L2	46	0.0	0.282	6.6	LOS A	1.8	12.8	0.72	0.76	0.72	44.9
2	T1	105	0.0	0.282	6.5	LOS A	1.8	12.8	0.72	0.76	0.72	45.9
3	R2	84	0.0	0.282	11.0	LOS A	1.8	12.8	0.72	0.76	0.72	46.1
Approach		236	0.0	0.282	8.1	LOS A	1.8	12.8	0.72	0.76	0.72	45.8
All Vehicles		1615	0.0	0.490	6.0	LOS A	3.7	25.9	0.63	0.62	0.63	46.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2041_100HH_W_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	24	0.0	0.245	4.0	LOS A	1.5	10.8	0.46	0.50	0.46	46.3
5	T1	208	0.0	0.245	3.9	LOS A	1.5	10.8	0.46	0.50	0.46	47.3
6	R2	52	0.0	0.245	8.4	LOS A	1.5	10.8	0.46	0.50	0.46	47.5
Approach		284	0.0	0.245	4.8	LOS A	1.5	10.8	0.46	0.50	0.46	47.3
NorthEast: Central Boulevard												
7	L2	169	0.0	0.362	5.1	LOS A	2.4	16.8	0.61	0.67	0.61	45.7
8	T1	71	0.0	0.362	5.1	LOS A	2.4	16.8	0.61	0.67	0.61	46.7
9	R2	134	0.0	0.362	9.6	LOS A	2.4	16.8	0.61	0.67	0.61	46.9
Approach		374	0.0	0.362	6.7	LOS A	2.4	16.8	0.61	0.67	0.61	46.3
NorthWest: Moss Vale Road												
10	L2	80	0.0	0.326	3.8	LOS A	2.1	15.0	0.43	0.45	0.43	46.7
11	T1	315	0.0	0.326	3.8	LOS A	2.1	15.0	0.43	0.45	0.43	47.8
12	R2	9	0.0	0.326	8.3	LOS A	2.1	15.0	0.43	0.45	0.43	48.0
Approach		404	0.0	0.326	3.9	LOS A	2.1	15.0	0.43	0.45	0.43	47.6
SouthWest: South URA Access												
1	L2	58	0.0	0.181	4.9	LOS A	1.0	7.2	0.54	0.60	0.54	46.0
2	T1	84	0.0	0.181	4.9	LOS A	1.0	7.2	0.54	0.60	0.54	47.0
3	R2	42	0.0	0.181	9.4	LOS A	1.0	7.2	0.54	0.60	0.54	47.2
Approach		184	0.0	0.181	5.9	LOS A	1.0	7.2	0.54	0.60	0.54	46.7
All Vehicles		1246	0.0	0.362	5.2	LOS A	2.4	16.8	0.51	0.55	0.51	47.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2041_100HH_W_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	43	0.0	0.511	4.6	LOS A	4.3	29.9	0.64	0.57	0.64	45.7
5	T1	415	0.0	0.511	4.5	LOS A	4.3	29.9	0.64	0.57	0.64	46.7
6	R2	124	0.0	0.511	9.0	LOS A	4.3	29.9	0.64	0.57	0.64	46.9
Approach		582	0.0	0.511	5.5	LOS A	4.3	29.9	0.64	0.57	0.64	46.7
NorthEast: Central Boulevard												
7	L2	140	0.0	0.445	6.6	LOS A	3.3	23.3	0.79	0.80	0.80	44.8
8	T1	88	0.0	0.445	6.5	LOS A	3.3	23.3	0.79	0.80	0.80	45.8
9	R2	154	0.0	0.445	11.0	LOS A	3.3	23.3	0.79	0.80	0.80	46.0
Approach		382	0.0	0.445	8.4	LOS A	3.3	23.3	0.79	0.80	0.80	45.5
NorthWest: Moss Vale Road												
10	L2	179	0.0	0.600	5.6	LOS A	5.5	38.5	0.72	0.66	0.75	45.8
11	T1	478	0.0	0.600	5.6	LOS A	5.5	38.5	0.72	0.66	0.75	46.9
12	R2	7	0.0	0.600	10.1	LOS A	5.5	38.5	0.72	0.66	0.75	47.1
Approach		664	0.0	0.600	5.6	LOS A	5.5	38.5	0.72	0.66	0.75	46.6
SouthWest: South URA Access												
1	L2	63	0.0	0.319	7.4	LOS A	2.2	15.3	0.79	0.80	0.79	44.9
2	T1	127	0.0	0.319	7.3	LOS A	2.2	15.3	0.79	0.80	0.79	45.9
3	R2	52	0.0	0.319	11.9	LOS A	2.2	15.3	0.79	0.80	0.79	46.1
Approach		242	0.0	0.319	8.3	LOS A	2.2	15.3	0.79	0.80	0.79	45.7
All Vehicles		1871	0.0	0.600	6.5	LOS A	5.5	38.5	0.72	0.68	0.73	46.3

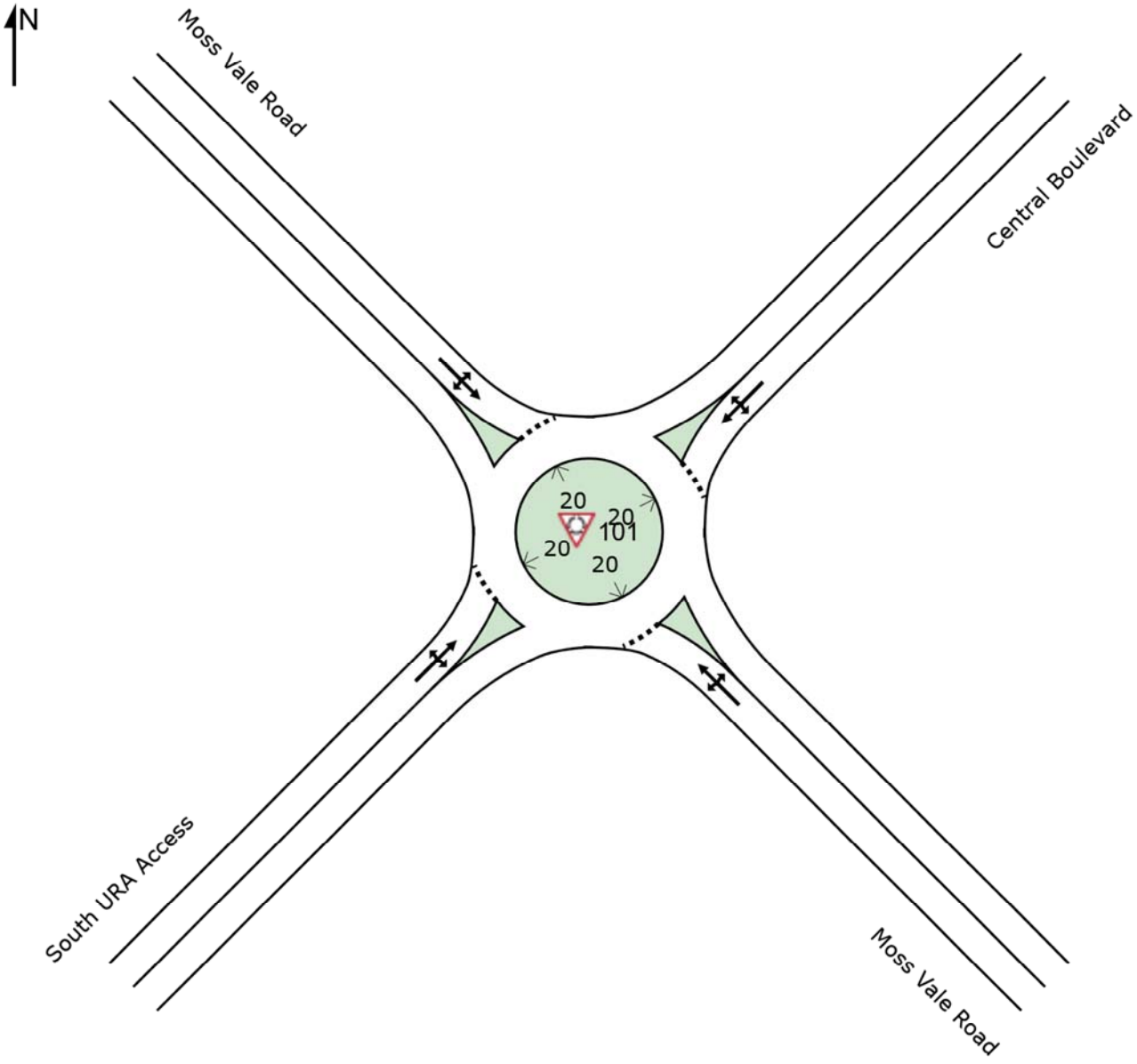
Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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SITE LAYOUT

Site: 101 [2021_AAST_WO_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout



MOVEMENT SUMMARY

Site: 101 [2021_AAST_WO_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	1	0.0	0.169	2.9	LOS A	0.9	6.6	0.08	0.31	0.08	47.9
5	T1	269	0.0	0.169	2.8	LOS A	0.9	6.6	0.08	0.31	0.08	49.0
6	R2	1	0.0	0.169	7.3	LOS A	0.9	6.6	0.08	0.31	0.08	49.2
Approach		272	0.0	0.169	2.8	LOS A	0.9	6.6	0.08	0.31	0.08	49.0
NorthEast: Central Boulevard												
7	L2	1	0.0	0.007	4.6	LOS A	0.0	0.2	0.47	0.56	0.47	45.2
8	T1	1	0.0	0.007	4.5	LOS A	0.0	0.2	0.47	0.56	0.47	46.2
9	R2	5	0.0	0.007	9.0	LOS A	0.0	0.2	0.47	0.56	0.47	46.4
Approach		7	0.0	0.007	7.8	LOS A	0.0	0.2	0.47	0.56	0.47	46.2
NorthWest: Moss Vale Road												
10	L2	5	0.0	0.239	2.8	LOS A	1.5	10.3	0.04	0.32	0.04	48.0
11	T1	400	0.0	0.239	2.8	LOS A	1.5	10.3	0.04	0.32	0.04	49.2
12	R2	6	0.0	0.239	7.3	LOS A	1.5	10.3	0.04	0.32	0.04	49.4
Approach		412	0.0	0.239	2.9	LOS A	1.5	10.3	0.04	0.32	0.04	49.2
SouthWest: South URA Access												
1	L2	63	0.0	0.058	4.1	LOS A	0.3	2.0	0.40	0.49	0.40	47.1
2	T1	1	0.0	0.058	4.0	LOS A	0.3	2.0	0.40	0.49	0.40	48.2
3	R2	1	0.0	0.058	8.5	LOS A	0.3	2.0	0.40	0.49	0.40	48.4
Approach		65	0.0	0.058	4.1	LOS A	0.3	2.0	0.40	0.49	0.40	47.1
All Vehicles		756	0.0	0.239	3.0	LOS A	1.5	10.3	0.09	0.33	0.09	48.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2021_AAST_WO_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	1	0.0	0.264	2.9	LOS A	1.7	11.6	0.09	0.31	0.09	47.9
5	T1	429	0.0	0.264	2.8	LOS A	1.7	11.6	0.09	0.31	0.09	49.0
6	R2	1	0.0	0.264	7.3	LOS A	1.7	11.6	0.09	0.31	0.09	49.2
Approach		432	0.0	0.264	2.9	LOS A	1.7	11.6	0.09	0.31	0.09	49.0
NorthEast: Central Boulevard												
7	L2	1	0.0	0.008	4.7	LOS A	0.0	0.3	0.49	0.57	0.49	45.1
8	T1	1	0.0	0.008	4.7	LOS A	0.0	0.3	0.49	0.57	0.49	46.1
9	R2	6	0.0	0.008	9.2	LOS A	0.0	0.3	0.49	0.57	0.49	46.3
Approach		8	0.0	0.008	8.1	LOS A	0.0	0.3	0.49	0.57	0.49	46.1
NorthWest: Moss Vale Road												
10	L2	6	0.0	0.256	2.8	LOS A	1.6	11.5	0.04	0.32	0.04	48.0
11	T1	429	0.0	0.256	2.8	LOS A	1.6	11.5	0.04	0.32	0.04	49.2
12	R2	6	0.0	0.256	7.3	LOS A	1.6	11.5	0.04	0.32	0.04	49.4
Approach		442	0.0	0.256	2.9	LOS A	1.6	11.5	0.04	0.32	0.04	49.2
SouthWest: South URA Access												
1	L2	65	0.0	0.067	4.9	LOS A	0.3	2.4	0.51	0.55	0.51	46.8
2	T1	1	0.0	0.067	4.9	LOS A	0.3	2.4	0.51	0.55	0.51	47.9
3	R2	1	0.0	0.067	9.4	LOS A	0.3	2.4	0.51	0.55	0.51	48.1
Approach		67	0.0	0.067	5.0	LOS A	0.3	2.4	0.51	0.55	0.51	46.8
All Vehicles		949	0.0	0.264	3.1	LOS A	1.7	11.6	0.10	0.33	0.10	48.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2021_100HH_WO_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	1	0.0	0.156	2.9	LOS A	0.9	6.0	0.07	0.31	0.07	47.9
5	T1	252	0.0	0.156	2.8	LOS A	0.9	6.0	0.07	0.31	0.07	49.1
6	R2	1	0.0	0.156	7.3	LOS A	0.9	6.0	0.07	0.31	0.07	49.3
Approach		254	0.0	0.156	2.8	LOS A	0.9	6.0	0.07	0.31	0.07	49.1
NorthEast: Central Boulevard												
7	L2	1	0.0	0.006	4.4	LOS A	0.0	0.2	0.45	0.55	0.45	45.4
8	T1	1	0.0	0.006	4.4	LOS A	0.0	0.2	0.45	0.55	0.45	46.4
9	R2	4	0.0	0.006	8.9	LOS A	0.0	0.2	0.45	0.55	0.45	46.6
Approach		6	0.0	0.006	7.4	LOS A	0.0	0.2	0.45	0.55	0.45	46.3
NorthWest: Moss Vale Road												
10	L2	4	0.0	0.224	2.8	LOS A	1.3	9.4	0.04	0.32	0.04	48.0
11	T1	376	0.0	0.224	2.8	LOS A	1.3	9.4	0.04	0.32	0.04	49.2
12	R2	5	0.0	0.224	7.3	LOS A	1.3	9.4	0.04	0.32	0.04	49.4
Approach		385	0.0	0.224	2.9	LOS A	1.3	9.4	0.04	0.32	0.04	49.2
SouthWest: South URA Access												
1	L2	59	0.0	0.053	4.0	LOS A	0.3	1.8	0.39	0.48	0.39	47.1
2	T1	1	0.0	0.053	3.9	LOS A	0.3	1.8	0.39	0.48	0.39	48.2
3	R2	1	0.0	0.053	8.4	LOS A	0.3	1.8	0.39	0.48	0.39	48.4
Approach		61	0.0	0.053	4.0	LOS A	0.3	1.8	0.39	0.48	0.39	47.1
All Vehicles		706	0.0	0.224	3.0	LOS A	1.3	9.4	0.08	0.33	0.08	48.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2021_100HH_WO_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	1	0.0	0.324	2.9	LOS A	2.2	15.4	0.11	0.31	0.11	47.8
5	T1	526	0.0	0.324	2.9	LOS A	2.2	15.4	0.11	0.31	0.11	48.9
6	R2	1	0.0	0.324	7.4	LOS A	2.2	15.4	0.11	0.31	0.11	49.1
Approach		528	0.0	0.324	2.9	LOS A	2.2	15.4	0.11	0.31	0.11	48.9
NorthEast: Central Boulevard												
7	L2	1	0.0	0.011	5.6	LOS A	0.1	0.4	0.58	0.60	0.58	44.6
8	T1	1	0.0	0.011	5.5	LOS A	0.1	0.4	0.58	0.60	0.58	45.6
9	R2	7	0.0	0.011	10.0	LOS A	0.1	0.4	0.58	0.60	0.58	45.8
Approach		9	0.0	0.011	9.0	LOS A	0.1	0.4	0.58	0.60	0.58	45.6
NorthWest: Moss Vale Road												
10	L2	7	0.0	0.354	3.0	LOS A	2.7	19.0	0.18	0.32	0.18	47.5
11	T1	541	0.0	0.354	2.9	LOS A	2.7	19.0	0.18	0.32	0.18	48.7
12	R2	8	0.0	0.354	7.4	LOS A	2.7	19.0	0.18	0.32	0.18	48.8
Approach		557	0.0	0.354	3.0	LOS A	2.7	19.0	0.18	0.32	0.18	48.6
SouthWest: South URA Access												
1	L2	78	0.0	0.114	5.6	LOS A	0.6	4.3	0.58	0.65	0.58	45.8
2	T1	1	0.0	0.114	5.6	LOS A	0.6	4.3	0.58	0.65	0.58	46.8
3	R2	27	0.0	0.114	10.1	LOS A	0.6	4.3	0.58	0.65	0.58	47.0
Approach		106	0.0	0.114	6.8	LOS A	0.6	4.3	0.58	0.65	0.58	46.1
All Vehicles		1201	0.0	0.354	3.3	LOS A	2.7	19.0	0.19	0.35	0.19	48.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2026_AAST_WO_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	18	0.0	0.238	3.2	LOS A	1.5	10.3	0.27	0.42	0.27	46.8
5	T1	247	0.0	0.238	3.2	LOS A	1.5	10.3	0.27	0.42	0.27	47.9
6	R2	62	0.0	0.238	7.7	LOS A	1.5	10.3	0.27	0.42	0.27	48.1
Approach		327	0.0	0.238	4.1	LOS A	1.5	10.3	0.27	0.42	0.27	47.9
NorthEast: Central Boulevard												
7	L2	189	0.0	0.252	5.3	LOS A	1.5	10.7	0.60	0.65	0.60	46.2
8	T1	16	0.0	0.252	5.2	LOS A	1.5	10.7	0.60	0.65	0.60	47.2
9	R2	41	0.0	0.252	9.7	LOS A	1.5	10.7	0.60	0.65	0.60	47.4
Approach		246	0.0	0.252	6.0	LOS A	1.5	10.7	0.60	0.65	0.60	46.4
NorthWest: Moss Vale Road												
10	L2	29	0.0	0.326	3.6	LOS A	2.1	14.7	0.37	0.43	0.37	46.8
11	T1	367	0.0	0.326	3.6	LOS A	2.1	14.7	0.37	0.43	0.37	47.9
12	R2	28	0.0	0.326	8.1	LOS A	2.1	14.7	0.37	0.43	0.37	48.0
Approach		425	0.0	0.326	3.9	LOS A	2.1	14.7	0.37	0.43	0.37	47.8
SouthWest: South URA Access												
1	L2	97	0.0	0.164	4.6	LOS A	0.9	6.3	0.50	0.58	0.50	46.2
2	T1	38	0.0	0.164	4.6	LOS A	0.9	6.3	0.50	0.58	0.50	47.3
3	R2	38	0.0	0.164	9.1	LOS A	0.9	6.3	0.50	0.58	0.50	47.5
Approach		173	0.0	0.164	5.6	LOS A	0.9	6.3	0.50	0.58	0.50	46.7
All Vehicles		1172	0.0	0.326	4.6	LOS A	2.1	14.7	0.41	0.49	0.41	47.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2026_AAST_WO_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	35	0.0	0.412	3.4	LOS A	3.1	21.6	0.34	0.44	0.34	46.5
5	T1	411	0.0	0.412	3.3	LOS A	3.1	21.6	0.34	0.44	0.34	47.6
6	R2	132	0.0	0.412	7.8	LOS A	3.1	21.6	0.34	0.44	0.34	47.8
Approach		577	0.0	0.412	4.4	LOS A	3.1	21.6	0.34	0.44	0.34	47.6
NorthEast: Central Boulevard												
7	L2	129	0.0	0.214	6.1	LOS A	1.3	9.4	0.69	0.71	0.69	45.6
8	T1	17	0.0	0.214	6.1	LOS A	1.3	9.4	0.69	0.71	0.69	46.7
9	R2	37	0.0	0.214	10.6	LOS A	1.3	9.4	0.69	0.71	0.69	46.8
Approach		183	0.0	0.214	7.0	LOS A	1.3	9.4	0.69	0.71	0.69	46.0
NorthWest: Moss Vale Road												
10	L2	38	0.0	0.444	4.8	LOS A	3.2	22.2	0.60	0.57	0.60	46.0
11	T1	412	0.0	0.444	4.8	LOS A	3.2	22.2	0.60	0.57	0.60	47.0
12	R2	39	0.0	0.444	9.3	LOS A	3.2	22.2	0.60	0.57	0.60	47.2
Approach		488	0.0	0.444	5.1	LOS A	3.2	22.2	0.60	0.57	0.60	47.0
SouthWest: South URA Access												
1	L2	92	0.0	0.295	6.4	LOS A	1.9	13.1	0.70	0.76	0.70	44.8
2	T1	43	0.0	0.295	6.4	LOS A	1.9	13.1	0.70	0.76	0.70	45.8
3	R2	122	0.0	0.295	10.9	LOS A	1.9	13.1	0.70	0.76	0.70	46.0
Approach		257	0.0	0.295	8.5	LOS A	1.9	13.1	0.70	0.76	0.70	45.5
All Vehicles		1505	0.0	0.444	5.6	LOS A	3.2	22.2	0.53	0.57	0.53	46.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2026_100HH_WO_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	17	0.0	0.222	3.2	LOS A	1.3	9.4	0.25	0.41	0.25	46.9
5	T1	233	0.0	0.222	3.2	LOS A	1.3	9.4	0.25	0.41	0.25	48.0
6	R2	59	0.0	0.222	7.7	LOS A	1.3	9.4	0.25	0.41	0.25	48.2
Approach		308	0.0	0.222	4.0	LOS A	1.3	9.4	0.25	0.41	0.25	47.9
NorthEast: Central Boulevard												
7	L2	174	0.0	0.224	5.1	LOS A	1.3	9.3	0.57	0.63	0.57	46.2
8	T1	14	0.0	0.224	5.0	LOS A	1.3	9.3	0.57	0.63	0.57	47.3
9	R2	38	0.0	0.224	9.5	LOS A	1.3	9.3	0.57	0.63	0.57	47.5
Approach		225	0.0	0.224	5.8	LOS A	1.3	9.3	0.57	0.63	0.57	46.5
NorthWest: Moss Vale Road												
10	L2	26	0.0	0.302	3.5	LOS A	1.9	13.3	0.34	0.42	0.34	46.8
11	T1	345	0.0	0.302	3.5	LOS A	1.9	13.3	0.34	0.42	0.34	47.9
12	R2	26	0.0	0.302	8.0	LOS A	1.9	13.3	0.34	0.42	0.34	48.1
Approach		398	0.0	0.302	3.8	LOS A	1.9	13.3	0.34	0.42	0.34	47.9
SouthWest: South URA Access												
1	L2	88	0.0	0.146	4.5	LOS A	0.8	5.5	0.48	0.57	0.48	46.3
2	T1	33	0.0	0.146	4.4	LOS A	0.8	5.5	0.48	0.57	0.48	47.4
3	R2	36	0.0	0.146	8.9	LOS A	0.8	5.5	0.48	0.57	0.48	47.5
Approach		157	0.0	0.146	5.5	LOS A	0.8	5.5	0.48	0.57	0.48	46.8
All Vehicles		1088	0.0	0.302	4.5	LOS A	1.9	13.3	0.39	0.48	0.39	47.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2026_100HH_WO_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	38	0.0	0.489	3.6	LOS A	4.1	28.4	0.42	0.46	0.42	46.3
5	T1	482	0.0	0.489	3.6	LOS A	4.1	28.4	0.42	0.46	0.42	47.4
6	R2	146	0.0	0.489	8.1	LOS A	4.1	28.4	0.42	0.46	0.42	47.6
Approach		666	0.0	0.489	4.6	LOS A	4.1	28.4	0.42	0.46	0.42	47.3
NorthEast: Central Boulevard												
7	L2	151	0.0	0.288	7.2	LOS A	2.0	13.7	0.79	0.80	0.79	45.0
8	T1	21	0.0	0.288	7.1	LOS A	2.0	13.7	0.79	0.80	0.79	46.0
9	R2	46	0.0	0.288	11.7	LOS A	2.0	13.7	0.79	0.80	0.79	46.2
Approach		218	0.0	0.288	8.1	LOS A	2.0	13.7	0.79	0.80	0.79	45.4
NorthWest: Moss Vale Road												
10	L2	49	0.0	0.555	5.6	LOS A	4.7	32.6	0.71	0.67	0.73	45.6
11	T1	492	0.0	0.555	5.6	LOS A	4.7	32.6	0.71	0.67	0.73	46.7
12	R2	49	0.0	0.555	10.1	LOS A	4.7	32.6	0.71	0.67	0.73	46.8
Approach		591	0.0	0.555	6.0	LOS A	4.7	32.6	0.71	0.67	0.73	46.6
SouthWest: South URA Access												
1	L2	95	0.0	0.364	7.4	LOS A	2.5	17.4	0.79	0.83	0.79	44.3
2	T1	52	0.0	0.364	7.4	LOS A	2.5	17.4	0.79	0.83	0.79	45.3
3	R2	141	0.0	0.364	11.9	LOS A	2.5	17.4	0.79	0.83	0.79	45.4
Approach		287	0.0	0.364	9.6	LOS A	2.5	17.4	0.79	0.83	0.79	45.0
All Vehicles		1762	0.0	0.555	6.3	LOS A	4.7	32.6	0.62	0.63	0.63	46.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2031_AAST_WO_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	22	0.0	0.251	3.6	LOS A	1.6	11.0	0.38	0.46	0.38	46.5
5	T1	231	0.0	0.251	3.6	LOS A	1.6	11.0	0.38	0.46	0.38	47.6
6	R2	62	0.0	0.251	8.1	LOS A	1.6	11.0	0.38	0.46	0.38	47.7
Approach		315	0.0	0.251	4.5	LOS A	1.6	11.0	0.38	0.46	0.38	47.5
NorthEast: Central Boulevard												
7	L2	203	0.0	0.333	5.7	LOS A	2.2	15.2	0.66	0.70	0.66	45.8
8	T1	39	0.0	0.333	5.6	LOS A	2.2	15.2	0.66	0.70	0.66	46.8
9	R2	74	0.0	0.333	10.1	LOS A	2.2	15.2	0.66	0.70	0.66	47.0
Approach		316	0.0	0.333	6.7	LOS A	2.2	15.2	0.66	0.70	0.66	46.2
NorthWest: Moss Vale Road												
10	L2	49	0.0	0.366	4.0	LOS A	2.5	17.4	0.46	0.48	0.46	46.5
11	T1	362	0.0	0.366	3.9	LOS A	2.5	17.4	0.46	0.48	0.46	47.5
12	R2	37	0.0	0.366	8.4	LOS A	2.5	17.4	0.46	0.48	0.46	47.7
Approach		448	0.0	0.366	4.3	LOS A	2.5	17.4	0.46	0.48	0.46	47.4
SouthWest: South URA Access												
1	L2	111	0.0	0.233	4.8	LOS A	1.4	9.6	0.55	0.62	0.55	46.0
2	T1	64	0.0	0.233	4.8	LOS A	1.4	9.6	0.55	0.62	0.55	47.0
3	R2	66	0.0	0.233	9.3	LOS A	1.4	9.6	0.55	0.62	0.55	47.2
Approach		241	0.0	0.233	6.1	LOS A	1.4	9.6	0.55	0.62	0.55	46.6
All Vehicles		1320	0.0	0.366	5.2	LOS A	2.5	17.4	0.51	0.55	0.51	47.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2031_AAST_WO_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	44	0.0	0.433	3.9	LOS A	3.3	23.0	0.47	0.50	0.47	46.2
5	T1	379	0.0	0.433	3.8	LOS A	3.3	23.0	0.47	0.50	0.47	47.2
6	R2	124	0.0	0.433	8.4	LOS A	3.3	23.0	0.47	0.50	0.47	47.4
Approach		547	0.0	0.433	4.9	LOS A	3.3	23.0	0.47	0.50	0.47	47.2
NorthEast: Central Boulevard												
7	L2	151	0.0	0.320	6.7	LOS A	2.2	15.1	0.75	0.78	0.75	45.2
8	T1	44	0.0	0.320	6.7	LOS A	2.2	15.1	0.75	0.78	0.75	46.2
9	R2	67	0.0	0.320	11.2	LOS A	2.2	15.1	0.75	0.78	0.75	46.3
Approach		262	0.0	0.320	7.9	LOS A	2.2	15.1	0.75	0.78	0.75	45.6
NorthWest: Moss Vale Road												
10	L2	72	0.0	0.504	5.4	LOS A	3.8	26.9	0.69	0.64	0.69	45.7
11	T1	394	0.0	0.504	5.4	LOS A	3.8	26.9	0.69	0.64	0.69	46.7
12	R2	55	0.0	0.504	9.9	LOS A	3.8	26.9	0.69	0.64	0.69	46.9
Approach		520	0.0	0.504	5.8	LOS A	3.8	26.9	0.69	0.64	0.69	46.6
SouthWest: South URA Access												
1	L2	86	0.0	0.373	6.6	LOS A	2.5	17.7	0.74	0.79	0.74	44.6
2	T1	72	0.0	0.373	6.5	LOS A	2.5	17.7	0.74	0.79	0.74	45.6
3	R2	164	0.0	0.373	11.0	LOS A	2.5	17.7	0.74	0.79	0.74	45.8
Approach		322	0.0	0.373	8.8	LOS A	2.5	17.7	0.74	0.79	0.74	45.4
All Vehicles		1652	0.0	0.504	6.4	LOS A	3.8	26.9	0.64	0.64	0.64	46.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2031_100HH_WO_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	21	0.0	0.236	3.5	LOS A	1.5	10.2	0.35	0.45	0.35	46.6
5	T1	220	0.0	0.236	3.5	LOS A	1.5	10.2	0.35	0.45	0.35	47.6
6	R2	60	0.0	0.236	8.0	LOS A	1.5	10.2	0.35	0.45	0.35	47.8
Approach		301	0.0	0.236	4.4	LOS A	1.5	10.2	0.35	0.45	0.35	47.6
NorthEast: Central Boulevard												
7	L2	188	0.0	0.299	5.4	LOS A	1.9	13.2	0.63	0.68	0.63	45.9
8	T1	35	0.0	0.299	5.4	LOS A	1.9	13.2	0.63	0.68	0.63	47.0
9	R2	67	0.0	0.299	9.9	LOS A	1.9	13.2	0.63	0.68	0.63	47.1
Approach		291	0.0	0.299	6.5	LOS A	1.9	13.2	0.63	0.68	0.63	46.3
NorthWest: Moss Vale Road												
10	L2	45	0.0	0.342	3.9	LOS A	2.3	15.8	0.43	0.46	0.43	46.5
11	T1	345	0.0	0.342	3.8	LOS A	2.3	15.8	0.43	0.46	0.43	47.6
12	R2	34	0.0	0.342	8.3	LOS A	2.3	15.8	0.43	0.46	0.43	47.8
Approach		424	0.0	0.342	4.2	LOS A	2.3	15.8	0.43	0.46	0.43	47.5
SouthWest: South URA Access												
1	L2	102	0.0	0.210	4.7	LOS A	1.2	8.5	0.52	0.60	0.52	46.0
2	T1	58	0.0	0.210	4.6	LOS A	1.2	8.5	0.52	0.60	0.52	47.1
3	R2	61	0.0	0.210	9.1	LOS A	1.2	8.5	0.52	0.60	0.52	47.3
Approach		221	0.0	0.210	5.9	LOS A	1.2	8.5	0.52	0.60	0.52	46.7
All Vehicles		1237	0.0	0.342	5.1	LOS A	2.3	15.8	0.48	0.54	0.48	47.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2031_100HH_WO_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	47	0.0	0.503	4.3	LOS A	4.1	28.7	0.58	0.54	0.58	45.9
5	T1	426	0.0	0.503	4.3	LOS A	4.1	28.7	0.58	0.54	0.58	46.9
6	R2	129	0.0	0.503	8.8	LOS A	4.1	28.7	0.58	0.54	0.58	47.1
Approach		603	0.0	0.503	5.2	LOS A	4.1	28.7	0.58	0.54	0.58	46.9
NorthEast: Central Boulevard												
7	L2	172	0.0	0.440	8.5	LOS A	3.4	24.0	0.87	0.90	0.93	44.2
8	T1	56	0.0	0.440	8.5	LOS A	3.4	24.0	0.87	0.90	0.93	45.2
9	R2	86	0.0	0.440	13.0	LOS A	3.4	24.0	0.87	0.90	0.93	45.3
Approach		314	0.0	0.440	9.8	LOS A	3.4	24.0	0.87	0.90	0.93	44.7
NorthWest: Moss Vale Road												
10	L2	94	0.0	0.637	7.6	LOS A	6.6	46.5	0.82	0.83	0.95	45.1
11	T1	464	0.0	0.637	7.5	LOS A	6.6	46.5	0.82	0.83	0.95	46.1
12	R2	71	0.0	0.637	12.0	LOS A	6.6	46.5	0.82	0.83	0.95	46.3
Approach		628	0.0	0.637	8.0	LOS A	6.6	46.5	0.82	0.83	0.95	45.9
SouthWest: South URA Access												
1	L2	115	0.0	0.491	8.4	LOS A	4.0	28.1	0.84	0.91	0.94	43.8
2	T1	89	0.0	0.491	8.4	LOS A	4.0	28.1	0.84	0.91	0.94	44.8
3	R2	185	0.0	0.491	12.9	LOS A	4.0	28.1	0.84	0.91	0.94	45.0
Approach		389	0.0	0.491	10.5	LOS A	4.0	28.1	0.84	0.91	0.94	44.6
All Vehicles		1935	0.0	0.637	7.9	LOS A	6.6	46.5	0.76	0.77	0.83	45.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2036_AAST_WO_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	53	0.0	0.280	4.2	LOS A	1.8	12.4	0.48	0.52	0.48	46.2
5	T1	209	0.0	0.280	4.1	LOS A	1.8	12.4	0.48	0.52	0.48	47.3
6	R2	57	0.0	0.280	8.6	LOS A	1.8	12.4	0.48	0.52	0.48	47.5
Approach		319	0.0	0.280	4.9	LOS A	1.8	12.4	0.48	0.52	0.48	47.2
NorthEast: Central Boulevard												
7	L2	142	0.0	0.326	5.4	LOS A	2.1	14.7	0.63	0.68	0.63	45.7
8	T1	81	0.0	0.326	5.3	LOS A	2.1	14.7	0.63	0.68	0.63	46.7
9	R2	97	0.0	0.326	9.8	LOS A	2.1	14.7	0.63	0.68	0.63	46.9
Approach		320	0.0	0.326	6.7	LOS A	2.1	14.7	0.63	0.68	0.63	46.3
NorthWest: Moss Vale Road												
10	L2	63	0.0	0.352	3.9	LOS A	2.4	16.6	0.44	0.48	0.44	46.5
11	T1	317	0.0	0.352	3.8	LOS A	2.4	16.6	0.44	0.48	0.44	47.5
12	R2	58	0.0	0.352	8.3	LOS A	2.4	16.6	0.44	0.48	0.44	47.7
Approach		438	0.0	0.352	4.4	LOS A	2.4	16.6	0.44	0.48	0.44	47.4
SouthWest: South URA Access												
1	L2	114	0.0	0.226	4.8	LOS A	1.3	9.4	0.55	0.60	0.55	46.1
2	T1	72	0.0	0.226	4.8	LOS A	1.3	9.4	0.55	0.60	0.55	47.2
3	R2	48	0.0	0.226	9.3	LOS A	1.3	9.4	0.55	0.60	0.55	47.4
Approach		234	0.0	0.226	5.7	LOS A	1.3	9.4	0.55	0.60	0.55	46.7
All Vehicles		1311	0.0	0.352	5.3	LOS A	2.4	16.6	0.52	0.56	0.52	46.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2036_AAST_WO_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	42	0.0	0.439	4.1	LOS A	3.3	23.4	0.52	0.52	0.52	46.0
5	T1	361	0.0	0.439	4.0	LOS A	3.3	23.4	0.52	0.52	0.52	47.0
6	R2	133	0.0	0.439	8.5	LOS A	3.3	23.4	0.52	0.52	0.52	47.2
Approach		536	0.0	0.439	5.2	LOS A	3.3	23.4	0.52	0.52	0.52	47.0
NorthEast: Central Boulevard												
7	L2	172	0.0	0.373	6.7	LOS A	2.6	18.1	0.76	0.79	0.76	45.1
8	T1	55	0.0	0.373	6.7	LOS A	2.6	18.1	0.76	0.79	0.76	46.1
9	R2	85	0.0	0.373	11.2	LOS A	2.6	18.1	0.76	0.79	0.76	46.3
Approach		312	0.0	0.373	7.9	LOS A	2.6	18.1	0.76	0.79	0.76	45.6
NorthWest: Moss Vale Road												
10	L2	94	0.0	0.512	5.4	LOS A	3.9	27.5	0.70	0.65	0.70	45.7
11	T1	382	0.0	0.512	5.4	LOS A	3.9	27.5	0.70	0.65	0.70	46.7
12	R2	54	0.0	0.512	9.9	LOS A	3.9	27.5	0.70	0.65	0.70	46.9
Approach		529	0.0	0.512	5.9	LOS A	3.9	27.5	0.70	0.65	0.70	46.6
SouthWest: South URA Access												
1	L2	88	0.0	0.369	6.6	LOS A	2.5	17.5	0.75	0.79	0.75	44.7
2	T1	72	0.0	0.369	6.6	LOS A	2.5	17.5	0.75	0.79	0.75	45.6
3	R2	155	0.0	0.369	11.1	LOS A	2.5	17.5	0.75	0.79	0.75	45.8
Approach		315	0.0	0.369	8.8	LOS A	2.5	17.5	0.75	0.79	0.75	45.4
All Vehicles		1692	0.0	0.512	6.6	LOS A	3.9	27.5	0.66	0.66	0.66	46.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2036_100HH_WO_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	34	0.0	0.252	4.0	LOS A	1.6	10.9	0.44	0.50	0.44	46.3
5	T1	205	0.0	0.252	3.9	LOS A	1.6	10.9	0.44	0.50	0.44	47.4
6	R2	56	0.0	0.252	8.4	LOS A	1.6	10.9	0.44	0.50	0.44	47.6
Approach		295	0.0	0.252	4.8	LOS A	1.6	10.9	0.44	0.50	0.44	47.3
NorthEast: Central Boulevard												
7	L2	138	0.0	0.298	5.2	LOS A	1.9	13.1	0.61	0.66	0.61	45.8
8	T1	71	0.0	0.298	5.2	LOS A	1.9	13.1	0.61	0.66	0.61	46.8
9	R2	87	0.0	0.298	9.7	LOS A	1.9	13.1	0.61	0.66	0.61	47.0
Approach		296	0.0	0.298	6.6	LOS A	1.9	13.1	0.61	0.66	0.61	46.4
NorthWest: Moss Vale Road												
10	L2	56	0.0	0.334	3.8	LOS A	2.2	15.4	0.42	0.47	0.42	46.5
11	T1	313	0.0	0.334	3.7	LOS A	2.2	15.4	0.42	0.47	0.42	47.6
12	R2	52	0.0	0.334	8.2	LOS A	2.2	15.4	0.42	0.47	0.42	47.8
Approach		420	0.0	0.334	4.3	LOS A	2.2	15.4	0.42	0.47	0.42	47.5
SouthWest: South URA Access												
1	L2	105	0.0	0.206	4.7	LOS A	1.2	8.4	0.53	0.59	0.53	46.2
2	T1	64	0.0	0.206	4.6	LOS A	1.2	8.4	0.53	0.59	0.53	47.2
3	R2	46	0.0	0.206	9.1	LOS A	1.2	8.4	0.53	0.59	0.53	47.4
Approach		216	0.0	0.206	5.6	LOS A	1.2	8.4	0.53	0.59	0.53	46.7
All Vehicles		1226	0.0	0.334	5.2	LOS A	2.2	15.4	0.49	0.54	0.49	47.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2036_100HH_WO_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	46	0.0	0.527	4.6	LOS A	4.4	30.9	0.63	0.57	0.63	45.7
5	T1	423	0.0	0.527	4.5	LOS A	4.4	30.9	0.63	0.57	0.63	46.7
6	R2	142	0.0	0.527	9.0	LOS A	4.4	30.9	0.63	0.57	0.63	46.9
Approach		612	0.0	0.527	5.6	LOS A	4.4	30.9	0.63	0.57	0.63	46.7
NorthEast: Central Boulevard												
7	L2	192	0.0	0.512	9.7	LOS A	4.5	31.4	0.90	0.97	1.05	43.6
8	T1	65	0.0	0.512	9.6	LOS A	4.5	31.4	0.90	0.97	1.05	44.5
9	R2	106	0.0	0.512	14.1	LOS A	4.5	31.4	0.90	0.97	1.05	44.7
Approach		363	0.0	0.512	11.0	LOS A	4.5	31.4	0.90	0.97	1.05	44.0
NorthWest: Moss Vale Road												
10	L2	120	0.0	0.681	8.7	LOS A	7.9	55.0	0.87	0.90	1.06	44.6
11	T1	469	0.0	0.681	8.6	LOS A	7.9	55.0	0.87	0.90	1.06	45.5
12	R2	68	0.0	0.681	13.1	LOS A	7.9	55.0	0.87	0.90	1.06	45.7
Approach		658	0.0	0.681	9.1	LOS A	7.9	55.0	0.87	0.90	1.06	45.4
SouthWest: South URA Access												
1	L2	115	0.0	0.521	9.3	LOS A	4.5	31.7	0.87	0.95	1.01	43.5
2	T1	107	0.0	0.521	9.2	LOS A	4.5	31.7	0.87	0.95	1.01	44.4
3	R2	177	0.0	0.521	13.7	LOS A	4.5	31.7	0.87	0.95	1.01	44.6
Approach		399	0.0	0.521	11.2	LOS A	4.5	31.7	0.87	0.95	1.01	44.2
All Vehicles		2032	0.0	0.681	8.8	LOS A	7.9	55.0	0.80	0.82	0.92	45.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2041_AAST_WO_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	71	0.0	0.322	4.7	LOS A	2.1	14.9	0.57	0.58	0.57	46.0
5	T1	211	0.0	0.322	4.7	LOS A	2.1	14.9	0.57	0.58	0.57	47.0
6	R2	60	0.0	0.322	9.2	LOS A	2.1	14.9	0.57	0.58	0.57	47.2
Approach		341	0.0	0.322	5.5	LOS A	2.1	14.9	0.57	0.58	0.57	46.8
NorthEast: Central Boulevard												
7	L2	124	0.0	0.384	5.5	LOS A	2.6	18.2	0.65	0.69	0.65	45.4
8	T1	108	0.0	0.384	5.4	LOS A	2.6	18.2	0.65	0.69	0.65	46.4
9	R2	147	0.0	0.384	9.9	LOS A	2.6	18.2	0.65	0.69	0.65	46.6
Approach		380	0.0	0.384	7.2	LOS A	2.6	18.2	0.65	0.69	0.65	46.1
NorthWest: Moss Vale Road												
10	L2	87	0.0	0.373	4.0	LOS A	2.6	18.0	0.47	0.50	0.47	46.4
11	T1	306	0.0	0.373	4.0	LOS A	2.6	18.0	0.47	0.50	0.47	47.4
12	R2	60	0.0	0.373	8.5	LOS A	2.6	18.0	0.47	0.50	0.47	47.6
Approach		454	0.0	0.373	4.6	LOS A	2.6	18.0	0.47	0.50	0.47	47.2
SouthWest: South URA Access												
1	L2	116	0.0	0.256	5.2	LOS A	1.6	10.9	0.60	0.64	0.60	46.0
2	T1	93	0.0	0.256	5.2	LOS A	1.6	10.9	0.60	0.64	0.60	47.1
3	R2	44	0.0	0.256	9.7	LOS A	1.6	10.9	0.60	0.64	0.60	47.2
Approach		253	0.0	0.256	6.0	LOS A	1.6	10.9	0.60	0.64	0.60	46.6
All Vehicles		1427	0.0	0.384	5.7	LOS A	2.6	18.2	0.57	0.59	0.57	46.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2041_AAST_WO_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	40	0.0	0.457	4.5	LOS A	3.5	24.4	0.58	0.56	0.58	45.8
5	T1	366	0.0	0.457	4.4	LOS A	3.5	24.4	0.58	0.56	0.58	46.9
6	R2	119	0.0	0.457	8.9	LOS A	3.5	24.4	0.58	0.56	0.58	47.1
Approach		525	0.0	0.457	5.5	LOS A	3.5	24.4	0.58	0.56	0.58	46.8
NorthEast: Central Boulevard												
7	L2	126	0.0	0.365	6.2	LOS A	2.5	17.6	0.73	0.76	0.73	45.1
8	T1	73	0.0	0.365	6.1	LOS A	2.5	17.6	0.73	0.76	0.73	46.1
9	R2	121	0.0	0.365	10.6	LOS A	2.5	17.6	0.73	0.76	0.73	46.3
Approach		320	0.0	0.365	7.9	LOS A	2.5	17.6	0.73	0.76	0.73	45.8
NorthWest: Moss Vale Road												
10	L2	138	0.0	0.531	5.1	LOS A	4.2	29.4	0.67	0.61	0.67	45.8
11	T1	389	0.0	0.531	5.0	LOS A	4.2	29.4	0.67	0.61	0.67	46.9
12	R2	54	0.0	0.531	9.5	LOS A	4.2	29.4	0.67	0.61	0.67	47.1
Approach		581	0.0	0.531	5.5	LOS A	4.2	29.4	0.67	0.61	0.67	46.6
SouthWest: South URA Access												
1	L2	91	0.0	0.338	6.7	LOS A	2.3	15.9	0.75	0.78	0.75	45.0
2	T1	105	0.0	0.338	6.7	LOS A	2.3	15.9	0.75	0.78	0.75	46.0
3	R2	84	0.0	0.338	11.2	LOS A	2.3	15.9	0.75	0.78	0.75	46.2
Approach		280	0.0	0.338	8.0	LOS A	2.3	15.9	0.75	0.78	0.75	45.7
All Vehicles		1706	0.0	0.531	6.3	LOS A	4.2	29.4	0.67	0.65	0.67	46.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2041_100HH_WO_AM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	24	0.0	0.253	4.2	LOS A	1.6	11.0	0.48	0.52	0.48	46.2
5	T1	208	0.0	0.253	4.1	LOS A	1.6	11.0	0.48	0.52	0.48	47.3
6	R2	52	0.0	0.253	8.6	LOS A	1.6	11.0	0.48	0.52	0.48	47.4
Approach		284	0.0	0.253	4.9	LOS A	1.6	11.0	0.48	0.52	0.48	47.2
NorthEast: Central Boulevard												
7	L2	169	0.0	0.372	5.3	LOS A	2.5	17.4	0.64	0.68	0.64	45.6
8	T1	71	0.0	0.372	5.3	LOS A	2.5	17.4	0.64	0.68	0.64	46.6
9	R2	134	0.0	0.372	9.8	LOS A	2.5	17.4	0.64	0.68	0.64	46.8
Approach		374	0.0	0.372	6.9	LOS A	2.5	17.4	0.64	0.68	0.64	46.2
NorthWest: Moss Vale Road												
10	L2	80	0.0	0.350	3.9	LOS A	2.4	16.5	0.44	0.47	0.44	46.5
11	T1	315	0.0	0.350	3.8	LOS A	2.4	16.5	0.44	0.47	0.44	47.6
12	R2	39	0.0	0.350	8.3	LOS A	2.4	16.5	0.44	0.47	0.44	47.8
Approach		434	0.0	0.350	4.2	LOS A	2.4	16.5	0.44	0.47	0.44	47.4
SouthWest: South URA Access												
1	L2	107	0.0	0.231	5.0	LOS A	1.4	9.6	0.57	0.62	0.57	46.1
2	T1	84	0.0	0.231	5.0	LOS A	1.4	9.6	0.57	0.62	0.57	47.1
3	R2	42	0.0	0.231	9.5	LOS A	1.4	9.6	0.57	0.62	0.57	47.3
Approach		234	0.0	0.231	5.8	LOS A	1.4	9.6	0.57	0.62	0.57	46.7
All Vehicles		1325	0.0	0.372	5.4	LOS A	2.5	17.4	0.53	0.57	0.53	46.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2041_100HH_WO_PM]

Moss Vale Road / Central Boulevard Roundabout
Site Category: (None)
Roundabout

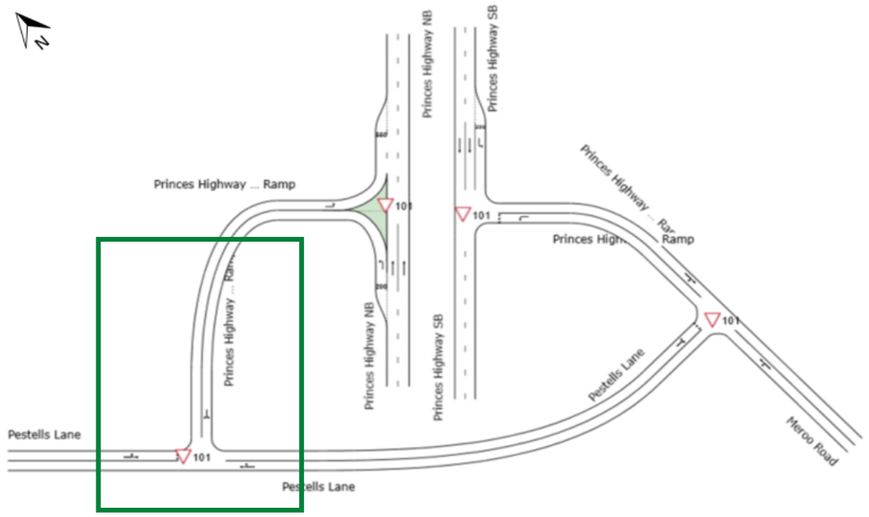
Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
4	L2	43	0.0	0.541	5.1	LOS A	4.5	31.3	0.70	0.62	0.70	45.5
5	T1	415	0.0	0.541	5.1	LOS A	4.5	31.3	0.70	0.62	0.70	46.5
6	R2	124	0.0	0.541	9.6	LOS A	4.5	31.3	0.70	0.62	0.70	46.7
Approach		582	0.0	0.541	6.0	LOS A	4.5	31.3	0.70	0.62	0.70	46.5
NorthEast: Central Boulevard												
7	L2	140	0.0	0.477	7.6	LOS A	3.9	27.2	0.84	0.87	0.90	44.4
8	T1	88	0.0	0.477	7.6	LOS A	3.9	27.2	0.84	0.87	0.90	45.3
9	R2	154	0.0	0.477	12.1	LOS A	3.9	27.2	0.84	0.87	0.90	45.5
Approach		382	0.0	0.477	9.4	LOS A	3.9	27.2	0.84	0.87	0.90	45.1
NorthWest: Moss Vale Road												
10	L2	179	0.0	0.653	6.3	LOS A	6.9	48.0	0.76	0.72	0.83	45.5
11	T1	478	0.0	0.653	6.2	LOS A	6.9	48.0	0.76	0.72	0.83	46.5
12	R2	68	0.0	0.653	10.7	LOS A	6.9	48.0	0.76	0.72	0.83	46.7
Approach		725	0.0	0.653	6.6	LOS A	6.9	48.0	0.76	0.72	0.83	46.3
SouthWest: South URA Access												
1	L2	120	0.0	0.398	7.6	LOS A	2.9	20.0	0.83	0.84	0.83	44.9
2	T1	127	0.0	0.398	7.6	LOS A	2.9	20.0	0.83	0.84	0.83	45.9
3	R2	52	0.0	0.398	12.1	LOS A	2.9	20.0	0.83	0.84	0.83	46.1
Approach		299	0.0	0.398	8.4	LOS A	2.9	20.0	0.83	0.84	0.83	45.5
All Vehicles		1988	0.0	0.653	7.3	LOS A	6.9	48.0	0.77	0.74	0.81	46.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Appendix I: Pestells Lane Interchange & Boxsells Lane Intersection SIDRA Summaries

Revised Analysis based on updated May 2020 TRACKS models

Pestells Lane Interchange - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model May 2020 version (Node #22075).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.7 and 0.8; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 0.8; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the Annual Average School Term (AAST).

The Pestells Lane western approach is give-way controlled.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The queue length on the Pestells Lane western approach reaches a maximum of 5.5m in year 2041 PM peak hour, however the delay remains insignificant at 7.5 seconds.

A Level of Service (LoS) of 'A' is consistent within all scenarios.

Intersection Performance - Annual Average School Term (AAST)

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	17	0.05	0	0	LOS A
	Right	79	0.05	5.4	0	LOS A
NB Ramp (N)	Left	24	0.03	5.7	0.3	LOS A
	Right	24	0.03	5.7	0.3	LOS A
Pestells Lane (W)	Left	1	0.05	5.8	0.5	LOS A
	Through	55	0.05	4.6	0.5	LOS A
Intersection	**All**	**200**	**0.05**	**4.8**	**0.5**	**N/A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	17	0.07	0	0	LOS A
	Right	111	0.07	5.4	0	LOS A
NB Ramp (N)	Left	24	0.04	5.9	0.5	LOS A
	Right	37	0.04	5.8	0.5	LOS A
Pestells Lane (W)	Left	1	0.04	5.9	0.4	LOS A
	Through	45	0.04	4.8	0.4	LOS A
Intersection	**All**	**235**	**0.07**	**5**	**0.5**	**N/A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	20	0.05	0	0	LOS A
	Right	78	0.05	5.4	0	LOS A
NB Ramp (N)	Left	28	0.03	5.7	0.3	LOS A
	Right	23	0.03	5.7	0.3	LOS A
Pestells Lane (W)	Left	20	0.06	5.8	0.7	LOS A
	Through	60	0.06	4.7	0.7	LOS A
Intersection	**All**	**229**	**0.06**	**4.9**	**0.7**	**N/A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	20	0.08	0	0	LOS A
	Right	120	0.08	5.4	0	LOS A
NB Ramp (N)	Left	28	0.04	5.9	0.5	LOS A
	Right	37	0.04	5.9	0.5	LOS A
Pestells Lane (W)	Left	22	0.06	5.9	0.6	LOS A
	Through	48	0.06	4.9	0.6	LOS A
Intersection	**All**	**276**	**0.08**	**5.1**	**0.6**	**N/A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	35	0.06	0	0	LOS A
	Right	79	0.06	5.4	0	LOS A
NB Ramp (N)	Left	34	0.03	5.7	0.3	LOS A
	Right	21	0.03	5.8	0.3	LOS A
Pestells Lane (W)	Left	64	0.11	5.8	1.3	LOS A
	Through	82	0.11	4.8	1.3	LOS A
Intersection	**All**	**315**	**0.11**	**4.8**	**1.3**	**N/A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	35	0.08	0	0	LOS A
	Right	122	0.08	5.5	0	LOS A
NB Ramp (N)	Left	34	0.04	5.9	0.5	LOS A
	Right	36	0.04	5.9	0.5	LOS A
Pestells Lane (W)	Left	73	0.11	5.9	1.2	LOS A
	Through	66	0.11	5	1.2	LOS A
Intersection	**All**	**365**	**0.11**	**5**	**1.2**	**N/A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	52	0.07	0	0	LOS A
	Right	77	0.07	5.4	0	LOS A
NB Ramp (N)	Left	34	0.04	5.8	0.4	LOS A
	Right	28	0.04	5.8	0.4	LOS A
Pestells Lane (W)	Left	97	0.17	5.8	2	LOS A
	Through	126	0.17	4.9	2	LOS A
Intersection	**All**	**414**	**0.17**	**4.7**	**2**	**N/A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	77	0.11	0	0	LOS A
	Right	128	0.11	5.5	0	LOS A
NB Ramp (N)	Left	34	0.05	6.1	0.7	LOS A
	Right	53	0.05	6.1	0.7	LOS A
Pestells Lane (W)	Left	105	0.16	6	1.8	LOS A
	Through	89	0.16	5.3	1.8	LOS A
Intersection	**All**	**486**	**0.16**	**4.8**	**1.8**	**N/A**

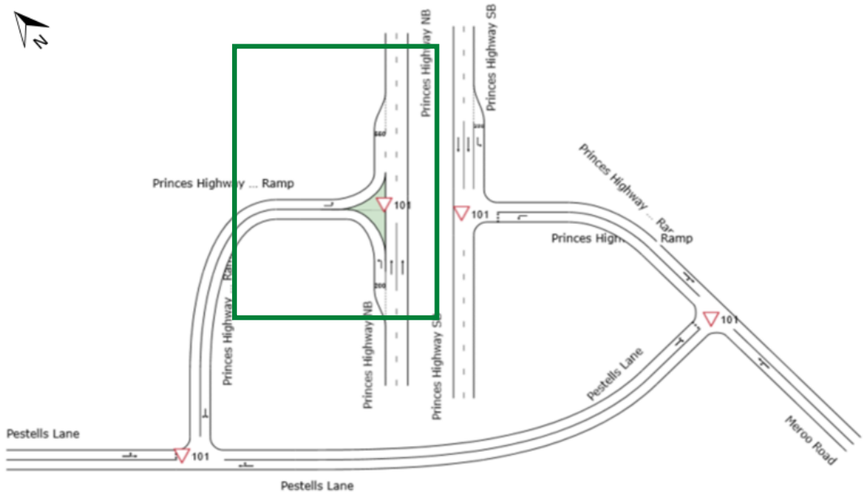
Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	97	0.09	0	0	LOS A
	Right	80	0.09	5.5	0	LOS A
NB Ramp (N)	Left	34	0.07	6.1	0.9	LOS A
	Right	79	0.07	6	0.9	LOS A
Pestells Lane (W)	Left	143	0.49	6.3	9.6	LOS A
	Through	423	0.49	6.1	9.6	LOS A
Intersection	**All**	**856**	**0.49**	**5.4**	**9.6**	**N/A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	279	0.21	0	0	LOS A
	Right	129	0.21	5.5	0	LOS A
NB Ramp (N)	Left	34	0.17	7.2	2.3	LOS A
	Right	182	0.17	7.1	2.3	LOS A
Pestells Lane (W)	Left	144	0.37	6.3	5.5	LOS A
	Through	224	0.37	7.5	5.5	LOS A
Intersection	**All**	**993**	**0.37**	**4.9**	**5.5**	**N/A**

Pestells Lane Interchange - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model May 2020 version (Nodes #22078 and #22079). The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.95 and 1.10; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the Annual Average School Term (AAST).

The Princes Highway road section is divided into two (2) sites within the SIDRA assessment.

Pestells Lane NB on-ramp onto Princes Highway includes a 550m long acceleration lane.

Princes Highway deceleration lane onto Pestells Lane is 200m in length.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

Queue length is not relevant with this intersection due to the Princes Highway.

Delay times reach a maximum of 5.6 seconds within both Princes Highway NB and Pestells Lane NB on-ramp approaches in all scenarios.

A Level of Service (LoS) of 'A' is consistent within all scenarios.

Intersection Performance - Annual Average School Term (AAST)

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	48	0.02	5.6	0	LOS A
	Through	524	0.11	0	0	LOS A
NB Ramp (W)	Left	80	0.04	5.6	0	LOS A
Intersection	**All**	**653**	**0.11**	**1.1**	**0**	**N/A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	61	0.03	5.6	0	LOS A
	Through	959	0.21	0	0	LOS A
NB Ramp (W)	Left	112	0.06	5.6	0	LOS A
Intersection	**All**	**1132**	**0.21**	**0.9**	**0**	**N/A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	52	0.02	5.6	0	LOS A
	Through	558	0.12	0	0	LOS A
NB Ramp (W)	Left	98	0.05	5.6	0	LOS A
Intersection	**All**	**707**	**0.12**	**1.2**	**0**	**N/A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	65	0.03	5.6	0	LOS A
	Through	1036	0.22	0	0	LOS A
NB Ramp (W)	Left	142	0.08	5.6	0	LOS A
Intersection	**All**	**1243**	**0.22**	**1**	**0**	**N/A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	54	0.02	5.6	0	LOS A
	Through	579	0.12	0	0	LOS A
NB Ramp (W)	Left	142	0.08	5.6	0	LOS A
Intersection	**All**	**775**	**0.12**	**1.4**	**0**	**N/A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	69	0.03	5.6	0	LOS A
	Through	1133	0.24	0	0	LOS A
NB Ramp (W)	Left	195	0.11	5.6	0	LOS A
Intersection	**All**	**1397**	**0.24**	**1.1**	**0**	**N/A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	62	0.03	5.6	0	LOS A
	Through	592	0.13	0	0	LOS A
NB Ramp (W)	Left	174	0.09	5.6	0	LOS A
Intersection	**All**	**827**	**0.13**	**1.6**	**0**	**N/A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	86	0.04	5.6	0	LOS A
	Through	1231	0.26	0.1	0	LOS A
NB Ramp (W)	Left	234	0.13	5.6	0	LOS A
Intersection	**All**	**1551**	**0.26**	**1.2**	**0**	**N/A**

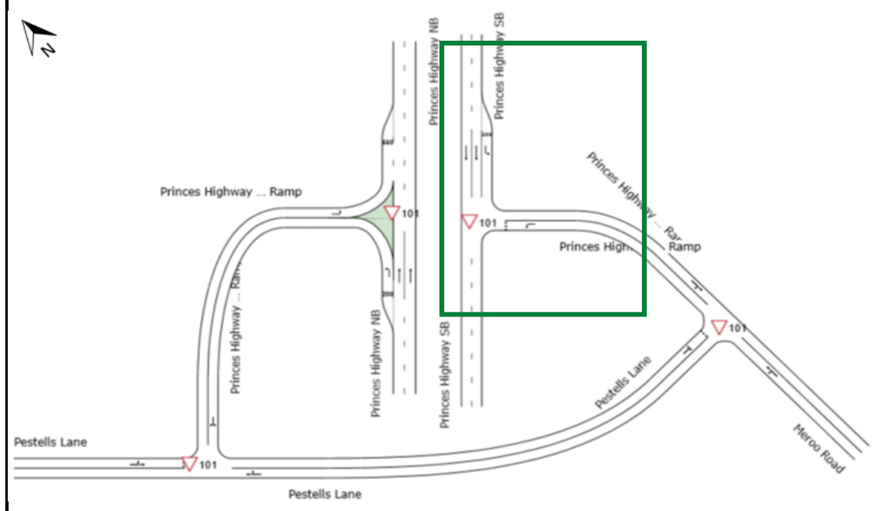
Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	112	0.05	5.6	0	LOS A
	Through	617	0.13	0	0	LOS A
NB Ramp (W)	Left	223	0.12	5.6	0	LOS A
Intersection	**All**	**952**	**0.13**	**2**	**0**	**N/A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	215	0.10	5.6	0	LOS A
	Through	1275	0.27	0.1	0	LOS A
NB Ramp (W)	Left	276	0.15	5.6	0	LOS A
Intersection	**All**	**1765**	**0.27**	**1.6**	**0**	**N/A**

Pestells Lane Interchange - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model May 2020 version (Nodes #22077).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.95 and 1.10; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the Annual Average School Term (AAST).

The Princes Highway road section is divided into two (2) sites within the SIDRA assessment.

Princes Highway deceleration lane onto Meroo Road is 200m in length.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The queue length on the Meroo Road SB ramp reaches a maximum of 3.1m in year 2041 AM peak hour, however the delay remains insignificant at 8.1 seconds.

A Level of Service (LoS) of 'A' is consistent within all scenarios.

Intersection Performance - Annual Average School Term (AAST)

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	41	0.04	0.0	0.4	LOS A
Highway SB (N)	Left	169	0.09	0.1	0	LOS A
	Through	905	0.23	0.2	0	LOS A
Intersection	**All**	**1116**	**0.23**	**0.2**	**0.4**	**N/A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	29	0.03	7.2	0.3	LOS A
Highway SB (N)	Left	165	0.09	5.5	0	LOS A
	Through	924	0.24	0	0	LOS A
Intersection	**All**	**1119**	**0.24**	**1**	**0.3**	**N/A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	49	0.05	7.5	0.5	LOS A
Highway SB (N)	Left	176	0.10	5.5	0	LOS A
	Through	1017	0.26	0	0	LOS A
Intersection	**All**	**1242**	**0.26**	**1.1**	**0.5**	**N/A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	37	0.04	7.4	0.4	LOS A
Highway SB (N)	Left	163	0.09	5.5	0	LOS A
	Through	1001	0.26	0	0	LOS A
Intersection	**All**	**1201**	**0.26**	**1**	**0.4**	**N/A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	48	0.05	7.9	0.6	LOS A
Highway SB (N)	Left	186	0.10	5.6	0	LOS A
	Through	1157	0.30	0	0	LOS A
Intersection	**All**	**1392**	**0.30**	**1**	**0.6**	**N/A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	39	0.04	7.5	0.4	LOS A
Highway SB (N)	Left	161	0.09	5.5	0	LOS A
	Through	1039	0.27	0	0	LOS A
Intersection	**All**	**1239**	**0.27**	**1**	**0.4**	**N/A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	56	0.07	8.4	0.7	LOS A
Highway SB (N)	Left	204	0.11	5.6	0	LOS A
	Through	1280	0.33	0	0	LOS A
Intersection	**All**	**1540**	**0.33**	**1.1**	**0.7**	**N/A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	42	0.04	7.6	0.5	LOS A
Highway SB (N)	Left	177	0.10	5.5	0	LOS A
	Through	1065	0.27	0	0	LOS A
Intersection	**All**	**1284**	**0.27**	**1**	**0.5**	**N/A**

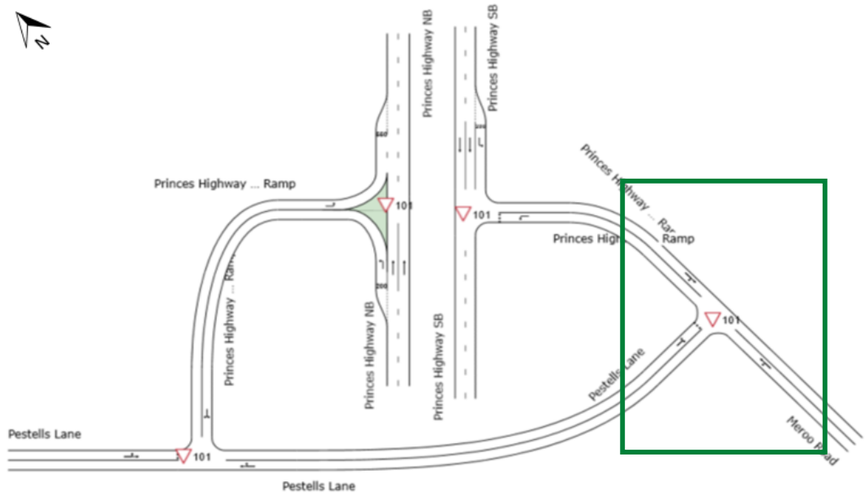
Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	228	0.26	8.7	3.1	LOS A
Highway SB (N)	Left	216	0.12	5.6	0	LOS A
	Through	1220	0.31	0	0	LOS A
Intersection	**All**	**1664**	**0.31**	**1.9**	**3.1**	**N/A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	115	0.13	8	1.4	LOS A
Highway SB (N)	Left	300	0.16	5.6	0	LOS A
	Through	1143	0.29	0	0	LOS A
Intersection	**All**	**1558**	**0.29**	**1.7**	**1.4**	**N/A**

Pestells Lane Interchange - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model May 2020 version (Nodes #22073).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.7 and 0.8; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 0.8; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the Annual Average School Term (AAST).

The Pestells Lane south-western approach is give-way controlled.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The queue length on the Pestells Lane south-western approach reaches a maximum of 4.5m in year 2041 AM peak hour, however the delay remains insignificant at 7.3 seconds.

A Level of Service (LoS) of 'A' is consistent within all scenarios.

Intersection Performance - Annual Average School Term (AAST)

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	95	0.05	5.5	0	LOS A
	Through	2	0.05	0	0	LOS A
SB Ramp (NW)	Through	169	0.09	0	0	LOS A
	Right	1	0.09	5.7	0	LOS A
Pestells Lane (SW)	Left	39	0.04	5.5	0.4	LOS A
	Right	16	0.04	6.2	0.4	LOS A
Intersection	**All**	**322**	**0.09**	**2.6**	**0.4**	**N/A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	127	0.07	5.5	0	LOS A
	Through	1	0.07	0	0	LOS A
SB Ramp (NW)	Through	165	0.09	0	0	LOS A
	Right	1	0.09	5.8	0	LOS A
Pestells Lane (SW)	Left	28	0.03	5.5	0.3	LOS A
	Right	17	0.03	6.3	0.3	LOS A
Intersection	**All**	**340**	**0.09**	**2.9**	**0.3**	**N/A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	99	0.06	5.5	0	LOS A
	Through	9	0.06	0	0	LOS A
SB Ramp (NW)	Through	176	0.09	0	0	LOS A
	Right	2	0.09	5.8	0	LOS A
Pestells Lane (SW)	Left	40	0.04	5.6	0.5	LOS A
	Right	20	0.04	6.3	0.5	LOS A
Intersection	**All**	**346**	**0.09**	**2.6**	**0.5**	**N/A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	140	0.08	5.5	0	LOS A
	Through	11	0.08	0	0	LOS A
SB Ramp (NW)	Through	163	0.09	0	0.1	LOS A
	Right	5	0.09	5.9	0.1	LOS A
Pestells Lane (SW)	Left	27	0.04	5.6	0.4	LOS A
	Right	21	0.04	6.3	0.4	LOS A
Intersection	**All**	**367**	**0.09**	**3**	**0.4**	**N/A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	114	0.06	5.5	0	LOS A
	Through	6	0.06	0	0	LOS A
SB Ramp (NW)	Through	186	0.10	0	0.2	LOS A
	Right	9	0.10	5.8	0.2	LOS A
Pestells Lane (SW)	Left	42	0.07	5.6	0.7	LOS A
	Right	40	0.07	6.4	0.7	LOS A
Intersection	**All**	**398**	**0.10**	**3**	**0.7**	**N/A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	158	0.09	5.5	0	LOS A
	Through	12	0.09	0	0	LOS A
SB Ramp (NW)	Through	161	0.10	0.1	0.4	LOS A
	Right	19	0.10	6	0.4	LOS A
Pestells Lane (SW)	Left	27	0.06	5.6	0.6	LOS A
	Right	40	0.06	6.5	0.6	LOS A
Intersection	**All**	**417**	**0.10**	**3.4**	**0.6**	**N/A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	128	0.07	5.5	0	LOS A
	Through	1	0.07	0	0	LOS A
SB Ramp (NW)	Through	204	0.11	0	0.3	LOS A
	Right	15	0.11	5.9	0.3	LOS A
Pestells Lane (SW)	Left	55	0.11	5.5	1.1	LOS A
	Right	72	0.11	6.6	1.1	LOS A
Intersection	**All**	**475**	**0.11**	**3.3**	**1.1**	**N/A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	193	0.11	5.5	0	LOS A
	Through	11	0.11	0	0	LOS A
SB Ramp (NW)	Through	164	0.09	0.1	0.3	LOS A
	Right	13	0.09	6.1	0.3	LOS A
Pestells Lane (SW)	Left	32	0.08	5.6	0.8	LOS A
	Right	57	0.08	6.5	0.8	LOS A
Intersection	**All**	**468**	**0.11**	**3.6**	**0.8**	**N/A**

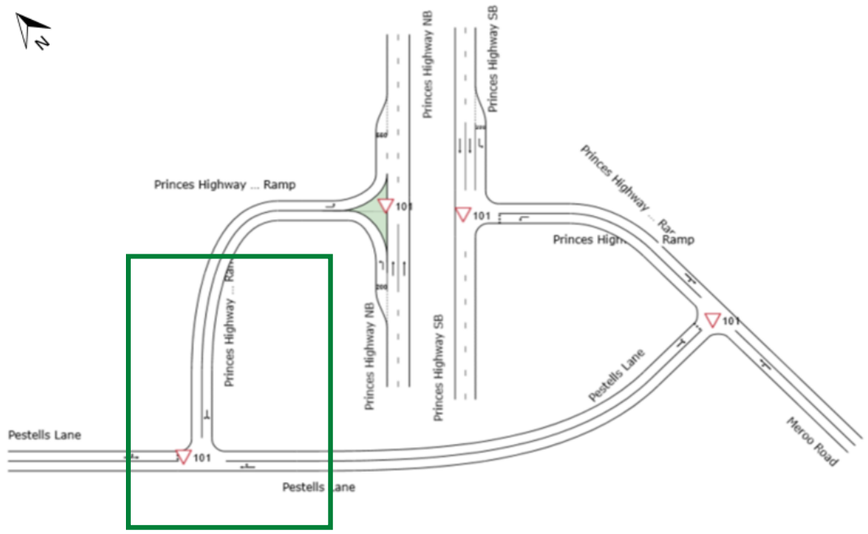
Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	177	0.10	5.5	0	LOS A
	Through	1	0.10	0	0	LOS A
SB Ramp (NW)	Through	217	0.13	0.1	0.6	LOS A
	Right	27	0.13	6.1	0.6	LOS A
Pestells Lane (SW)	Left	228	0.34	5.5	4.5	LOS A
	Right	194	0.34	7.3	4.5	LOS A
Intersection	**All**	**844**	**0.34**	**4.6**	**4.5**	**N/A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	285	0.16	5.5	0	LOS A
	Through	12	0.16	0	0	LOS A
SB Ramp (NW)	Through	174	0.18	0.8	2.4	LOS A
	Right	126	0.18	6.6	2.4	LOS A
Pestells Lane (SW)	Left	103	0.21	5.6	2.3	LOS A
	Right	121	0.21	7.7	2.3	LOS A
Intersection	**All**	**821**	**0.21**	**4.9**	**2.4**	**N/A**

Pestells Lane Interchange - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model May 2020 version (Nodes #22075).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.7 and 0.8; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 0.8; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the 100th Highest Hour (100HH).

The Pestells Lane western approach is give-way controlled.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The queue length on the Pestells Lane western approach reaches a maximum of 9.2m in year 2041 PM peak hour, however the delay remains insignificant at 9.8 seconds.

A Level of Service (LoS) of 'A' is consistent within all scenarios.

Intersection Performance - 100th Highest Hour (100HH)

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	16	0.05	0	0	LOS A
	Right	80	0.05	5.4	0	LOS A
NB Ramp (N)	Left	24	0.03	5.7	0.3	LOS A
	Right	23	0.03	5.7	0.3	LOS A
Pestells Lane (W)	Left	1	0.04	5.8	0.4	LOS A
	Through	51	0.04	4.6	0.4	LOS A
Intersection	**All**	**195**	**0.05**	**4.9**	**0.4**	**N/A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	20	0.09	0	0	LOS A
	Right	141	0.09	5.5	0	LOS A
NB Ramp (N)	Left	24	0.04	6	0.5	LOS A
	Right	42	0.04	5.9	0.5	LOS A
Pestells Lane (W)	Left	1	0.05	6	0.5	LOS A
	Through	56	0.05	5	0.5	LOS A
Intersection	**All**	**284**	**0.09**	**5.1**	**0.5**	**N/A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	19	0.05	0	0	LOS A
	Right	77	0.05	5.4	0	LOS A
NB Ramp (N)	Left	28	0.03	5.7	0.3	LOS A
	Right	22	0.03	5.7	0.3	LOS A
Pestells Lane (W)	Left	21	0.06	5.8	0.6	LOS A
	Through	55	0.06	4.7	0.6	LOS A
Intersection	**All**	**222**	**0.06**	**4.9**	**0.6**	**N/A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	25	0.09	0	0	LOS A
	Right	142	0.09	5.5	0	LOS A
NB Ramp (N)	Left	28	0.04	6.1	0.8	LOS A
	Right	41	0.04	6.1	0.8	LOS A
Pestells Lane (W)	Left	24	0.07	5.9	0.7	LOS A
	Through	59	0.07	5.3	0.7	LOS A
Intersection	**All**	**320**	**0.09**	**4.5**	**0.8**	**N/A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	34	0.06	0	0	LOS A
	Right	80	0.06	5.4	0	LOS A
NB Ramp (N)	Left	34	0.03	5.7	0.3	LOS A
	Right	20	0.03	5.8	0.3	LOS A
Pestells Lane (W)	Left	61	0.10	5.8	1.2	LOS A
	Through	75	0.10	4.7	1.2	LOS A
Intersection	**All**	**303**	**0.10**	**4.8**	**1.2**	**N/A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	53	0.11	0	0	LOS A
	Right	146	0.11	5.5	0	LOS A
NB Ramp (N)	Left	34	0.04	6	0.5	LOS A
	Right	39	0.04	6.1	0.5	LOS A
Pestells Lane (W)	Left	78	0.13	6	1.5	LOS A
	Through	80	0.13	5.2	1.5	LOS A
Intersection	**All**	**429**	**0.13**	**4.9**	**1.5**	**LOS A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	49	0.07	0	0	LOS A
	Right	79	0.07	5.4	0	LOS A
NB Ramp (N)	Left	34	0.04	5.8	0.4	LOS A
	Right	28	0.04	5.8	0.4	LOS A
Pestells Lane (W)	Left	92	0.16	5.8	1.9	LOS A
	Through	116	0.16	4.9	1.9	LOS A
Intersection	**All**	**398**	**0.16**	**4.7**	**1.9**	**N/A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	144	0.16	0	0	LOS A
	Right	152	0.16	5.5	0	LOS A
NB Ramp (N)	Left	34	0.06	6.4	0.8	LOS A
	Right	62	0.06	6.4	0.8	LOS A
Pestells Lane (W)	Left	117	0.19	6.1	2.3	LOS A
	Through	108	0.19	5.7	2.3	LOS A
Intersection	**All**	**617**	**0.19**	**4.5**	**2.3**	**N/A**

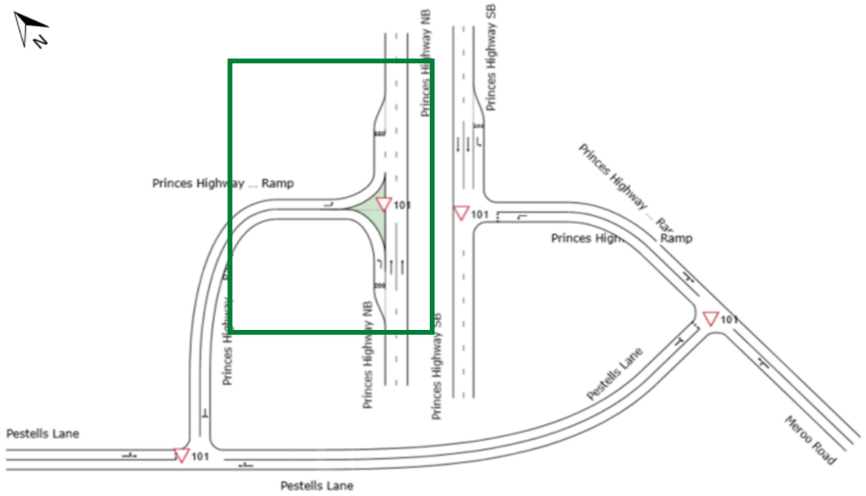
Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	91	0.09	0	0	LOS A
	Right	83	0.09	5.5	0	LOS A
NB Ramp (N)	Left	34	0.07	6	0.9	LOS A
	Right	78	0.07	6	0.9	LOS A
Pestells Lane (W)	Left	134	0.45	6.1	7.5	LOS A
	Through	384	0.45	5.8	7.5	LOS A
Intersection	**All**	**803**	**0.45**	**5.2**	**7.5**	**N/A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Pestells Lane (E)	Through	399	0.29	0	0	LOS A
	Right	157	0.29	5.5	0	LOS A
NB Ramp (N)	Left	34	0.23	8.2	3.1	LOS A
	Right	212	0.23	8.1	3.1	LOS A
Pestells Lane (W)	Left	163	0.49	7.3	9.2	LOS A
	Through	267	0.49	9.8	9.2	LOS A
Intersection	**All**	**1232**	**0.49**	**5.4**	**9.2**	**N/A**

Pestells Lane Interchange - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model May 2020 version (Nodes #22078 and #22079). The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.95 and 1.10; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the Annual Average School Term (AAST).

The Princes Highway road section is divided into two (2) sites within the SIDRA assessment.

Pestells Lane NB on-ramp onto Princes Highway includes a 550m long acceleration lane.

Princes Highway deceleration lane onto Pestells Lane is 200m in length.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

Queue length is not relevant with this intersection due to Princes Highway.

Delay times reach a maximum of 5.6 seconds within both Princes Highway NB and Pestells Lane NB on-ramp approaches in all scenarios.

A Level of Service (LoS) of 'A' is consistent within all scenarios.

Intersection Performance - 100th Highest Hour (100HH)

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	46	0.02	5.6	0	LOS A
	Through	521	0.11	0	0	LOS A
NB Ramp (W)	Left	81	0.04	5.6	0	LOS A
Intersection	**All**	**648**	**0.11**	**1.1**	**0**	**N/A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	65	0.03	5.6	0	LOS A
	Through	1031	0.22	0	0	LOS A
NB Ramp (W)	Left	142	0.08	5.6	0	LOS A
Intersection	**All**	**1238**	**0.22**	**1**	**0**	**N/A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	51	0.02	5.6	0	LOS A
	Through	560	0.12	0	0	LOS A
NB Ramp (W)	Left	98	0.05	5.6	0	LOS A
Intersection	**All**	**708**	**0.12**	**1.2**	**0**	**N/A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	69	0.03	5.6	0	LOS A
	Through	1111	0.24	0	0	LOS A
NB Ramp (W)	Left	166	0.09	5.6	0	LOS A
Intersection	**All**	**1346**	**0.24**	**1**	**0**	**N/A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	53	0.02	5.6	0	LOS A
	Through	591	0.13	0	0	LOS A
NB Ramp (W)	Left	141	0.08	5.6	0	LOS A
Intersection	**All**	**784**	**0.13**	**1.4**	**0**	**N/A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	72	0.03	5.6	0	LOS A
	Through	1203	0.26	0.1	0	LOS A
NB Ramp (W)	Left	224	0.12	5.6	0	LOS A
Intersection	**All**	**1499**	**0.26**	**1.2**	**0**	**N/A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	62	0.03	5.6	0	LOS A
	Through	618	0.13	0	0	LOS A
NB Ramp (W)	Left	171	0.09	5.6	0	LOS A
Intersection	**All**	**851**	**0.13**	**1.6**	**0**	**N/A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	96	0.04	5.6	0	LOS A
	Through	1305	0.28	0.1	0	LOS A
NB Ramp (W)	Left	268	0.15	5.6	0	LOS A
Intersection	**All**	**1669**	**0.28**	**1.3**	**0**	**N/A**

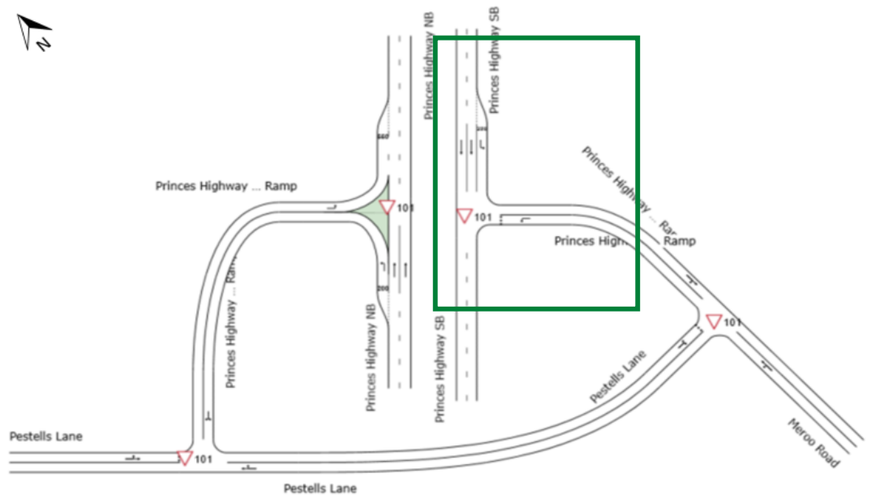
Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	111	0.05	5.6	0	LOS A
	Through	658	0.14	0	0	LOS A
NB Ramp (W)	Left	217	0.12	5.6	0	LOS A
Intersection	**All**	**985**	**0.14**	**1.9**	**0**	**N/A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Highway NB (S)	Left	244	0.11	5.6	0	LOS A
	Through	1354	0.29	0.1	0	LOS A
NB Ramp (W)	Left	320	0.17	5.6	0	LOS A
Intersection	**All**	**1918**	**0.29**	**1.7**	**0**	**N/A**

Pestells Lane Interchange - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model May 2020 version (Nodes #22077).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.95 and 1.10; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the Annual Average School Term (AAST).

The Princes Highway road section is divided into two (2) sites within the SIDRA assessment.

Princes Highway deceleration lane onto Meroo Road is 200m in length.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The queue length on the Meroo Road SB ramp reaches a maximum of 2.8m in year 2041 AM peak hour, however the delay remains insignificant at 8.4 seconds.

A Level of Service (LoS) of 'A' is consistent within all scenarios.

Intersection Performance - 100th Highest Hour (100HH)

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	38	0.03	7	0.4	LOS A
Highway SB (N)	Left	157	0.08	5.5	0	LOS A
	Through	828	0.21	0	0	LOS A
Intersection	**All**	**1023**	**0.21**	**1.1**	**0.4**	**N/A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	51	0.05	7.7	0.6	LOS A
Highway SB (N)	Left	205	0.11	5.6	0	LOS A
	Through	1067	0.27	0	0	LOS A
Intersection	**All**	**1323**	**0.27**	**1.2**	**0.6**	**N/A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	44	0.04	7.3	0.5	LOS A
Highway SB (N)	Left	162	0.09	5.5	0	LOS A
	Through	932	0.24	0	0	LOS A
Intersection	**All**	**1138**	**0.24**	**1.1**	**0.5**	**N/A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	48	0.05	7.8	0.6	LOS A
Highway SB (N)	Left	202	0.11	5.6	0	LOS A
	Through	1131	0.29	0	0	LOS A
Intersection	**All**	**1381**	**0.29**	**1.1**	**0.6**	**N/A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	46	0.05	7.7	0.5	LOS A
Highway SB (N)	Left	172	0.09	5.5	0	LOS A
	Through	1073	0.28	0	0	LOS A
Intersection	**All**	**1291**	**0.28**	**1**	**0.5**	**N/A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	44	0.05	7.9	0.5	LOS A
Highway SB (N)	Left	202	0.11	5.6	0	LOS A
	Through	1141	0.29	0	0	LOS A
Intersection	**All**	**1387**	**0.29**	**1.1**	**0.5**	**N/A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	52	0.06	8.1	0.6	LOS A
Highway SB (N)	Left	186	0.10	5.6	0	LOS A
	Through	1199	0.31	0	0	LOS A
Intersection	**All**	**1437**	**0.31**	**1**	**0.6**	**N/A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	49	0.06	8	0.6	LOS A
Highway SB (N)	Left	258	0.14	5.6	0	LOS A
	Through	1174	0.30	0	0	LOS A
Intersection	**All**	**1481**	**0.30**	**1.3**	**0.6**	**N/A**

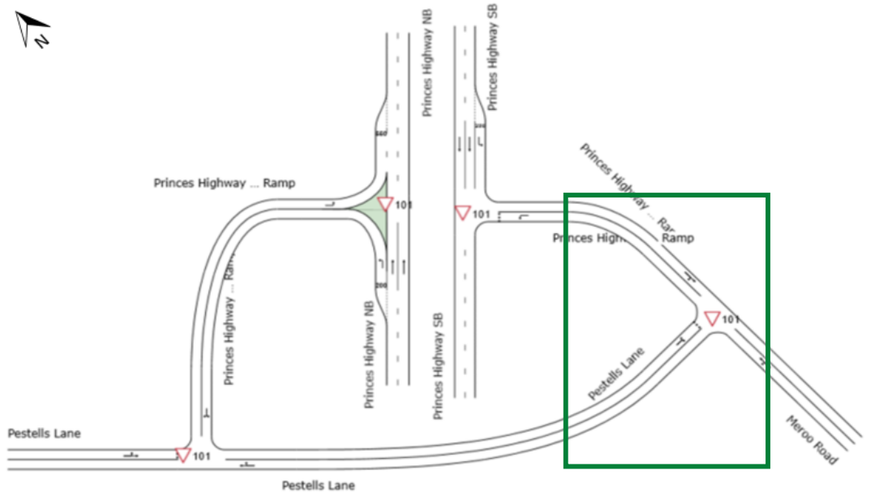
Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	214	0.24	8.4	2.8	LOS A
Highway SB (N)	Left	192	0.10	5.6	0	LOS A
	Through	1185	0.30	0	0	LOS A
Intersection	**All**	**1591**	**0.30**	**1.8**	**2.8**	**N/A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
SB Ramp (S)	Left	128	0.15	8.5	1.6	LOS A
Highway SB (N)	Left	402	0.22	5.6	0	LOS A
	Through	1245	0.32	0	0	LOS A
Intersection	**All**	**1776**	**0.32**	**1.9**	**1.6**	**N/A**

Pestells Lane Interchange - Proposed Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model May 2020 version (Nodes #22073).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.7 and 0.8; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 0.8; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the Annual Average School Term (AAST).

The Pestells Lane south-western approach is give-way controlled.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The queue length on the Pestells Lane south-western approach reaches a maximum of 3.9m in year 2041 AM peak hour, however the delay remains insignificant at 7.0 seconds.

A Level of Service (LoS) of 'A' is consistent within all scenarios.

Intersection Performance - 100th Highest Hour (100HH)

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	96	0.05	5.5	0	LOS A
	Through	2	0.05	0	0	LOS A
SB Ramp (NW)	Through	157	0.08	0	0	LOS A
	Right	1	0.08	5.7	0	LOS A
Pestells Lane (SW)	Left	36	0.04	5.5	0.4	LOS A
	Right	15	0.04	6.2	0.4	LOS A
Intersection	**All**	**306**	**0.08**	**2.7**	**0.4**	**N/A**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	161	0.10	5.5	0	LOS A
	Through	16	0.10	0	0	LOS A
SB Ramp (NW)	Through	206	0.11	0	0	LOS A
	Right	1	0.11	6	0	LOS A
Pestells Lane (SW)	Left	35	0.04	5.6	0.4	LOS A
	Right	21	0.04	6.6	0.4	LOS A
Intersection	**All**	**440**	**0.11**	**2.8**	**0.4**	**N/A**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	96	0.06	5.5	0	LOS A
	Through	7	0.06	0	0	LOS A
SB Ramp (NW)	Through	162	0.08	0	0.1	LOS A
	Right	2	0.08	5.8	0.1	LOS A
Pestells Lane (SW)	Left	37	0.04	5.6	0.4	LOS A
	Right	19	0.04	6.2	0.4	LOS A
Intersection	**All**	**323**	**0.08**	**2.7**	**0.4**	**N/A**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	167	0.10	5.5	0	LOS A
	Through	16	0.10	0	0	LOS A
SB Ramp (NW)	Through	202	0.11	0	0.1	LOS A
	Right	6	0.11	6.1	0.1	LOS A
Pestells Lane (SW)	Left	33	0.05	5.6	0.5	LOS A
	Right	26	0.05	6.6	0.5	LOS A
Intersection	**All**	**451**	**0.11**	**2.9**	**0.5**	**N/A**

Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	114	0.07	5.5	0	LOS A
	Through	8	0.07	0	0	LOS A
SB Ramp (NW)	Through	172	0.09	0	0.2	LOS A
	Right	9	0.09	5.8	0.2	LOS A
Pestells Lane (SW)	Left	38	0.06	5.6	0.6	LOS A
	Right	37	0.06	6.4	0.6	LOS A
Intersection	**All**	**378**	**0.09**	**3**	**0.6**	**N/A**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	197	0.11	5.5	0	LOS A
	Through	13	0.11	0	0	LOS A
SB Ramp (NW)	Through	200	0.10	0	0	LOS A
	Right	2	0.10	6.2	0	LOS A
Pestells Lane (SW)	Left	32	0.07	5.6	0.7	LOS A
	Right	48	0.07	6.7	0.7	LOS A
Intersection	**All**	**492**	**0.11**	**3.3**	**0.7**	**N/A**

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	129	0.07	5.5	0	LOS A
	Through	1	0.07	0	0	LOS A
SB Ramp (NW)	Through	186	0.10	0	0.3	LOS A
	Right	14	0.10	5.9	0.3	LOS A
Pestells Lane (SW)	Left	51	0.09	5.5	1	LOS A
	Right	64	0.09	6.5	1	LOS A
Intersection	**All**	**445**	**0.10**	**3.4**	**1**	**N/A**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	239	0.14	5.5	0	LOS A
	Through	13	0.14	0	0	LOS A
SB Ramp (NW)	Through	200	0.14	0.3	1.2	LOS A
	Right	57	0.14	6.4	1.2	LOS A
Pestells Lane (SW)	Left	37	0.10	5.6	1	LOS A
	Right	72	0.10	7.1	1	LOS A
Intersection	**All**	**617**	**0.14**	**4**	**1.2**	**N/A**

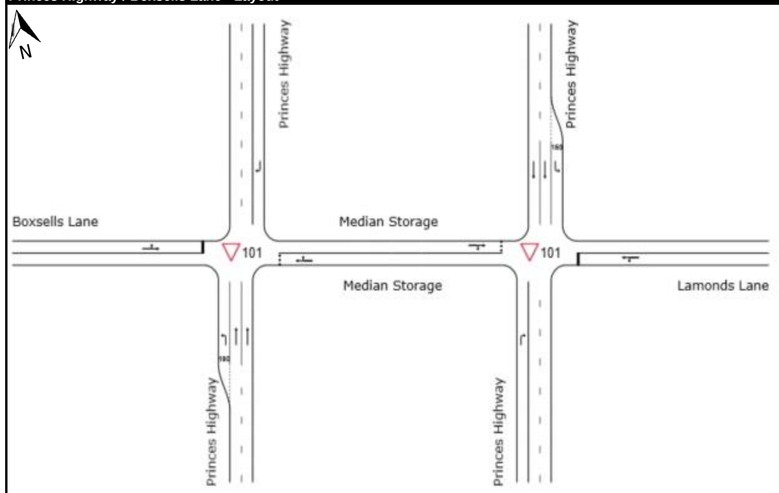
Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	174	0.09	5.5	0	LOS A
	Through	1	0.09	0	0	LOS A
SB Ramp (NW)	Through	192	0.12	0.1	0.5	LOS A
	Right	24	0.12	6	0.5	LOS A
Pestells Lane (SW)	Left	213	0.31	5.5	3.9	LOS A
	Right	174	0.31	7	3.9	LOS A
Intersection	**All**	**777**	**0.31**	**4.5**	**3.9**	**N/A**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Meroo Road (SE)	Left	365	0.20	5.5	0	LOS A
	Through	12	0.20	0	0	LOS A
SB Ramp (NW)	Through	212	0.26	1.3	4	LOS A
	Right	191	0.26	7.2	4	LOS A
Pestells Lane (SW)	Left	116	0.28	5.6	3.2	LOS A
	Right	152	0.28	9	3.2	LOS A
Intersection	**All**	**1046**	**0.28**	**5.4**	**4**	**N/A**

Princes Highway / Boxsells Lane - Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model May 2020 version (Node #20528).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.70 and 0.80; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 0.80; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.
- LOS 'F'

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the Annual Average School Term (AAST).

Boxsells Lane on-ramp to Princes Highway NB as well as the Lamonds Lane on-ramp to Princes Highway SB is stop sign controlled.

Princes Highway NB deceleration lane is 190m in length and Princes Highway SB deceleration lane is 150m.

Median storage length is 6m.

Boxsells Lane and Lamonds Lane is 60km/h, and Princes Highway is 100km/h.

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The queue length on the Princes Highway right turn reaches a maximum of 5.3m in year 2031 PM peak hour with a delay time of 42.8 seconds.

A Level of Service (LoS) of 'A' to 'D' is consistent throughout all scenarios.

Intersection Performance - Annual Average School Term (AAST)

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	5	0.00	7.8	0	LOS A
	Through	599	0.15	0	0	LOS A
Median Storage (E)	Through	1	0.01	6.8	0	LOS A
	Right	1	0.01	8.4	0	LOS A
Princes Highway (N)	Right	1	0.00	12	0	LOS A
Boxsells Lane (W)	Left	1	0.00	9.4	0	LOS A
East Section						
Princes Highway (S)	Right	1	0.01	20.6	0	LOS B
Lamonds Lane (E)	Left	1	0.00	11.3	0.1	LOS A
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1075	0.28	0	0	LOS A
Median Storage (W)	Through	1	0.01	18.3	0	LOS B
	Right	1	0.01	23.7	0	LOS B
Intersection	**All**	**1689**	**0.28**	**0.1**	**0.1**	**NA**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	6	0.00	7.8	0	LOS A
	Through	1065	0.27	0	0	LOS A
Median Storage (E)	Through	1	0.01	18.1	0.1	LOS B
	Right	1	0.01	23.2	0.1	LOS B
Princes Highway (N)	Right	2	0.01	20.6	0.1	LOS B
Boxsells Lane (W)	Left	1	0.00	11.2	0	LOS A
East Section						
Princes Highway (S)	Right	1	0.01	21	0	LOS B
Lamonds Lane (E)	Left	1	0.00	11.4	0	LOS A
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1091	0.28	0	0	LOS A
Median Storage (W)	Through	1	0.01	19	0.1	LOS B
	Right	1	0.01	24.5	0.1	LOS B
Intersection	**All**	**2173**	**0.28**	**0.1**	**0.1**	**NA**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	5	0.00	7.8	0	LOS A
	Through	651	0.17	0	0	LOS A
Median Storage (E)	Through	1	0.01	7.7	0.1	LOS A
	Right	1	0.01	9.6	0.1	LOS A
Princes Highway (N)	Right	11	0.02	12.9	0.2	LOS A
Boxsells Lane (W)	Left	1	0.00	9.6	0	LOS A
East Section						
Princes Highway (S)	Right	1	0.01	24.4	0	LOS B
Lamonds Lane (E)	Left	1	0.00	11.9	0	LOS A
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1195	0.31	0	0	LOS A
Median Storage (W)	Through	1	0.02	23.8	0.1	LOS B
	Right	1	0.02	31.1	0.1	LOS C
Intersection	**All**	**1871**	**0.306**	**0.2**	**0.2**	**NA**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	7	0.00	7.8	0	LOS A
	Through	1172	0.30	0	0	LOS A
Median Storage (E)	Through	1	0.02	23.5	0.1	LOS B
	Right	1	0.02	30.3	0.1	LOS C
Princes Highway (N)	Right	19	0.10	24.9	0.8	LOS B
Boxsells Lane (W)	Left	1	0.00	11.8	0	LOS A
East Section						
Princes Highway (S)	Right	1	0.01	23.5	0	LOS B
Lamonds Lane (E)	Left	1	0.00	11.8	0	LOS A
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1169	0.30	0	0	LOS A
Median Storage (W)	Through	1	0.02	22.5	0.1	LOS B
	Right	1	0.02	29.3	0.1	LOS C
Intersection	**All**	**2377**	**0.30**	**0.2**	**0.8**	**NA**

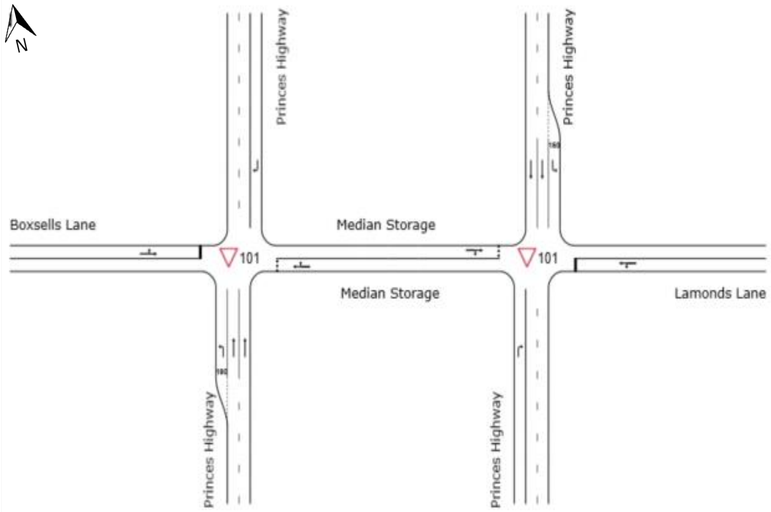
Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	6	0.00	7.8	0	LOS A
	Through	715	0.18	0	0	LOS A
Median Storage (E)	Through	1	0.01	9.4	0.1	LOS A
	Right	1	0.01	11.6	0.1	LOS A
Princes Highway (N)	Right	40	0.10	14.2	0.9	LOS A
Boxsells Lane (W)	Left	1	0.00	9.8	0	LOS A
East Section						
Princes Highway (S)	Right	1	0.01	31.5	0.1	LOS C
Lamonds Lane (E)	Left	1	0.02	12.9	0	LOS A
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1354	0.35	0	0	LOS A
Median Storage (W)	Through	1	0.02	34	0.2	LOS C
	Right	1	0.02	45.5	0.2	LOS D
Intersection	**All**	**2124**	**0.35**	**0.2**	**0.9**	**NA**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	7	0.00	7.8	0	LOS A
	Through	1320	0.34	0	0	LOS A
Median Storage (E)	Through	1	0.03	35.9	0.2	LOS C
	Right	1	0.03	47.5	0.2	LOS D
Princes Highway (N)	Right	74	0.53	42.8	5.3	LOS D
Boxsells Lane (W)	Left	1	0.00	12.7	0	LOS A
East Section						
Princes Highway (S)	Right	1	0.01	25.4	0	LOS B
Lamonds Lane (E)	Left	1	0.00	12.1	0	LOS A
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1220	0.31	0	0	LOS A
Median Storage (W)	Through	1	0.02	25.1	0.1	LOS B
	Right	1	0.02	33	0.1	LOS C
Intersection	**All**	**2630**	**0.313**	**0.2**	**5.3**	**NA**

Princes Highway / Boxsells Lane - Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model May 2020 version (Node #20528).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.70 and 0.80; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 0.80; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.
- LOS 'F'

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the Annual Average School Term (AAST).

Boxsells Lane on-ramp to Princes Highway NB as well as the Lamonds Lane on-ramp to Princes Highway SB is stop sign controlled.

Princes Highway NB deceleration lane is 190m in length and Princes Highway SB deceleration lane is 150m.

Median storage length is 6m.

Boxsells Lane and Lamonds Lane is 60km/h, and Princes Highway is 100km/h.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios until year 2036 PM peak period.

The queue length on the Boxsells Lane western approach reaches a maximum of 4.1m in year 2041 PM peak hour with an average delay time of 1.9 seconds.

The Level of Service (LoS) fails by year 2036 in the Median storage eastern approach and Princes Highway northern approach. This is a result of high forecasted through traffic volumes on the Princes Highway.

Intersection Performance - Annual Average School Term (AAST)

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	7	0.00	7.8	0	LOS A
	Through	758	0.19	0	0	LOS A
Median Storage (E)	Through	1	0.01	10.6	0.1	LOS A
	Right	1	0.01	13.2	0.1	LOS A
Princes Highway (N)	Right	59	0.15	15.1	1.4	LOS B
Boxsells Lane (W)	Left	1	0.00	10	0	LOS A
East Section						
Princes Highway (S)	Right	1	0.01	40.8	0.1	LOS C
Lamonds Lane (E)	Left	1	0.00	14	0	LOS A
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1499	0.38	0.1	0	LOS A
Median Storage (W)	Through	1	0.03	47.9	0.3	LOS D
	Right	1	0.03	65.8	0.3	LOS E
Intersection	**All**	**2332**	**0.38**	**0.2**	**1.4**	**NA**

Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	13	0.01	7.8	0	LOS A
	Through	827	0.21	0	0	LOS A
Median Storage (E)	Through	1	0.01	13.6	0.1	LOS A
	Right	1	0.01	18.7	0.1	LOS B
Princes Highway (N)	Right	112	0.33	18.3	3.5	LOS B
Boxsells Lane (W)	Left	53	0.07	10.5	0.7	LOS A
East Section						
Princes Highway (S)	Right	1	0.01	38.2	0.1	LOS C
Lamonds Lane (E)	Left	1	0.00	13.7	0	LOS A
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1463	0.38	0	0	LOS A
Median Storage (W)	Through	1	0.03	43.9	0.2	LOS D
	Right	1	0.03	59.9	0.2	LOS E
Intersection	**All**	**2476**	**0.375**	**0.2**	**3.5**	**NA**

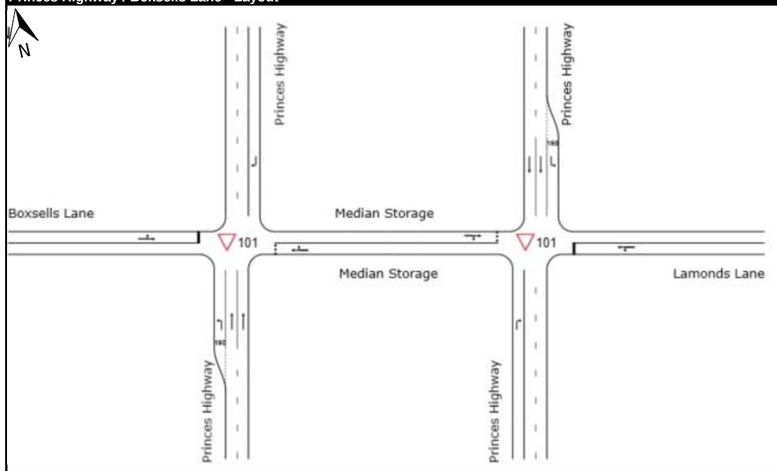
Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	9	0.01	7.8	0	LOS A
	Through	1454	0.37	0	0	LOS A
Median Storage (E)	Through	1	0.04	52.2	0.3	LOS D
	Right	1	0.04	70.6	0.3	LOS F
Princes Highway (N)	Right	105	1.01	144.3	22.1	LOS F
Boxsells Lane (W)	Left	1	0.02	13.6	0	LOS A
East Section						
Princes Highway (S)	Right	1	0.01	26.2	0.1	LOS B
Lamonds Lane (E)	Left	1	0.00	12.2	0	LOS A
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1241	0.32	0	0	LOS A
Median Storage (W)	Through	1	0.02	26.3	0.2	LOS B
	Right	1	0.02	34.6	0.2	LOS C
Intersection	**All**	**2818**	**1.01**	**0.2**	**22.1**	**NA**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	24	0.01	7.8	0	LOS A
	Through	1526	0.39	0.1	0	LOS A
Median Storage (E)	Through	1	0.05	66.8	0.4	LOS E
	Right	1	0.05	102.8	0.4	LOS F
Princes Highway (N)	Right	122	1.41	441.5	76.4	LOS F
Boxsells Lane (W)	Left	57	0.14	15.1	1.3	LOS B
East Section						
Princes Highway (S)	Right	1	0.01	36.7	0.1	LOS C
Lamonds Lane (E)	Left	1	0.00	13.6	0	LOS A
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1442	0.37	0	0	LOS A
Median Storage (W)	Through	1	0.03	41.8	0.2	LOS C
	Right	1	0.03	56.8	0.2	LOS E
Intersection	**All**	**3179**	**1.41**	**0.2**	**76.4**	**NA**

Princes Highway / Boxsells Lane - Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model May 2020 version (Node #20528).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.70 and 0.80; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 0.80; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.
- LOS 'F'

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the 100th Highest Hour (100HH).

Boxsells Lane on-ramp to Princes Highway NB as well as the Lamonds Lane on-ramp to Princes Highway SB is stop sign controlled.

Princes Highway NB deceleration lane is 190m in length and Princes Highway SB deceleration lane is 150m.

Median storage length is 6m.

Boxsells Lane and Lamonds Lane is 60km/h, and Princes Highway is 100km/h.

The intersection remains within Degree of Saturation (DoS) limits in all scenarios.

The Level of Service (LoS) of the intersection fails by year 2031 in the Princes Highway northern approach. This is a result of high forecasted through traffic volumes on the Princes Highway and volumes utilising the right turn into Boxsells Lane.

Intersection Performance - 100th Highest Hour (100HH)

Year 2021 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	5	0.00	7.8	0	LOS A
	Through	597	0.15	0	0	LOS A
Median Storage (E)	Through	1	0.01	6.8	0	LOS A
	Right	1	0.01	8.4	0	LOS A
Princes Highway (N)	Right	1	0.00	12	0	LOS A
Boxsells Lane (W)	Left	1	0.00	9.4	0	LOS A
East Section						
Princes Highway (S)	Right	1	0.00	18.3	0	LOS B
Lamonds Lane (E)	Left	1	0.00	10.9	0	LOS A
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	985	0.25	0	0	LOS A
Median Storage (W)	Through	1	0.01	15.2	0.1	LOS A
	Right	1	0.01	19.4	0.1	LOS B
Intersection	**All**	**1598**	**0.25**	**0.1**	**0.1**	**NA**

Year 2021 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	7	0.00	7.8	0	LOS A
	Through	1165	0.30	0	0	LOS A
Median Storage (E)	Through	1	0.02	22.5	0.1	LOS B
	Right	1	0.02	29.1	0.1	LOS C
Princes Highway (N)	Right	2	0.01	23.7	0.1	LOS B
Boxsells Lane (W)	Left	1	0.00	11.8	0	LOS A
East Section						
Princes Highway (S)	Right	1	0.01	27.6	0.1	LOS B
Lamonds Lane (E)	Left	1	0.00	12.4	0	LOS A
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1275	0.33	0	0	LOS A
Median Storage (W)	Through	1	0.02	28.4	0.2	LOS B
	Right	1	0.02	37.5	0.2	LOS C
Intersection	**All**	**2458**	**0.33**	**0.2**	**0.2**	**NA**

Year 2026 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	5	0.00	7.8	0	LOS A
	Through	652	0.17	0	0	LOS A
Median Storage (E)	Through	1	0.01	7.8	0.1	LOS A
	Right	1	0.01	9.6	0.1	LOS A
Princes Highway (N)	Right	11	0.02	12.9	0.2	LOS A
Boxsells Lane (W)	Left	1	0.00	9.6	0	LOS A
East Section						
Princes Highway (S)	Right	1	0.01	21.2	0	LOS B
Lamonds Lane (E)	Left	1	0.00	11.4	0	LOS A
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1097	0.28	0	0	LOS A
Median Storage (W)	Through	1	0.01	19.2	0.1	LOS B
	Right	1	0.01	24.8	0.1	LOS B
Intersection	**All**	**1774**	**0.281**	**0.1**	**0.2**	**NA**

Year 2026 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	7	0.00	7.8	0	LOS A
	Through	1271	0.33	0	0	LOS A
Median Storage (E)	Through	1	0.02	29.5	0.2	LOS C
	Right	1	0.02	38.5	0.2	LOS C
Princes Highway (N)	Right	24	0.16	29.5	1.3	LOS C
Boxsells Lane (W)	Left	1	0.00	12.4	0	LOS A
East Section						
Princes Highway (S)	Right	1	0.01	30.7	0.1	LOS C
Lamonds Lane (E)	Left	1	0.02	12.8	0	LOS A
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1339	0.34	0	0	LOS A
Median Storage (W)	Through	1	0.02	32.8	0.2	LOS C
	Right	1	0.02	43.8	0.2	LOS D
Intersection	**All**	**2650**	**0.34**	**0.2**	**1.3**	**NA**

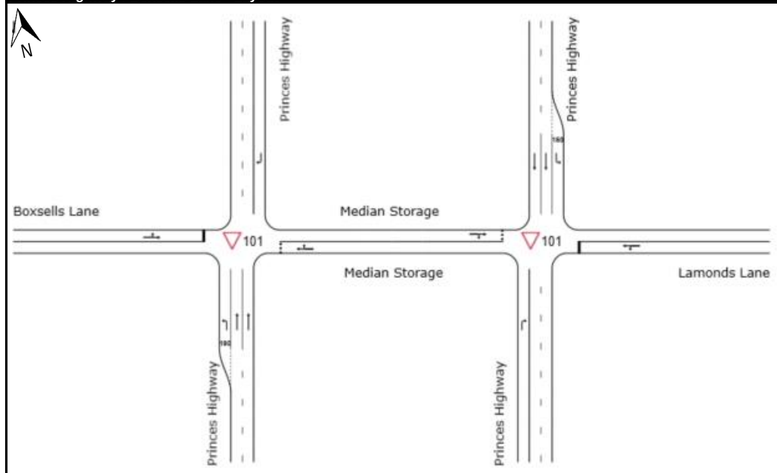
Year 2031 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	6	0.00	7.8	0	LOS A
	Through	726	0.19	0	0	LOS A
Median Storage (E)	Through	1	0.01	9.5	0.1	LOS A
	Right	1	0.01	11.8	0.1	LOS A
Princes Highway (N)	Right	36	0.09	14.3	0.8	LOS A
Boxsells Lane (W)	Left	1	0.00	9.9	0	LOS A
East Section						
Princes Highway (S)	Right	1	0.01	26.7	0.1	LOS B
Lamonds Lane (E)	Left	1	0.00	12.3	0	LOS A
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1254	0.32	0	0	LOS A
Median Storage (W)	Through	1	0.02	27.1	0.2	LOS B
	Right	1	0.02	35.7	0.2	LOS C
Intersection	**All**	**2031**	**0.32**	**0.2**	**0.8**	**NA**

Year 2031 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	8	0.01	7.8	0	LOS A
	Through	1419	0.36	0	0	LOS A
Median Storage (E)	Through	1	0.03	46.7	0.3	LOS D
	Right	1	0.03	62.8	0.3	LOS E
Princes Highway (N)	Right	91	0.80	74.9	9.9	LOS F
Boxsells Lane (W)	Left	1	0.02	13.4	0	LOS A
East Section						
Princes Highway (S)	Right	1	0.01	30.9	0.1	LOS C
Lamonds Lane (E)	Left	1	0.00	12.8	0	LOS A
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1343	0.34	0	0	LOS A
Median Storage (W)	Through	1	0.02	33.1	0.2	LOS C
	Right	1	0.02	44.3	0.2	LOS D
Intersection	**All**	**2870**	**0.344**	**0.2**	**9.9**	**NA**

Princes Highway / Boxsells Lane - Layout



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model May 2020 version (Node #20528).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.70 and 0.80; and
- the 95th percentile queue length is ±10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 0.80; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.
- LOS 'F'

The design years are 2021, 2026, 2031, 2036, and 2041.

Model Description

The traffic volumes represent the AM and PM peak hour for the 100th Highest Hour (100HH).

Boxsells Lane on-ramp to Princes Highway NB as well as the Lamonds Lane on-ramp to Princes Highway SB is stop sign controlled.

Princes Highway NB deceleration lane is 190m in length and Princes Highway SB deceleration lane is 150m.

Median storage length is 6m.

Boxsells Lane and Lamonds Lane is 60km/h, and Princes Highway is 100km/h.

Key Findings

The intersection remains within Degree of Saturation (DoS) limits in all scenarios until year 2036 PM peak period.

The Level of Service (LoS) of the intersection fails by year 2031 in the Princes Highway northern approach, year 2036 in the Median Storage eastern approach and year 2041 in the Median Storage western approach. This is a result of high forecasted through traffic volumes on the Princes Highway and volumes utilising the right turn into Boxsells Lane.

Intersection Performance - 100th Highest Hour (100HH)

Year 2036 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	7	0.00	7.8	0	LOS A
	Through	781	0.20	0	0	LOS A
Median Storage (E)	Through	1	0.01	11	0.1	LOS A
	Right	1	0.01	13.7	0.1	LOS A
Princes Highway (N)	Right	54	0.14	15.5	1.3	LOS B
Boxsells Lane (W)	Left	1	0.01	10.1	0	LOS A
East Section						
Princes Highway (S)	Right	1	0.01	34	0.1	LOS C
Lamonds Lane (E)	Left	1	0.00	13.2	0	LOS A
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1398	0.36	0	0	LOS A
Median Storage (W)	Through	1	0.03	37.6	0.2	LOS C
	Right	1	0.03	50.7	0.2	LOS D
Intersection	**All**	**2249**	**0.36**	**0.2**	**1.3**	**NA**

Year 2041 AM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	13	0.01	7.8	0	LOS A
	Through	863	0.22	0	0	LOS A
Median Storage (E)	Through	1	0.01	14.3	0.1	LOS A
	Right	1	0.01	19.6	0.1	LOS B
Princes Highway (N)	Right	98	0.30	18.8	3.2	LOS B
Boxsells Lane (W)	Left	51	0.07	10.7	0.7	LOS A
East Section						
Princes Highway (S)	Right	1	0.01	34.1	0.1	LOS C
Lamonds Lane (E)	Left	1	0.02	13.3	0.1	LOS A
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1401	0.36	0	0	LOS A
Median Storage (W)	Through	1	0.03	37.9	0.2	LOS C
	Right	1	0.03	51.1	0.2	LOS D
Intersection	**All**	**2434**	**0.359**	**0.2**	**3.2**	**NA**

Year 2036 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	11	0.01	7.8	0	LOS A
	Through	1562	0.40	0.1	0	LOS A
Median Storage (E)	Through	1	0.05	66.6	0.4	LOS E
	Right	1	0.05	91.6	0.4	LOS F
Princes Highway (N)	Right	91	1.11	226.6	30.9	LOS F
Boxsells Lane (W)	Left	1	0.03	14.5	0	LOS B
East Section						
Princes Highway (S)	Right	1	0.01	36	0.1	LOS C
Lamonds Lane (E)	Left	1	0.00	13.5	0	LOS A
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1432	0.37	0	0	LOS A
Median Storage (W)	Through	1	0.03	40.7	0.2	LOS C
	Right	1	0.03	55.3	0.2	LOS D
Intersection	**All**	**3105**	**1.11**	**0.2**	**30.9**	**NA**

Year 2041 PM Peak Hour

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
West Section						
Princes Highway (S)	Left	27	0.02	7.8	0	LOS A
	Through	1646	0.42	0.1	0	LOS A
Median Storage (E)	Through	1	0.08	95.4	0.6	LOS F
	Right	1	0.08	154.6	0.6	LOS F
Princes Highway (N)	Right	141	2.18	1120.5	152.3	LOS F
Boxsells Lane (W)	Left	65	0.17	16.4	1.6	LOS B
East Section						
Princes Highway (S)	Right	1	0.02	54.9	0.1	LOS D
Lamonds Lane (E)	Left	1	0.00	15.4	0	LOS B
Princes Highway (N)	Left	1	0.00	7.8	0	LOS A
	Through	1647	0.42	0.1	0	LOS A
Median Storage (W)	Through	1	0.05	69.8	0	LOS E
	Right	1	0.05	98.8	0.4	LOS F
Intersection	**All**	**3535**	**2.18**	**0.3**	**152.3**	**NA**

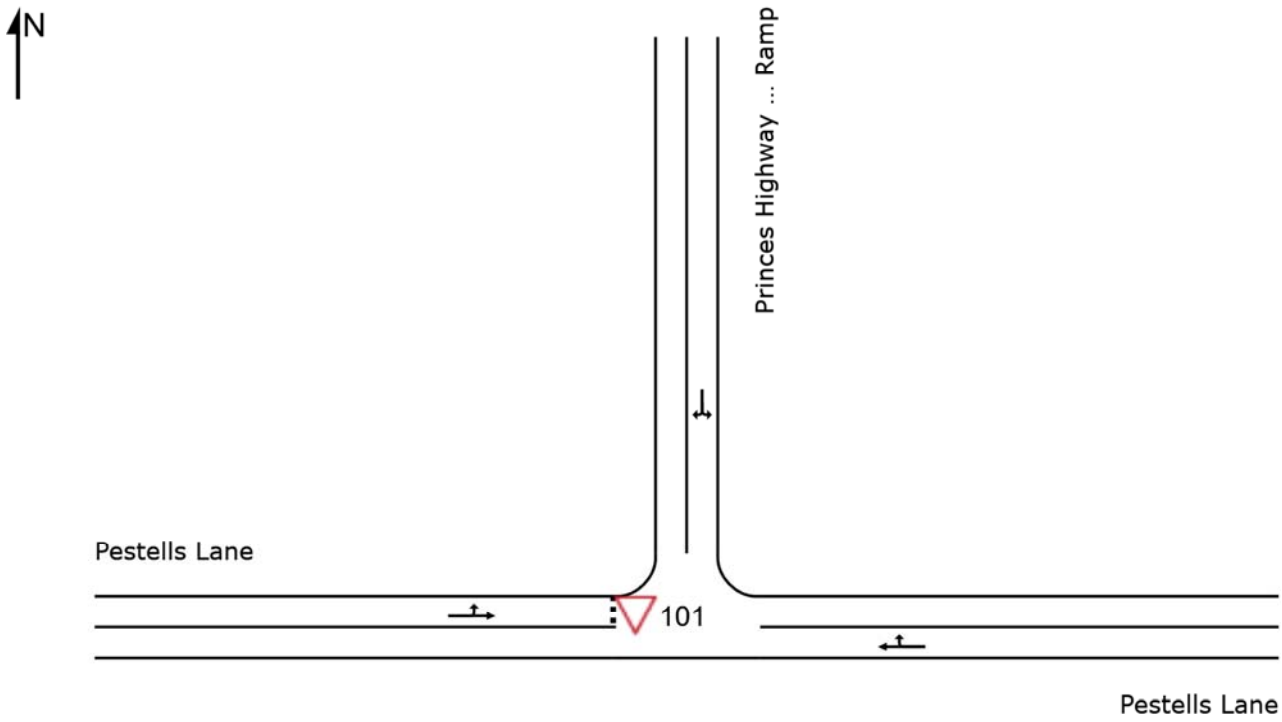
Appendix J: Pestells Lane Interchange & Boxsells Lane Intersection SIDRA Outputs

Revised Analysis based on updated May 2020 TRACKS models

SITE LAYOUT

Site: 101 [1 - 2021_AAST_AM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

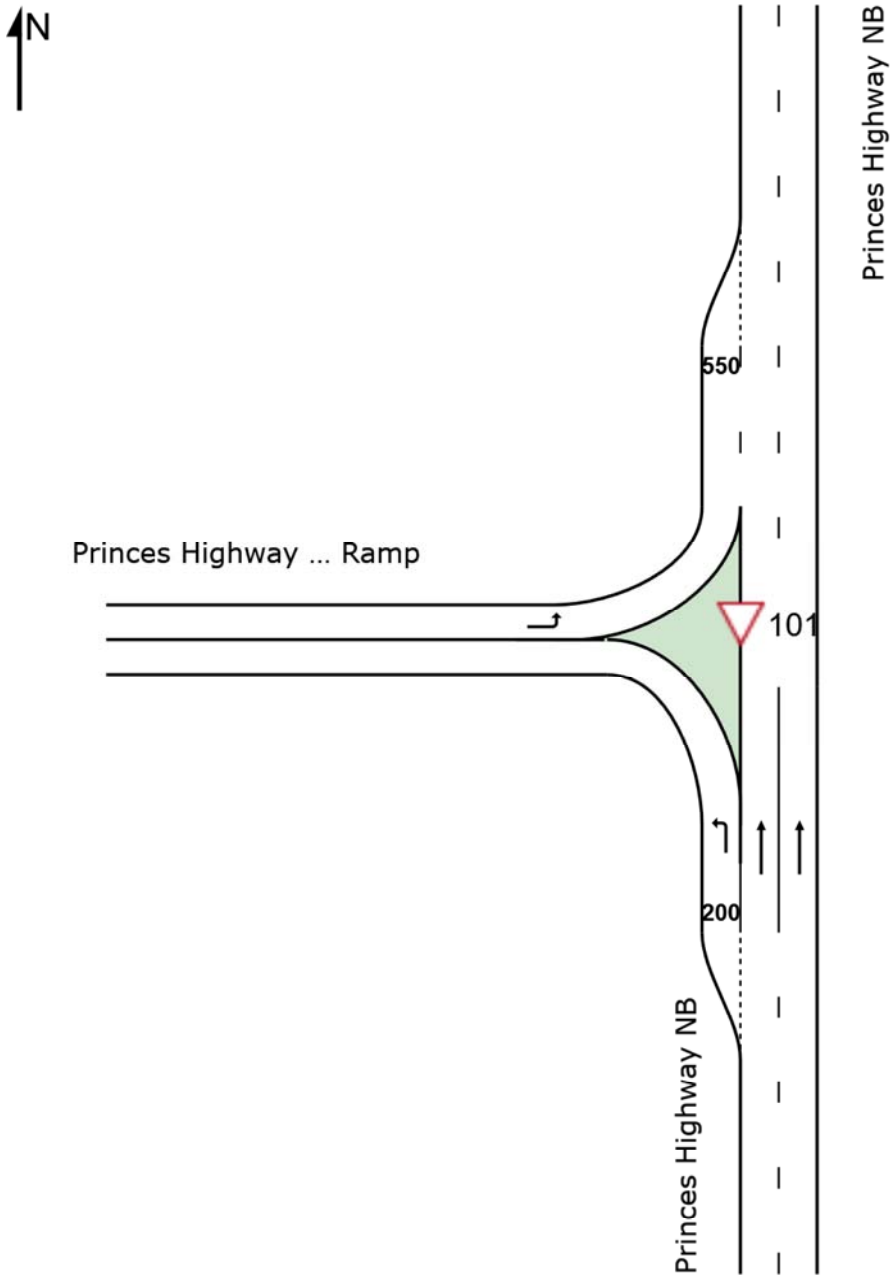


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Project: P:\P4627 Moss Vale Road North URA Traffic Study\Technical Work\Models\Pestells Lane Interchange_Meroo Road\Pestells Lane Exchange Intersection\P4516 Pestells Lane Interchange - AAST and 100HH.sip8

SITE LAYOUT

Site: 101 [2 - 2021_AAST_AM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

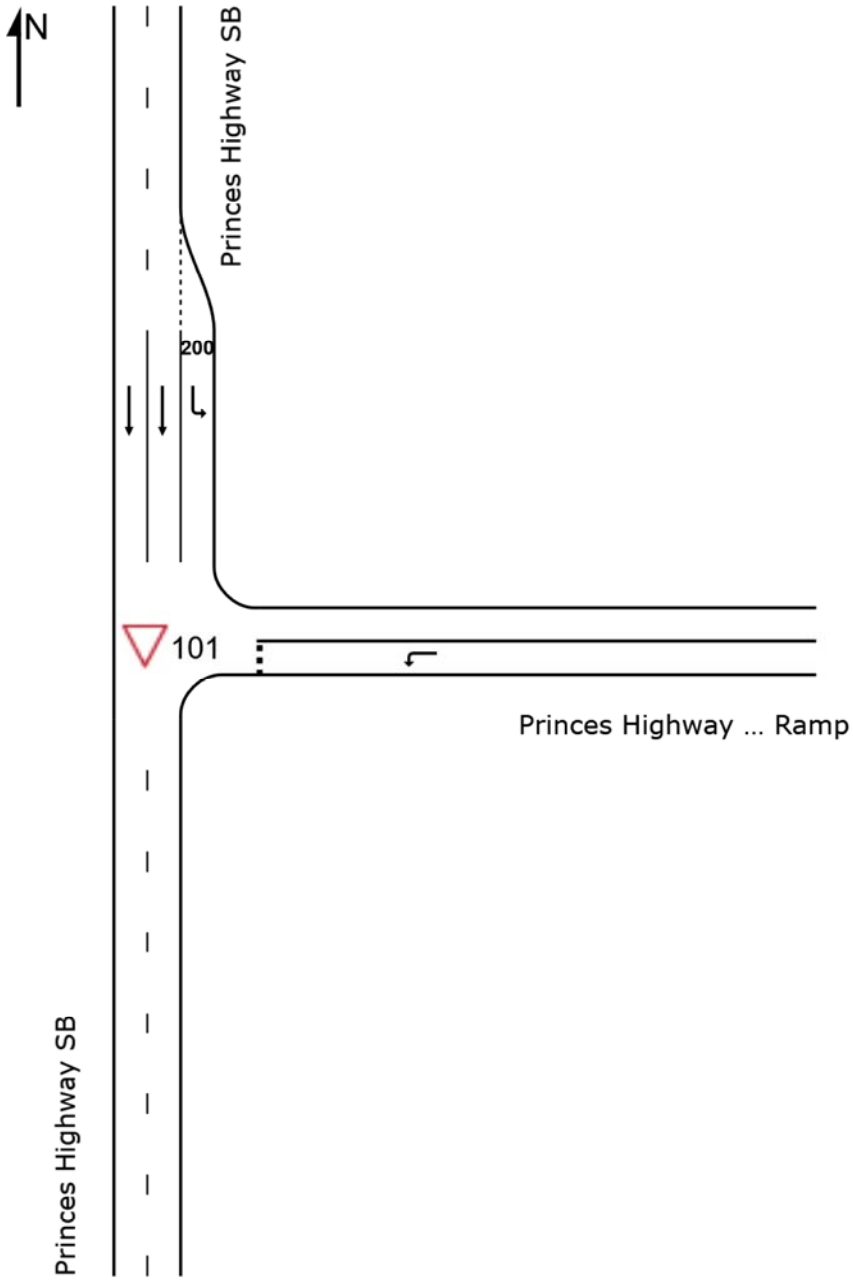


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SITE LAYOUT

Site: 101 [3 - 2021_AAST_AM]

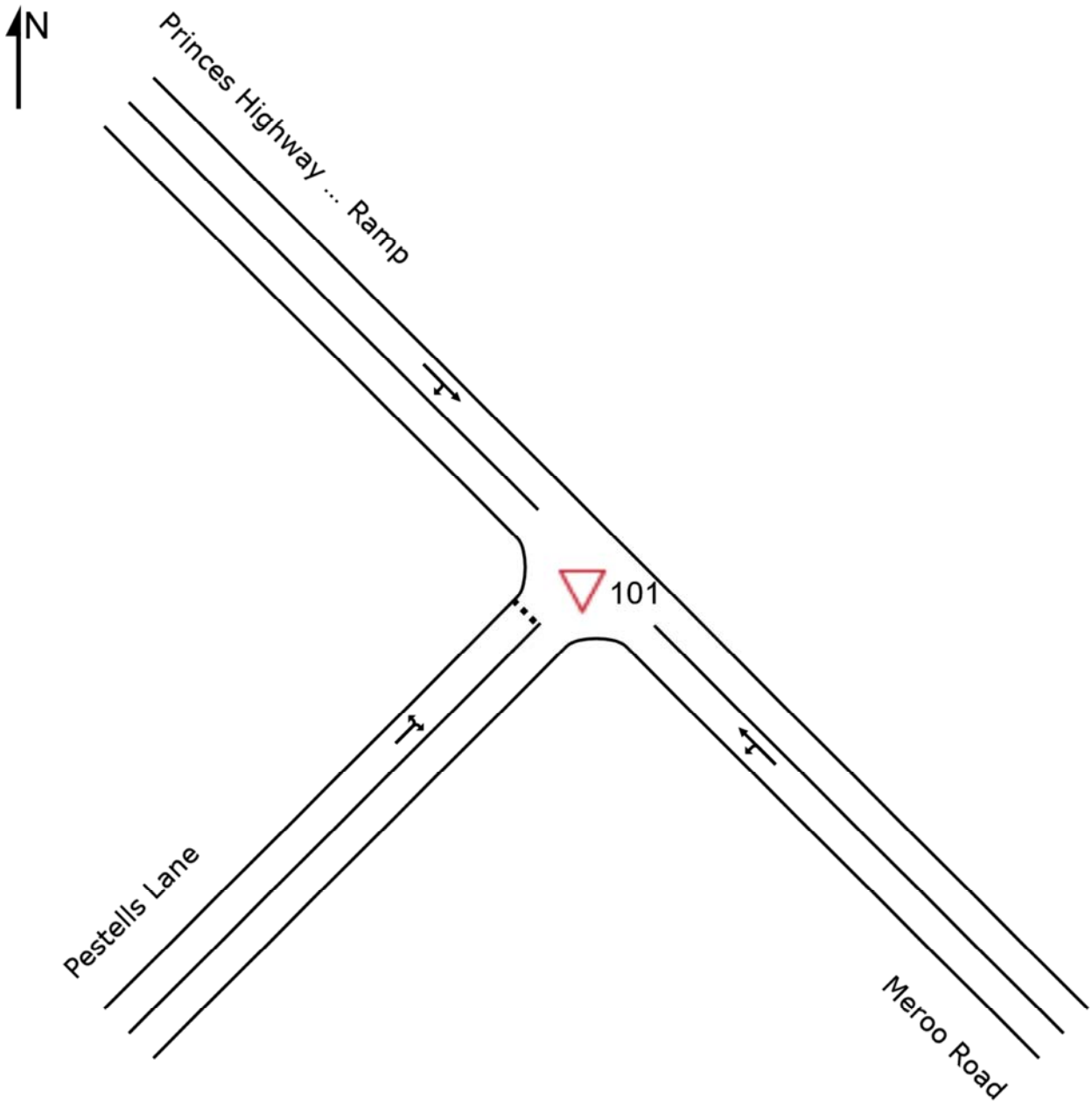
Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)



SITE LAYOUT

Site: 101 [4 - 2021_AAST_AM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)



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Project: P:\P4627 Moss Vale Road North URA Traffic Study\Technical Work\Models\Pestells Lane Interchange_Meroo Road\Pestells Lane Exchange Intersection\P4516 Pestells Lane Interchange - AAST and 100HH.sip8

MOVEMENT SUMMARY

Site: 101 [1 - 2021_AAST_AM]

Network: N101 [2021_AAST_AM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	17	0.0	17	0.0	0.051	0.0	LOS A	0.0	0.0	0.00	0.50	0.00	55.1
6	R2	79	0.0	79	0.0	0.051	5.4	LOS A	0.0	0.0	0.00	0.50	0.00	49.3
Approach		96	0.0	96	0.0	0.051	4.5	NA	0.0	0.0	0.00	0.50	0.00	51.2
North: Princes Highway NB Ramp														
7	L2	24	0.0	24	0.0	0.028	5.7	LOS A	0.0	0.3	0.17	0.52	0.17	38.5
9	R2	24	0.0	24	0.0	0.028	5.7	LOS A	0.0	0.3	0.17	0.52	0.17	49.7
Approach		48	0.0	48	0.0	0.028	5.7	NA	0.0	0.3	0.17	0.52	0.17	46.8
West: Pestells Lane														
10	L2	1	0.0	1	0.0	0.047	5.8	LOS A	0.1	0.5	0.23	0.52	0.23	51.6
11	T1	55	0.0	55	0.0	0.047	4.6	LOS A	0.1	0.5	0.23	0.52	0.23	51.6
Approach		56	0.0	56	0.0	0.047	4.7	LOS A	0.1	0.5	0.23	0.52	0.23	51.6
All Vehicles		200	0.0	200	0.0	0.051	4.8	NA	0.1	0.5	0.10	0.51	0.10	50.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2021_AAST_PM]

Network: N101 [2021_AAST_PM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	17	0.0	17	0.0	0.068	0.0	LOS A	0.0	0.0	0.00	0.53	0.00	54.9
6	R2	111	0.0	111	0.0	0.068	5.4	LOS A	0.0	0.0	0.00	0.53	0.00	48.8
Approach		127	0.0	127	0.0	0.068	4.7	NA	0.0	0.0	0.00	0.53	0.00	50.4
North: Princes Highway NB Ramp														
7	L2	24	0.0	24	0.0	0.036	5.9	LOS A	0.1	0.5	0.22	0.52	0.22	38.0
9	R2	37	0.0	37	0.0	0.036	5.8	LOS A	0.1	0.5	0.22	0.52	0.22	49.5
Approach		61	0.0	61	0.0	0.036	5.8	NA	0.1	0.5	0.22	0.52	0.22	47.4
West: Pestells Lane														
10	L2	1	0.0	1	0.0	0.041	5.9	LOS A	0.1	0.4	0.26	0.53	0.26	51.4
11	T1	45	0.0	45	0.0	0.041	4.8	LOS A	0.1	0.4	0.26	0.53	0.26	51.4
Approach		46	0.0	46	0.0	0.041	4.8	LOS A	0.1	0.4	0.26	0.53	0.26	51.4
All Vehicles		235	0.0	235	0.0	0.068	5.0	NA	0.1	0.5	0.11	0.52	0.11	49.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2021_AAST_AM]

Network: N101 [2021_AAST_AM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	48	0.0	48	0.0	0.022	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	524	0.0	524	0.0	0.112	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	100.0
Approach		573	0.0	573	0.0	0.112	0.5	NA	0.0	0.0	0.00	0.04	0.00	96.5
West: Princes Highway NB Ramp														
10	L2	80	0.0	80	0.0	0.043	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		80	0.0	80	0.0	0.043	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		653	0.0	653	0.0	0.112	1.1	NA	0.0	0.0	0.00	0.10	0.00	90.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2021_AAST_PM]

Network: N101 [2021_AAST_PM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	61	0.0	61	0.0	0.027	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	959	0.0	959	0.0	0.205	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		1020	0.0	1020	0.0	0.205	0.4	NA	0.0	0.0	0.00	0.03	0.00	97.5
West: Princes Highway NB Ramp														
10	L2	112	0.0	112	0.0	0.060	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		112	0.0	112	0.0	0.060	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		1132	0.0	1132	0.0	0.205	0.9	NA	0.0	0.0	0.00	0.08	0.00	92.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2021_AAST_AM]

Network: N101 [2021_AAST_AM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	41	0.0	41	0.0	0.039	7.2	LOS A	0.1	0.4	0.45	0.64	0.45	53.6
Approach		41	0.0	41	0.0	0.039	7.2	LOS A	0.1	0.4	0.45	0.64	0.45	53.6
North: Princes Highway SB														
7	L2	169	0.0	169	0.0	0.091	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	905	0.0	905	0.0	0.232	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		1075	0.0	1075	0.0	0.232	0.9	NA	0.0	0.0	0.00	0.09	0.00	94.4
All Vehicles		1116	0.0	1116	0.0	0.232	1.1	NA	0.1	0.4	0.02	0.11	0.02	92.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2021_AAST_PM]

Network: N101 [2021_AAST_PM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	29	0.0	29	0.0	0.028	7.2	LOS A	0.0	0.3	0.45	0.63	0.45	53.6
Approach		29	0.0	29	0.0	0.028	7.2	LOS A	0.0	0.3	0.45	0.63	0.45	53.6
North: Princes Highway SB														
7	L2	165	0.0	165	0.0	0.089	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	924	0.0	924	0.0	0.237	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		1089	0.0	1089	0.0	0.237	0.9	NA	0.0	0.0	0.00	0.09	0.00	94.6
All Vehicles		1119	0.0	1119	0.0	0.237	1.0	NA	0.0	0.3	0.01	0.10	0.01	92.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
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Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2021_AAST_AM]

Network: N101 [2021_AAST_AM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	95	0.0	95	0.0	0.052	5.5	LOS A	0.0	0.0	0.00	0.56	0.00	42.3
22	T1	2	0.0	2	0.0	0.052	0.0	LOS A	0.0	0.0	0.00	0.56	0.00	42.3
Approach		97	0.0	97	0.0	0.052	5.4	NA	0.0	0.0	0.00	0.56	0.00	42.3
NorthWest: Princes Highway SB Ramp														
28	T1	169	0.0	169	0.0	0.088	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
29	R2	1	0.0	1	0.0	0.088	5.7	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
Approach		171	0.0	171	0.0	0.088	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
SouthWest: Pestells Lane														
30	L2	39	0.0	39	0.0	0.039	5.5	LOS A	0.1	0.4	0.01	0.58	0.01	47.1
32	R2	16	0.0	16	0.0	0.039	6.2	LOS A	0.1	0.4	0.01	0.58	0.01	48.1
Approach		55	0.0	55	0.0	0.039	5.7	LOS A	0.1	0.4	0.01	0.58	0.01	47.5
All Vehicles		322	0.0	322	0.0	0.088	2.6	NA	0.1	0.4	0.00	0.27	0.00	52.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2021_AAST_PM]

Network: N101 [2021_AAST_PM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	127	0.0	127	0.0	0.069	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.069	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		128	0.0	128	0.0	0.069	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB Ramp														
28	T1	165	0.0	165	0.0	0.085	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
29	R2	1	0.0	1	0.0	0.085	5.8	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
Approach		166	0.0	166	0.0	0.085	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
SouthWest: Pestells Lane														
30	L2	28	0.0	28	0.0	0.033	5.5	LOS A	0.0	0.3	0.00	0.58	0.00	47.0
32	R2	17	0.0	17	0.0	0.033	6.3	LOS A	0.0	0.3	0.00	0.58	0.00	48.0
Approach		45	0.0	45	0.0	0.033	5.8	LOS A	0.0	0.3	0.00	0.58	0.00	47.5
All Vehicles		340	0.0	340	0.0	0.085	2.9	NA	0.0	0.3	0.00	0.30	0.00	51.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2021_100HH_AM]

Network: N101 [2021_100HH_AM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	16	0.0	16	0.0	0.051	0.0	LOS A	0.0	0.0	0.00	0.51	0.00	55.1
6	R2	80	0.0	80	0.0	0.051	5.4	LOS A	0.0	0.0	0.00	0.51	0.00	49.2
Approach		96	0.0	96	0.0	0.051	4.6	NA	0.0	0.0	0.00	0.51	0.00	51.0
North: Princes Highway NB Ramp														
7	L2	24	0.0	24	0.0	0.027	5.7	LOS A	0.0	0.3	0.17	0.52	0.17	38.5
9	R2	23	0.0	23	0.0	0.027	5.7	LOS A	0.0	0.3	0.17	0.52	0.17	49.7
Approach		47	0.0	47	0.0	0.027	5.7	NA	0.0	0.3	0.17	0.52	0.17	46.7
West: Pestells Lane														
10	L2	1	0.0	1	0.0	0.044	5.8	LOS A	0.1	0.4	0.22	0.52	0.22	51.6
11	T1	51	0.0	51	0.0	0.044	4.6	LOS A	0.1	0.4	0.22	0.52	0.22	51.6
Approach		52	0.0	52	0.0	0.044	4.7	LOS A	0.1	0.4	0.22	0.52	0.22	51.6
All Vehicles		195	0.0	195	0.0	0.051	4.9	NA	0.1	0.4	0.10	0.51	0.10	50.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2021_100HH_PM]

Network: N101 [2021_100HH_PM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	20	0.0	20	0.0	0.086	0.0	LOS A	0.0	0.0	0.00	0.53	0.00	54.8
6	R2	141	0.0	141	0.0	0.086	5.5	LOS A	0.0	0.0	0.00	0.53	0.00	48.8
Approach		161	0.0	161	0.0	0.086	4.8	NA	0.0	0.0	0.00	0.53	0.00	50.2
North: Princes Highway NB Ramp														
7	L2	24	0.0	24	0.0	0.040	6.0	LOS A	0.1	0.5	0.26	0.52	0.26	37.7
9	R2	42	0.0	42	0.0	0.040	5.9	LOS A	0.1	0.5	0.26	0.52	0.26	49.4
Approach		66	0.0	66	0.0	0.040	5.9	NA	0.1	0.5	0.26	0.52	0.26	47.4
West: Pestells Lane														
10	L2	1	0.0	1	0.0	0.052	6.0	LOS A	0.1	0.5	0.30	0.55	0.30	51.2
11	T1	56	0.0	56	0.0	0.052	5.0	LOS A	0.1	0.5	0.30	0.55	0.30	51.2
Approach		57	0.0	57	0.0	0.052	5.0	LOS A	0.1	0.5	0.30	0.55	0.30	51.2
All Vehicles		284	0.0	284	0.0	0.086	5.1	NA	0.1	0.5	0.12	0.53	0.12	49.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2021_100HH_AM]

Network: N101 [2021_100HH_AM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	46	0.0	46	0.0	0.021	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	521	0.0	521	0.0	0.112	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	100.0
Approach		567	0.0	567	0.0	0.112	0.5	NA	0.0	0.0	0.00	0.04	0.00	96.6
West: Princes Highway NB Ramp														
10	L2	81	0.0	81	0.0	0.044	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		81	0.0	81	0.0	0.044	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		648	0.0	648	0.0	0.112	1.1	NA	0.0	0.0	0.00	0.10	0.00	90.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2021_100HH_PM]

Network: N101 [2021_100HH_PM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	65	0.0	65	0.0	0.029	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	1031	0.0	1031	0.0	0.221	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		1096	0.0	1096	0.0	0.221	0.4	NA	0.0	0.0	0.00	0.03	0.00	97.5
West: Princes Highway NB Ramp														
10	L2	142	0.0	142	0.0	0.077	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		142	0.0	142	0.0	0.077	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		1238	0.0	1238	0.0	0.221	1.0	NA	0.0	0.0	0.00	0.09	0.00	91.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2021_100HH_AM]

Network: N101 [2021_100HH_AM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	38	0.0	38	0.0	0.034	7.0	LOS A	0.1	0.4	0.42	0.62	0.42	53.7
Approach		38	0.0	38	0.0	0.034	7.0	LOS A	0.1	0.4	0.42	0.62	0.42	53.7
North: Princes Highway SB														
7	L2	157	0.0	157	0.0	0.084	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	828	0.0	828	0.0	0.212	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		985	0.0	985	0.0	0.212	0.9	NA	0.0	0.0	0.00	0.09	0.00	94.4
All Vehicles		1023	0.0	1023	0.0	0.212	1.1	NA	0.1	0.4	0.02	0.11	0.02	91.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2021_100HH_PM]

Network: N101 [2021_100HH_PM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	51	0.0	51	0.0	0.052	7.7	LOS A	0.1	0.6	0.49	0.68	0.49	53.4
Approach		51	0.0	51	0.0	0.052	7.7	LOS A	0.1	0.6	0.49	0.68	0.49	53.4
North: Princes Highway SB														
7	L2	205	0.0	205	0.0	0.111	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1067	0.0	1067	0.0	0.274	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1273	0.0	1273	0.0	0.274	0.9	NA	0.0	0.0	0.00	0.09	0.00	94.2
All Vehicles		1323	0.0	1323	0.0	0.274	1.2	NA	0.1	0.6	0.02	0.12	0.02	91.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2021_100HH_AM]

Network: N101 [2021_100HH_AM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	96	0.0	96	0.0	0.053	5.5	LOS A	0.0	0.0	0.00	0.56	0.00	42.3
22	T1	2	0.0	2	0.0	0.053	0.0	LOS A	0.0	0.0	0.00	0.56	0.00	42.3
Approach		98	0.0	98	0.0	0.053	5.4	NA	0.0	0.0	0.00	0.56	0.00	42.3
NorthWest: Princes Highway SB Ramp														
28	T1	157	0.0	157	0.0	0.081	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
29	R2	1	0.0	1	0.0	0.081	5.7	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
Approach		158	0.0	158	0.0	0.081	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
SouthWest: Pestells Lane														
30	L2	36	0.0	36	0.0	0.036	5.5	LOS A	0.1	0.4	0.01	0.58	0.01	47.1
32	R2	15	0.0	15	0.0	0.036	6.2	LOS A	0.1	0.4	0.01	0.58	0.01	48.2
Approach		51	0.0	51	0.0	0.036	5.7	LOS A	0.1	0.4	0.01	0.58	0.01	47.5
All Vehicles		306	0.0	306	0.0	0.081	2.7	NA	0.1	0.4	0.00	0.28	0.00	52.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2021_100HH_PM]

Network: N101 [2021_100HH_PM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	161	0.0	161	0.0	0.095	5.5	LOS A	0.0	0.0	0.00	0.53	0.00	43.1
22	T1	16	0.0	16	0.0	0.095	0.0	LOS A	0.0	0.0	0.00	0.53	0.00	43.1
Approach		177	0.0	177	0.0	0.095	5.0	NA	0.0	0.0	0.00	0.53	0.00	43.1
NorthWest: Princes Highway SB Ramp														
28	T1	206	0.0	206	0.0	0.107	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
29	R2	1	0.0	1	0.0	0.107	6.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
Approach		207	0.0	207	0.0	0.107	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
SouthWest: Pestells Lane														
30	L2	35	0.0	35	0.0	0.043	5.6	LOS A	0.1	0.4	0.04	0.58	0.04	46.7
32	R2	21	0.0	21	0.0	0.043	6.6	LOS A	0.1	0.4	0.04	0.58	0.04	47.9
Approach		56	0.0	56	0.0	0.043	6.0	LOS A	0.1	0.4	0.04	0.58	0.04	47.3
All Vehicles		440	0.0	440	0.0	0.107	2.8	NA	0.1	0.4	0.01	0.29	0.01	52.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2026_AAST_AM]

Network: N101 [2026_AAST_AM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	20	0.0	20	0.0	0.052	0.0	LOS A	0.0	0.0	0.00	0.48	0.00	55.3
6	R2	78	0.0	78	0.0	0.052	5.4	LOS A	0.0	0.0	0.00	0.48	0.00	49.6
Approach		98	0.0	98	0.0	0.052	4.3	NA	0.0	0.0	0.00	0.48	0.00	51.7
North: Princes Highway NB Ramp														
7	L2	28	0.0	28	0.0	0.029	5.7	LOS A	0.0	0.3	0.16	0.52	0.16	38.5
9	R2	23	0.0	23	0.0	0.029	5.7	LOS A	0.0	0.3	0.16	0.52	0.16	49.7
Approach		52	0.0	52	0.0	0.029	5.7	NA	0.0	0.3	0.16	0.52	0.16	46.4
West: Pestells Lane														
10	L2	20	0.0	20	0.0	0.064	5.8	LOS A	0.1	0.7	0.21	0.53	0.21	51.2
11	T1	60	0.0	60	0.0	0.064	4.7	LOS A	0.1	0.7	0.21	0.53	0.21	51.2
Approach		80	0.0	80	0.0	0.064	4.9	LOS A	0.1	0.7	0.21	0.53	0.21	51.2
All Vehicles		229	0.0	229	0.0	0.064	4.9	NA	0.1	0.7	0.11	0.51	0.11	50.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2026_AAST_PM]

Network: N101 [2026_AAST_PM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	20	0.0	20	0.0	0.075	0.0	LOS A	0.0	0.0	0.00	0.52	0.00	54.9
6	R2	120	0.0	120	0.0	0.075	5.4	LOS A	0.0	0.0	0.00	0.52	0.00	49.0
Approach		140	0.0	140	0.0	0.075	4.7	NA	0.0	0.0	0.00	0.52	0.00	50.6
North: Princes Highway NB Ramp														
7	L2	28	0.0	28	0.0	0.038	5.9	LOS A	0.1	0.5	0.23	0.51	0.23	38.0
9	R2	37	0.0	37	0.0	0.038	5.9	LOS A	0.1	0.5	0.23	0.51	0.23	49.5
Approach		65	0.0	65	0.0	0.038	5.9	NA	0.1	0.5	0.23	0.51	0.23	47.0
West: Pestells Lane														
10	L2	22	0.0	22	0.0	0.058	5.9	LOS A	0.1	0.6	0.25	0.54	0.25	50.9
11	T1	48	0.0	48	0.0	0.058	4.9	LOS A	0.1	0.6	0.25	0.54	0.25	50.9
Approach		71	0.0	71	0.0	0.058	5.2	LOS A	0.1	0.6	0.25	0.54	0.25	50.9
All Vehicles		276	0.0	276	0.0	0.075	5.1	NA	0.1	0.6	0.12	0.52	0.12	49.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2026_AAST_AM]

Network: N101 [2026_AAST_AM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	52	0.0	52	0.0	0.023	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	558	0.0	558	0.0	0.119	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		609	0.0	609	0.0	0.119	0.5	NA	0.0	0.0	0.00	0.04	0.00	96.5
West: Princes Highway NB Ramp														
10	L2	98	0.0	98	0.0	0.053	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		98	0.0	98	0.0	0.053	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		707	0.0	707	0.0	0.119	1.2	NA	0.0	0.0	0.00	0.11	0.00	89.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2026_AAST_PM]

Network: N101 [2026_AAST_PM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	65	0.0	65	0.0	0.029	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	1036	0.0	1036	0.0	0.222	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		1101	0.0	1101	0.0	0.222	0.4	NA	0.0	0.0	0.00	0.03	0.00	97.5
West: Princes Highway NB Ramp														
10	L2	142	0.0	142	0.0	0.077	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		142	0.0	142	0.0	0.077	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		1243	0.0	1243	0.0	0.222	1.0	NA	0.0	0.0	0.00	0.09	0.00	91.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2026_AAST_AM]

Network: N101 [2026_AAST_AM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	49	0.0	49	0.0	0.050	7.5	LOS A	0.1	0.5	0.48	0.67	0.48	53.5
Approach		49	0.0	49	0.0	0.050	7.5	LOS A	0.1	0.5	0.48	0.67	0.48	53.5
North: Princes Highway SB														
7	L2	176	0.0	176	0.0	0.095	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1017	0.0	1017	0.0	0.261	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1193	0.0	1193	0.0	0.261	0.8	NA	0.0	0.0	0.00	0.08	0.00	94.8
All Vehicles		1242	0.0	1242	0.0	0.261	1.1	NA	0.1	0.5	0.02	0.11	0.02	92.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2026_AAST_PM]

Network: N101 [2026_AAST_PM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	37	0.0	37	0.0	0.037	7.4	LOS A	0.1	0.4	0.47	0.66	0.47	53.5
Approach		37	0.0	37	0.0	0.037	7.4	LOS A	0.1	0.4	0.47	0.66	0.47	53.5
North: Princes Highway SB														
7	L2	163	0.0	163	0.0	0.088	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1001	0.0	1001	0.0	0.257	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1164	0.0	1164	0.0	0.257	0.8	NA	0.0	0.0	0.00	0.08	0.00	95.0
All Vehicles		1201	0.0	1201	0.0	0.257	1.0	NA	0.1	0.4	0.01	0.10	0.01	93.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2026_AAST_AM]

Network: N101 [2026_AAST_AM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	99	0.0	99	0.0	0.058	5.5	LOS A	0.0	0.0	0.00	0.53	0.00	43.1
22	T1	9	0.0	9	0.0	0.058	0.0	LOS A	0.0	0.0	0.00	0.53	0.00	43.1
Approach		108	0.0	108	0.0	0.058	5.1	NA	0.0	0.0	0.00	0.53	0.00	43.1
NorthWest: Princes Highway SB Ramp														
28	T1	176	0.0	176	0.0	0.091	0.0	LOS A	0.0	0.0	0.01	0.01	0.01	59.8
29	R2	2	0.0	2	0.0	0.091	5.8	LOS A	0.0	0.0	0.01	0.01	0.01	59.5
Approach		178	0.0	178	0.0	0.091	0.1	NA	0.0	0.0	0.01	0.01	0.01	59.8
SouthWest: Pestells Lane														
30	L2	40	0.0	40	0.0	0.044	5.6	LOS A	0.1	0.5	0.03	0.58	0.03	47.0
32	R2	20	0.0	20	0.0	0.044	6.3	LOS A	0.1	0.5	0.03	0.58	0.03	48.1
Approach		60	0.0	60	0.0	0.044	5.8	LOS A	0.1	0.5	0.03	0.58	0.03	47.4
All Vehicles		346	0.0	346	0.0	0.091	2.6	NA	0.1	0.5	0.01	0.27	0.01	52.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2026_AAST_PM]

Network: N101 [2026_AAST_PM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	140	0.0	140	0.0	0.081	5.5	LOS A	0.0	0.0	0.00	0.54	0.00	42.9
22	T1	11	0.0	11	0.0	0.081	0.0	LOS A	0.0	0.0	0.00	0.54	0.00	42.9
Approach		151	0.0	151	0.0	0.081	5.2	NA	0.0	0.0	0.00	0.54	0.00	42.9
NorthWest: Princes Highway SB Ramp														
28	T1	163	0.0	163	0.0	0.087	0.0	LOS A	0.0	0.1	0.02	0.02	0.02	59.3
29	R2	5	0.0	5	0.0	0.087	5.9	LOS A	0.0	0.1	0.02	0.02	0.02	58.6
Approach		168	0.0	168	0.0	0.087	0.2	NA	0.0	0.1	0.02	0.02	0.02	59.3
SouthWest: Pestells Lane														
30	L2	27	0.0	27	0.0	0.037	5.6	LOS A	0.1	0.4	0.03	0.58	0.03	46.8
32	R2	21	0.0	21	0.0	0.037	6.3	LOS A	0.1	0.4	0.03	0.58	0.03	47.9
Approach		48	0.0	48	0.0	0.037	5.9	LOS A	0.1	0.4	0.03	0.58	0.03	47.4
All Vehicles		367	0.0	367	0.0	0.087	3.0	NA	0.1	0.4	0.01	0.31	0.01	51.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2026_100HH_AM]

Network: N101 [2026_100HH_AM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	19	0.0	19	0.0	0.051	0.0	LOS A	0.0	0.0	0.00	0.49	0.00	55.2
6	R2	77	0.0	77	0.0	0.051	5.4	LOS A	0.0	0.0	0.00	0.49	0.00	49.5
Approach		96	0.0	96	0.0	0.051	4.4	NA	0.0	0.0	0.00	0.49	0.00	51.5
North: Princes Highway NB Ramp														
7	L2	28	0.0	28	0.0	0.029	5.7	LOS A	0.0	0.3	0.16	0.52	0.16	38.6
9	R2	22	0.0	22	0.0	0.029	5.7	LOS A	0.0	0.3	0.16	0.52	0.16	49.7
Approach		51	0.0	51	0.0	0.029	5.7	NA	0.0	0.3	0.16	0.52	0.16	46.3
West: Pestells Lane														
10	L2	21	0.0	21	0.0	0.060	5.8	LOS A	0.1	0.6	0.20	0.53	0.20	51.2
11	T1	55	0.0	55	0.0	0.060	4.7	LOS A	0.1	0.6	0.20	0.53	0.20	51.2
Approach		76	0.0	76	0.0	0.060	5.0	LOS A	0.1	0.6	0.20	0.53	0.20	51.2
All Vehicles		222	0.0	222	0.0	0.060	4.9	NA	0.1	0.6	0.10	0.51	0.10	50.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2026_100HH_PM]

Network: N101 [2026_100HH_PM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	25	0.0	25	0.0	0.089	0.0	LOS A	0.0	0.0	0.00	0.51	0.00	55.0
6	R2	142	0.0	142	0.0	0.089	5.5	LOS A	0.0	0.0	0.00	0.51	0.00	49.0
Approach		167	0.0	167	0.0	0.089	4.6	NA	0.0	0.0	0.00	0.51	0.00	50.7
North: Princes Highway NB Ramp														
7	L2	28	0.0	28	0.0	0.042	6.0	LOS A	0.1	0.5	0.26	0.51	0.26	37.7
9	R2	41	0.0	41	0.0	0.042	5.9	LOS A	0.1	0.5	0.26	0.51	0.26	49.3
Approach		69	0.0	69	0.0	0.042	6.0	NA	0.1	0.5	0.26	0.51	0.26	47.1
West: Pestells Lane														
10	L2	24	0.0	24	0.0	0.071	6.0	LOS A	0.1	0.8	0.28	0.55	0.28	50.7
11	T1	59	0.0	59	0.0	0.071	5.0	LOS A	0.1	0.8	0.28	0.55	0.28	50.7
Approach		83	0.0	83	0.0	0.071	5.3	LOS A	0.1	0.8	0.28	0.55	0.28	50.7
All Vehicles		320	0.0	320	0.0	0.089	5.1	NA	0.1	0.8	0.13	0.52	0.13	49.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2026_100HH_AM]

Network: N101 [2026_100HH_AM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	51	0.0	51	0.0	0.023	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	560	0.0	560	0.0	0.120	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		611	0.0	611	0.0	0.120	0.5	NA	0.0	0.0	0.00	0.04	0.00	96.6
West: Princes Highway NB														
10	L2	98	0.0	98	0.0	0.053	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		98	0.0	98	0.0	0.053	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		708	0.0	708	0.0	0.120	1.2	NA	0.0	0.0	0.00	0.11	0.00	89.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2026_100HH_PM]

Network: N101 [2026_100HH_PM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	69	0.0	69	0.0	0.031	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	1111	0.0	1111	0.0	0.238	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		1180	0.0	1180	0.0	0.238	0.4	NA	0.0	0.0	0.00	0.03	0.00	97.5
West: Princes Highway NB Ramp														
10	L2	166	0.0	166	0.0	0.090	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		166	0.0	166	0.0	0.090	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		1346	0.0	1346	0.0	0.238	1.0	NA	0.0	0.0	0.00	0.09	0.00	91.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2026_100HH_AM]

Network: N101 [2026_100HH_AM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	44	0.0	44	0.0	0.042	7.3	LOS A	0.1	0.5	0.45	0.65	0.45	53.6
Approach		44	0.0	44	0.0	0.042	7.3	LOS A	0.1	0.5	0.45	0.65	0.45	53.6
North: Princes Highway SB														
7	L2	162	0.0	162	0.0	0.087	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	932	0.0	932	0.0	0.239	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		1094	0.0	1094	0.0	0.239	0.8	NA	0.0	0.0	0.00	0.09	0.00	94.7
All Vehicles		1138	0.0	1138	0.0	0.239	1.1	NA	0.1	0.5	0.02	0.11	0.02	92.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2026_100HH_PM]

Network: N101 [2026_100HH_PM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	48	0.0	48	0.0	0.052	7.8	LOS A	0.1	0.6	0.50	0.69	0.50	53.3
Approach		48	0.0	48	0.0	0.052	7.8	LOS A	0.1	0.6	0.50	0.69	0.50	53.3
North: Princes Highway SB														
7	L2	202	0.0	202	0.0	0.109	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1131	0.0	1131	0.0	0.290	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1333	0.0	1333	0.0	0.290	0.9	NA	0.0	0.0	0.00	0.09	0.00	94.6
All Vehicles		1381	0.0	1381	0.0	0.290	1.1	NA	0.1	0.6	0.02	0.11	0.02	92.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2026_100HH_AM]

Network: N101 [2026_100HH_AM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	96	0.0	96	0.0	0.055	5.5	LOS A	0.0	0.0	0.00	0.54	0.00	42.9
22	T1	7	0.0	7	0.0	0.055	0.0	LOS A	0.0	0.0	0.00	0.54	0.00	42.9
Approach		103	0.0	103	0.0	0.055	5.1	NA	0.0	0.0	0.00	0.54	0.00	42.9
NorthWest: Princes Highway SB Ramp														
28	T1	162	0.0	162	0.0	0.084	0.0	LOS A	0.0	0.0	0.01	0.01	0.01	59.7
29	R2	2	0.0	2	0.0	0.084	5.8	LOS A	0.0	0.0	0.01	0.01	0.01	59.4
Approach		164	0.0	164	0.0	0.084	0.1	NA	0.0	0.0	0.01	0.01	0.01	59.7
SouthWest: Pestells Lane														
30	L2	37	0.0	37	0.0	0.040	5.6	LOS A	0.1	0.4	0.02	0.58	0.02	47.0
32	R2	19	0.0	19	0.0	0.040	6.2	LOS A	0.1	0.4	0.02	0.58	0.02	48.1
Approach		56	0.0	56	0.0	0.040	5.8	LOS A	0.1	0.4	0.02	0.58	0.02	47.5
All Vehicles		323	0.0	323	0.0	0.084	2.7	NA	0.1	0.4	0.01	0.28	0.01	52.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2026_100HH_PM]

Network: N101 [2026_100HH_PM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	167	0.0	167	0.0	0.098	5.5	LOS A	0.0	0.0	0.00	0.53	0.00	43.1
22	T1	16	0.0	16	0.0	0.098	0.0	LOS A	0.0	0.0	0.00	0.53	0.00	43.1
Approach		183	0.0	183	0.0	0.098	5.1	NA	0.0	0.0	0.00	0.53	0.00	43.1
NorthWest: Princes Highway SB Ramp														
28	T1	202	0.0	202	0.0	0.108	0.0	LOS A	0.0	0.1	0.02	0.02	0.02	59.3
29	R2	6	0.0	6	0.0	0.108	6.1	LOS A	0.0	0.1	0.02	0.02	0.02	58.5
Approach		208	0.0	208	0.0	0.108	0.2	NA	0.0	0.1	0.02	0.02	0.02	59.3
SouthWest: Pestells Lane														
30	L2	33	0.0	33	0.0	0.047	5.6	LOS A	0.1	0.5	0.05	0.58	0.05	46.5
32	R2	26	0.0	26	0.0	0.047	6.6	LOS A	0.1	0.5	0.05	0.58	0.05	47.8
Approach		59	0.0	59	0.0	0.047	6.0	LOS A	0.1	0.5	0.05	0.58	0.05	47.2
All Vehicles		451	0.0	451	0.0	0.108	2.9	NA	0.1	0.5	0.02	0.30	0.02	51.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2031_AAST_AM]

Network: N101 [2031_AAST_AM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	35	0.0	35	0.0	0.060	0.0	LOS A	0.0	0.0	0.00	0.42	0.00	55.8
6	R2	79	0.0	79	0.0	0.060	5.4	LOS A	0.0	0.0	0.00	0.42	0.00	50.7
Approach		114	0.0	114	0.0	0.060	3.8	NA	0.0	0.0	0.00	0.42	0.00	53.3
North: Princes Highway NB Ramp														
7	L2	34	0.0	34	0.0	0.031	5.7	LOS A	0.0	0.3	0.16	0.52	0.16	38.6
9	R2	21	0.0	21	0.0	0.031	5.8	LOS A	0.0	0.3	0.16	0.52	0.16	49.7
Approach		55	0.0	55	0.0	0.031	5.7	NA	0.0	0.3	0.16	0.52	0.16	45.7
West: Pestells Lane														
10	L2	64	0.0	64	0.0	0.113	5.8	LOS A	0.2	1.3	0.20	0.54	0.20	50.9
11	T1	82	0.0	82	0.0	0.113	4.8	LOS A	0.2	1.3	0.20	0.54	0.20	50.9
Approach		146	0.0	146	0.0	0.113	5.2	LOS A	0.2	1.3	0.20	0.54	0.20	50.9
All Vehicles		315	0.0	315	0.0	0.113	4.8	NA	0.2	1.3	0.12	0.49	0.12	50.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2031_AAST_PM]

Network: N101 [2031_AAST_PM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	35	0.0	35	0.0	0.084	0.0	LOS A	0.0	0.0	0.00	0.47	0.00	55.4
6	R2	122	0.0	122	0.0	0.084	5.5	LOS A	0.0	0.0	0.00	0.47	0.00	49.8
Approach		157	0.0	157	0.0	0.084	4.2	NA	0.0	0.0	0.00	0.47	0.00	51.9
North: Princes Highway NB Ramp														
7	L2	34	0.0	34	0.0	0.041	5.9	LOS A	0.1	0.5	0.23	0.51	0.23	37.9
9	R2	36	0.0	36	0.0	0.041	5.9	LOS A	0.1	0.5	0.23	0.51	0.23	49.4
Approach		69	0.0	69	0.0	0.041	5.9	NA	0.1	0.5	0.23	0.51	0.23	46.6
West: Pestells Lane														
10	L2	73	0.0	73	0.0	0.110	5.9	LOS A	0.2	1.2	0.25	0.55	0.25	50.4
11	T1	66	0.0	66	0.0	0.110	5.0	LOS A	0.2	1.2	0.25	0.55	0.25	50.4
Approach		139	0.0	139	0.0	0.110	5.5	LOS A	0.2	1.2	0.25	0.55	0.25	50.4
All Vehicles		365	0.0	365	0.0	0.110	5.0	NA	0.2	1.2	0.14	0.51	0.14	50.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2031_AAST_PM]

Network: N101 [2031_AAST_PM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	69	0.0	69	0.0	0.031	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	1133	0.0	1133	0.0	0.242	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		1202	0.0	1202	0.0	0.242	0.4	NA	0.0	0.0	0.00	0.03	0.00	97.6
West: Princes Highway NB Ramp														
10	L2	195	0.0	195	0.0	0.105	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		195	0.0	195	0.0	0.105	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		1397	0.0	1397	0.0	0.242	1.1	NA	0.0	0.0	0.00	0.10	0.00	90.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2031_AAST_AM]

Network: N101 [2031_AAST_AM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	54	0.0	54	0.0	0.024	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	579	0.0	579	0.0	0.124	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		633	0.0	633	0.0	0.124	0.5	NA	0.0	0.0	0.00	0.04	0.00	96.5
West: Princes Highway NB Ramp														
10	L2	142	0.0	142	0.0	0.077	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		142	0.0	142	0.0	0.077	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		775	0.0	775	0.0	0.124	1.4	NA	0.0	0.0	0.00	0.13	0.00	87.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2031_AAST_PM]

Network: N101 [2031_AAST_PM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	39	0.0	39	0.0	0.040	7.5	LOS A	0.1	0.4	0.48	0.67	0.48	53.5
Approach		39	0.0	39	0.0	0.040	7.5	LOS A	0.1	0.4	0.48	0.67	0.48	53.5
North: Princes Highway SB														
7	L2	161	0.0	161	0.0	0.087	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1039	0.0	1039	0.0	0.266	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1200	0.0	1200	0.0	0.266	0.8	NA	0.0	0.0	0.00	0.08	0.00	95.2
All Vehicles		1239	0.0	1239	0.0	0.266	1.0	NA	0.1	0.4	0.02	0.10	0.02	93.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2031_AAST_AM]

Network: N101 [2031_AAST_AM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	48	0.0	48	0.0	0.053	7.9	LOS A	0.1	0.6	0.51	0.70	0.51	53.2
Approach		48	0.0	48	0.0	0.053	7.9	LOS A	0.1	0.6	0.51	0.70	0.51	53.2
North: Princes Highway SB														
7	L2	186	0.0	186	0.0	0.100	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1157	0.0	1157	0.0	0.297	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1343	0.0	1343	0.0	0.297	0.8	NA	0.0	0.0	0.00	0.08	0.00	95.0
All Vehicles		1392	0.0	1392	0.0	0.297	1.0	NA	0.1	0.6	0.02	0.10	0.02	92.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2031_AAST_AM]

Network: N101 [2031_AAST_AM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	114	0.0	114	0.0	0.064	5.5	LOS A	0.0	0.0	0.00	0.55	0.00	42.7
22	T1	6	0.0	6	0.0	0.064	0.0	LOS A	0.0	0.0	0.00	0.55	0.00	42.7
Approach		120	0.0	120	0.0	0.064	5.3	NA	0.0	0.0	0.00	0.55	0.00	42.7
NorthWest: Princes Highway SB Ramp														
28	T1	186	0.0	186	0.0	0.102	0.0	LOS A	0.0	0.2	0.03	0.03	0.03	59.0
29	R2	9	0.0	9	0.0	0.102	5.8	LOS A	0.0	0.2	0.03	0.03	0.03	57.9
Approach		196	0.0	196	0.0	0.102	0.3	NA	0.0	0.2	0.03	0.03	0.03	59.0
SouthWest: Pestells Lane														
30	L2	42	0.0	42	0.0	0.065	5.6	LOS A	0.1	0.7	0.02	0.58	0.02	46.6
32	R2	40	0.0	40	0.0	0.065	6.4	LOS A	0.1	0.7	0.02	0.58	0.02	47.8
Approach		82	0.0	82	0.0	0.065	6.0	LOS A	0.1	0.7	0.02	0.58	0.02	47.4
All Vehicles		398	0.0	398	0.0	0.102	3.0	NA	0.1	0.7	0.02	0.30	0.02	51.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2031_AAST_PM]

Network: N101 [2031_AAST_PM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	158	0.0	158	0.0	0.091	5.5	LOS A	0.0	0.0	0.00	0.54	0.00	42.9
22	T1	12	0.0	12	0.0	0.091	0.0	LOS A	0.0	0.0	0.00	0.54	0.00	42.9
Approach		169	0.0	169	0.0	0.091	5.2	NA	0.0	0.0	0.00	0.54	0.00	42.9
NorthWest: Princes Highway SB Ramp														
28	T1	161	0.0	161	0.0	0.095	0.1	LOS A	0.1	0.4	0.07	0.06	0.07	57.7
29	R2	19	0.0	19	0.0	0.095	6.0	LOS A	0.1	0.4	0.07	0.06	0.07	55.4
Approach		180	0.0	180	0.0	0.095	0.7	NA	0.1	0.4	0.07	0.06	0.07	57.6
SouthWest: Pestells Lane														
30	L2	27	0.0	27	0.0	0.056	5.6	LOS A	0.1	0.6	0.04	0.58	0.04	46.4
32	R2	40	0.0	40	0.0	0.056	6.5	LOS A	0.1	0.6	0.04	0.58	0.04	47.7
Approach		67	0.0	67	0.0	0.056	6.1	LOS A	0.1	0.6	0.04	0.58	0.04	47.3
All Vehicles		417	0.0	417	0.0	0.095	3.4	NA	0.1	0.6	0.04	0.34	0.04	50.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2031_100HH_AM]

Network: N101 [2031_100HH_AM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	34	0.0	34	0.0	0.060	0.0	LOS A	0.0	0.0	0.00	0.43	0.00	55.8
6	R2	80	0.0	80	0.0	0.060	5.4	LOS A	0.0	0.0	0.00	0.43	0.00	50.6
Approach		114	0.0	114	0.0	0.060	3.8	NA	0.0	0.0	0.00	0.43	0.00	53.1
North: Princes Highway NB Ramp														
7	L2	34	0.0	34	0.0	0.030	5.7	LOS A	0.0	0.3	0.16	0.52	0.16	38.6
9	R2	20	0.0	20	0.0	0.030	5.8	LOS A	0.0	0.3	0.16	0.52	0.16	49.7
Approach		54	0.0	54	0.0	0.030	5.7	NA	0.0	0.3	0.16	0.52	0.16	45.6
West: Pestells Lane														
10	L2	61	0.0	61	0.0	0.104	5.8	LOS A	0.2	1.2	0.20	0.54	0.20	50.8
11	T1	75	0.0	75	0.0	0.104	4.7	LOS A	0.2	1.2	0.20	0.54	0.20	50.8
Approach		136	0.0	136	0.0	0.104	5.2	LOS A	0.2	1.2	0.20	0.54	0.20	50.8
All Vehicles		303	0.0	303	0.0	0.104	4.8	NA	0.2	1.2	0.12	0.49	0.12	50.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [1 - 2031_100HH_PM]

Network: N101 [2031_100HH_PM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	53	0.0	53	0.0	0.106	0.0	LOS A	0.0	0.0	0.00	0.45	0.00	55.6
6	R2	146	0.0	146	0.0	0.106	5.5	LOS A	0.0	0.0	0.00	0.45	0.00	50.3
Approach		199	0.0	199	0.0	0.106	4.0	NA	0.0	0.0	0.00	0.45	0.00	52.6
North: Princes Highway NB Ramp														
7	L2	34	0.0	34	0.0	0.044	6.0	LOS A	0.1	0.5	0.27	0.50	0.27	37.6
9	R2	39	0.0	39	0.0	0.044	6.1	LOS A	0.1	0.5	0.27	0.50	0.27	49.3
Approach		73	0.0	73	0.0	0.044	6.0	NA	0.1	0.5	0.27	0.50	0.27	46.6
West: Pestells Lane														
10	L2	78	0.0	78	0.0	0.130	6.0	LOS A	0.2	1.5	0.28	0.57	0.28	50.3
11	T1	80	0.0	80	0.0	0.130	5.2	LOS A	0.2	1.5	0.28	0.57	0.28	50.3
Approach		158	0.0	158	0.0	0.130	5.6	LOS A	0.2	1.5	0.28	0.57	0.28	50.3
All Vehicles		429	0.0	429	0.0	0.130	4.9	NA	0.2	1.5	0.15	0.50	0.15	50.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [2 - 2031_100HH_AM]

Network: N101 [2031_100HH_AM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	53	0.0	53	0.0	0.024	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	591	0.0	591	0.0	0.126	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		643	0.0	643	0.0	0.126	0.5	NA	0.0	0.0	0.00	0.04	0.00	96.6
West: Princes Highway NB Ramp														
10	L2	141	0.0	141	0.0	0.076	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		141	0.0	141	0.0	0.076	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		784	0.0	784	0.0	0.126	1.4	NA	0.0	0.0	0.00	0.13	0.00	87.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2031_100HH_PM]

Network: N101 [2031_100HH_PM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	72	0.0	72	0.0	0.032	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	1203	0.0	1203	0.0	0.258	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		1275	0.0	1275	0.0	0.258	0.4	NA	0.0	0.0	0.00	0.03	0.00	97.6
West: Princes Highway NB Ramp														
10	L2	224	0.0	224	0.0	0.121	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		224	0.0	224	0.0	0.121	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		1499	0.0	1499	0.0	0.258	1.2	NA	0.0	0.0	0.00	0.10	0.00	89.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2031_100HH_AM]

Network: N101 [2031_100HH_AM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	46	0.0	46	0.0	0.048	7.7	LOS A	0.1	0.5	0.49	0.68	0.49	53.4
Approach		46	0.0	46	0.0	0.048	7.7	LOS A	0.1	0.5	0.49	0.68	0.49	53.4
North: Princes Highway SB														
7	L2	172	0.0	172	0.0	0.092	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1073	0.0	1073	0.0	0.275	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1244	0.0	1244	0.0	0.275	0.8	NA	0.0	0.0	0.00	0.08	0.00	95.1
All Vehicles		1291	0.0	1291	0.0	0.275	1.0	NA	0.1	0.5	0.02	0.10	0.02	92.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2031_100HH_PM]

Network: N101 [2031_100HH_PM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	44	0.0	44	0.0	0.048	7.9	LOS A	0.1	0.5	0.51	0.69	0.51	53.3
Approach		44	0.0	44	0.0	0.048	7.9	LOS A	0.1	0.5	0.51	0.69	0.51	53.3
North: Princes Highway SB														
7	L2	202	0.0	202	0.0	0.109	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1141	0.0	1141	0.0	0.293	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1343	0.0	1343	0.0	0.293	0.9	NA	0.0	0.0	0.00	0.09	0.00	94.6
All Vehicles		1387	0.0	1387	0.0	0.293	1.1	NA	0.1	0.5	0.02	0.11	0.02	92.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2031_100HH_AM]

Network: N101 [2031_100HH_AM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	114	0.0	114	0.0	0.066	5.5	LOS A	0.0	0.0	0.00	0.54	0.00	42.9
22	T1	8	0.0	8	0.0	0.066	0.0	LOS A	0.0	0.0	0.00	0.54	0.00	42.9
Approach		122	0.0	122	0.0	0.066	5.2	NA	0.0	0.0	0.00	0.54	0.00	42.9
NorthWest: Princes Highway SB Ramp														
28	T1	172	0.0	172	0.0	0.094	0.0	LOS A	0.0	0.2	0.03	0.03	0.03	58.9
29	R2	9	0.0	9	0.0	0.094	5.8	LOS A	0.0	0.2	0.03	0.03	0.03	57.7
Approach		181	0.0	181	0.0	0.094	0.3	NA	0.0	0.2	0.03	0.03	0.03	58.9
SouthWest: Pestells Lane														
30	L2	38	0.0	38	0.0	0.059	5.6	LOS A	0.1	0.6	0.03	0.58	0.03	46.7
32	R2	37	0.0	37	0.0	0.059	6.4	LOS A	0.1	0.6	0.03	0.58	0.03	47.9
Approach		75	0.0	75	0.0	0.059	6.0	LOS A	0.1	0.6	0.03	0.58	0.03	47.4
All Vehicles		378	0.0	378	0.0	0.094	3.0	NA	0.1	0.6	0.02	0.30	0.02	51.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2031_100HH_PM]

Network: N101 [2031_100HH_PM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	197	0.0	197	0.0	0.112	5.5	LOS A	0.0	0.0	0.00	0.54	0.00	42.8
22	T1	13	0.0	13	0.0	0.112	0.0	LOS A	0.0	0.0	0.00	0.54	0.00	42.8
Approach		209	0.0	209	0.0	0.112	5.2	NA	0.0	0.0	0.00	0.54	0.00	42.8
NorthWest: Princes Highway SB Ramp														
28	T1	200	0.0	200	0.0	0.104	0.0	LOS A	0.0	0.0	0.01	0.01	0.01	59.8
29	R2	2	0.0	2	0.0	0.104	6.2	LOS A	0.0	0.0	0.01	0.01	0.01	59.5
Approach		202	0.0	202	0.0	0.104	0.1	NA	0.0	0.0	0.01	0.01	0.01	59.7
SouthWest: Pestells Lane														
30	L2	32	0.0	32	0.0	0.069	5.6	LOS A	0.1	0.7	0.05	0.59	0.05	46.2
32	R2	48	0.0	48	0.0	0.069	6.7	LOS A	0.1	0.7	0.05	0.59	0.05	47.5
Approach		80	0.0	80	0.0	0.069	6.2	LOS A	0.1	0.7	0.05	0.59	0.05	47.1
All Vehicles		492	0.0	492	0.0	0.112	3.3	NA	0.1	0.7	0.01	0.33	0.01	50.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2036_AAST_AM]

Network: N101 [2036_AAST_AM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Aver. Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	52	0.0	52	0.0	0.068	0.0	LOS A	0.0	0.0	0.00	0.37	0.00	56.4
6	R2	77	0.0	77	0.0	0.068	5.4	LOS A	0.0	0.0	0.00	0.37	0.00	51.8
Approach		128	0.0	128	0.0	0.068	3.3	NA	0.0	0.0	0.00	0.37	0.00	54.6
North: Princes Highway NB Ramp														
7	L2	34	0.0	34	0.0	0.036	5.8	LOS A	0.1	0.4	0.19	0.51	0.19	38.3
9	R2	28	0.0	28	0.0	0.036	5.8	LOS A	0.1	0.4	0.19	0.51	0.19	49.6
Approach		62	0.0	62	0.0	0.036	5.8	NA	0.1	0.4	0.19	0.51	0.19	46.3
West: Pestells Lane														
10	L2	97	0.0	97	0.0	0.173	5.8	LOS A	0.3	2.0	0.21	0.54	0.21	50.8
11	T1	126	0.0	126	0.0	0.173	4.9	LOS A	0.3	2.0	0.21	0.54	0.21	50.8
Approach		223	0.0	223	0.0	0.173	5.3	LOS A	0.3	2.0	0.21	0.54	0.21	50.8
All Vehicles		414	0.0	414	0.0	0.173	4.7	NA	0.3	2.0	0.14	0.48	0.14	51.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2036_AAST_PM]

Network: N101 [2036_AAST_PM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	77	0.0	77	0.0	0.109	0.0	LOS A	0.0	0.0	0.00	0.38	0.00	56.2
6	R2	128	0.0	128	0.0	0.109	5.5	LOS A	0.0	0.0	0.00	0.38	0.00	51.5
Approach		205	0.0	205	0.0	0.109	3.4	NA	0.0	0.0	0.00	0.38	0.00	54.2
North: Princes Highway NB Ramp														
7	L2	34	0.0	34	0.0	0.053	6.1	LOS A	0.1	0.7	0.29	0.51	0.29	37.4
9	R2	53	0.0	53	0.0	0.053	6.1	LOS A	0.1	0.7	0.29	0.51	0.29	49.2
Approach		86	0.0	86	0.0	0.053	6.1	NA	0.1	0.7	0.29	0.51	0.29	47.0
West: Pestells Lane														
10	L2	105	0.0	105	0.0	0.157	6.0	LOS A	0.3	1.8	0.27	0.57	0.27	50.3
11	T1	89	0.0	89	0.0	0.157	5.3	LOS A	0.3	1.8	0.27	0.57	0.27	50.3
Approach		195	0.0	195	0.0	0.157	5.7	LOS A	0.3	1.8	0.27	0.57	0.27	50.3
All Vehicles		486	0.0	486	0.0	0.157	4.8	NA	0.3	1.8	0.16	0.48	0.16	51.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2036_AAST_AM]

Network: N101 [2036_AAST_AM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	62	0.0	62	0.0	0.028	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	592	0.0	592	0.0	0.127	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		654	0.0	654	0.0	0.127	0.6	NA	0.0	0.0	0.00	0.05	0.00	96.1
West: Princes Highway NB Ramp														
10	L2	174	0.0	174	0.0	0.094	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		174	0.0	174	0.0	0.094	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		827	0.0	827	0.0	0.127	1.6	NA	0.0	0.0	0.00	0.15	0.00	85.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2036_AAST_PM]

Network: N101 [2036_AAST_PM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	86	0.0	86	0.0	0.039	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	1231	0.0	1231	0.0	0.263	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		1317	0.0	1317	0.0	0.263	0.4	NA	0.0	0.0	0.00	0.03	0.00	97.2
West: Princes Highway NB Ramp														
10	L2	234	0.0	234	0.0	0.126	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		234	0.0	234	0.0	0.126	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		1551	0.0	1551	0.0	0.263	1.2	NA	0.0	0.0	0.00	0.11	0.00	89.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2036_AAST_AM]

Network: N101 [2036_AAST_AM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	56	0.0	56	0.0	0.066	8.4	LOS A	0.1	0.7	0.54	0.74	0.54	53.0
Approach		56	0.0	56	0.0	0.066	8.4	LOS A	0.1	0.7	0.54	0.74	0.54	53.0
North: Princes Highway SB														
7	L2	204	0.0	204	0.0	0.110	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1280	0.0	1280	0.0	0.328	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1484	0.0	1484	0.0	0.328	0.8	NA	0.0	0.0	0.00	0.08	0.00	95.1
All Vehicles		1540	0.0	1540	0.0	0.328	1.1	NA	0.1	0.7	0.02	0.10	0.02	92.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2036_AAST_PM]

Network: N101 [2036_AAST_PM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	42	0.0	42	0.0	0.044	7.6	LOS A	0.1	0.5	0.49	0.67	0.49	53.4
Approach		42	0.0	42	0.0	0.044	7.6	LOS A	0.1	0.5	0.49	0.67	0.49	53.4
North: Princes Highway SB														
7	L2	177	0.0	177	0.0	0.095	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1065	0.0	1065	0.0	0.273	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1242	0.0	1242	0.0	0.273	0.8	NA	0.0	0.0	0.00	0.08	0.00	94.9
All Vehicles		1284	0.0	1284	0.0	0.273	1.0	NA	0.1	0.5	0.02	0.10	0.02	92.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2036_AAST_AM]

Network: N101 [2036_AAST_AM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	128	0.0	128	0.0	0.070	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.070	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		129	0.0	129	0.0	0.070	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB Ramp														
28	T1	204	0.0	204	0.0	0.114	0.0	LOS A	0.0	0.3	0.04	0.04	0.04	58.6
29	R2	15	0.0	15	0.0	0.114	5.9	LOS A	0.0	0.3	0.04	0.04	0.04	57.1
Approach		219	0.0	219	0.0	0.114	0.4	NA	0.0	0.3	0.04	0.04	0.04	58.5
SouthWest: Pestells Lane														
30	L2	55	0.0	55	0.0	0.105	5.5	LOS A	0.2	1.1	0.00	0.59	0.00	46.4
32	R2	72	0.0	72	0.0	0.105	6.6	LOS A	0.2	1.1	0.00	0.59	0.00	47.6
Approach		126	0.0	126	0.0	0.105	6.1	LOS A	0.2	1.1	0.00	0.59	0.00	47.2
All Vehicles		475	0.0	475	0.0	0.114	3.3	NA	0.2	1.1	0.02	0.33	0.02	50.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2036_AAST_PM]

Network: N101 [2036_AAST_PM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	193	0.0	193	0.0	0.109	5.5	LOS A	0.0	0.0	0.00	0.55	0.00	42.6
22	T1	11	0.0	11	0.0	0.109	0.0	LOS A	0.0	0.0	0.00	0.55	0.00	42.6
Approach		203	0.0	203	0.0	0.109	5.3	NA	0.0	0.0	0.00	0.55	0.00	42.6
NorthWest: Princes Highway SB Ramp														
28	T1	164	0.0	164	0.0	0.093	0.1	LOS A	0.0	0.3	0.05	0.04	0.05	58.4
29	R2	13	0.0	13	0.0	0.093	6.1	LOS A	0.0	0.3	0.05	0.04	0.05	56.6
Approach		177	0.0	177	0.0	0.093	0.5	NA	0.0	0.3	0.05	0.04	0.05	58.3
SouthWest: Pestells Lane														
30	L2	32	0.0	32	0.0	0.076	5.6	LOS A	0.1	0.8	0.05	0.59	0.05	46.3
32	R2	57	0.0	57	0.0	0.076	6.5	LOS A	0.1	0.8	0.05	0.59	0.05	47.6
Approach		88	0.0	88	0.0	0.076	6.2	LOS A	0.1	0.8	0.05	0.59	0.05	47.2
All Vehicles		468	0.0	468	0.0	0.109	3.6	NA	0.1	0.8	0.03	0.37	0.03	49.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2036_100HH_AM]

Network: N101 [2036_100HH_AM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	49	0.0	49	0.0	0.068	0.0	LOS A	0.0	0.0	0.00	0.38	0.00	56.3
6	R2	79	0.0	79	0.0	0.068	5.4	LOS A	0.0	0.0	0.00	0.38	0.00	51.6
Approach		128	0.0	128	0.0	0.068	3.4	NA	0.0	0.0	0.00	0.38	0.00	54.4
North: Princes Highway NB Ramp														
7	L2	34	0.0	34	0.0	0.036	5.8	LOS A	0.1	0.4	0.19	0.51	0.19	38.3
9	R2	28	0.0	28	0.0	0.036	5.8	LOS A	0.1	0.4	0.19	0.51	0.19	49.6
Approach		62	0.0	62	0.0	0.036	5.8	NA	0.1	0.4	0.19	0.51	0.19	46.3
West: Pestells Lane														
10	L2	92	0.0	92	0.0	0.161	5.8	LOS A	0.3	1.9	0.21	0.54	0.21	50.8
11	T1	116	0.0	116	0.0	0.161	4.9	LOS A	0.3	1.9	0.21	0.54	0.21	50.8
Approach		207	0.0	207	0.0	0.161	5.3	LOS A	0.3	1.9	0.21	0.54	0.21	50.8
All Vehicles		398	0.0	398	0.0	0.161	4.7	NA	0.3	1.9	0.14	0.48	0.14	51.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2036_100HH_PM]

Network: N101 [2036_100HH_PM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	144	0.0	144	0.0	0.156	0.0	LOS A	0.0	0.0	0.00	0.31	0.00	56.8
6	R2	152	0.0	152	0.0	0.156	5.5	LOS A	0.0	0.0	0.00	0.31	0.00	52.9
Approach		296	0.0	296	0.0	0.156	2.8	NA	0.0	0.0	0.00	0.31	0.00	55.6
North: Princes Highway NB Ramp														
7	L2	34	0.0	34	0.0	0.064	6.4	LOS A	0.1	0.8	0.37	0.52	0.37	36.8
9	R2	62	0.0	62	0.0	0.064	6.4	LOS A	0.1	0.8	0.37	0.52	0.37	48.9
Approach		96	0.0	96	0.0	0.064	6.4	NA	0.1	0.8	0.37	0.52	0.37	47.0
West: Pestells Lane														
10	L2	117	0.0	117	0.0	0.192	6.1	LOS A	0.3	2.3	0.31	0.59	0.31	50.1
11	T1	108	0.0	108	0.0	0.192	5.7	LOS A	0.3	2.3	0.31	0.59	0.31	50.1
Approach		225	0.0	225	0.0	0.192	5.9	LOS A	0.3	2.3	0.31	0.59	0.31	50.1
All Vehicles		617	0.0	617	0.0	0.192	4.5	NA	0.3	2.3	0.17	0.45	0.17	52.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2036_100HH_AM]

Network: N101 [2036_100HH_AM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	62	0.0	62	0.0	0.028	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	618	0.0	618	0.0	0.132	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		680	0.0	680	0.0	0.132	0.5	NA	0.0	0.0	0.00	0.05	0.00	96.2
West: Princes Highway NB Ramp														
10	L2	171	0.0	171	0.0	0.092	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		171	0.0	171	0.0	0.092	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		851	0.0	851	0.0	0.132	1.6	NA	0.0	0.0	0.00	0.14	0.00	86.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2036_100HH_PM]

Network: N101 [2036_100HH_PM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	96	0.0	96	0.0	0.043	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	1305	0.0	1305	0.0	0.279	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		1401	0.0	1401	0.0	0.279	0.4	NA	0.0	0.0	0.00	0.04	0.00	97.1
West: Princes Highway NB Ramp														
10	L2	268	0.0	268	0.0	0.145	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		268	0.0	268	0.0	0.145	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		1669	0.0	1669	0.0	0.279	1.3	NA	0.0	0.0	0.00	0.12	0.00	88.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2036_100HH_AM]

Network: N101 [2036_100HH_AM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	52	0.0	52	0.0	0.058	8.1	LOS A	0.1	0.6	0.52	0.71	0.52	53.2
Approach		52	0.0	52	0.0	0.058	8.1	LOS A	0.1	0.6	0.52	0.71	0.52	53.2
North: Princes Highway SB														
7	L2	186	0.0	186	0.0	0.100	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1199	0.0	1199	0.0	0.307	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1385	0.0	1385	0.0	0.307	0.8	NA	0.0	0.0	0.00	0.08	0.00	95.2
All Vehicles		1437	0.0	1437	0.0	0.307	1.0	NA	0.1	0.6	0.02	0.10	0.02	92.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2036_100HH_PM]

Network: N101 [2036_100HH_PM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	49	0.0	49	0.0	0.055	8.0	LOS A	0.1	0.6	0.51	0.71	0.51	53.2
Approach		49	0.0	49	0.0	0.055	8.0	LOS A	0.1	0.6	0.51	0.71	0.51	53.2
North: Princes Highway SB														
7	L2	258	0.0	258	0.0	0.139	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1174	0.0	1174	0.0	0.301	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1432	0.0	1432	0.0	0.301	1.0	NA	0.0	0.0	0.00	0.10	0.00	93.5
All Vehicles		1481	0.0	1481	0.0	0.301	1.3	NA	0.1	0.6	0.02	0.12	0.02	91.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2036_100HH_AM]

Network: N101 [2036_100HH_AM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	129	0.0	129	0.0	0.070	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.070	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		131	0.0	131	0.0	0.070	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB Ramp														
28	T1	186	0.0	186	0.0	0.104	0.0	LOS A	0.0	0.3	0.04	0.04	0.04	58.6
29	R2	14	0.0	14	0.0	0.104	5.9	LOS A	0.0	0.3	0.04	0.04	0.04	57.0
Approach		200	0.0	200	0.0	0.104	0.4	NA	0.0	0.3	0.04	0.04	0.04	58.5
SouthWest: Pestells Lane														
30	L2	51	0.0	51	0.0	0.094	5.5	LOS A	0.1	1.0	0.00	0.59	0.00	46.5
32	R2	64	0.0	64	0.0	0.094	6.5	LOS A	0.1	1.0	0.00	0.59	0.00	47.7
Approach		115	0.0	115	0.0	0.094	6.1	LOS A	0.1	1.0	0.00	0.59	0.00	47.3
All Vehicles		445	0.0	445	0.0	0.104	3.4	NA	0.1	1.0	0.02	0.34	0.02	50.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2036_100HH_PM]

Network: N101 [2036_100HH_PM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	239	0.0	239	0.0	0.135	5.5	LOS A	0.0	0.0	0.00	0.55	0.00	42.6
22	T1	13	0.0	13	0.0	0.135	0.0	LOS A	0.0	0.0	0.00	0.55	0.00	42.6
Approach		252	0.0	252	0.0	0.135	5.3	NA	0.0	0.0	0.00	0.55	0.00	42.6
NorthWest: Princes Highway SB														
28	T1	200	0.0	200	0.0	0.143	0.3	LOS A	0.2	1.2	0.18	0.14	0.18	55.1
29	R2	57	0.0	57	0.0	0.143	6.4	LOS A	0.2	1.2	0.18	0.14	0.18	50.4
Approach		257	0.0	257	0.0	0.143	1.7	NA	0.2	1.2	0.18	0.14	0.18	54.5
SouthWest: Pestells Lane														
30	L2	37	0.0	37	0.0	0.102	5.6	LOS A	0.1	1.0	0.05	0.59	0.05	45.6
32	R2	72	0.0	72	0.0	0.102	7.1	LOS A	0.1	1.0	0.05	0.59	0.05	47.1
Approach		108	0.0	108	0.0	0.102	6.6	LOS A	0.1	1.0	0.05	0.59	0.05	46.7
All Vehicles		617	0.0	617	0.0	0.143	4.0	NA	0.2	1.2	0.09	0.38	0.09	48.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2041_AAST_AM]

Network: N101 [2041_AAST_AM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	97	0.0	97	0.0	0.093	0.0	LOS A	0.0	0.0	0.00	0.28	0.00	57.2
6	R2	80	0.0	80	0.0	0.093	5.5	LOS A	0.0	0.0	0.00	0.28	0.00	53.6
Approach		177	0.0	177	0.0	0.093	2.5	NA	0.0	0.0	0.00	0.28	0.00	56.3
North: Princes Highway NB Ramp														
7	L2	34	0.0	34	0.0	0.069	6.1	LOS A	0.1	0.9	0.28	0.53	0.28	37.5
9	R2	79	0.0	79	0.0	0.069	6.0	LOS A	0.1	0.9	0.28	0.53	0.28	49.3
Approach		113	0.0	113	0.0	0.069	6.0	NA	0.1	0.9	0.28	0.53	0.28	47.7
West: Pestells Lane														
10	L2	143	0.0	143	0.0	0.491	6.3	LOS A	1.4	9.6	0.35	0.61	0.40	49.9
11	T1	423	0.0	423	0.0	0.491	6.1	LOS A	1.4	9.6	0.35	0.61	0.40	49.9
Approach		566	0.0	566	0.0	0.491	6.2	LOS A	1.4	9.6	0.35	0.61	0.40	49.9
All Vehicles		856	0.0	856	0.0	0.491	5.4	NA	1.4	9.6	0.27	0.53	0.30	51.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [1 - 2041_AAST_PM]

Network: N101 [2041_AAST_PM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	279	0.0	279	0.0	0.213	0.0	LOS A	0.0	0.0	0.00	0.19	0.00	58.0
6	R2	129	0.0	129	0.0	0.213	5.5	LOS A	0.0	0.0	0.00	0.19	0.00	55.3
Approach		408	0.0	408	0.0	0.213	1.7	NA	0.0	0.0	0.00	0.19	0.00	57.5
North: Princes Highway NB Ramp														
7	L2	34	0.0	34	0.0	0.169	7.2	LOS A	0.3	2.3	0.48	0.63	0.48	36.0
9	R2	182	0.0	182	0.0	0.169	7.1	LOS A	0.3	2.3	0.48	0.63	0.48	48.6
Approach		216	0.0	216	0.0	0.169	7.1	NA	0.3	2.3	0.48	0.63	0.48	47.8
West: Pestells Lane														
10	L2	144	0.0	144	0.0	0.372	6.3	LOS A	0.8	5.5	0.37	0.66	0.41	48.8
11	T1	224	0.0	224	0.0	0.372	7.5	LOS A	0.8	5.5	0.37	0.66	0.41	48.8
Approach		368	0.0	368	0.0	0.372	7.1	LOS A	0.8	5.5	0.37	0.66	0.41	48.8
All Vehicles		993	0.0	993	0.0	0.372	4.9	NA	0.8	5.5	0.24	0.46	0.26	52.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2041_AAST_AM]

Network: N101 [2041_AAST_AM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	112	0.0	112	0.0	0.050	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	617	0.0	617	0.0	0.132	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		728	0.0	728	0.0	0.132	0.9	NA	0.0	0.0	0.00	0.08	0.00	93.7
West: Princes Highway NB Ramp														
10	L2	223	0.0	223	0.0	0.120	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		223	0.0	223	0.0	0.120	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		952	0.0	952	0.0	0.132	2.0	NA	0.0	0.0	0.00	0.19	0.00	82.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2041_AAST_PM]

Network: N101 [2041_AAST_PM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	215	0.0	215	0.0	0.097	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	1275	0.0	1275	0.0	0.273	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		1489	0.0	1489	0.0	0.273	0.9	NA	0.0	0.0	0.00	0.08	0.00	94.0
West: Princes Highway NB Ramp														
10	L2	276	0.0	276	0.0	0.149	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		276	0.0	276	0.0	0.149	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		1765	0.0	1765	0.0	0.273	1.6	NA	0.0	0.0	0.00	0.15	0.00	86.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2041_AAST_AM]

Network: N101 [2041_AAST_AM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	228	0.0	228	0.0	0.261	8.7	LOS A	0.4	3.1	0.58	0.82	0.61	52.8
Approach		228	0.0	228	0.0	0.261	8.7	LOS A	0.4	3.1	0.58	0.82	0.61	52.8
North: Princes Highway SB														
7	L2	216	0.0	216	0.0	0.116	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1220	0.0	1220	0.0	0.313	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1436	0.0	1436	0.0	0.313	0.9	NA	0.0	0.0	0.00	0.09	0.00	94.6
All Vehicles		1664	0.0	1664	0.0	0.313	1.9	NA	0.4	3.1	0.08	0.19	0.08	85.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2041_AAST_PM]

Network: N101 [2041_AAST_PM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	115	0.0	115	0.0	0.125	8.0	LOS A	0.2	1.4	0.53	0.74	0.53	53.2
Approach		115	0.0	115	0.0	0.125	8.0	LOS A	0.2	1.4	0.53	0.74	0.53	53.2
North: Princes Highway SB														
7	L2	300	0.0	300	0.0	0.162	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1143	0.0	1143	0.0	0.293	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1443	0.0	1443	0.0	0.293	1.2	NA	0.0	0.0	0.00	0.12	0.00	92.5
All Vehicles		1558	0.0	1558	0.0	0.293	1.7	NA	0.2	1.4	0.04	0.17	0.04	87.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2041_AAST_AM]

Network: N101 [2041_AAST_AM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	177	0.0	177	0.0	0.096	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.096	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		178	0.0	178	0.0	0.096	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB Ramp														
28	T1	217	0.0	217	0.0	0.130	0.1	LOS A	0.1	0.6	0.08	0.07	0.08	57.6
29	R2	27	0.0	27	0.0	0.130	6.1	LOS A	0.1	0.6	0.08	0.07	0.08	55.0
Approach		244	0.0	244	0.0	0.130	0.8	NA	0.1	0.6	0.08	0.07	0.08	57.4
SouthWest: Pestells Lane														
30	L2	228	0.0	228	0.0	0.343	5.5	LOS A	0.6	4.5	0.00	0.59	0.00	46.0
32	R2	194	0.0	194	0.0	0.343	7.3	LOS A	0.6	4.5	0.00	0.59	0.00	47.4
Approach		422	0.0	422	0.0	0.343	6.4	LOS A	0.6	4.5	0.00	0.59	0.00	46.8
All Vehicles		844	0.0	844	0.0	0.343	4.6	NA	0.6	4.5	0.03	0.43	0.03	48.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2041_AAST_PM]

Network: N101 [2041_AAST_PM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	285	0.0	285	0.0	0.160	5.5	LOS A	0.0	0.0	0.00	0.56	0.00	42.5
22	T1	12	0.0	12	0.0	0.160	0.0	LOS A	0.0	0.0	0.00	0.56	0.00	42.5
Approach		297	0.0	297	0.0	0.160	5.3	NA	0.0	0.0	0.00	0.56	0.00	42.5
NorthWest: Princes Highway SB Ramp														
28	T1	174	0.0	174	0.0	0.184	0.8	LOS A	0.3	2.4	0.34	0.27	0.34	51.6
29	R2	126	0.0	126	0.0	0.184	6.6	LOS A	0.3	2.4	0.34	0.27	0.34	44.5
Approach		300	0.0	300	0.0	0.184	3.2	NA	0.3	2.4	0.34	0.27	0.34	49.6
SouthWest: Pestells Lane														
30	L2	103	0.0	103	0.0	0.207	5.6	LOS A	0.3	2.3	0.04	0.59	0.04	45.4
32	R2	121	0.0	121	0.0	0.207	7.7	LOS A	0.3	2.3	0.04	0.59	0.04	47.0
Approach		224	0.0	224	0.0	0.207	6.7	LOS A	0.3	2.3	0.04	0.59	0.04	46.4
All Vehicles		821	0.0	821	0.0	0.207	4.9	NA	0.3	2.4	0.14	0.46	0.14	46.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2041_100HH_AM]

Network: N101 [2041_100HH_AM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	91	0.0	91	0.0	0.091	0.0	LOS A	0.0	0.0	0.00	0.29	0.00	57.1
6	R2	83	0.0	83	0.0	0.091	5.5	LOS A	0.0	0.0	0.00	0.29	0.00	53.3
Approach		174	0.0	174	0.0	0.091	2.6	NA	0.0	0.0	0.00	0.29	0.00	56.0
North: Princes Highway NB Ramp														
7	L2	34	0.0	34	0.0	0.069	6.0	LOS A	0.1	0.9	0.28	0.53	0.28	37.6
9	R2	78	0.0	78	0.0	0.069	6.0	LOS A	0.1	0.9	0.28	0.53	0.28	49.3
Approach		112	0.0	112	0.0	0.069	6.0	NA	0.1	0.9	0.28	0.53	0.28	47.7
West: Pestells Lane														
10	L2	134	0.0	134	0.0	0.448	6.1	LOS A	1.1	7.5	0.34	0.60	0.36	50.3
11	T1	384	0.0	384	0.0	0.448	5.8	LOS A	1.1	7.5	0.34	0.60	0.36	50.3
Approach		518	0.0	518	0.0	0.448	5.9	LOS A	1.1	7.5	0.34	0.60	0.36	50.3
All Vehicles		803	0.0	803	0.0	0.448	5.2	NA	1.1	7.5	0.26	0.52	0.27	51.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [1 - 2041_100HH_PM]

Network: N101 [2041_100HH_PM]

Pestells Lane / Princes Highway NB
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Aver. Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Pestells Lane														
5	T1	399	0.0	399	0.0	0.289	0.0	LOS A	0.0	0.0	0.00	0.17	0.00	58.2
6	R2	157	0.0	157	0.0	0.289	5.5	LOS A	0.0	0.0	0.00	0.17	0.00	55.8
Approach		556	0.0	556	0.0	0.289	1.6	NA	0.0	0.0	0.00	0.17	0.00	57.8
North: Princes Highway NB Ramp														
7	L2	34	0.0	34	0.0	0.228	8.2	LOS A	0.4	3.1	0.58	0.71	0.58	34.4
9	R2	212	0.0	212	0.0	0.228	8.1	LOS A	0.4	3.1	0.58	0.71	0.58	47.7
Approach		245	0.0	245	0.0	0.228	8.1	NA	0.4	3.1	0.58	0.71	0.58	47.0
West: Pestells Lane														
10	L2	163	0.0	163	0.0	0.490	7.3	LOS A	1.3	9.2	0.45	0.76	0.65	46.6
11	T1	267	0.0	267	0.0	0.490	9.8	LOS A	1.3	9.2	0.45	0.76	0.65	46.6
Approach		431	0.0	431	0.0	0.490	8.9	LOS A	1.3	9.2	0.45	0.76	0.65	46.6
All Vehicles		1232	0.0	1232	0.0	0.490	5.4	NA	1.3	9.2	0.27	0.48	0.34	51.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2041_100HH_AM]

Network: N101 [2041_100HH_AM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	111	0.0	111	0.0	0.050	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	658	0.0	658	0.0	0.141	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		768	0.0	768	0.0	0.141	0.8	NA	0.0	0.0	0.00	0.08	0.00	94.1
West: Princes Highway NB Ramp														
10	L2	217	0.0	217	0.0	0.117	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		217	0.0	217	0.0	0.117	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		985	0.0	985	0.0	0.141	1.9	NA	0.0	0.0	0.00	0.18	0.00	83.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [2 - 2041_100HH_PM]

Network: N101 [2041_100HH_PM]

Princes Highway NB / Pestells Lane Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway NB														
1	L2	244	0.0	244	0.0	0.110	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	55.0
1	T1	1354	0.0	1354	0.0	0.290	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1598	0.0	1598	0.0	0.290	0.9	NA	0.0	0.0	0.00	0.08	0.00	93.6
West: Princes Highway NB Ramp														
10	L2	320	0.0	320	0.0	0.172	5.6	LOS A	0.0	0.0	0.00	0.53	0.00	56.6
Approach		320	0.0	320	0.0	0.172	5.6	NA	0.0	0.0	0.00	0.53	0.00	56.6
All Vehicles		1918	0.0	1918	0.0	0.290	1.7	NA	0.0	0.0	0.00	0.16	0.00	85.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2041_100HH_AM]

Network: N101 [2041_100HH_AM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	214	0.0	214	0.0	0.239	8.4	LOS A	0.4	2.8	0.57	0.79	0.57	52.9
Approach		214	0.0	214	0.0	0.239	8.4	LOS A	0.4	2.8	0.57	0.79	0.57	52.9
North: Princes Highway SB														
7	L2	192	0.0	192	0.0	0.103	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1185	0.0	1185	0.0	0.304	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1377	0.0	1377	0.0	0.304	0.8	NA	0.0	0.0	0.00	0.08	0.00	95.0
All Vehicles		1591	0.0	1591	0.0	0.304	1.8	NA	0.4	2.8	0.08	0.18	0.08	86.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [3 - 2041_100HH_PM]

Network: N101 [2041_100HH_PM]

Princes Highway SB / Meroo Road Merge
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Princes Highway SB Ramp														
4	L2	128	0.0	128	0.0	0.149	8.5	LOS A	0.2	1.6	0.55	0.78	0.55	52.9
Approach		128	0.0	128	0.0	0.149	8.5	LOS A	0.2	1.6	0.55	0.78	0.55	52.9
North: Princes Highway SB														
7	L2	402	0.0	402	0.0	0.217	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
8	T1	1245	0.0	1245	0.0	0.319	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1647	0.0	1647	0.0	0.319	1.4	NA	0.0	0.0	0.00	0.14	0.00	91.1
All Vehicles		1776	0.0	1776	0.0	0.319	1.9	NA	0.2	1.6	0.04	0.19	0.04	86.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2041_100HH_AM]

Network: N101 [2041_100HH_AM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	174	0.0	174	0.0	0.094	5.5	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
22	T1	1	0.0	1	0.0	0.094	0.0	LOS A	0.0	0.0	0.00	0.57	0.00	42.1
Approach		175	0.0	175	0.0	0.094	5.5	NA	0.0	0.0	0.00	0.57	0.00	42.1
NorthWest: Princes Highway SB Ramp														
28	T1	192	0.0	192	0.0	0.115	0.1	LOS A	0.1	0.5	0.08	0.07	0.08	57.6
29	R2	24	0.0	24	0.0	0.115	6.0	LOS A	0.1	0.5	0.08	0.07	0.08	55.0
Approach		216	0.0	216	0.0	0.115	0.8	NA	0.1	0.5	0.08	0.07	0.08	57.4
SouthWest: Pestells Lane														
30	L2	213	0.0	213	0.0	0.307	5.5	LOS A	0.6	3.9	0.00	0.59	0.00	46.2
32	R2	174	0.0	174	0.0	0.307	7.0	LOS A	0.6	3.9	0.00	0.59	0.00	47.6
Approach		386	0.0	386	0.0	0.307	6.2	LOS A	0.6	3.9	0.00	0.59	0.00	47.0
All Vehicles		777	0.0	777	0.0	0.307	4.5	NA	0.6	3.9	0.02	0.44	0.02	48.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [4 - 2041_100HH_PM]

Network: N101 [2041_100HH_PM]

Princes Highway SB / Pestells Lane / Meroo Road
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Meroo Road														
21	L2	365	0.0	365	0.0	0.203	5.5	LOS A	0.0	0.0	0.00	0.56	0.00	42.4
22	T1	12	0.0	12	0.0	0.203	0.0	LOS A	0.0	0.0	0.00	0.56	0.00	42.4
Approach		377	0.0	377	0.0	0.203	5.4	NA	0.0	0.0	0.00	0.56	0.00	42.4
NorthWest: Princes Highway SB Ramp														
28	T1	212	0.0	212	0.0	0.263	1.3	LOS A	0.6	4.0	0.44	0.33	0.44	50.3
29	R2	191	0.0	191	0.0	0.263	7.2	LOS A	0.6	4.0	0.44	0.33	0.44	42.4
Approach		402	0.0	402	0.0	0.263	4.1	NA	0.6	4.0	0.44	0.33	0.44	47.7
SouthWest: Pestells Lane														
30	L2	116	0.0	116	0.0	0.283	5.6	LOS A	0.5	3.2	0.05	0.59	0.05	44.1
32	R2	152	0.0	152	0.0	0.283	9.0	LOS A	0.5	3.2	0.05	0.59	0.05	46.1
Approach		267	0.0	267	0.0	0.283	7.5	LOS A	0.5	3.2	0.05	0.59	0.05	45.5
All Vehicles		1046	0.0	1046	0.0	0.283	5.4	NA	0.6	4.0	0.18	0.48	0.18	45.4

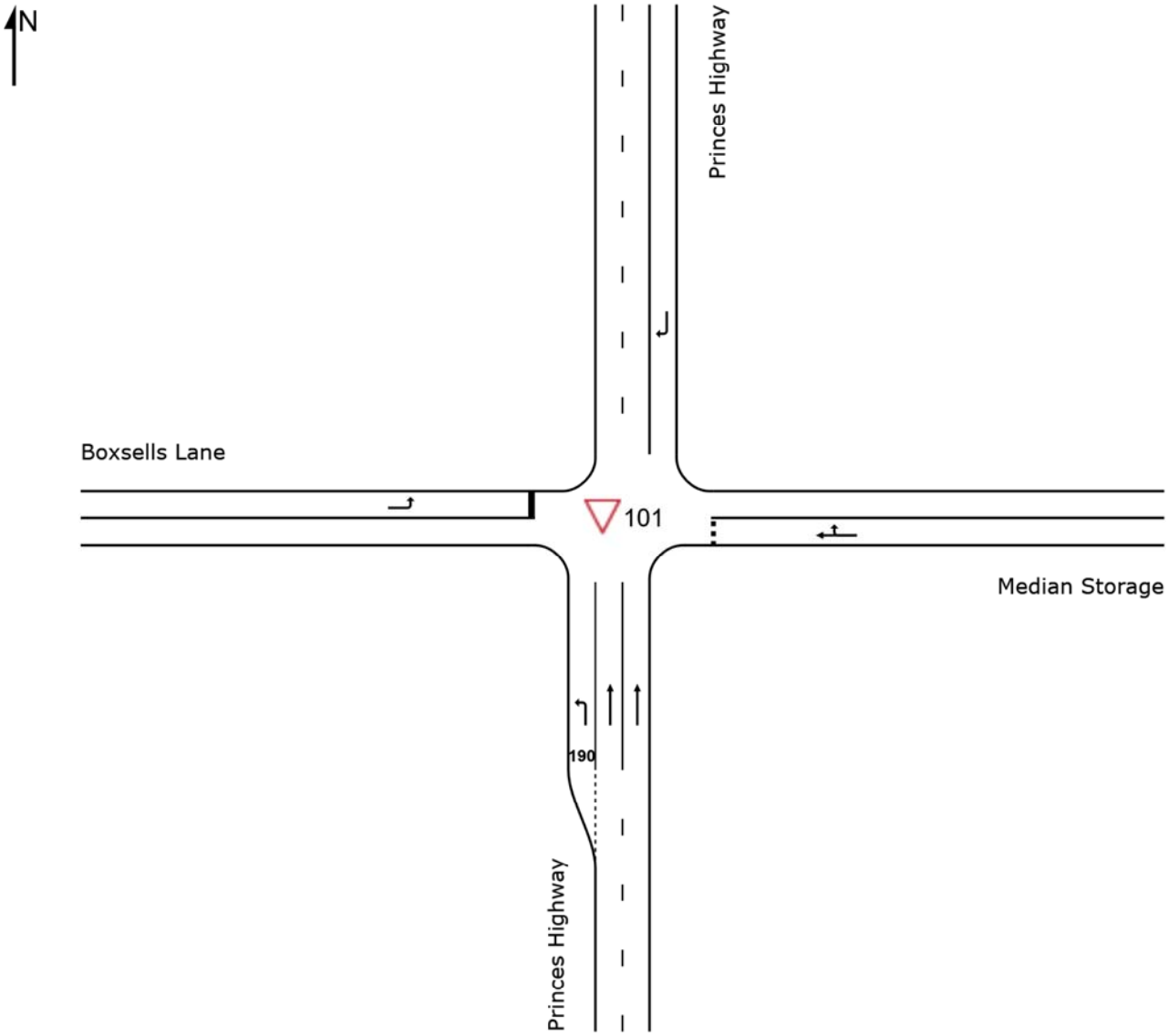
Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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SITE LAYOUT

Site: 101 [W - 2021 AAST AM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

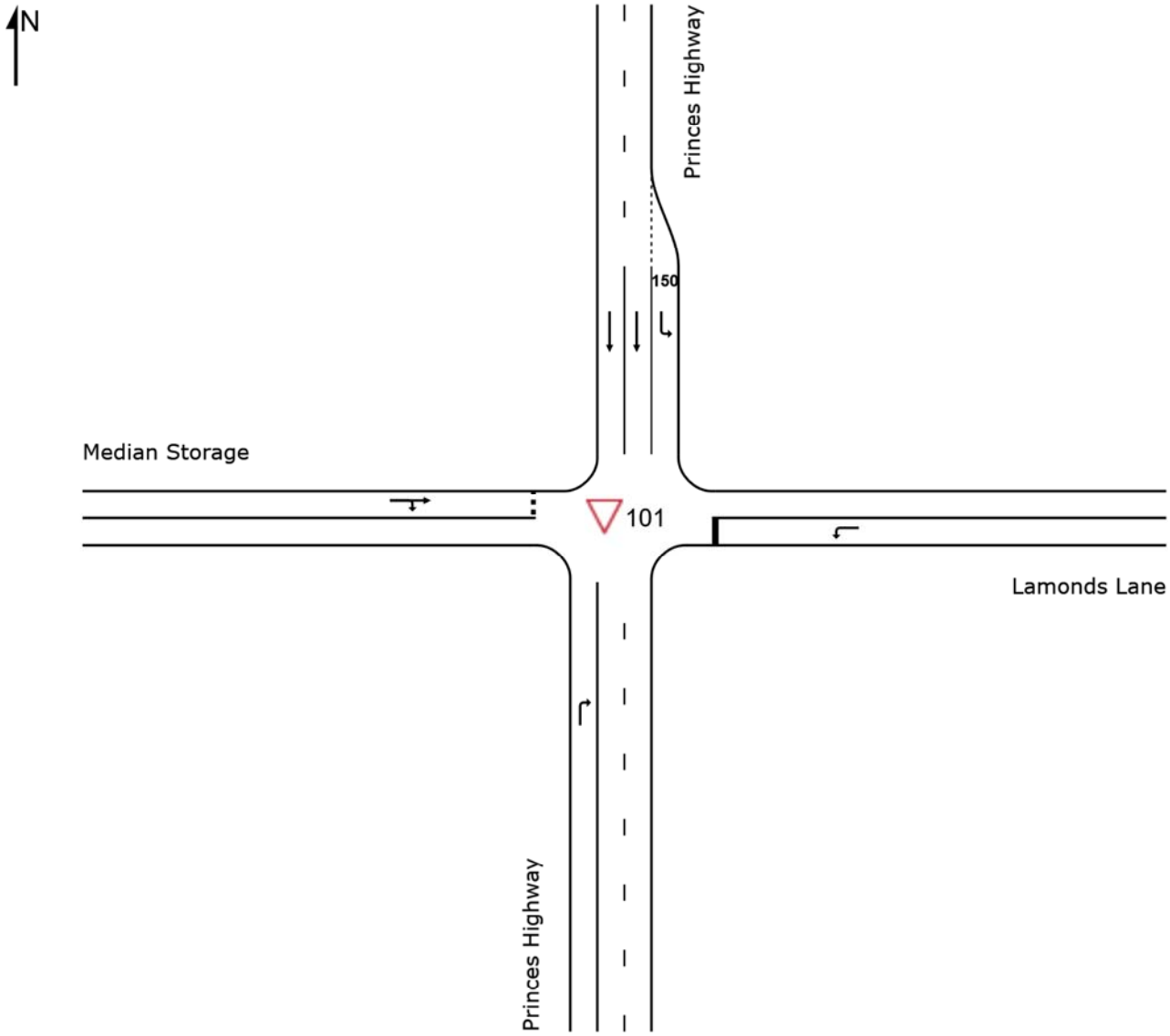


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SITE LAYOUT

Site: 101 [E - 2021 AAST AM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)



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MOVEMENT SUMMARY

Site: 101 [W - 2021 AAST AM]

Network: N101 [2021 AAST AM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	5	0.0	5	0.0	0.003	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	599	0.0	599	0.0	0.154	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		604	0.0	604	0.0	0.154	0.1	NA	0.0	0.0	0.00	0.01	0.00	99.5
East: Median Storage														
5	T1	1	0.0	1	0.0	0.005	6.8	LOS A	0.0	0.0	0.59	0.61	0.59	46.6
6	R2	1	0.0	1	0.0	0.005	8.4	LOS A	0.0	0.0	0.59	0.61	0.59	41.5
Approach		2	0.0	2	0.0	0.005	7.6	LOS A	0.0	0.0	0.59	0.61	0.59	44.7
North: Princes Highway														
9	R2	1	0.0	1	0.0	0.002	12.0	LOS A	0.0	0.0	0.52	0.67	0.52	51.7
Approach		1	0.0	1	0.0	0.002	12.0	NA	0.0	0.0	0.52	0.67	0.52	51.7
West: Boxsells Lane														
10	L2	1	0.0	1	0.0	0.001	9.4	LOS A	0.0	0.0	0.37	0.81	0.37	51.1
Approach		1	0.0	1	0.0	0.001	9.4	LOS A	0.0	0.0	0.37	0.81	0.37	51.1
All Vehicles		608	0.0	608	0.0	0.154	0.1	NA	0.0	0.0	0.00	0.01	0.00	99.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [W - 2021 AAST PM]

Network: N101 [2021 AAST PM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	6	0.0	6	0.0	0.003	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1065	0.0	1065	0.0	0.273	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1072	0.0	1072	0.0	0.273	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.6
East: Median Storage														
5	T1	1	0.0	1	0.0	0.012	18.1	LOS B	0.0	0.1	0.83	0.87	0.83	35.2
6	R2	1	0.0	1	0.0	0.012	23.2	LOS B	0.0	0.1	0.83	0.87	0.83	26.9
Approach		2	0.0	2	0.0	0.012	20.7	LOS B	0.0	0.1	0.83	0.87	0.83	31.8
North: Princes Highway														
9	R2	2	0.0	2	0.0	0.009	20.6	LOS B	0.0	0.1	0.78	0.87	0.78	44.6
Approach		2	0.0	2	0.0	0.009	20.6	NA	0.0	0.1	0.78	0.87	0.78	44.6
West: Boxsells Lane														
10	L2	1	0.0	1	0.0	0.002	11.2	LOS A	0.0	0.0	0.50	0.81	0.50	49.7
Approach		1	0.0	1	0.0	0.002	11.2	LOS A	0.0	0.0	0.50	0.81	0.50	49.7
All Vehicles		1077	0.0	1077	0.0	0.273	0.2	NA	0.0	0.1	0.00	0.01	0.00	99.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [E - 2021 AAST AM]

Network: N101 [2021 AAST AM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.005	20.6	LOS B	0.0	0.0	0.78	0.83	0.78	43.6
Approach		1	0.0	1	0.0	0.005	20.6	NA	0.0	0.0	0.78	0.83	0.78	43.6
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.002	11.3	LOS A	0.0	0.0	0.51	0.81	0.51	48.7
Approach		1	0.0	1	0.0	0.002	11.3	LOS A	0.0	0.0	0.51	0.81	0.51	48.7
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1075	0.0	1075	0.0	0.276	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1076	0.0	1076	0.0	0.276	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
West: Median Storage														
5	T1	1	0.0	1	0.0	0.012	18.3	LOS B	0.0	0.1	0.84	0.88	0.84	34.9
6	R2	1	0.0	1	0.0	0.012	23.6	LOS B	0.0	0.1	0.84	0.88	0.84	24.5
Approach		2	0.0	2	0.0	0.012	21.0	LOS B	0.0	0.1	0.84	0.88	0.84	30.7
All Vehicles		1080	0.0	1080	0.0	0.276	0.1	NA	0.0	0.1	0.00	0.00	0.00	99.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [E - 2021 AAST PM]

Network: N101 [2021 AAST PM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.005	21.0	LOS B	0.0	0.0	0.79	0.83	0.79	43.3
Approach		1	0.0	1	0.0	0.005	21.0	NA	0.0	0.0	0.79	0.83	0.79	43.3
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.002	11.4	LOS A	0.0	0.0	0.51	0.81	0.51	48.6
Approach		1	0.0	1	0.0	0.002	11.4	LOS A	0.0	0.0	0.51	0.81	0.51	48.6
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1091	0.0	1091	0.0	0.280	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1092	0.0	1092	0.0	0.280	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
West: Median Storage														
5	T1	1	0.0	1	0.0	0.013	19.0	LOS B	0.0	0.1	0.84	0.88	0.84	34.5
6	R2	1	0.0	1	0.0	0.013	24.5	LOS B	0.0	0.1	0.84	0.88	0.84	24.0
Approach		2	0.0	2	0.0	0.013	21.7	LOS B	0.0	0.1	0.84	0.88	0.84	30.2
All Vehicles		1096	0.0	1096	0.0	0.280	0.1	NA	0.0	0.1	0.00	0.00	0.00	99.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [W - 2021 100HH AM]

Network: N101 [2021 100HH AM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	5	0.0	5	0.0	0.003	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	597	0.0	597	0.0	0.153	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		602	0.0	602	0.0	0.153	0.1	NA	0.0	0.0	0.00	0.01	0.00	99.5
East: Median Storage														
5	T1	1	0.0	1	0.0	0.005	6.8	LOS A	0.0	0.0	0.59	0.61	0.59	46.6
6	R2	1	0.0	1	0.0	0.005	8.4	LOS A	0.0	0.0	0.59	0.61	0.59	41.6
Approach		2	0.0	2	0.0	0.005	7.6	LOS A	0.0	0.0	0.59	0.61	0.59	44.7
North: Princes Highway														
9	R2	1	0.0	1	0.0	0.002	12.0	LOS A	0.0	0.0	0.52	0.67	0.52	51.7
Approach		1	0.0	1	0.0	0.002	12.0	NA	0.0	0.0	0.52	0.67	0.52	51.7
West: Boxsells Lane														
10	L2	1	0.0	1	0.0	0.001	9.4	LOS A	0.0	0.0	0.37	0.81	0.37	51.1
Approach		1	0.0	1	0.0	0.001	9.4	LOS A	0.0	0.0	0.37	0.81	0.37	51.1
All Vehicles		606	0.0	606	0.0	0.153	0.1	NA	0.0	0.0	0.00	0.01	0.00	99.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [W - 2021 100HH PM]

Network: N101 [2021 100HH PM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	7	0.0	7	0.0	0.004	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1165	0.0	1165	0.0	0.299	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1173	0.0	1173	0.0	0.299	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.5
East: Median Storage														
5	T1	1	0.0	1	0.0	0.015	22.5	LOS B	0.0	0.1	0.87	0.92	0.87	32.0
6	R2	1	0.0	1	0.0	0.015	29.1	LOS C	0.0	0.1	0.87	0.92	0.87	23.7
Approach		2	0.0	2	0.0	0.015	25.8	LOS B	0.0	0.1	0.87	0.92	0.87	28.5
North: Princes Highway														
9	R2	2	0.0	2	0.0	0.011	23.7	LOS B	0.0	0.1	0.82	0.92	0.82	42.5
Approach		2	0.0	2	0.0	0.011	23.7	NA	0.0	0.1	0.82	0.92	0.82	42.5
West: Boxsells Lane														
10	L2	1	0.0	1	0.0	0.002	11.8	LOS A	0.0	0.0	0.53	0.81	0.53	49.3
Approach		1	0.0	1	0.0	0.002	11.8	LOS A	0.0	0.0	0.53	0.81	0.53	49.3
All Vehicles		1178	0.0	1178	0.0	0.299	0.2	NA	0.0	0.1	0.00	0.01	0.00	99.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [E - 2021 100HH AM]

Network: N101 [2021 100HH AM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.004	18.3	LOS B	0.0	0.0	0.74	0.79	0.74	45.3
Approach		1	0.0	1	0.0	0.004	18.3	NA	0.0	0.0	0.74	0.79	0.74	45.3
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.002	10.9	LOS A	0.0	0.0	0.48	0.81	0.48	49.0
Approach		1	0.0	1	0.0	0.002	10.9	LOS A	0.0	0.0	0.48	0.81	0.48	49.0
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	985	0.0	985	0.0	0.253	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		986	0.0	986	0.0	0.253	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
West: Median Storage														
5	T1	1	0.0	1	0.0	0.010	15.2	LOS B	0.0	0.1	0.80	0.82	0.80	37.5
6	R2	1	0.0	1	0.0	0.010	19.4	LOS B	0.0	0.1	0.80	0.82	0.80	27.3
Approach		2	0.0	2	0.0	0.010	17.3	LOS B	0.0	0.1	0.80	0.82	0.80	33.5
All Vehicles		991	0.0	991	0.0	0.253	0.1	NA	0.0	0.1	0.00	0.00	0.00	99.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [E - 2021 100HH PM]

Network: N101 [2021 100HH PM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.007	27.6	LOS B	0.0	0.1	0.85	0.91	0.85	39.1
Approach		1	0.0	1	0.0	0.007	27.6	NA	0.0	0.1	0.85	0.91	0.85	39.1
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.002	12.4	LOS A	0.0	0.0	0.56	0.82	0.56	47.8
Approach		1	0.0	1	0.0	0.002	12.4	LOS A	0.0	0.0	0.56	0.82	0.56	47.8
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1275	0.0	1275	0.0	0.327	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1276	0.0	1276	0.0	0.327	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.7
West: Median Storage														
5	T1	1	0.0	1	0.0	0.019	28.4	LOS B	0.0	0.2	0.90	0.94	0.90	28.5
6	R2	1	0.0	1	0.0	0.019	37.5	LOS C	0.0	0.2	0.90	0.94	0.90	18.5
Approach		2	0.0	2	0.0	0.019	32.9	LOS C	0.0	0.2	0.90	0.94	0.90	24.2
All Vehicles		1280	0.0	1280	0.0	0.327	0.1	NA	0.0	0.2	0.00	0.00	0.00	99.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [W - 2026 AAST AM]

Network: N101 [2026 AAST AM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	5	0.0	5	0.0	0.003	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	651	0.0	651	0.0	0.167	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		656	0.0	656	0.0	0.167	0.1	NA	0.0	0.0	0.00	0.01	0.00	99.6
East: Median Storage														
5	T1	1	0.0	1	0.0	0.005	7.7	LOS A	0.0	0.1	0.63	0.64	0.63	45.4
6	R2	1	0.0	1	0.0	0.005	9.6	LOS A	0.0	0.1	0.63	0.64	0.63	39.8
Approach		2	0.0	2	0.0	0.005	8.7	LOS A	0.0	0.1	0.63	0.64	0.63	43.3
North: Princes Highway														
9	R2	11	0.0	11	0.0	0.023	12.9	LOS A	0.0	0.2	0.56	0.78	0.56	50.9
Approach		11	0.0	11	0.0	0.023	12.9	NA	0.0	0.2	0.56	0.78	0.56	50.9
West: Boxsells Lane														
10	L2	1	0.0	1	0.0	0.001	9.6	LOS A	0.0	0.0	0.39	0.81	0.39	51.0
Approach		1	0.0	1	0.0	0.001	9.6	LOS A	0.0	0.0	0.39	0.81	0.39	51.0
All Vehicles		669	0.0	669	0.0	0.167	0.3	NA	0.0	0.2	0.01	0.02	0.01	97.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [W - 2026 AAST PM]

Network: N101 [2026 AAST PM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	7	0.0	7	0.0	0.004	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1172	0.0	1172	0.0	0.300	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1179	0.0	1179	0.0	0.300	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.5
East: Median Storage														
5	T1	1	0.0	1	0.0	0.016	23.5	LOS B	0.0	0.1	0.87	0.93	0.87	31.5
6	R2	1	0.0	1	0.0	0.016	30.3	LOS C	0.0	0.1	0.87	0.93	0.87	23.1
Approach		2	0.0	2	0.0	0.016	26.9	LOS B	0.0	0.1	0.87	0.93	0.87	27.9
North: Princes Highway														
9	R2	19	0.0	19	0.0	0.101	24.9	LOS B	0.1	0.8	0.83	0.94	0.83	41.7
Approach		19	0.0	19	0.0	0.101	24.9	NA	0.1	0.8	0.83	0.94	0.83	41.7
West: Boxsells Lane														
10	L2	1	0.0	1	0.0	0.002	11.8	LOS A	0.0	0.0	0.53	0.81	0.53	49.3
Approach		1	0.0	1	0.0	0.002	11.8	LOS A	0.0	0.0	0.53	0.81	0.53	49.3
All Vehicles		1201	0.0	1201	0.0	0.300	0.5	NA	0.1	0.8	0.02	0.02	0.02	97.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [E - 2026 AAST AM]

Network: N101 [2026 AAST AM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.006	24.4	LOS B	0.0	0.0	0.82	0.88	0.82	41.0
Approach		1	0.0	1	0.0	0.006	24.4	NA	0.0	0.0	0.82	0.88	0.82	41.0
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.002	11.9	LOS A	0.0	0.0	0.53	0.82	0.53	48.2
Approach		1	0.0	1	0.0	0.002	11.9	LOS A	0.0	0.0	0.53	0.82	0.53	48.2
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1195	0.0	1195	0.0	0.306	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1196	0.0	1196	0.0	0.306	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
West: Median Storage														
5	T1	1	0.0	1	0.0	0.016	23.8	LOS B	0.0	0.1	0.87	0.93	0.87	31.2
6	R2	1	0.0	1	0.0	0.016	31.1	LOS C	0.0	0.1	0.87	0.93	0.87	20.8
Approach		2	0.0	2	0.0	0.016	27.4	LOS B	0.0	0.1	0.87	0.93	0.87	26.9
All Vehicles		1200	0.0	1200	0.0	0.306	0.1	NA	0.0	0.1	0.00	0.00	0.00	99.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [E - 2026 AAST PM]

Network: N101 [2026 AAST PM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.006	23.5	LOS B	0.0	0.0	0.82	0.87	0.82	41.6
Approach		1	0.0	1	0.0	0.006	23.5	NA	0.0	0.0	0.82	0.87	0.82	41.6
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.002	11.8	LOS A	0.0	0.0	0.53	0.81	0.53	48.3
Approach		1	0.0	1	0.0	0.002	11.8	LOS A	0.0	0.0	0.53	0.81	0.53	48.3
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1169	0.0	1169	0.0	0.300	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1171	0.0	1171	0.0	0.300	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
West: Median Storage														
5	T1	1	0.0	1	0.0	0.015	22.5	LOS B	0.0	0.1	0.87	0.92	0.87	32.0
6	R2	1	0.0	1	0.0	0.015	29.3	LOS C	0.0	0.1	0.87	0.92	0.87	21.6
Approach		2	0.0	2	0.0	0.015	25.9	LOS B	0.0	0.1	0.87	0.92	0.87	27.7
All Vehicles		1175	0.0	1175	0.0	0.300	0.1	NA	0.0	0.1	0.00	0.00	0.00	99.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [W - 2026 100HH AM]

Network: N101 [2026 100HH AM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	5	0.0	5	0.0	0.003	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	652	0.0	652	0.0	0.167	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		657	0.0	657	0.0	0.167	0.1	NA	0.0	0.0	0.00	0.01	0.00	99.6
East: Median Storage														
5	T1	1	0.0	1	0.0	0.005	7.8	LOS A	0.0	0.1	0.63	0.64	0.63	45.4
6	R2	1	0.0	1	0.0	0.005	9.6	LOS A	0.0	0.1	0.63	0.64	0.63	39.8
Approach		2	0.0	2	0.0	0.005	8.7	LOS A	0.0	0.1	0.63	0.64	0.63	43.3
North: Princes Highway														
9	R2	11	0.0	11	0.0	0.023	12.9	LOS A	0.0	0.2	0.56	0.78	0.56	50.8
Approach		11	0.0	11	0.0	0.023	12.9	NA	0.0	0.2	0.56	0.78	0.56	50.8
West: Boxsells Lane														
10	L2	1	0.0	1	0.0	0.001	9.6	LOS A	0.0	0.0	0.39	0.81	0.39	51.0
Approach		1	0.0	1	0.0	0.001	9.6	LOS A	0.0	0.0	0.39	0.81	0.39	51.0
All Vehicles		671	0.0	671	0.0	0.167	0.3	NA	0.0	0.2	0.01	0.02	0.01	97.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [W - 2026 100HH PM]

Network: N101 [2026 100HH PM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	7	0.0	7	0.0	0.004	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1271	0.0	1271	0.0	0.326	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1278	0.0	1278	0.0	0.326	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.5
East: Median Storage														
5	T1	1	0.0	1	0.0	0.020	29.5	LOS C	0.0	0.2	0.90	0.94	0.90	28.1
6	R2	1	0.0	1	0.0	0.020	38.5	LOS C	0.0	0.2	0.90	0.94	0.90	19.8
Approach		2	0.0	2	0.0	0.020	34.0	LOS C	0.0	0.2	0.90	0.94	0.90	24.5
North: Princes Highway														
9	R2	24	0.0	24	0.0	0.156	29.5	LOS C	0.2	1.3	0.87	0.96	0.88	39.0
Approach		24	0.0	24	0.0	0.156	29.5	NA	0.2	1.3	0.87	0.96	0.88	39.0
West: Boxsells Lane														
10	L2	1	0.0	1	0.0	0.002	12.4	LOS A	0.0	0.0	0.56	0.82	0.56	48.8
Approach		1	0.0	1	0.0	0.002	12.4	LOS A	0.0	0.0	0.56	0.82	0.56	48.8
All Vehicles		1305	0.0	1305	0.0	0.326	0.7	NA	0.2	1.3	0.02	0.02	0.02	96.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [E - 2026 100HH AM]

Network: N101 [2026 100HH AM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.005	21.2	LOS B	0.0	0.0	0.79	0.84	0.79	43.2
Approach		1	0.0	1	0.0	0.005	21.2	NA	0.0	0.0	0.79	0.84	0.79	43.2
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.002	11.4	LOS A	0.0	0.0	0.51	0.81	0.51	48.6
Approach		1	0.0	1	0.0	0.002	11.4	LOS A	0.0	0.0	0.51	0.81	0.51	48.6
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1097	0.0	1097	0.0	0.281	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1098	0.0	1098	0.0	0.281	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
West: Median Storage														
5	T1	1	0.0	1	0.0	0.013	19.2	LOS B	0.0	0.1	0.84	0.89	0.84	34.3
6	R2	1	0.0	1	0.0	0.013	24.8	LOS B	0.0	0.1	0.84	0.89	0.84	23.8
Approach		2	0.0	2	0.0	0.013	22.0	LOS B	0.0	0.1	0.84	0.89	0.84	30.0
All Vehicles		1102	0.0	1102	0.0	0.281	0.1	NA	0.0	0.1	0.00	0.00	0.00	99.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [E - 2026 100HH PM]

Network: N101 [2026 100HH PM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.008	30.7	LOS C	0.0	0.1	0.87	0.94	0.87	37.4
Approach		1	0.0	1	0.0	0.008	30.7	NA	0.0	0.1	0.87	0.94	0.87	37.4
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.002	12.8	LOS A	0.0	0.0	0.58	0.82	0.58	47.5
Approach		1	0.0	1	0.0	0.002	12.8	LOS A	0.0	0.0	0.58	0.82	0.58	47.5
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1339	0.0	1339	0.0	0.343	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1340	0.0	1340	0.0	0.343	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.7
West: Median Storage														
5	T1	1	0.0	1	0.0	0.022	32.8	LOS C	0.0	0.2	0.91	0.95	0.91	26.4
6	R2	1	0.0	1	0.0	0.022	43.8	LOS D	0.0	0.2	0.91	0.95	0.91	16.6
Approach		2	0.0	2	0.0	0.022	38.3	LOS C	0.0	0.2	0.91	0.95	0.91	22.2
All Vehicles		1344	0.0	1344	0.0	0.343	0.1	NA	0.0	0.2	0.00	0.00	0.00	99.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [W - 2031 AAST AM]

Network: N101 [2031 AAST AM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	6	0.0	6	0.0	0.003	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	715	0.0	715	0.0	0.183	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		721	0.0	721	0.0	0.183	0.1	NA	0.0	0.0	0.00	0.01	0.00	99.5
East: Median Storage														
5	T1	1	0.0	1	0.0	0.006	9.4	LOS A	0.0	0.1	0.68	0.69	0.68	43.5
6	R2	1	0.0	1	0.0	0.006	11.6	LOS A	0.0	0.1	0.68	0.69	0.68	37.1
Approach		2	0.0	2	0.0	0.006	10.5	LOS A	0.0	0.1	0.68	0.69	0.68	41.0
North: Princes Highway														
9	R2	40	0.0	40	0.0	0.097	14.2	LOS A	0.1	0.9	0.62	0.87	0.62	49.7
Approach		40	0.0	40	0.0	0.097	14.2	NA	0.1	0.9	0.62	0.87	0.62	49.7
West: Boxsells Lane														
10	L2	1	0.0	1	0.0	0.001	9.8	LOS A	0.0	0.0	0.41	0.80	0.41	50.8
Approach		1	0.0	1	0.0	0.001	9.8	LOS A	0.0	0.0	0.41	0.80	0.41	50.8
All Vehicles		764	0.0	764	0.0	0.183	0.9	NA	0.1	0.9	0.04	0.05	0.04	94.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [W - 2031 AAST PM]

Network: N101 [2031 AAST PM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	7	0.0	7	0.0	0.004	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1320	0.0	1320	0.0	0.338	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1327	0.0	1327	0.0	0.338	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.5
East: Median Storage														
5	T1	1	0.0	1	0.0	0.025	35.9	LOS C	0.0	0.2	0.92	0.96	0.92	25.2
6	R2	1	0.0	1	0.0	0.025	47.5	LOS D	0.0	0.2	0.92	0.96	0.92	17.2
Approach		2	0.0	2	0.0	0.025	41.7	LOS C	0.0	0.2	0.92	0.96	0.92	21.7
North: Princes Highway														
9	R2	74	0.0	74	0.0	0.526	42.8	LOS D	0.8	5.3	0.93	1.03	1.29	32.9
Approach		74	0.0	74	0.0	0.526	42.8	NA	0.8	5.3	0.93	1.03	1.29	32.9
West: Boxsells Lane														
10	L2	1	0.0	1	0.0	0.002	12.7	LOS A	0.0	0.0	0.58	0.82	0.58	48.6
Approach		1	0.0	1	0.0	0.002	12.7	LOS A	0.0	0.0	0.58	0.82	0.58	48.6
All Vehicles		1404	0.0	1404	0.0	0.526	2.4	NA	0.8	5.3	0.05	0.06	0.07	89.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [E - 2031 AAST AM]

Network: N101 [2031 AAST AM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.008	31.5	LOS C	0.0	0.1	0.87	0.95	0.87	37.0
Approach		1	0.0	1	0.0	0.008	31.5	NA	0.0	0.1	0.87	0.95	0.87	37.0
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.002	12.9	LOS A	0.0	0.0	0.59	0.82	0.59	47.4
Approach		1	0.0	1	0.0	0.002	12.9	LOS A	0.0	0.0	0.59	0.82	0.59	47.4
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1354	0.0	1354	0.0	0.347	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1355	0.0	1355	0.0	0.347	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.7
West: Median Storage														
5	T1	1	0.0	1	0.0	0.023	34.0	LOS C	0.0	0.2	0.92	0.95	0.92	25.9
6	R2	1	0.0	1	0.0	0.023	45.5	LOS D	0.0	0.2	0.92	0.95	0.92	16.2
Approach		2	0.0	2	0.0	0.023	39.7	LOS C	0.0	0.2	0.92	0.95	0.92	21.7
All Vehicles		1359	0.0	1359	0.0	0.347	0.1	NA	0.0	0.2	0.00	0.00	0.00	99.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [E - 2031 AAST PM]

Network: N101 [2031 AAST PM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.006	25.4	LOS B	0.0	0.0	0.83	0.89	0.83	40.5
Approach		1	0.0	1	0.0	0.006	25.4	NA	0.0	0.0	0.83	0.89	0.83	40.5
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.002	12.1	LOS A	0.0	0.0	0.54	0.82	0.54	48.1
Approach		1	0.0	1	0.0	0.002	12.1	LOS A	0.0	0.0	0.54	0.82	0.54	48.1
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1220	0.0	1220	0.0	0.313	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1221	0.0	1221	0.0	0.313	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
West: Median Storage														
5	T1	1	0.0	1	0.0	0.017	25.1	LOS B	0.0	0.1	0.88	0.93	0.88	30.4
6	R2	1	0.0	1	0.0	0.017	33.0	LOS C	0.0	0.1	0.88	0.93	0.88	20.1
Approach		2	0.0	2	0.0	0.017	29.0	LOS C	0.0	0.1	0.88	0.93	0.88	26.0
All Vehicles		1225	0.0	1225	0.0	0.313	0.1	NA	0.0	0.1	0.00	0.00	0.00	99.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [W - 2031 100HH AM]

Network: N101 [2031 100HH AM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	6	0.0	6	0.0	0.003	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	726	0.0	726	0.0	0.186	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		733	0.0	733	0.0	0.186	0.1	NA	0.0	0.0	0.00	0.01	0.00	99.5
East: Median Storage														
5	T1	1	0.0	1	0.0	0.006	9.5	LOS A	0.0	0.1	0.69	0.70	0.69	43.3
6	R2	1	0.0	1	0.0	0.006	11.8	LOS A	0.0	0.1	0.69	0.70	0.69	36.9
Approach		2	0.0	2	0.0	0.006	10.7	LOS A	0.0	0.1	0.69	0.70	0.69	40.8
North: Princes Highway														
9	R2	36	0.0	36	0.0	0.088	14.3	LOS A	0.1	0.8	0.63	0.87	0.63	49.6
Approach		36	0.0	36	0.0	0.088	14.3	NA	0.1	0.8	0.63	0.87	0.63	49.6
West: Boxsells Lane														
10	L2	1	0.0	1	0.0	0.001	9.9	LOS A	0.0	0.0	0.41	0.80	0.41	50.8
Approach		1	0.0	1	0.0	0.001	9.9	LOS A	0.0	0.0	0.41	0.80	0.41	50.8
All Vehicles		772	0.0	772	0.0	0.186	0.8	NA	0.1	0.8	0.03	0.05	0.03	94.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [W - 2031 100HH PM]

Network: N101 [2031 100HH PM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	8	0.0	8	0.0	0.005	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1419	0.0	1419	0.0	0.364	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.7
Approach		1427	0.0	1427	0.0	0.364	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.5
East: Median Storage														
5	T1	1	0.0	1	0.0	0.033	46.7	LOS D	0.0	0.3	0.94	0.97	0.94	21.4
6	R2	1	0.0	1	0.0	0.033	62.8	LOS E	0.0	0.3	0.94	0.97	0.94	14.1
Approach		2	0.0	2	0.0	0.033	54.7	LOS D	0.0	0.3	0.94	0.97	0.94	18.1
North: Princes Highway														
9	R2	91	0.0	91	0.0	0.800	74.9	LOS F	1.4	9.9	0.98	1.14	1.92	23.8
Approach		91	0.0	91	0.0	0.800	74.9	NA	1.4	9.9	0.98	1.14	1.92	23.8
West: Boxsells Lane														
10	L2	1	0.0	1	0.0	0.002	13.4	LOS A	0.0	0.0	0.61	0.82	0.61	48.1
Approach		1	0.0	1	0.0	0.002	13.4	LOS A	0.0	0.0	0.61	0.82	0.61	48.1
All Vehicles		1521	0.0	1521	0.0	0.800	4.6	NA	1.4	9.9	0.06	0.07	0.12	83.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [E - 2031 100HH AM]

Network: N101 [2031 100HH AM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.007	26.7	LOS B	0.0	0.1	0.84	0.90	0.84	39.6
Approach		1	0.0	1	0.0	0.007	26.7	NA	0.0	0.1	0.84	0.90	0.84	39.6
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.002	12.3	LOS A	0.0	0.0	0.55	0.82	0.55	47.9
Approach		1	0.0	1	0.0	0.002	12.3	LOS A	0.0	0.0	0.55	0.82	0.55	47.9
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1254	0.0	1254	0.0	0.321	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1255	0.0	1255	0.0	0.321	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
West: Median Storage														
5	T1	1	0.0	1	0.0	0.018	27.1	LOS B	0.0	0.2	0.89	0.94	0.89	29.2
6	R2	1	0.0	1	0.0	0.018	35.7	LOS C	0.0	0.2	0.89	0.94	0.89	19.1
Approach		2	0.0	2	0.0	0.018	31.4	LOS C	0.0	0.2	0.89	0.94	0.89	24.9
All Vehicles		1259	0.0	1259	0.0	0.321	0.1	NA	0.0	0.2	0.00	0.00	0.00	99.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [E - 2031 100HH PM]

Network: N101 [2031 100HH PM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.008	30.9	LOS C	0.0	0.1	0.87	0.94	0.87	37.3
Approach		1	0.0	1	0.0	0.008	30.9	NA	0.0	0.1	0.87	0.94	0.87	37.3
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.002	12.8	LOS A	0.0	0.0	0.58	0.82	0.58	47.5
Approach		1	0.0	1	0.0	0.002	12.8	LOS A	0.0	0.0	0.58	0.82	0.58	47.5
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1343	0.0	1343	0.0	0.344	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1344	0.0	1344	0.0	0.344	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.7
West: Median Storage														
5	T1	1	0.0	1	0.0	0.023	33.1	LOS C	0.0	0.2	0.91	0.95	0.91	26.2
6	R2	1	0.0	1	0.0	0.023	44.3	LOS D	0.0	0.2	0.91	0.95	0.91	16.5
Approach		2	0.0	2	0.0	0.023	38.7	LOS C	0.0	0.2	0.91	0.95	0.91	22.0
All Vehicles		1348	0.0	1348	0.0	0.344	0.1	NA	0.0	0.2	0.00	0.00	0.00	99.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [W - 2036 AAST AM]

Network: N101 [2036 AAST AM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	7	0.0	7	0.0	0.004	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	758	0.0	758	0.0	0.194	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		765	0.0	765	0.0	0.194	0.1	NA	0.0	0.0	0.00	0.01	0.00	99.5
East: Median Storage														
5	T1	1	0.0	1	0.0	0.007	10.6	LOS A	0.0	0.1	0.72	0.72	0.72	42.1
6	R2	1	0.0	1	0.0	0.007	13.2	LOS A	0.0	0.1	0.72	0.72	0.72	35.3
Approach		2	0.0	2	0.0	0.007	11.9	LOS A	0.0	0.1	0.72	0.72	0.72	39.4
North: Princes Highway														
9	R2	59	0.0	59	0.0	0.153	15.1	LOS B	0.2	1.4	0.66	0.89	0.66	48.9
Approach		59	0.0	59	0.0	0.153	15.1	NA	0.2	1.4	0.66	0.89	0.66	48.9
West: Boxsells Lane														
10	L2	1	0.0	1	0.0	0.001	10.0	LOS A	0.0	0.0	0.42	0.80	0.42	50.7
Approach		1	0.0	1	0.0	0.001	10.0	LOS A	0.0	0.0	0.42	0.80	0.42	50.7
All Vehicles		827	0.0	827	0.0	0.194	1.2	NA	0.2	1.4	0.05	0.07	0.05	92.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [W - 2036 AAST PM]

Network: N101 [2036 AAST PM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	9	0.0	9	0.0	0.005	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1454	0.0	1454	0.0	0.373	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.7
Approach		1463	0.0	1463	0.0	0.373	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.5
East: Median Storage														
5	T1	1	0.0	1	0.0	0.037	52.2	LOS D	0.0	0.3	0.95	0.97	0.95	19.9
6	R2	1	0.0	1	0.0	0.037	70.6	LOS F	0.0	0.3	0.95	0.97	0.95	12.8
Approach		2	0.0	2	0.0	0.037	61.4	LOS E	0.0	0.3	0.95	0.97	0.95	16.7
North: Princes Highway														
9	R2	105	0.0	105	0.0	1.006	144.3	LOS F	3.2	22.1	1.00	1.39	3.56	14.9
Approach		105	0.0	105	0.0	1.006	144.3	NA	3.2	22.1	1.00	1.39	3.56	14.9
West: Boxsells Lane														
10	L2	1	0.0	1	0.0	0.002	13.6	LOS A	0.0	0.0	0.62	0.83	0.62	47.9
Approach		1	0.0	1	0.0	0.002	13.6	LOS A	0.0	0.0	0.62	0.83	0.62	47.9
All Vehicles		1572	0.0	1572	0.0	1.006	9.8	NA	3.2	22.1	0.07	0.10	0.24	71.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [E - 2036 AAST AM]

Network: N101 [2036 AAST AM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.011	40.8	LOS C	0.0	0.1	0.91	0.97	0.91	32.8
Approach		1	0.0	1	0.0	0.011	40.8	NA	0.0	0.1	0.91	0.97	0.91	32.8
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.002	14.0	LOS A	0.0	0.0	0.64	0.83	0.64	46.6
Approach		1	0.0	1	0.0	0.002	14.0	LOS A	0.0	0.0	0.64	0.83	0.64	46.6
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1499	0.0	1499	0.0	0.384	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	99.7
Approach		1500	0.0	1500	0.0	0.384	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.7
West: Median Storage														
5	T1	1	0.0	1	0.0	0.034	47.9	LOS D	0.0	0.3	0.94	0.97	0.94	20.9
6	R2	1	0.0	1	0.0	0.034	65.8	LOS E	0.0	0.3	0.94	0.97	0.94	12.3
Approach		2	0.0	2	0.0	0.034	56.9	LOS E	0.0	0.3	0.94	0.97	0.94	17.1
All Vehicles		1504	0.0	1504	0.0	0.384	0.2	NA	0.0	0.3	0.00	0.00	0.00	99.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [E - 2036 AAST PM]

Network: N101 [2036 AAST PM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.006	26.2	LOS B	0.0	0.1	0.84	0.90	0.84	39.9
Approach		1	0.0	1	0.0	0.006	26.2	NA	0.0	0.1	0.84	0.90	0.84	39.9
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.002	12.2	LOS A	0.0	0.0	0.55	0.82	0.55	48.0
Approach		1	0.0	1	0.0	0.002	12.2	LOS A	0.0	0.0	0.55	0.82	0.55	48.0
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1241	0.0	1241	0.0	0.318	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1242	0.0	1242	0.0	0.318	0.0	NA	0.0	0.0	0.00	0.00	0.00	99.8
West: Median Storage														
5	T1	1	0.0	1	0.0	0.018	26.3	LOS B	0.0	0.2	0.89	0.94	0.89	29.7
6	R2	1	0.0	1	0.0	0.018	34.6	LOS C	0.0	0.2	0.89	0.94	0.89	19.4
Approach		2	0.0	2	0.0	0.018	30.5	LOS C	0.0	0.2	0.89	0.94	0.89	25.4
All Vehicles		1246	0.0	1246	0.0	0.318	0.1	NA	0.0	0.2	0.00	0.00	0.00	99.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [W - 2036 100HH AM]

Network: N101 [2036 100HH AM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	7	0.0	7	0.0	0.004	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	781	0.0	781	0.0	0.200	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		788	0.0	788	0.0	0.200	0.1	NA	0.0	0.0	0.00	0.01	0.00	99.5
East: Median Storage														
5	T1	1	0.0	1	0.0	0.007	11.0	LOS A	0.0	0.1	0.73	0.73	0.73	41.7
6	R2	1	0.0	1	0.0	0.007	13.7	LOS A	0.0	0.1	0.73	0.73	0.73	34.7
Approach		2	0.0	2	0.0	0.007	12.4	LOS A	0.0	0.1	0.73	0.73	0.73	38.9
North: Princes Highway														
9	R2	54	0.0	54	0.0	0.144	15.5	LOS B	0.2	1.3	0.67	0.89	0.67	48.6
Approach		54	0.0	54	0.0	0.144	15.5	NA	0.2	1.3	0.67	0.89	0.67	48.6
West: Boxsells Lane														
10	L2	1	0.0	1	0.0	0.001	10.1	LOS A	0.0	0.0	0.43	0.80	0.43	50.7
Approach		1	0.0	1	0.0	0.001	10.1	LOS A	0.0	0.0	0.43	0.80	0.43	50.7
All Vehicles		845	0.0	845	0.0	0.200	1.1	NA	0.2	1.3	0.05	0.07	0.05	93.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [W - 2036 100HH PM]

Network: N101 [2036 100HH PM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	11	0.0	11	0.0	0.006	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1562	0.0	1562	0.0	0.401	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	99.7
Approach		1573	0.0	1573	0.0	0.401	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.4
East: Median Storage														
5	T1	1	0.0	1	0.0	0.048	66.6	LOS E	0.1	0.4	0.96	0.98	0.96	16.7
6	R2	1	0.0	1	0.0	0.048	91.6	LOS F	0.1	0.4	0.96	0.98	0.96	10.5
Approach		2	0.0	2	0.0	0.048	79.1	LOS F	0.1	0.4	0.96	0.98	0.96	13.8
North: Princes Highway														
9	R2	91	0.0	91	0.0	1.112	226.6	LOS F	4.4	30.9	1.00	1.51	4.37	10.2
Approach		91	0.0	91	0.0	1.112	226.6	NA	4.4	30.9	1.00	1.51	4.37	10.2
West: Boxsells Lane														
10	L2	1	0.0	1	0.0	0.003	14.5	LOS B	0.0	0.0	0.66	0.83	0.66	47.2
Approach		1	0.0	1	0.0	0.003	14.5	LOS B	0.0	0.0	0.66	0.83	0.66	47.2
All Vehicles		1666	0.0	1666	0.0	1.112	12.5	NA	4.4	30.9	0.06	0.09	0.24	67.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [E - 2036 100HH AM]

Network: N101 [2036 100HH AM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.009	34.0	LOS C	0.0	0.1	0.88	0.96	0.88	35.8
Approach		1	0.0	1	0.0	0.009	34.0	NA	0.0	0.1	0.88	0.96	0.88	35.8
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.002	13.2	LOS A	0.0	0.0	0.60	0.82	0.60	47.2
Approach		1	0.0	1	0.0	0.002	13.2	LOS A	0.0	0.0	0.60	0.82	0.60	47.2
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1398	0.0	1398	0.0	0.358	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.8
Approach		1399	0.0	1399	0.0	0.358	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.7
West: Median Storage														
5	T1	1	0.0	1	0.0	0.026	37.6	LOS C	0.0	0.2	0.92	0.96	0.92	24.3
6	R2	1	0.0	1	0.0	0.026	50.7	LOS D	0.0	0.2	0.92	0.96	0.92	15.0
Approach		2	0.0	2	0.0	0.026	44.2	LOS D	0.0	0.2	0.92	0.96	0.92	20.2
All Vehicles		1403	0.0	1403	0.0	0.358	0.2	NA	0.0	0.2	0.00	0.00	0.00	99.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [E - 2036 100HH PM]

Network: N101 [2036 100HH PM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.009	36.0	LOS C	0.0	0.1	0.89	0.96	0.89	34.8
Approach		1	0.0	1	0.0	0.009	36.0	NA	0.0	0.1	0.89	0.96	0.89	34.8
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.002	13.5	LOS A	0.0	0.0	0.62	0.83	0.62	47.0
Approach		1	0.0	1	0.0	0.002	13.5	LOS A	0.0	0.0	0.62	0.83	0.62	47.0
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1432	0.0	1432	0.0	0.367	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.7
Approach		1433	0.0	1433	0.0	0.367	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.7
West: Median Storage														
5	T1	1	0.0	1	0.0	0.028	40.7	LOS C	0.0	0.2	0.93	0.96	0.93	23.2
6	R2	1	0.0	1	0.0	0.028	55.3	LOS D	0.0	0.2	0.93	0.96	0.93	14.1
Approach		2	0.0	2	0.0	0.028	48.0	LOS D	0.0	0.2	0.93	0.96	0.93	19.2
All Vehicles		1437	0.0	1437	0.0	0.367	0.2	NA	0.0	0.2	0.00	0.00	0.00	99.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [W - 2041 AAST AM]

Network: N101 [2041 AAST AM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	13	0.0	13	0.0	0.007	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	827	0.0	827	0.0	0.212	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		840	0.0	840	0.0	0.212	0.1	NA	0.0	0.0	0.00	0.01	0.00	99.2
East: Median Storage														
5	T1	1	0.0	1	0.0	0.009	13.6	LOS A	0.0	0.1	0.79	0.80	0.79	38.4
6	R2	1	0.0	1	0.0	0.009	18.7	LOS B	0.0	0.1	0.79	0.80	0.79	30.7
Approach		2	0.0	2	0.0	0.009	16.2	LOS B	0.0	0.1	0.79	0.80	0.79	35.3
North: Princes Highway														
9	R2	112	0.0	112	0.0	0.325	18.3	LOS B	0.5	3.5	0.75	0.95	0.92	46.3
Approach		112	0.0	112	0.0	0.325	18.3	NA	0.5	3.5	0.75	0.95	0.92	46.3
West: Boxsells Lane														
10	L2	53	0.0	53	0.0	0.071	10.5	LOS A	0.1	0.7	0.46	0.92	0.46	50.3
Approach		53	0.0	53	0.0	0.071	10.5	LOS A	0.1	0.7	0.46	0.92	0.46	50.3
All Vehicles		1006	0.0	1006	0.0	0.325	2.7	NA	0.5	3.5	0.11	0.16	0.13	84.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [W - 2041 AAST PM]

Network: N101 [2041 AAST PM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	24	0.0	24	0.0	0.013	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1526	0.0	1526	0.0	0.391	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	99.7
Approach		1551	0.0	1551	0.0	0.391	0.2	NA	0.0	0.0	0.00	0.01	0.00	99.1
East: Median Storage														
5	T1	1	0.0	1	0.0	0.052	66.8	LOS E	0.1	0.4	0.96	0.98	0.96	15.9
6	R2	1	0.0	1	0.0	0.052	102.8	LOS F	0.1	0.4	0.96	0.98	0.96	9.9
Approach		2	0.0	2	0.0	0.052	84.8	LOS F	0.1	0.4	0.96	0.98	0.96	13.1
North: Princes Highway														
9	R2	122	0.0	122	0.0	1.406	441.5	LOS F	10.9	76.4	1.00	2.06	7.96	5.6
Approach		122	0.0	122	0.0	1.406	441.5	NA	10.9	76.4	1.00	2.06	7.96	5.6
West: Boxsells Lane														
10	L2	57	0.0	57	0.0	0.135	15.1	LOS B	0.2	1.3	0.68	1.00	0.68	46.8
Approach		57	0.0	57	0.0	0.135	15.1	LOS B	0.2	1.3	0.68	1.00	0.68	46.8
All Vehicles		1732	0.0	1732	0.0	1.406	31.9	NA	10.9	76.4	0.09	0.19	0.58	44.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [E - 2041 AAST AM]

Network: N101 [2041 AAST AM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.010	38.2	LOS C	0.0	0.1	0.90	0.97	0.90	33.9
Approach		1	0.0	1	0.0	0.010	38.2	NA	0.0	0.1	0.90	0.97	0.90	33.9
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.002	13.7	LOS A	0.0	0.0	0.63	0.83	0.63	46.8
Approach		1	0.0	1	0.0	0.002	13.7	LOS A	0.0	0.0	0.63	0.83	0.63	46.8
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1463	0.0	1463	0.0	0.375	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.7
Approach		1464	0.0	1464	0.0	0.375	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.7
West: Median Storage														
5	T1	1	0.0	1	0.0	0.031	43.9	LOS D	0.0	0.2	0.94	0.96	0.94	22.1
6	R2	1	0.0	1	0.0	0.031	59.9	LOS E	0.0	0.2	0.94	0.96	0.94	13.2
Approach		2	0.0	2	0.0	0.031	51.9	LOS D	0.0	0.2	0.94	0.96	0.94	18.2
All Vehicles		1468	0.0	1468	0.0	0.375	0.2	NA	0.0	0.2	0.00	0.00	0.00	99.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [E - 2041 AAST PM]

Network: N101 [2041 AAST PM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.010	36.7	LOS C	0.0	0.1	0.90	0.96	0.90	34.5
Approach		1	0.0	1	0.0	0.010	36.7	NA	0.0	0.1	0.90	0.96	0.90	34.5
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.002	13.6	LOS A	0.0	0.0	0.62	0.83	0.62	47.0
Approach		1	0.0	1	0.0	0.002	13.6	LOS A	0.0	0.0	0.62	0.83	0.62	47.0
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1442	0.0	1442	0.0	0.370	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.7
Approach		1443	0.0	1443	0.0	0.370	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.7
West: Median Storage														
5	T1	1	0.0	1	0.0	0.029	41.8	LOS C	0.0	0.2	0.93	0.96	0.93	22.8
6	R2	1	0.0	1	0.0	0.029	56.8	LOS E	0.0	0.2	0.93	0.96	0.93	13.8
Approach		2	0.0	2	0.0	0.029	49.3	LOS D	0.0	0.2	0.93	0.96	0.93	18.8
All Vehicles		1447	0.0	1447	0.0	0.370	0.2	NA	0.0	0.2	0.00	0.00	0.00	99.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [W - 2041 100HH AM]

Network: N101 [2041 100HH AM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	13	0.0	13	0.0	0.007	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	863	0.0	863	0.0	0.221	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.9
Approach		876	0.0	876	0.0	0.221	0.1	NA	0.0	0.0	0.00	0.01	0.00	99.3
East: Median Storage														
5	T1	1	0.0	1	0.0	0.010	14.3	LOS A	0.0	0.1	0.80	0.82	0.80	37.8
6	R2	1	0.0	1	0.0	0.010	19.6	LOS B	0.0	0.1	0.80	0.82	0.80	29.9
Approach		2	0.0	2	0.0	0.010	16.9	LOS B	0.0	0.1	0.80	0.82	0.80	34.6
North: Princes Highway														
9	R2	98	0.0	98	0.0	0.302	18.8	LOS B	0.5	3.2	0.76	0.94	0.90	45.9
Approach		98	0.0	98	0.0	0.302	18.8	NA	0.5	3.2	0.76	0.94	0.90	45.9
West: Boxsells Lane														
10	L2	51	0.0	51	0.0	0.070	10.7	LOS A	0.1	0.7	0.47	0.92	0.47	50.2
Approach		51	0.0	51	0.0	0.070	10.7	LOS A	0.1	0.7	0.47	0.92	0.47	50.2
All Vehicles		1026	0.0	1026	0.0	0.302	2.5	NA	0.5	3.2	0.10	0.15	0.11	85.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [W - 2041 100HH PM]

Network: N101 [2041 100HH PM]

Princes Highway / Boxsells Lane
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
1	L2	27	0.0	27	0.0	0.015	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1646	0.0	1646	0.0	0.422	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	99.7
Approach		1674	0.0	1674	0.0	0.422	0.2	NA	0.0	0.0	0.00	0.01	0.00	99.0
East: Median Storage														
5	T1	1	0.0	1	0.0	0.079	95.4	LOS F	0.1	0.6	0.98	0.99	0.98	11.8
6	R2	1	0.0	1	0.0	0.079	154.6	LOS F	0.1	0.6	0.98	0.99	0.98	7.1
Approach		2	0.0	2	0.0	0.079	125.0	LOS F	0.1	0.6	0.98	0.99	0.98	9.6
North: Princes Highway														
9	R2	141	0.0	141	0.0	2.179	1120.5	LOS F	21.8	152.3	1.00	2.42	10.57	2.3
Approach		141	0.0	141	0.0	2.179	1120.5	NA	21.8	152.3	1.00	2.42	10.57	2.3
West: Boxsells Lane														
10	L2	65	0.0	65	0.0	0.174	16.4	LOS B	0.2	1.6	0.73	1.00	0.73	45.9
Approach		65	0.0	65	0.0	0.174	16.4	LOS B	0.2	1.6	0.73	1.00	0.73	45.9
All Vehicles		1882	0.0	1882	0.0	2.179	84.8	NA	21.8	152.3	0.10	0.23	0.82	23.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [E - 2041 100HH PM]

Network: N101 [2041 100HH PM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.016	54.9	LOS D	0.0	0.1	0.94	0.98	0.94	28.0
Approach		1	0.0	1	0.0	0.016	54.9	NA	0.0	0.1	0.94	0.98	0.94	28.0
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.003	15.4	LOS B	0.0	0.0	0.69	0.84	0.69	45.6
Approach		1	0.0	1	0.0	0.003	15.4	LOS B	0.0	0.0	0.69	0.84	0.69	45.6
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1647	0.0	1647	0.0	0.422	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	99.7
Approach		1648	0.0	1648	0.0	0.422	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.6
West: Median Storage														
5	T1	1	0.0	1	0.0	0.052	69.8	LOS E	0.1	0.4	0.96	0.98	0.96	16.0
6	R2	1	0.0	1	0.0	0.052	98.8	LOS F	0.1	0.4	0.96	0.98	0.96	9.0
Approach		2	0.0	2	0.0	0.052	84.3	LOS F	0.1	0.4	0.96	0.98	0.96	12.7
All Vehicles		1653	0.0	1653	0.0	0.422	0.2	NA	0.1	0.4	0.00	0.00	0.00	99.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [E - 2041 100HH AM]

Network: N101 [2041 100HH AM]

New Site
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Princes Highway														
9	R2	1	0.0	1	0.0	0.009	34.1	LOS C	0.0	0.1	0.89	0.96	0.89	35.7
Approach		1	0.0	1	0.0	0.009	34.1	NA	0.0	0.1	0.89	0.96	0.89	35.7
East: Lamonds Lane														
10	L2	1	0.0	1	0.0	0.002	13.2	LOS A	0.0	0.0	0.61	0.82	0.61	47.2
Approach		1	0.0	1	0.0	0.002	13.2	LOS A	0.0	0.0	0.61	0.82	0.61	47.2
North: Princes Highway														
1	L2	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.00	0.66	0.00	75.3
2	T1	1401	0.0	1401	0.0	0.359	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	99.7
Approach		1402	0.0	1402	0.0	0.359	0.1	NA	0.0	0.0	0.00	0.00	0.00	99.7
West: Median Storage														
5	T1	1	0.0	1	0.0	0.026	37.9	LOS C	0.0	0.2	0.92	0.96	0.92	24.2
6	R2	1	0.0	1	0.0	0.026	51.1	LOS D	0.0	0.2	0.92	0.96	0.92	14.9
Approach		2	0.0	2	0.0	0.026	44.5	LOS D	0.0	0.2	0.92	0.96	0.92	20.1
All Vehicles		1406	0.0	1406	0.0	0.359	0.2	NA	0.0	0.2	0.00	0.00	0.00	99.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Appendix K: P4627.001T Moss Vale Road Revised SIDRA Analysis Updates Technical Note

(*Moss Vale Road / Bells Lane / Far North Collector Road Signalised Intersection)*

Revised Analysis based on updated May 2020 TRACKS models

Issue History

File Name	Prepared	Reviewed	Issued by	Date	Issued to
P4627.001T Moss Vale Road Revised SIDRA Analysis Updates	J. Beame	L. Johnston	L. Johnston	07/07/2020	Micaiah Tipton Shoalhaven City Council Micaiah.Tipton@shoalhaven.nsw.gov.au

Moss Vale Road / Bells Lane / FNCR Intersection

Revised SIDRA Analysis Updates

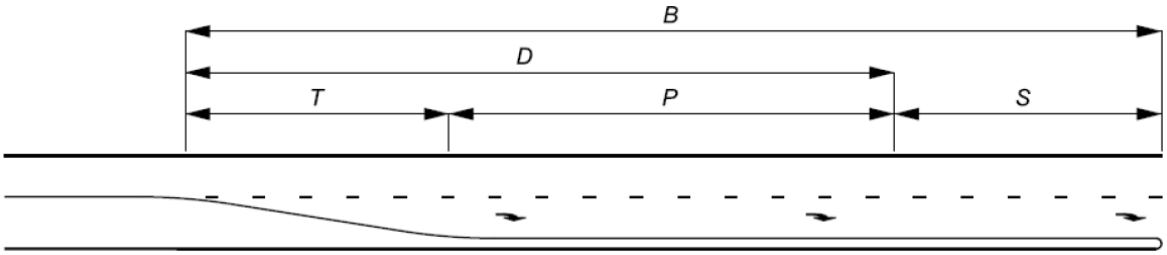
1. Introduction

Bitzios Consulting has been engaged by Shoalhaven City Council (Council) to undertake an updated revised SIDRA assessment of the proposed Moss Vale Road / Bells Lane / Far North Collector Road (FNCR) signalised intersection, Cambewarra. A detailed SIDRA analysis was previously conducted by Bitzios Consulting (*P3968.002R Moss Vale Road SIDRA Assessment Report*) followed by a subsequent technical note (*P3968.001T Moss Vale Road SIDRA Analysis Updates*). Transport for New South Wales (TfNSW) undertook a review of the previous detailed SIDRA analysis, with the following updates undertaken based on feedback from this review.

2. Model Development

2.1 Model Updates

TfNSW requested that SIDRA models be updated with a posted speed of 90km/h on Moss Vale Road in both directions. Changes to posted speed limits impact required deceleration length (D) illustrated in Figure 2.1 below.



Source: Figure 5.1 Austroads Guide to Road Design Part 4A

Figure 2.1: Components of a Deceleration Turning Lane

It is also noted that the turn pocket length in SIDRA notates the length of lane available for vehicles to store in, equivalent to S + P in the above figure. Turn pocket lengths in the following assessment will therefore be updated to accommodate the required storage length (S) and deceleration length (D). Minimum required deceleration lengths (D) and taper lengths (T) are outlined in Table 2.1.

Table 2.1: Deceleration & Taper Lengths

Design Speed*	Minimum Deceleration Length (D)	Minimum Taper Length (T)
70	55	20
100	110	30

Note: Design speed is adopted as 10km/h faster than the posted speed limit

2.2 Methodology

2.2.1 Traffic Scenarios

Traffic volumes were adopted as per the previous assessments with Average Annual School Term (AAST) and 100th Highest Hour (100HH) intersection volumes assessed for the following years:

- 2021
- 2026
- 2031
- 2036
- 2041

Traffic volumes for these scenarios are provided at **Attachment A.**

2.2.2 Traffic Redistribution

In the process of extracting traffic volumes for the MVR / Bells Lane / FNCR intersection, two (2) movements were identified to have no assigned traffic volumes. Those movements are identified as follows:

- MVR north-western approach to Bells Lane departure (left turn)
- Bells Lane north-eastern approach to Moss Vale Road departure (right turn).

Notwithstanding, following the development of the MRVN URA road network within TRACKS, these movements have been able to reroute internally through the URA, which is to be expected.

The traffic demands of the above movements are expected to be low, as the majority of the traffic is to/from the Princes Highway, rather than to/from West of the URA. An assumption was made to reinstate a low traffic demand (for those movements) through the MVR / Bells Lane / FNCR intersection.

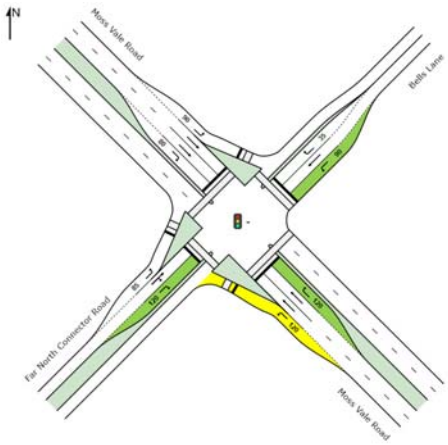
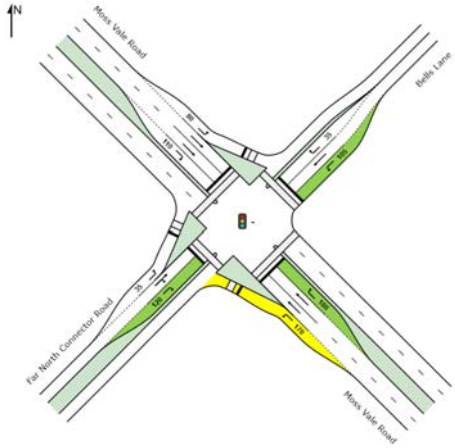
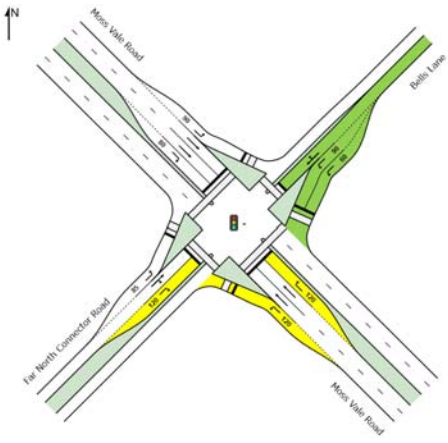
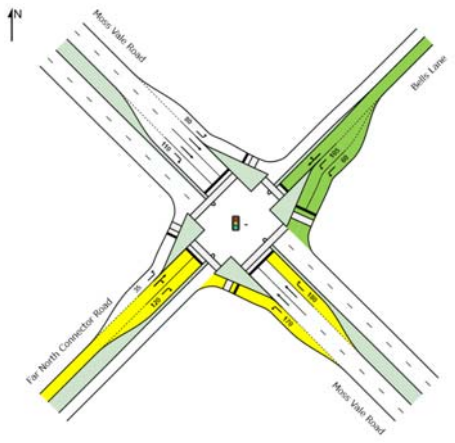
2.2.3 FNCR Considerations

As part of TfNSW's traffic signal design review for the MVR / Bells Lane / FNCR intersection, an issue was identified for the left-turn movement from FNCR. It was determined the sight distance to/from vehicles at the FNCR left-turn movement and through traffic from the MVR south-eastern approach is insufficient when assessed against TfNSW's *Traffic Signal Design – Appendix E Left Turn on Red* and Austroads' *Guide to Road Design Part 4A*. As such, the left-turn movement is to be fully-signalised and not permitted for use on a red signal. As a result, SIDRA modelling of the MVR / Bells Lane / FNCR signalised intersection is to reflect this outcome.

2.2.4 Intersection Scenarios

As requested, the SIDRA analysis has been updated for the second iteration and ultimate form intersection arrangements. The SIDRA layouts of the previous and updated configurations are illustrated in Table 2.2.

Table 2.2: SIDRA Intersection Layouts

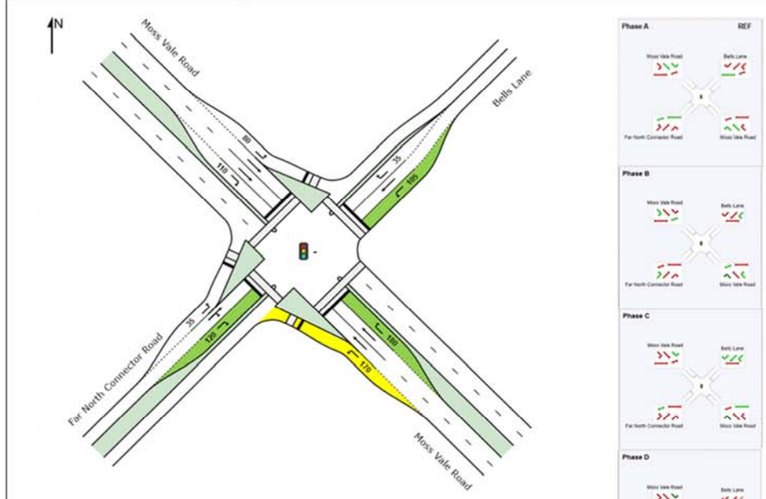
Scenario	Previous Configuration	Updated Configuration
Second Iteration		
Ultimate Form		

3. Findings

3.1 Model Outputs

Output sheets for each traffic and intersection scenario updated are provided overleaf.

Moss Vale Road / Far North Connector Road Signals - Second Iteration



Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model (Node #20725 May 2020 version).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.90 and 1.00; and
- the 95th percentile queue length is ± 10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021 (year of opening), 2026 (5-year design horizon), 2031 (10-year design horizon), 2036 (15-year design horizon), and 2041 (20-year design horizon).

Model Description

The traffic volumes represent the AM and PM peak hour for the average annual daily traffic volumes.

The intersection form is as per the previous assessment with modified turn pocket lengths and a 90km/h posted speed limit on Moss Vale Road.

The signal phasing is diamond overlap turn phasing for the Moss Vale Road approaches, and split phasing for the Bells Lane and Far North Collector Road approaches.

Key Findings

The intersection reaches over-capacity in queuing in the ultimate year during AM peak hour in the AAST scenario in the order of one movement. The Bells Lane left-turn movement exceeds the available turn pocket length by 2.5m in the 2041 AM Peak scenario.

The intersection exceeds saturation limits by the year 2041.

Intersection Performance - Average Annual School Term

Year 2021 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	254	0.20	9.1	7.6	A
	Through	266	0.44	21.8	22.9	C
	Right	2	0.01	29.4	0.3	C
Bells Lane (NE)	Left	5	0.01	7.9	0.3	A
	Through	9	0.04	22	1.6	C
	Right	3	0.02	27.4	0.5	C
Moss Vale Road (NW)	Left	3	0.00	12	0.2	B
	Through	356	0.59	22.7	31.8	C
	Right	44	0.21	30.7	7.7	C
Far North Connector Road (SW)	Left	4	0.01	13.8	0.3	B
	Through	8	0.57	24.7	23	C
	Right	239	0.57	30.4	23	C
Intersection	**All**	**1195**	**0.589**	**21.4**	**31.8**	**C**

Year 2021 PM Peak Hour — Cycle Time: 50s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	364	0.30	9.4	13.5	A
	Through	425	0.70	24.2	40.1	C
	Right	4	0.02	29.6	0.7	C
Bells Lane (NE)	Left	2	0.00	7.8	0.1	A
	Through	12	0.05	22.1	1.9	C
	Right	3	0.02	27.4	0.5	C
Moss Vale Road (NW)	Left	3	0.00	12	0.2	B
	Through	354	0.59	22.7	31.6	C
	Right	76	0.35	31.3	13.5	C
Far North Connector Road (SW)	Left	4	0.01	13.8	0.3	B
	Through	9	0.54	24.5	21.5	C
	Right	224	0.54	30.1	21.5	C
Intersection	**All**	**1481**	**0.704**	**21.4**	**40.1**	**C**

Year 2026 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	325	0.25	9.1	11.7	A
	Through	322	0.39	22.5	30.7	C
	Right	42	0.24	36.5	8.9	D
Bells Lane (NE)	Left	61	0.07	9.9	4.8	A
	Through	23	0.12	28.2	4.8	C
	Right	5	0.03	33.2	1.1	C
Moss Vale Road (NW)	Left	5	0.01	11.3	0.4	B
	Through	536	0.66	24.7	55.7	C
	Right	59	0.33	37	12.7	D
Far North Connector Road (SW)	Left	5	0.01	14.5	0.5	A
	Through	19	0.65	26.4	45.4	C
	Right	406	0.65	32.1	45.4	C
Intersection	**All**	**1809**	**0.655**	**23.4**	**55.7**	**C**

Year 2026 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	526	0.42	9.5	25.5	A
	Through	572	0.53	20.2	53.2	C
	Right	55	0.31	36.9	11.7	D
Bells Lane (NE)	Left	22	0.03	8.4	1.3	A
	Through	21	0.11	28.1	4.4	C
	Right	5	0.03	33.2	1.1	C
Moss Vale Road (NW)	Left	5	0.01	11.3	0.4	B
	Through	559	0.52	20.1	51.8	C
	Right	105	0.59	38.3	23.7	D
Far North Connector Road (SW)	Left	5	0.01	16.6	0.6	A
	Through	17	0.53	29	24.1	C
	Right	204	0.53	34.7	24.1	C
Intersection	**All**	**2097**	**0.587**	**20.3**	**53.2**	**C**

Year 2031 AM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	365	0.29	9.5	18.7	A
	Through	312	0.36	25.1	33.6	C
	Right	136	0.66	42.8	35.5	D
Bells Lane (NE)	Left	281	0.36	13	36.9	B
	Through	83	0.51	35.7	21.5	D
	Right	8	0.06	39	2	D
Moss Vale Road (NW)	Left	8	0.01	11.6	0.6	B
	Through	571	0.66	27.8	67.9	C
	Right	62	0.30	40.2	15.1	D
Far North Connector Road (SW)	Left	4	0.01	14.4	0.4	A
	Through	58	0.66	27.9	64.8	C
	Right	483	0.66	33.5	64.8	C
Intersection	**All**	**2372**	**0.663**	**25.5**	**67.9**	**C**

Year 2031 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	624	0.51	10.3	40.4	B
	Through	543	0.54	21	51.4	C
	Right	23	0.13	36	4.8	D
Bells Lane (NE)	Left	115	0.13	9.4	8.7	A
	Through	68	0.36	29.3	14.7	C
	Right	8	0.05	33.4	1.7	C
Moss Vale Road (NW)	Left	8	0.01	11.5	0.6	B
	Through	602	0.60	21.4	58.1	C
	Right	106	0.59	38.4	24	D
Far North Connector Road (SW)	Left	5	0.01	16.1	0.6	A
	Through	61	0.58	28.4	30.9	C
	Right	221	0.58	34.1	30.9	C
Intersection	**All**	**2386**	**0.598**	**20.3**	**58.1**	**C**

Year 2036 AM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	314	0.26	9.5	14.1	A
	Through	314	0.45	24.7	31.3	C
	Right	149	0.71	38.9	34.6	D
Bells Lane (NE)	Left	431	0.51	13.1	55	B
	Through	135	0.71	32	31.4	C
	Right	11	0.06	33.5	2.2	C
Moss Vale Road (NW)	Left	11	0.01	12	0.8	B
	Through	498	0.72	27.7	55	C
	Right	9	0.05	34.2	1.9	C
Far North Connector Road (SW)	Left	5	0.01	13.6	0.4	A
	Through	85	0.80	29.8	68.8	C
	Right	495	0.80	35.5	68.8	D
Intersection	**All**	**2456**	**0.803**	**24.9**	**68.8**	**C**

Year 2036 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	652	0.56	10.4	44.7	B
	Through	529	0.70	26.5	57.3	C
	Right	289	0.88	43.5	75.8	D
Bells Lane (NE)	Left	136	0.14	10.2	11.4	B
	Through	91	0.48	29.8	19.8	C
	Right	11	0.06	33.5	2.2	C
Moss Vale Road (NW)	Left	11	0.01	13.6	0.9	B
	Through	601	0.80	29.3	70	C
	Right	107	0.33	31.7	20.9	C
Far North Connector Road (SW)	Left	5	0.01	14	0.5	A
	Through	93	0.78	32.6	40.1	C
	Right	239	0.78	38.4	40.1	D
Intersection	**All**	**2763**	**0.881**	**25.8**	**75.8**	**C**

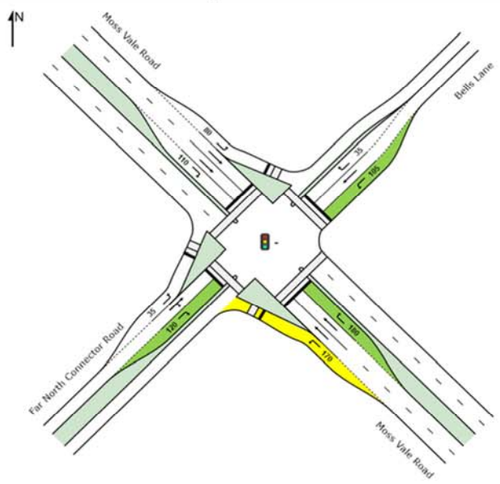
Year 2041 AM Peak Hour — Cycle Time: 90s

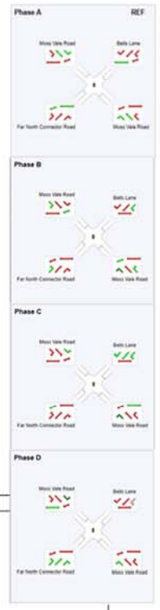
Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	288	0.26	10.6	23	B
	Through	328	0.56	39.2	50.5	D
	Right	285	0.84	53.3	101.1	D
Bells Lane (NE)	Left	605	0.63	19	107.5	B
	Through	260	0.83	45.9	91.1	D
	Right	7	0.03	39.7	2	D
Moss Vale Road (NW)	Left	18	0.02	14.1	1.9	B
	Through	449	0.77	43.3	75.1	D
	Right	6	0.02	39.7	1.7	D
Far North Connector Road (SW)	Left	5	0.01	14.1	0.5	B
	Through	174	0.77	39	102	D
	Right	447	0.77	44.7	102	D
Intersection	**All**	**2875**	**0.842**	**35.4**	**107.5**	**D**

Year 2041 PM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	544	0.50	11.5	53.3	B
	Through	500	0.88	46.4	83.9	C
	Right	434	0.92	56.5	159.2	D
Bells Lane (NE)	Left	338	0.33	12.8	45.6	B
	Through	204	0.87	45.9	67.2	D
	Right	19	0.09	40.1	4.9	D
Moss Vale Road (NW)	Left	8	0.01	16.8	1	B
	Through	497	0.88	45.9	82.7	C
	Right	95	0.20	32.8	21.3	D
Far North Connector Road (SW)	Left	6	0.01	12.8	0.5	A
	Through	194	0.88	46.1	89.4	D
	Right	329	0.88	51.9	89.4	D
Intersection	**All**	**3168**	**0.921**	**38.1**	**159.2**	**C**

Moss Vale Road / Far North Connector Road Signals - Second Iteration





Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model (Node #20725 May 2020 version).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.90 and 1.00; and
- the 95th percentile queue length is ± 10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
- the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021 (year of opening), 2026 (5-year design horizon), 2031 (10-year design horizon), 2036 (15-year design horizon), and 2041 (20-year design horizon).

Model Description

The traffic volumes represent the annual 100th highest hour for each AM and PM peak hour.

The intersection form is as per the previous assessment with modifed turn pokcet lengths and a 90km/h posted speed limit on Moss Vale Road

The signal phasing is diamond overlap turn phasing for the Moss Vale Road approaches, and split phasing for the Bells Lane and Far North Collector Road approaches.

Key Findings

The intersection reaches over-capacity in queuing in the ultimate year during PM peak hour in the AAST scenario in the order of one movement. The Far North Collector road right-turn movement exceeds the available turn pocket length by 29.5m in the 2041 PM Peak scenario.

The intersection remains within acceptable limits for saturation in the ultimate year.

Intersection Performance - 100th Highest Hour

Year 2021 AM Peak Hour — Cycle Time: 50s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	234	0.19	9.1	6.9	A
	Through	248	0.41	21.7	21.2	C
	Right	2	0.01	29.4	0.3	C
Bells Lane (NE)	Left	4	0.00	7.9	0.2	A
	Through	8	0.04	22	1.4	C
	Right	3	0.02	27.4	0.5	C
Moss Vale Road (NW)	Left	3	0.00	12	0.2	B
	Through	334	0.55	22.4	29.4	C
	Right	43	0.20	30.7	7.5	C
Far North Connector Road (SW)	Left	3	0.01	16	0.2	B
	Through	7	0.54	24.4	21.3	C
	Right	224	0.54	30.1	21.3	C
Intersection	**All**	**1115**	**0.552**	**21.2**	**29.4**	**C**

Year 2021 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	502	0.39	9.5	23.6	A
	Through	522	0.52	20.8	49.1	C
	Right	5	0.03	35.2	1.1	D
Bells Lane (NE)	Left	3	0.00	8	0.2	A
	Through	13	0.07	27.8	2.6	C
	Right	3	0.02	33	0.6	C
Moss Vale Road (NW)	Left	3	0.00	11.3	0.2	B
	Through	473	0.47	20.5	43.7	C
	Right	96	0.53	37.9	21.3	D
Far North Connector Road (SW)	Left	4	0.01	16	0.4	B
	Through	11	0.49	27.8	25.2	C
	Right	226	0.49	33.4	25.2	C
Intersection	**All**	**1861**	**0.534**	**20.2**	**49.1**	**C**

Year 2026 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	302	0.25	9.1	9.4	A
	Through	304	0.50	22.1	26.5	C
	Right	40	0.19	30.6	6.9	D
Bells Lane (NE)	Left	56	0.06	9.4	3.7	A
	Through	20	0.09	22.4	3.4	C
	Right	5	0.02	27.6	0.9	C
Moss Vale Road (NW)	Left	5	0.01	12	0.4	B
	Through	501	0.83	27.9	51.8	C
	Right	53	0.25	30.9	9.2	C
Far North Connector Road (SW)	Left	4	0.01	13.8	0.3	B
	Through	17	0.91	35.4	46.2	D
	Right	377	0.91	41.1	46.2	D
Intersection	**All**	**1684**	**0.913**	**25.9**	**51.8**	**C**

Year 2026 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	649	0.52	10	39.1	B
	Through	660	0.62	20.8	63.3	C
	Right	61	0.34	37	13.2	D
Bells Lane (NE)	Left	25	0.03	9.4	1.8	A
	Through	24	0.13	28.2	5	C
	Right	5	0.03	33.2	1.1	C
Moss Vale Road (NW)	Left	5	0.01	11.3	0.4	B
	Through	665	0.62	20.8	64	C
	Right	118	0.66	39.1	27.1	D
Far North Connector Road (SW)	Left	6	0.02	16.7	0.7	A
	Through	20	0.63	30	30	C
	Right	246	0.63	35.7	30	D
Intersection	**All**	**2486**	**0.657**	**20.7**	**64**	**C**

Year 2031 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	345	0.28	9.3	14.3	A
	Through	298	0.39	23.4	28.9	C
	Right	132	0.73	40.2	31	D
Bells Lane (NE)	Left	266	0.32	11.5	27.8	B
	Through	75	0.40	29.4	16.2	C
	Right	8	0.05	33.4	1.7	C
Moss Vale Road (NW)	Left	8	0.01	11.5	0.6	B
	Through	538	0.71	26.7	58.6	C
	Right	57	0.32	36.9	12.2	D
Far North Connector Road (SW)	Left	4	0.01	14	0.4	A
	Through	53	0.71	26.7	56	C
	Right	458	0.71	32.4	56	C
Intersection	**All**	**2242**	**0.734**	**24**	**58.6**	**C**

Year 2031 PM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	642	0.55	10.4	43.4	B
	Through	597	0.73	26.3	65.2	C
	Right	237	0.79	38.5	55.9	D
Bells Lane (NE)	Left	131	0.14	11.1	12	B
	Through	80	0.42	29.5	17.4	C
	Right	8	0.05	33.4	1.7	C
Moss Vale Road (NW)	Left	8	0.01	13.1	0.7	B
	Through	706	0.86	32.8	89.2	C
	Right	116	0.39	33	23.3	C
Far North Connector Road (SW)	Left	6	0.01	14.5	0.6	A
	Through	75	0.80	33.2	41.2	C
	Right	263	0.80	38.9	41.2	D
Intersection	**All**	**2869**	**0.863**	**26.3**	**89.2**	**C**

Year 2036 AM Peak Hour — Cycle Time: 80s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	318	0.25	9.3	15.7	A
	Through	289	0.38	30.7	36.7	C
	Right	149	0.56	43.3	41.4	D
Bells Lane (NE)	Left	412	0.48	14.3	70.2	B
	Through	118	0.56	38.3	33.7	D
	Right	11	0.05	40.9	2.8	D
Moss Vale Road (NW)	Left	11	0.01	12.4	0.9	B
	Through	488	0.65	33	66.6	C
	Right	8	0.03	39.5	2.1	D
Far North Connector Road (SW)	Left	4	0.00	14	0.4	A
	Through	78	0.65	30.8	75	C
	Right	482	0.65	36.4	75	D
Intersection	**All**	**2368**	**0.654**	**27.8**	**75**	**C**

Year 2036 PM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	578	0.49	10.8	46.5	B
	Through	605	0.66	27	71.1	C
	Right	301	0.84	44	84.9	D
Bells Lane (NE)	Left	159	0.18	11.8	17.4	B
	Through	109	0.68	37.2	29.4	D
	Right	11	0.07	39.1	2.6	D
Moss Vale Road (NW)	Left	11	0.01	14.3	1	B
	Through	712	0.78	30.4	91.6	C
	Right	126	0.35	34.6	28.1	C
Far North Connector Road (SW)	Left	7	0.01	14.8	0.8	A
	Through	112	0.84	39.4	57	D
	Right	282	0.84	45.2	57	D
Intersection	**All**	**3013**	**0.842**	**28.4**	**91.6**	**C**

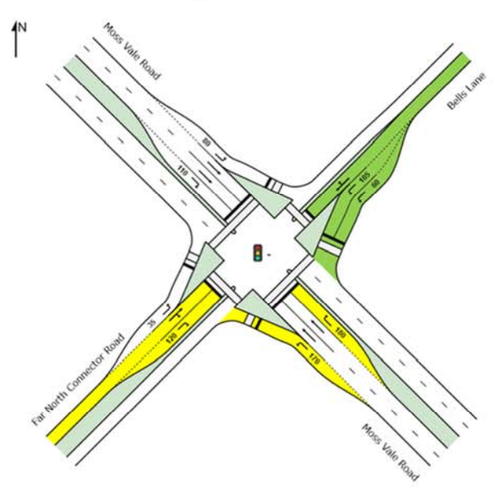
Year 2041 AM Peak Hour — Cycle Time: 80s

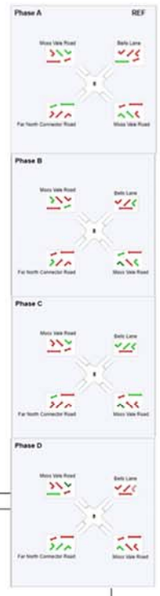
Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	326	0.30	10.8	25.4	B
	Through	273	0.48	35	37.1	C
	Right	295	0.82	47	91.6	D
Bells Lane (NE)	Left	566	0.59	16.8	87.8	B
	Through	226	0.80	40.7	69.7	D
	Right	7	0.03	37.4	1.8	D
Moss Vale Road (NW)	Left	17	0.02	14.4	1.7	B
	Through	457	0.81	41	70.8	D
	Right	53	0.15	36.7	12.6	D
Far North Connector Road (SW)	Left	4	0.01	13.4	0.4	B
	Through	159	0.83	39.4	94.2	D
	Right	440	0.83	45.1	94.2	D
Intersection	**All**	**2823**	**0.83**	**32.9**	**94.2**	**C**

Year 2041 PM Peak Hour — Cycle Time: 90s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	544	0.51	13.2	79.3	B
	Through	551	0.89	60.8	123.8	E
	Right	414	0.88	60.1	171.6	E
Bells Lane (NE)	Left	367	0.37	18.3	75.1	B
	Through	238	0.90	62.7	107.6	E
	Right	24	0.09	50.1	8.3	D
Moss Vale Road (NW)	Left	11	0.01	17.9	1.6	B
	Through	539	0.87	58.4	118.2	E
	Right	120	0.25	41.3	36.7	D
Far North Connector Road (SW)	Left	7	0.01	13.8	0.8	B
	Through	228	0.89	59.7	149.5	E
	Right	423	0.89	65.7	149.5	E
Intersection	**All**	**3466**	**0.897**	**47**	**180.1**	**D**

Moss Vale Road / Far North Connector Road Signals - Ultimate Form





Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model (Node #20725 May 2020 version).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.90 and 1.00; and
- the 95th percentile queue length is ± 10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021 (year of opening), 2026 (5-year design horizon), 2031 (10-year design horizon), 2036 (15-year design horizon), and 2041 (20-year design horizon).

Model Description

The traffic volumes represent the AM and PM peak hour for the average annual daily traffic volumes.

The intersection form is as per the previous assessment with modified turn pocket lengths and a posted speed limit of 90km/h on Moss Vale Road.

The signal phasing is diamond overlap turn phasing for the Moss Vale Road approaches, and split phasing for the Bells Lane and Far North Collector Road approaches.

Key Findings

The intersection remains within acceptable limits at the year 2041.

Intersection Performance - Average Annual School Term

Year 2021 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	254	0.20	9.1	7.6	A
	Through	266	0.44	21.8	22.9	C
	Right	2	0.01	29.4	0.3	C
Bells Lane (NE)	Left	5	0.00	16.6	0.3	B
	Through	9	0.06	22.2	2.1	C
	Right	3	0.06	27.8	2.1	C
Moss Vale Road (NW)	Left	3	0.00	12	0.2	B
	Through	356	0.59	22.7	31.8	C
	Right	44	0.21	30.7	7.7	C
Far North Connector Road (SW)	Left	4	0.01	13.8	0.3	B
	Through	8	0.57	24.7	23	C
	Right	239	0.57	30.4	23	C
Intersection	**All**	**1195**	**0.589**	**21.4**	**31.8**	**C**

Year 2021 PM Peak Hour — Cycle Time: 50s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	364	0.30	9.4	13.5	A
	Through	425	0.70	24.2	40.1	C
	Right	4	0.02	29.6	0.7	C
Bells Lane (NE)	Left	2	0.00	16.6	0.1	B
	Through	12	0.07	22.2	2.5	C
	Right	3	0.07	27.9	2.5	C
Moss Vale Road (NW)	Left	3	0.00	12	0.2	B
	Through	354	0.59	22.7	31.6	C
	Right	76	0.35	31.3	13.5	C
Far North Connector Road (SW)	Left	4	0.01	13.8	0.3	B
	Through	9	0.54	24.5	21.5	C
	Right	224	0.54	30.1	21.5	C
Intersection	**All**	**1481**	**0.704**	**21.4**	**40.1**	**C**

Year 2026 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	325	0.25	9.1	11.7	A
	Through	322	0.39	22.5	30.7	C
	Right	42	0.24	36.5	8.9	D
Bells Lane (NE)	Left	61	0.06	21.9	4.7	C
	Through	23	0.15	28.4	5.9	C
	Right	5	0.15	34	5.9	C
Moss Vale Road (NW)	Left	5	0.01	11.3	0.4	B
	Through	536	0.66	24.7	55.7	C
	Right	59	0.33	37	12.7	D
Far North Connector Road (SW)	Left	5	0.01	14.5	0.5	A
	Through	19	0.65	26.4	45.4	C
	Right	406	0.65	32.1	45.4	C
Intersection	**All**	**1809**	**0.655**	**23.8**	**55.7**	**C**

Year 2026 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	526	0.42	9.5	25.5	A
	Through	572	0.53	20.2	53.2	C
	Right	55	0.31	36.9	11.7	D
Bells Lane (NE)	Left	22	0.02	21.6	1.7	C
	Through	21	0.14	28.3	5.5	C
	Right	5	0.14	33.9	5.5	C
Moss Vale Road (NW)	Left	5	0.01	11.3	0.4	B
	Through	559	0.52	20.1	51.8	C
	Right	105	0.59	38.3	23.7	D
Far North Connector Road (SW)	Left	5	0.01	16.6	0.6	A
	Through	17	0.53	29	24.1	C
	Right	204	0.53	34.7	24.1	C
Intersection	**All**	**2097**	**0.587**	**20.4**	**53.2**	**C**

Year 2031 AM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	365	0.29	9.5	18.7	A
	Through	312	0.36	25.1	33.6	C
	Right	136	0.66	42.8	35.5	D
Bells Lane (NE)	Left	281	0.27	26.9	27.7	C
	Through	83	0.57	36.1	23.9	D
	Right	8	0.57	41.7	23.9	D
Moss Vale Road (NW)	Left	8	0.01	11.6	0.6	B
	Through	571	0.66	27.8	67.9	C
	Right	62	0.30	40.2	15.1	D
Far North Connector Road (SW)	Left	4	0.01	14.4	0.4	A
	Through	58	0.66	27.9	64.8	C
	Right	483	0.66	33.5	64.8	C
Intersection	**All**	**2372**	**0.663**	**27.2**	**67.9**	**C**

Year 2031 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	624	0.52	10.3	40.8	B
	Through	543	0.66	24.9	56.8	C
	Right	233	0.71	35.3	51.3	D
Bells Lane (NE)	Left	115	0.08	18.4	7.9	B
	Through	68	0.41	29.5	16.7	C
	Right	8	0.41	35.1	16.7	D
Moss Vale Road (NW)	Left	8	0.01	13.4	0.7	B
	Through	602	0.74	26.5	66.1	C
	Right	106	0.32	31.7	20.7	C
Far North Connector Road (SW)	Left	5	0.01	14.4	0.5	A
	Through	61	0.78	33.4	34.2	C
	Right	221	0.78	39.1	34.2	D
Intersection	**All**	**2596**	**0.778**	**24.2**	**66.1**	**C**

Year 2036 AM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	314	0.26	9.5	14.1	A
	Through	314	0.50	25.8	32.2	C
	Right	149	0.71	38.9	34.6	D
Bells Lane (NE)	Left	431	0.38	23.3	36.7	C
	Through	135	0.77	33.2	34.7	C
	Right	11	0.77	38.8	34.7	D
Moss Vale Road (NW)	Left	11	0.01	12	0.8	B
	Through	498	0.79	30.6	58.4	C
	Right	9	0.05	34.2	1.9	C
Far North Connector Road (SW)	Left	5	0.01	13.1	0.3	B
	Through	85	0.74	26.8	64.6	C
	Right	495	0.74	32.4	64.6	C
Intersection	**All**	**2456**	**0.791**	**26.8**	**64.6**	**C**

Year 2036 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	652	0.56	10.4	44.7	B
	Through	529	0.70	26.5	57.3	C
	Right	289	0.88	43.5	75.8	D
Bells Lane (NE)	Left	136	0.10	18.5	9.4	B
	Through	91	0.54	30.1	22.4	C
	Right	11	0.54	35.8	22.4	D
Moss Vale Road (NW)	Left	11	0.01	13.6	0.9	B
	Through	601	0.80	29.3	70	C
	Right	107	0.33	31.7	20.9	C
Far North Connector Road (SW)	Left	5	0.01	14	0.5	B
	Through	93	0.78	32.6	40.1	C
	Right	239	0.78	38.4	40.1	D
Intersection	**All**	**2763**	**0.881**	**26.2**	**75.8**	**C**

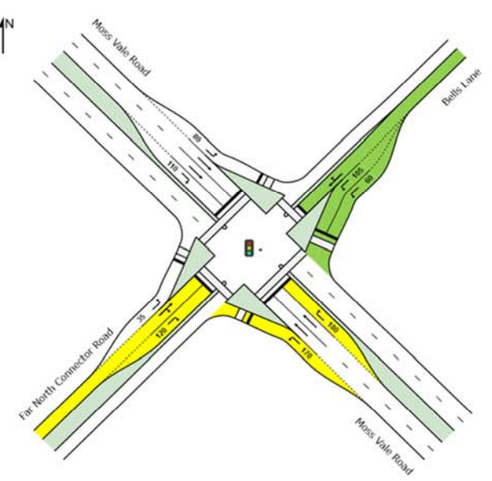
Year 2041 AM Peak Hour — Cycle Time: 80s

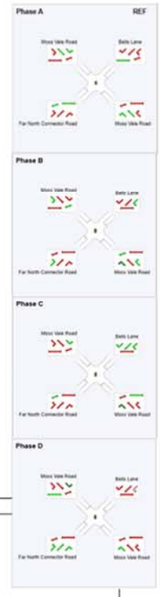
Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	288	0.26	10.4	20.5	B
	Through	328	0.63	37.3	46.9	D
	Right	285	0.85	49.6	91.7	D
Bells Lane (NE)	Left	605	0.40	22.9	59.9	C
	Through	260	0.87	44.9	88.5	D
	Right	7	0.87	50.5	88.5	D
Moss Vale Road (NW)	Left	18	0.02	14	1.8	B
	Through	449	0.87	45.4	73.9	D
	Right	6	0.02	36.4	1.5	D
Far North Connector Road (SW)	Left	5	0.01	13.5	0.5	B
	Through	174	0.81	37.5	95.3	D
	Right	447	0.81	43.2	95.3	D
Intersection	**All**	**2875**	**0.872**	**35.5**	**95.3**	**D**

Year 2041 PM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	544	0.50	11.8	59.6	B
	Through	500	0.85	47.9	89.6	D
	Right	434	0.87	51.2	157.3	D
Bells Lane (NE)	Left	338	0.20	20.1	31	C
	Through	204	0.89	52.9	84.1	D
	Right	19	0.89	58.6	84.1	E
Moss Vale Road (NW)	Left	8	0.01	17.5	1.1	B
	Through	497	0.85	47.5	88.5	D
	Right	95	0.19	34.6	23.3	C
Far North Connector Road (SW)	Left	6	0.01	13.1	0.6	B
	Through	194	0.86	48.4	96.3	D
	Right	329	0.86	54.2	96.3	D
Intersection	**All**	**3168**	**0.89**	**39.7**	**157.3**	**C**

Moss Vale Road / Far North Connector Road Signals - Ultimate Form





Model Development and Assessment Criteria

The future traffic model obtained from the Shoalhaven Kiama TRACKS model (Node #20725 May 2020 version).
The proposed intersection form was obtained from Shoalhaven City Council.

Intersection capacity mechanisms are indicated by dark grey shading, and outlined as follows:
- the degree of saturation for a particular movement is between 0.90 and 1.00; and
- the 95th percentile queue length is ± 10m the length of the available turn pocket for a short lane.

Intersection over-capacity mechanisms are indicated by dark grey shading and red font, and outlined as follows:
- the degree of saturation for any intersection movement exceeds 1.00; and
-the 95th percentile queue length exceeds 10m beyond the length of the available turn pocket for a short lane, or exceeds 500m for a continuous lane.

Design Years

The design years are 2021 (year of opening), 2026 (5-year design horizon), 2031 (10-year design horizon), 2036 (15-year design horizon), and 2041 (20-year design horizon).

Model Description

The traffic volumes represent the annual 100th highest hour for each AM and PM peak hour.

The intersection form is as per the previous assessment with modified turn pocket lengths and a posted speed limit of 90km/h on Moss Vale Road

The signal phasing is diamond overlap turn phasing for the Moss Vale Road approaches, and split phasing for the Bells Lane and Far North Collector Road approaches.

Key Findings

The intersection reaches over-capacity in queuing in the ultimate year during PM peak hour in the AAST scenario in the order of one movement. The Far North Collector road right-turn movement exceeds the available turn pocket length by 29.6m in the 2041 PM Peak scenario.

The intersection reaches saturation limits by the year 2041.

Intersection Performance - 100th Highest Hour

Year 2021 AM Peak Hour — Cycle Time: 50s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	234	0.19	9.1	6.9	A
	Through	248	0.41	21.7	21.2	C
	Right	2	0.01	29.4	0.3	C
Bells Lane (NE)	Left	4	0.00	16.6	0.2	B
	Through	8	0.05	22.1	1.9	C
	Right	3	0.05	27.8	1.9	C
Moss Vale Road (NW)	Left	3	0.00	12	0.2	B
	Through	334	0.55	22.4	29.4	C
	Right	43	0.20	30.7	7.5	C
Far North Connector Road (SW)	Left	3	0.01	13.8	0.2	A
	Through	7	0.54	24.4	21.3	C
	Right	224	0.54	30.1	21.3	C
Intersection	**All**	**1115**	**0.552**	**21.3**	**29.4**	**C**

Year 2021 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	502	0.39	9.5	23.6	A
	Through	522	0.52	20.8	49.1	C
	Right	5	0.03	35.2	1.1	D
Bells Lane (NE)	Left	3	0.00	21.3	0.2	B
	Through	13	0.08	28	3.2	C
	Right	3	0.08	33.6	3.2	C
Moss Vale Road (NW)	Left	3	0.00	11.3	0.2	B
	Through	473	0.47	20.5	43.7	C
	Right	96	0.53	37.9	21.3	D
Far North Connector Road (SW)	Left	4	0.01	16	0.4	A
	Through	11	0.49	27.8	25.2	C
	Right	226	0.49	33.4	25.2	C
Intersection	**All**	**1861**	**0.534**	**20.2**	**49.1**	**C**

Year 2026 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	302	0.25	9.1	9.4	A
	Through	304	0.50	22.1	26.5	C
	Right	40	0.19	30.6	6.9	C
Bells Lane (NE)	Left	56	0.04	17	3.3	B
	Through	20	0.11	22.5	4.3	C
	Right	5	0.11	28.2	4.3	C
Moss Vale Road (NW)	Left	5	0.01	12	0.4	B
	Through	501	0.83	27.9	51.8	C
	Right	53	0.25	30.9	9.2	C
Far North Connector Road (SW)	Left	4	0.01	13.8	0.3	B
	Through	17	0.91	35.4	46.2	D
	Right	377	0.91	41.1	46.2	D
Intersection	**All**	**1684**	**0.91**	**26.2**	**51.8**	**C**

Year 2026 PM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	649	0.52	10	39.1	B
	Through	660	0.62	20.8	63.3	C
	Right	61	0.34	37	13.2	D
Bells Lane (NE)	Left	25	0.02	21.7	1.9	C
	Through	24	0.16	28.4	6.2	C
	Right	5	0.16	34	6.2	C
Moss Vale Road (NW)	Left	5	0.01	11.3	0.4	B
	Through	665	0.62	20.8	64	C
	Right	118	0.66	39.1	27.1	D
Far North Connector Road (SW)	Left	6	0.02	16.7	0.7	A
	Through	20	0.63	30	30	C
	Right	246	0.63	35.7	30	D
Intersection	**All**	**2486**	**0.657**	**20.9**	**64**	**C**

Year 2031 AM Peak Hour — Cycle Time: 60s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	345	0.28	9.5	15.8	A
	Through	298	0.39	23.4	28.9	C
	Right	132	0.73	40.2	31	D
Bells Lane (NE)	Left	266	0.25	23.2	22.1	C
	Through	75	0.44	29.6	18.1	C
	Right	8	0.44	35.3	18.1	D
Moss Vale Road (NW)	Left	8	0.01	11.5	0.6	B
	Through	538	0.71	26.7	58.6	C
	Right	57	0.32	36.9	12.2	D
Far North Connector Road (SW)	Left	4	0.01	14	0.4	A
	Through	53	0.71	26.7	56	C
	Right	458	0.71	32.4	56	C
Intersection	**All**	**2242**	**0.73**	**25.5**	**58.6**	**C**

Year 2031 PM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	642	0.55	10.4	43.4	B
	Through	597	0.73	26.3	65.2	C
	Right	237	0.79	38.5	55.9	D
Bells Lane (NE)	Left	131	0.10	19.2	9.3	B
	Through	80	0.47	29.7	19.3	C
	Right	8	0.47	35.4	19.3	D
Moss Vale Road (NW)	Left	8	0.01	13.1	0.7	B
	Through	706	0.86	32.8	89.2	C
	Right	116	0.39	33	23.3	C
Far North Connector Road (SW)	Left	6	0.01	14.5	0.6	B
	Through	75	0.80	33.2	41.2	C
	Right	263	0.80	38.9	41.2	D
Intersection	**All**	**2869**	**0.863**	**26.7**	**89.2**	**C**

Year 2036 AM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	318	0.25	9.3	15.7	A
	Through	289	0.36	29.6	36.1	C
	Right	149	0.61	44.8	42.5	D
Bells Lane (NE)	Left	412	0.35	28.1	45.3	C
	Through	118	0.61	38.9	37.2	D
	Right	11	0.61	44.5	37.2	D
Moss Vale Road (NW)	Left	11	0.01	12.1	0.9	B
	Through	488	0.61	31.6	64.9	C
	Right	8	0.03	40.6	2.1	D
Far North Connector Road (SW)	Left	4	0.01	14.4	0.4	A
	Through	78	0.65	30.7	75	C
	Right	482	0.65	36.4	75	D
Intersection	**All**	**2368**	**0.654**	**29.9**	**75**	**C**

Year 2036 PM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	578	0.49	10.8	46.5	C
	Through	605	0.66	27	71.1	C
	Right	301	0.84	44	84.9	D
Bells Lane (NE)	Left	159	0.12	21.3	13.1	C
	Through	109	0.75	38.4	32.9	D
	Right	11	0.75	44	32.9	D
Moss Vale Road (NW)	Left	11	0.01	14.3	1	B
	Through	712	0.78	30.4	91.6	D
	Right	126	0.35	34.6	28.1	C
Far North Connector Road (SW)	Left	7	0.01	14.8	0.8	B
	Through	112	0.84	39.4	57	D
	Right	282	0.84	45.2	57	D
Intersection	**All**	**3013**	**0.842**	**29**	**91.6**	**C**

Year 2041 AM Peak Hour — Cycle Time: 70s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	326	0.30	10.6	22.5	B
	Through	273	0.51	31.4	33.1	C
	Right	295	0.89	48.7	88.9	D
Bells Lane (NE)	Left	566	0.38	21.2	49.6	C
	Through	226	0.87	40.5	68.3	D
	Right	7	0.87	46.1	68.3	D
Moss Vale Road (NW)	Left	17	0.02	13.9	1.6	B
	Through	457	0.85	39	65.2	D
	Right	53	0.16	34.2	11.4	C
Far North Connector Road (SW)	Left	4	0.01	13.2	0.3	A
	Through	159	0.89	41.2	91.7	D
	Right	440	0.89	47	91.7	D
Intersection	**All**	**2823**	**0.888**	**33.6**	**91.7**	**C**

Year 2041 PM Peak Hour — Cycle Time: 80s

Approach	Movement	Demand (veh/h)	Degree of Saturation (v/c)	Delay (s)	95%ile Queue (m)	Level of Service
Moss Vale Road (SE)	Left	544	0.51	13.2	79.5	B
	Through	551	0.89	60.8	123.8	E
	Right	414	0.88	60.1	180.1	E
Bells Lane (NE)	Left	367	0.22	23.8	41.7	C
	Through	238	0.90	63.2	120	E
	Right	24	0.90	68.8	120	E
Moss Vale Road (NW)	Left	11	0.01	17.9	1.6	B
	Through	539	0.87	58.4	118.2	E
	Right	120	0.25	42.2	37.2	D
Far North Connector Road (SW)	Left	7	0.01	14.1	0.8	B
	Through	228	0.89	59.7	149.5	E
	Right	423	0.89	65.7	149.5	E
Intersection	**All**	**3466**	**0.902**	**48.8**	**180.1**	**D**

3.2 Second Iteration

The second iteration intersection is expected to reach capacity at the year 2036 in both the AAST and 100HH scenarios. By 2041, queue lengths are expected to exceed turn pocket lengths in the Bells Lane left-turn movement by 2.5m and FNCR right-turn movement by 20.9m in the AAST scenarios. It is therefore recommended that the intersection be upgraded to its ultimate form by the year 2036.

3.3 Ultimate Intersection Form

The ultimate intersection form is expected to reach capacity at the year 2041 in the AAST scenario. It is noted that intersection delays at the 2041 AAST scenario are considered acceptable and expected vehicle queues are contained within proposed turn pocket lengths. However, the intersection is expected exceed queueing capacity by the 2041 100HH PM peak scenario in the FNCR right-turn movement by 29.6m.

3.4 Results Summary

A summary of the SIDRA analysis is provided in Table 3.1. Detailed SIDRA outputs are provided at **Attachment B**.

Table 3.1: Results Summary

Intersection Scenario	Model Year				
	2021	2026	2031	2036	2041
Second Iteration – AAST	Under	Under	Under	Capacity	Over
Second Iteration – 100HH	Under	Under	Under	Capacity	Over
Ultimate Form – AAST	Under	Under	Under	Capacity	Capacity
Ultimate Form – 100HH	Under	Under	Under	Under	Over

4. Conclusion

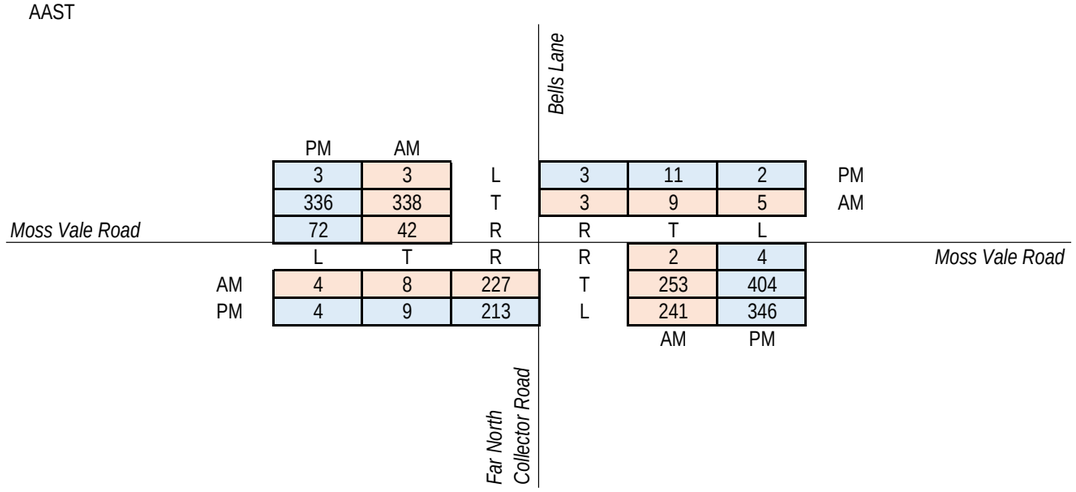
The key findings of the revised SIDRA analysis for the proposed Moss Vale Road / Bells Lane / FNCR signalised intersection are as follows:

- The updated posted speed limit of 90km/h on Moss Vale Road had minimal impact on intersection performance. However, turn pocket lengths were required to be lengthened to provide sufficient vehicle storage and deceleration
- The modified second iteration intersection proposed is expected to cater for forecast traffic volumes until the year 2036
- The modified ultimate intersection form is expected to cater for forecast traffic volumes at the year 2041 in the AAST scenario, however the queue length for the FNCR right-turn movement exceeds available turn pocket lengths in the 2041 100HH scenario.

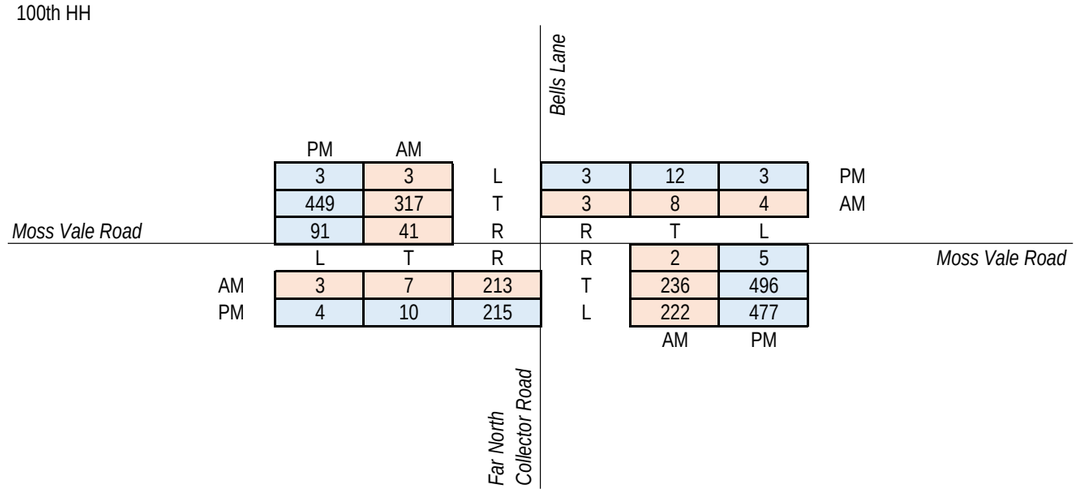
Attachment A: Traffic Volumes

2021

AAST

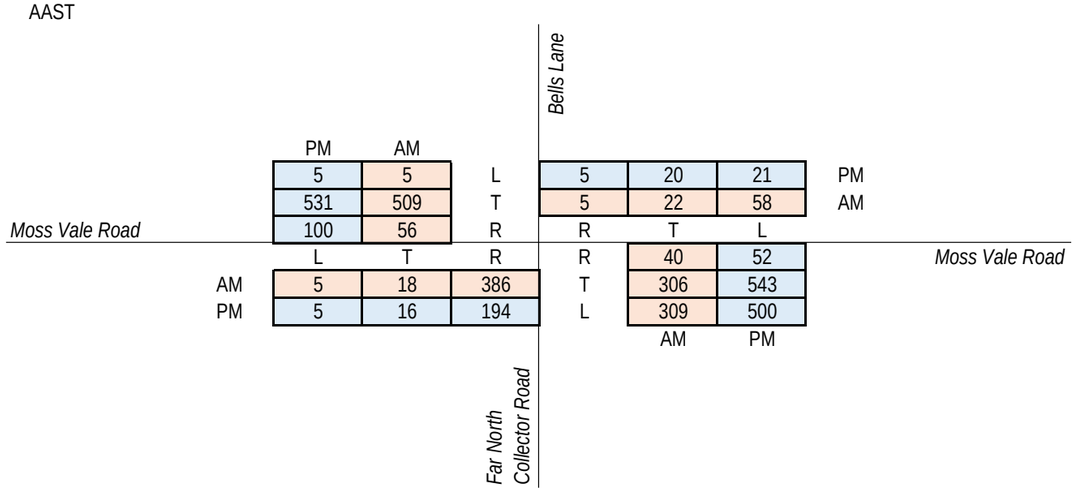


100th HH

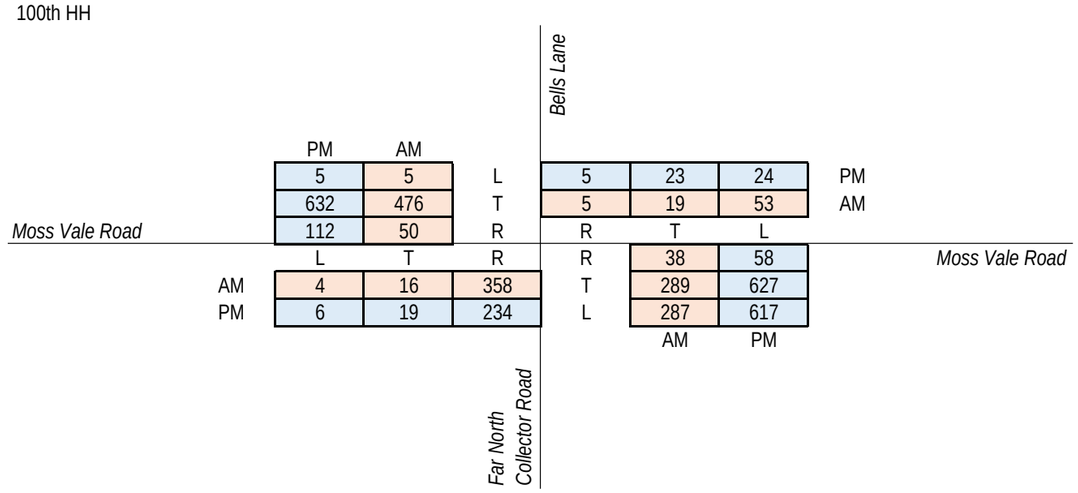


2026

AAST

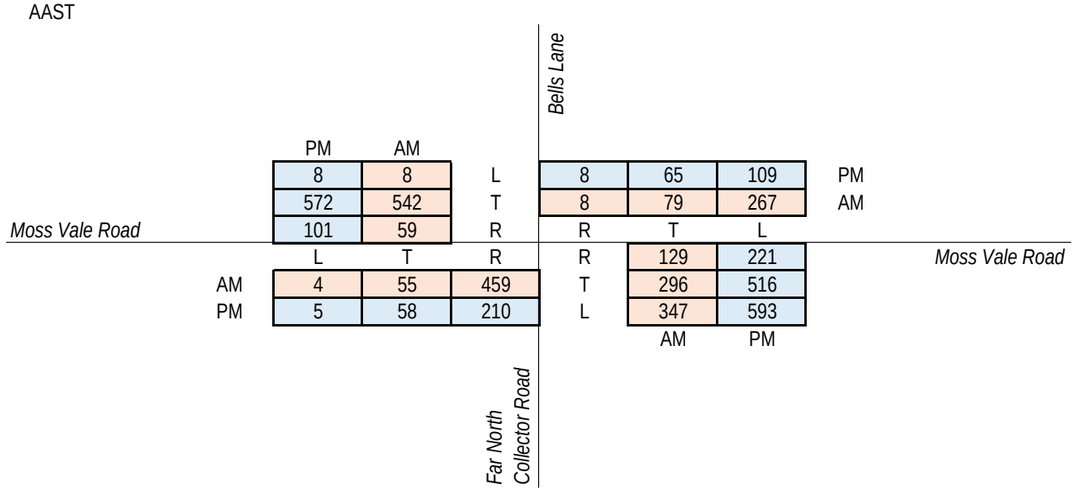


100th HH

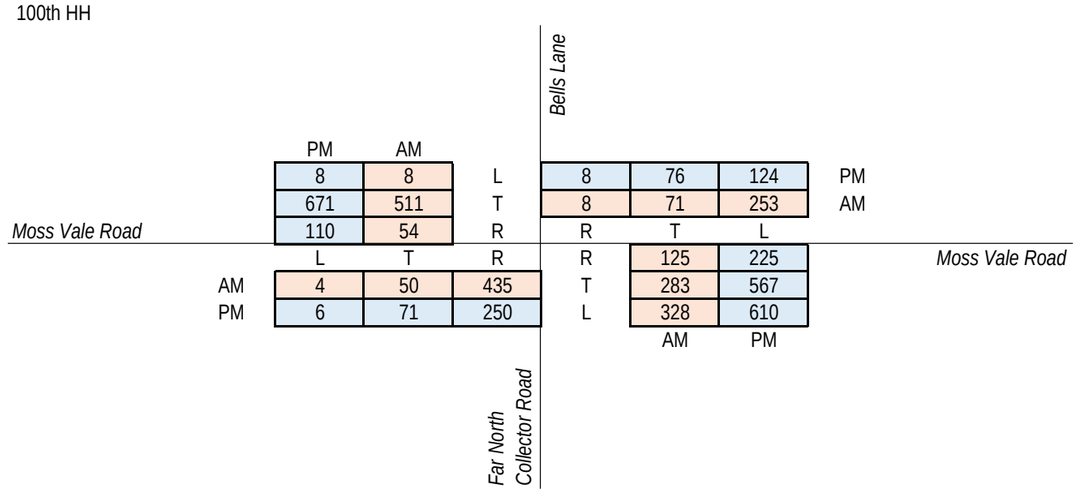


2031

AAST

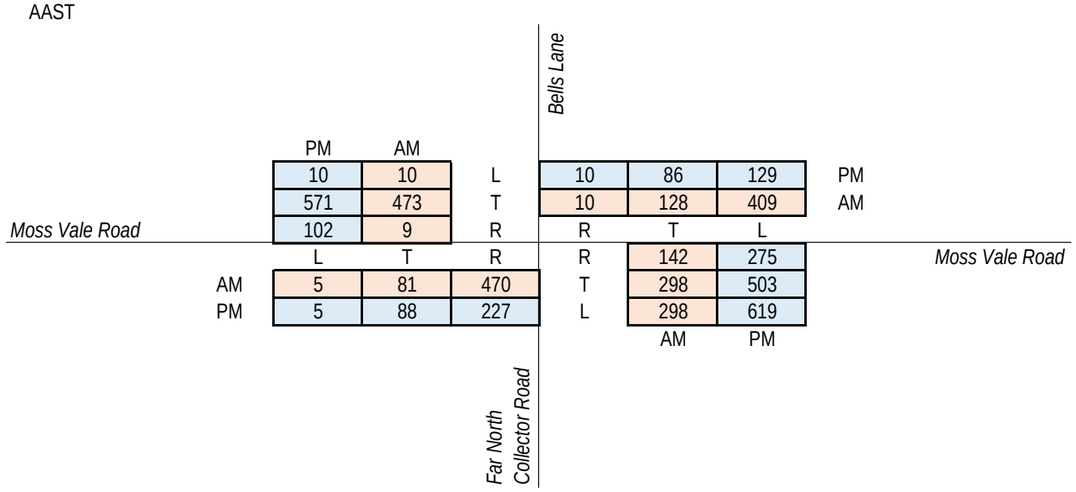


100th HH

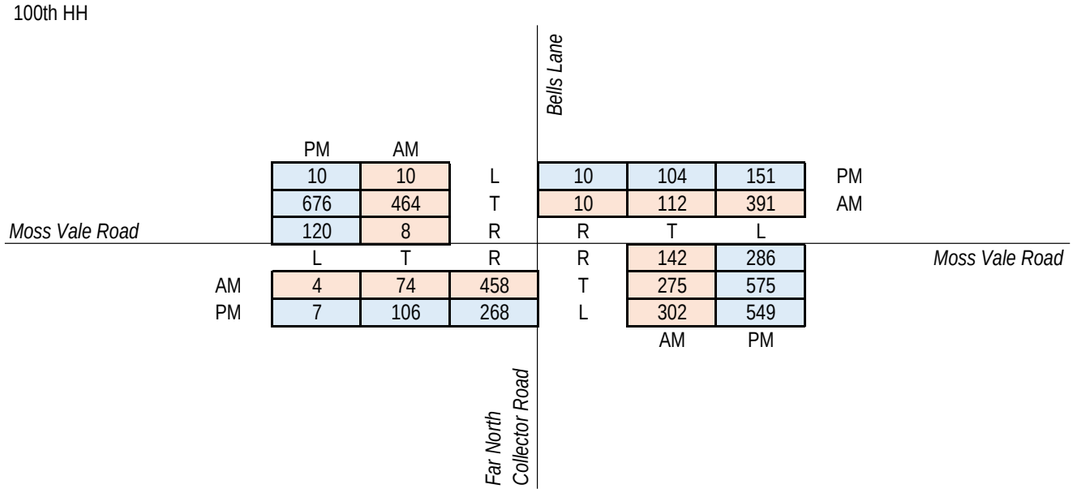


2036

AAST

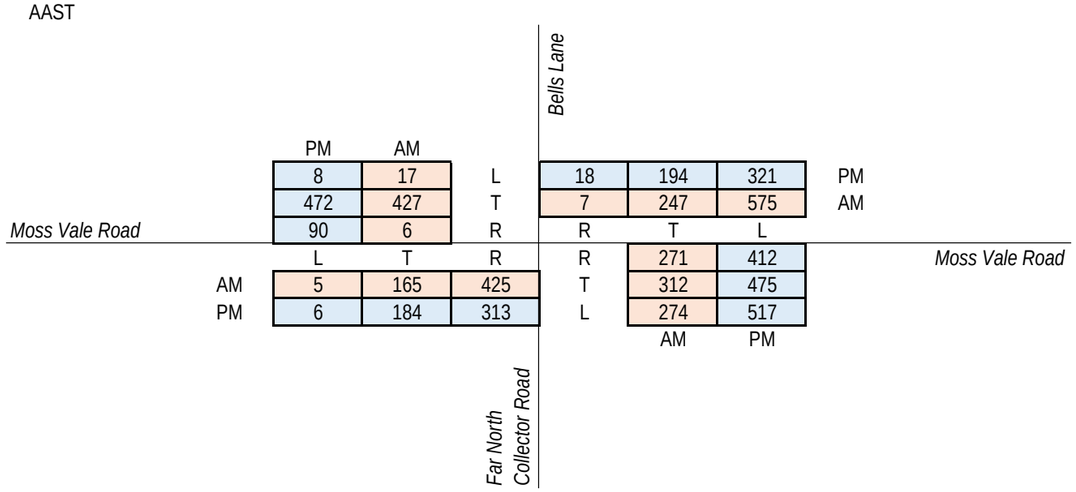


100th HH

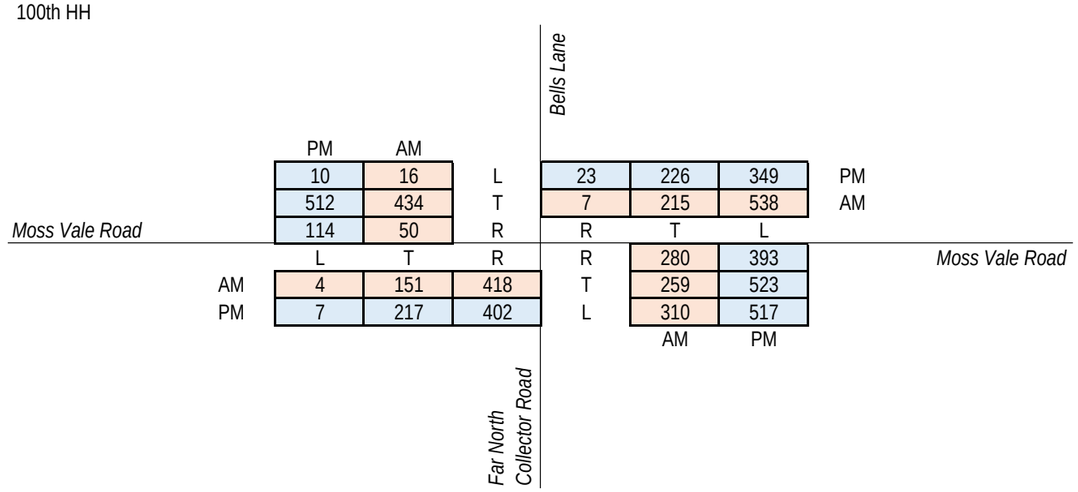


2041

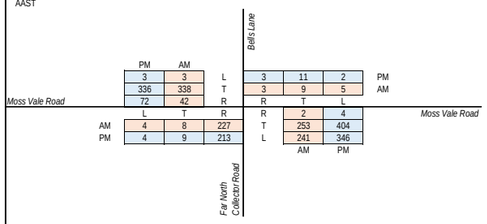
AAST



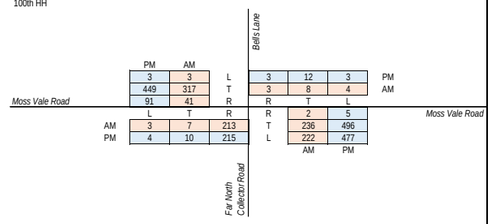
100th HH



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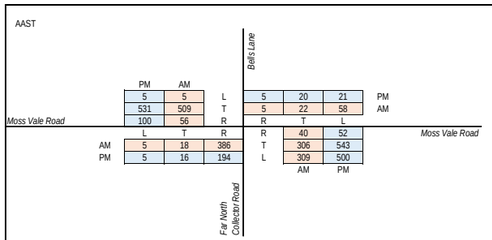


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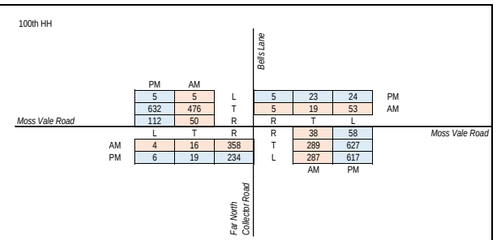


Sheet:	Year 2021 TRACKS Traffic Volumes
	Sheet 1 of 5
Project:	Moss Vale Road SIDRA Assessment
Project Number:	P4627

AAST

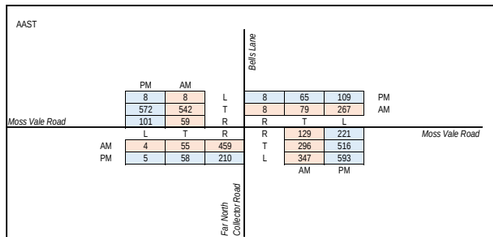


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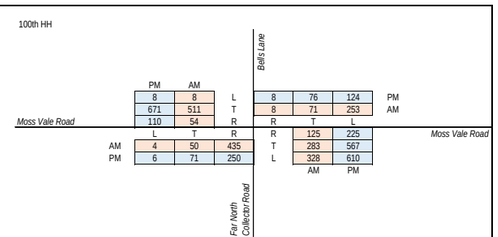


Sheet:	Year 2026 TRACKS Traffic Volumes
	Sheet 2 of 5
Project:	Moss Vale Road SIDRA Assessment
Project Number:	P4627

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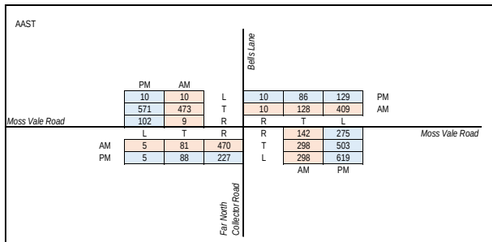


100th HH

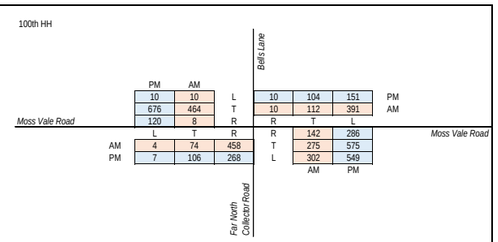


Sheet:	Year 2031 TRACKS Traffic Volumes
	Sheet 3 of 5
Project:	Moss Vale Road SIDRA Assessment
Project Number:	P4627

AAST

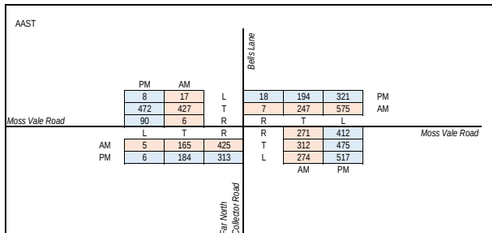


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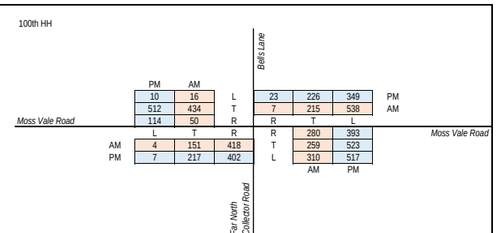


Sheet:	Year 2036 TRACKS Traffic Volumes
	Sheet 4 of 5
Project:	Moss Vale Road SIDRA Assessment
Project Number:	P4627

AAST



100th HH



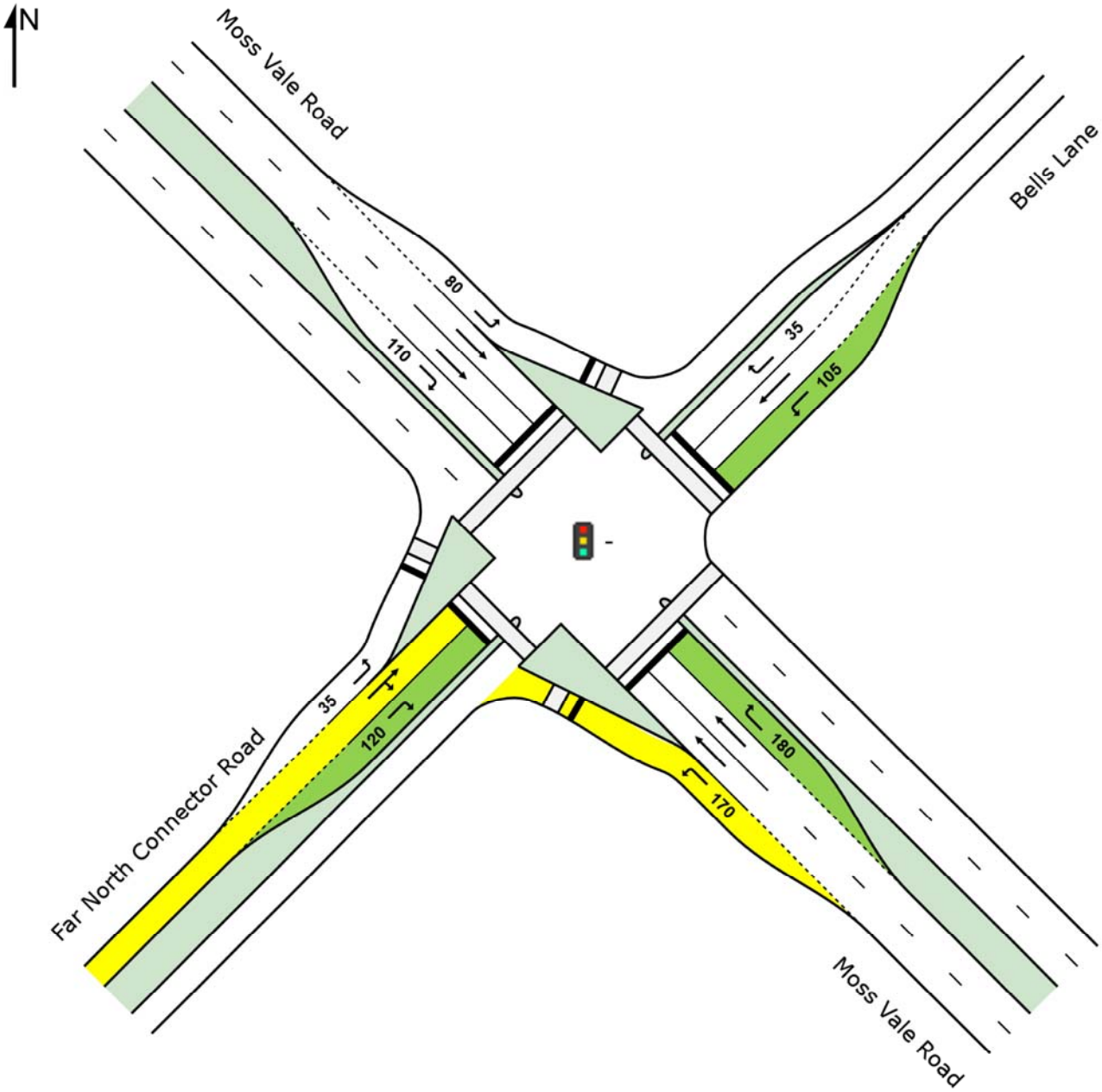
Sheet:	Year 2041 TRACKS Traffic Volumes
	Sheet 5 of 5
Project:	Moss Vale Road SIDRA Assessment
Project Number:	P4627

Attachment B: SIDRA Outputs

SITE LAYOUT

Site: - [2021_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated



PHASING SUMMARY

Site: - [2021_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

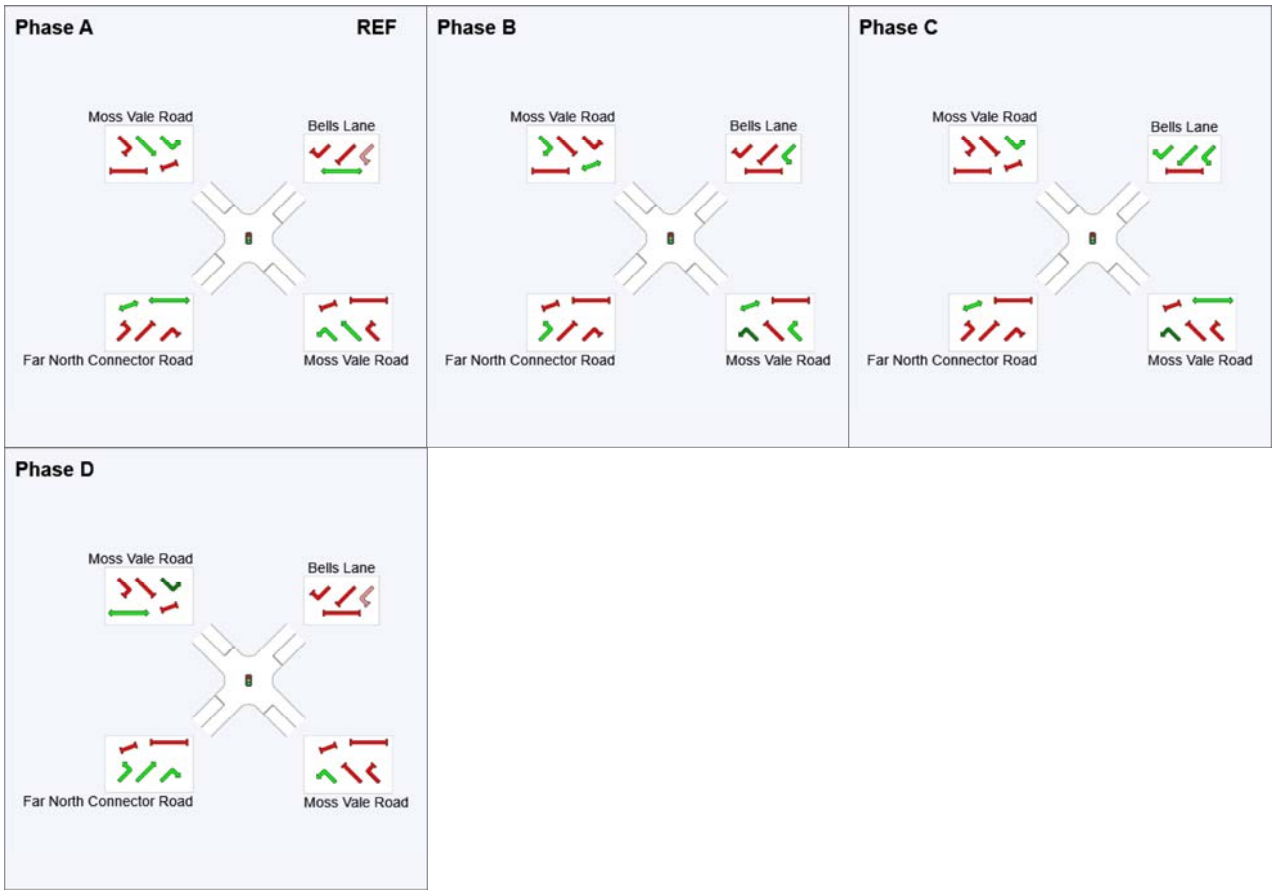
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Sequence1
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	14	26	38
Green Time (sec)	8	6	6	6
Phase Time (sec)	14	12	12	12
Phase Split	28%	24%	24%	24%

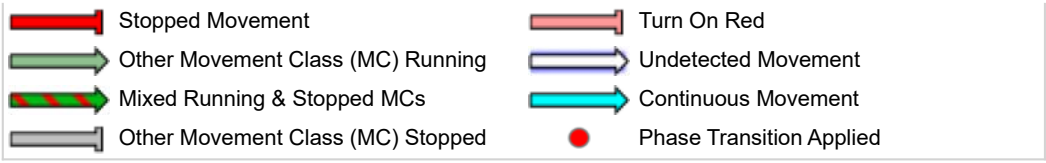
See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency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

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase





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MOVEMENT SUMMARY

Site: - [2021_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	254	5.0	0.204	9.1	LOS A	1.0	7.6	0.32	0.70	0.32	60.0
22	T1	266	5.0	0.441	21.8	LOS C	3.1	22.9	0.95	0.75	0.95	58.6
23	R2	2	5.0	0.010	29.4	LOS C	0.0	0.3	0.90	0.62	0.90	44.9
Approach		522	5.0	0.441	15.7	LOS B	3.1	22.9	0.64	0.72	0.64	59.2
NorthEast: Bells Lane												
24	L2	5	5.0	0.005	7.9	LOS A	0.0	0.3	0.39	0.61	0.39	57.1
25	T1	9	5.0	0.042	22.0	LOS C	0.2	1.6	0.91	0.61	0.91	44.1
26	R2	3	5.0	0.015	27.4	LOS C	0.1	0.5	0.90	0.62	0.90	44.0
Approach		18	5.0	0.042	18.8	LOS B	0.2	1.6	0.76	0.61	0.76	47.3
NorthWest: Moss Vale Road												
27	L2	3	5.0	0.004	12.0	LOS B	0.0	0.2	0.49	0.63	0.49	57.5
28	T1	356	5.0	0.589	22.7	LOS C	4.4	31.8	0.97	0.80	1.02	57.7
29	R2	44	5.0	0.205	30.7	LOS C	1.0	7.7	0.94	0.73	0.94	44.2
Approach		403	5.0	0.589	23.5	LOS C	4.4	31.8	0.97	0.79	1.01	55.8
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.010	13.8	LOS B	0.0	0.3	0.78	0.62	0.78	52.8
31	T1	8	5.0	0.574	24.7	LOS C	3.2	23.0	0.99	0.81	1.06	40.3
32	R2	239	5.0	0.574	30.4	LOS C	3.2	23.0	0.99	0.81	1.06	42.6
Approach		252	5.0	0.574	29.9	LOS C	3.2	23.0	0.98	0.80	1.05	42.7
All Vehicles		1195	5.0	0.589	21.4	LOS C	4.4	31.8	0.83	0.76	0.85	53.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P5B	SouthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6	NorthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7	NorthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7B	NorthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8	SouthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8B	SouthWest Slip/Bypass Lane Crossing	5	7.2	LOS A	0.0	0.0	0.76	0.76

All Pedestrians	37	17.6	LOS B	0.86	0.86

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: - [2021_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	364	5.0	0.299	9.4	LOS A	1.9	13.5	0.38	0.71	0.38	59.8
22	T1	425	5.0	0.704	24.2	LOS C	5.5	40.1	1.00	0.86	1.17	56.4
23	R2	4	5.0	0.020	29.6	LOS C	0.1	0.7	0.90	0.64	0.90	44.8
Approach		794	5.0	0.704	17.5	LOS B	5.5	40.1	0.71	0.79	0.81	57.8
NorthEast: Bells Lane												
24	L2	2	5.0	0.002	7.8	LOS A	0.0	0.1	0.39	0.60	0.39	57.1
25	T1	12	5.0	0.051	22.1	LOS C	0.3	1.9	0.91	0.62	0.91	44.1
26	R2	3	5.0	0.015	27.4	LOS C	0.1	0.5	0.90	0.62	0.90	44.0
Approach		17	5.0	0.051	21.3	LOS C	0.3	1.9	0.84	0.62	0.84	45.4
NorthWest: Moss Vale Road												
27	L2	3	5.0	0.004	12.0	LOS B	0.0	0.2	0.49	0.63	0.49	57.5
28	T1	354	5.0	0.585	22.7	LOS C	4.3	31.6	0.97	0.80	1.02	57.8
29	R2	76	5.0	0.352	31.3	LOS C	1.8	13.5	0.96	0.76	0.96	43.8
Approach		433	5.0	0.585	24.1	LOS C	4.3	31.6	0.97	0.79	1.00	54.7
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.010	13.8	LOS B	0.0	0.3	0.78	0.62	0.78	52.8
31	T1	9	5.0	0.542	24.5	LOS C	3.0	21.5	0.98	0.79	1.02	40.4
32	R2	224	5.0	0.542	30.1	LOS C	3.0	21.5	0.98	0.79	1.02	42.7
Approach		238	5.0	0.542	29.6	LOS C	3.0	21.5	0.98	0.79	1.02	42.8
All Vehicles		1481	5.0	0.704	21.4	LOS C	5.5	40.1	0.83	0.79	0.90	53.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P5B	SouthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6	NorthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7	NorthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7B	NorthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8	SouthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8B	SouthWest Slip/Bypass Lane Crossing	5	7.2	LOS A	0.0	0.0	0.76	0.76

All Pedestrians	37	17.6	LOS B	0.86	0.86

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: - [2021_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	234	5.0	0.187	9.1	LOS A	0.9	6.9	0.32	0.69	0.32	60.1
22	T1	248	5.0	0.411	21.7	LOS C	2.9	21.2	0.94	0.74	0.94	58.7
23	R2	2	5.0	0.010	29.4	LOS C	0.0	0.3	0.90	0.62	0.90	44.9
Approach		484	5.0	0.411	15.6	LOS B	2.9	21.2	0.64	0.72	0.64	59.3
NorthEast: Bells Lane												
24	L2	4	5.0	0.004	7.9	LOS A	0.0	0.2	0.39	0.61	0.39	57.1
25	T1	8	5.0	0.037	22.0	LOS C	0.2	1.4	0.91	0.60	0.91	44.2
26	R2	3	5.0	0.015	27.4	LOS C	0.1	0.5	0.90	0.62	0.90	44.0
Approach		16	5.0	0.037	19.3	LOS B	0.2	1.4	0.77	0.61	0.77	47.0
NorthWest: Moss Vale Road												
27	L2	3	5.0	0.004	12.0	LOS B	0.0	0.2	0.49	0.63	0.49	57.5
28	T1	334	5.0	0.552	22.4	LOS C	4.0	29.4	0.97	0.78	0.98	58.0
29	R2	43	5.0	0.201	30.7	LOS C	1.0	7.5	0.94	0.73	0.94	44.2
Approach		380	5.0	0.552	23.2	LOS C	4.0	29.4	0.96	0.77	0.97	56.0
SouthWest: Far North Connector Road												
30	L2	3	5.0	0.007	13.8	LOS B	0.0	0.2	0.78	0.61	0.78	52.8
31	T1	7	5.0	0.537	24.4	LOS C	2.9	21.3	0.98	0.79	1.02	40.4
32	R2	224	5.0	0.537	30.1	LOS C	2.9	21.3	0.98	0.79	1.02	42.7
Approach		235	5.0	0.537	29.7	LOS C	2.9	21.3	0.98	0.79	1.02	42.8
All Vehicles		1115	5.0	0.552	21.2	LOS C	4.0	29.4	0.82	0.75	0.83	53.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P5B	SouthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6	NorthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7	NorthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7B	NorthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8	SouthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8B	SouthWest Slip/Bypass Lane Crossing	5	7.2	LOS A	0.0	0.0	0.76	0.76

All Pedestrians	37	17.6	LOS B	0.86	0.86

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: - [2021_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	502	5.0	0.394	9.5	LOS A	3.2	23.6	0.38	0.72	0.38	59.8
22	T1	522	5.0	0.518	20.8	LOS C	6.7	49.1	0.90	0.75	0.90	59.5
23	R2	5	5.0	0.029	35.2	LOS D	0.1	1.1	0.92	0.65	0.92	41.9
Approach		1029	5.0	0.518	15.4	LOS B	6.7	49.1	0.65	0.74	0.65	59.5
NorthEast: Bells Lane												
24	L2	3	5.0	0.003	8.0	LOS A	0.0	0.2	0.36	0.60	0.36	57.0
25	T1	13	5.0	0.067	27.8	LOS C	0.4	2.6	0.93	0.64	0.93	41.3
26	R2	3	5.0	0.018	33.0	LOS C	0.1	0.6	0.92	0.62	0.92	41.3
Approach		19	5.0	0.067	25.4	LOS C	0.4	2.6	0.84	0.63	0.84	43.3
NorthWest: Moss Vale Road												
27	L2	3	5.0	0.003	11.3	LOS B	0.0	0.2	0.41	0.63	0.41	58.1
28	T1	473	5.0	0.469	20.5	LOS C	6.0	43.7	0.89	0.73	0.89	59.8
29	R2	96	5.0	0.534	37.9	LOS D	2.9	21.3	0.99	0.78	1.02	40.6
Approach		572	5.0	0.534	23.4	LOS C	6.0	43.7	0.90	0.74	0.91	55.4
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.010	16.0	LOS B	0.1	0.4	0.79	0.62	0.79	51.2
31	T1	11	5.0	0.494	27.8	LOS C	3.5	25.2	0.97	0.78	0.97	39.0
32	R2	226	5.0	0.494	33.4	LOS C	3.5	25.2	0.97	0.78	0.97	41.2
Approach		241	5.0	0.494	32.9	LOS C	3.5	25.2	0.97	0.78	0.97	41.2
All Vehicles		1861	5.0	0.534	20.2	LOS C	6.7	49.1	0.77	0.74	0.77	54.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	10.2	LOS B	0.0	0.0	0.80	0.80

All Pedestrians	37	22.3	LOS C	0.89	0.89

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: - [2026_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	325	5.0	0.254	9.1	LOS A	1.6	11.7	0.31	0.70	0.31	60.1
22	T1	322	5.0	0.394	22.5	LOS C	4.2	30.7	0.90	0.73	0.90	57.9
23	R2	42	5.0	0.235	36.5	LOS D	1.2	8.9	0.96	0.73	0.96	41.3
Approach		689	5.0	0.394	17.1	LOS B	4.2	30.7	0.62	0.71	0.62	57.5
NorthEast: Bells Lane												
24	L2	61	5.0	0.072	9.9	LOS A	0.7	4.8	0.48	0.67	0.48	55.3
25	T1	23	5.0	0.123	28.2	LOS C	0.7	4.8	0.94	0.67	0.94	41.1
26	R2	5	5.0	0.029	33.2	LOS C	0.1	1.1	0.92	0.64	0.92	41.2
Approach		89	5.0	0.123	16.0	LOS B	0.7	4.8	0.62	0.67	0.62	49.9
NorthWest: Moss Vale Road												
27	L2	5	5.0	0.005	11.3	LOS B	0.0	0.4	0.41	0.64	0.41	58.1
28	T1	536	5.0	0.655	24.7	LOS C	7.6	55.7	0.97	0.82	1.02	56.0
29	R2	59	5.0	0.329	37.0	LOS D	1.7	12.7	0.97	0.75	0.97	41.1
Approach		600	5.0	0.655	25.8	LOS C	7.6	55.7	0.96	0.81	1.01	54.1
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.010	14.5	LOS B	0.1	0.5	0.74	0.62	0.74	52.3
31	T1	19	5.0	0.645	26.4	LOS C	6.2	45.4	0.98	0.85	1.05	39.6
32	R2	406	5.0	0.645	32.1	LOS C	6.2	45.4	0.98	0.85	1.05	41.8
Approach		431	5.0	0.645	31.6	LOS C	6.2	45.4	0.97	0.84	1.04	41.8
All Vehicles		1809	5.0	0.655	23.4	LOS C	7.6	55.7	0.82	0.78	0.85	51.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	10.2	LOS B	0.0	0.0	0.80	0.80

All Pedestrians	37	22.3	LOS C	0.89	0.89

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: - [2026_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	526	5.0	0.416	9.5	LOS A	3.5	25.5	0.39	0.73	0.39	59.7
22	T1	572	5.0	0.534	20.2	LOS C	7.3	53.2	0.89	0.75	0.89	60.2
23	R2	55	5.0	0.305	36.9	LOS D	1.6	11.7	0.96	0.74	0.96	41.1
Approach		1153	5.0	0.534	16.1	LOS B	7.3	53.2	0.67	0.74	0.67	58.7
NorthEast: Bells Lane												
24	L2	22	5.0	0.025	8.4	LOS A	0.2	1.3	0.39	0.64	0.39	56.7
25	T1	21	5.0	0.111	28.1	LOS C	0.6	4.4	0.94	0.66	0.94	41.2
26	R2	5	5.0	0.029	33.2	LOS C	0.1	1.1	0.92	0.64	0.92	41.2
Approach		48	5.0	0.111	19.6	LOS B	0.6	4.4	0.69	0.65	0.69	47.0
NorthWest: Moss Vale Road												
27	L2	5	5.0	0.005	11.3	LOS B	0.0	0.4	0.41	0.64	0.41	58.1
28	T1	559	5.0	0.522	20.1	LOS C	7.1	51.8	0.89	0.75	0.89	60.2
29	R2	105	5.0	0.587	38.3	LOS D	3.2	23.7	1.00	0.80	1.08	40.5
Approach		669	5.0	0.587	22.9	LOS C	7.1	51.8	0.90	0.75	0.92	55.9
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.014	16.6	LOS B	0.1	0.6	0.80	0.63	0.80	50.8
31	T1	17	5.0	0.526	29.0	LOS C	3.3	24.1	0.98	0.78	0.99	38.7
32	R2	204	5.0	0.526	34.7	LOS C	3.3	24.1	0.98	0.78	0.99	40.7
Approach		226	5.0	0.526	33.8	LOS C	3.3	24.1	0.98	0.78	0.99	40.7
All Vehicles		2097	5.0	0.587	20.3	LOS C	7.3	53.2	0.78	0.75	0.78	54.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	10.2	LOS B	0.0	0.0	0.80	0.80

All Pedestrians	37	22.3	LOS C	0.89	0.89

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: - [2026_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	302	5.0	0.246	9.1	LOS A	1.3	9.4	0.34	0.70	0.34	60.0
22	T1	304	5.0	0.503	22.1	LOS C	3.6	26.5	0.96	0.76	0.96	58.3
23	R2	40	5.0	0.186	30.6	LOS C	0.9	6.9	0.93	0.73	0.93	44.2
Approach		646	5.0	0.503	16.6	LOS B	3.6	26.5	0.67	0.73	0.67	57.9
NorthEast: Bells Lane												
24	L2	56	5.0	0.060	9.4	LOS A	0.5	3.7	0.50	0.67	0.50	55.7
25	T1	20	5.0	0.088	22.4	LOS C	0.5	3.4	0.92	0.64	0.92	44.0
26	R2	5	5.0	0.024	27.6	LOS C	0.1	0.9	0.90	0.64	0.90	43.9
Approach		81	5.0	0.088	13.8	LOS B	0.5	3.7	0.63	0.66	0.63	51.4
NorthWest: Moss Vale Road												
27	L2	5	5.0	0.006	12.0	LOS B	0.0	0.4	0.49	0.64	0.49	57.5
28	T1	501	5.0	0.829	27.9	LOS C	7.1	51.8	1.00	0.95	1.42	53.4
29	R2	53	5.0	0.245	30.9	LOS C	1.3	9.2	0.94	0.74	0.94	44.1
Approach		559	5.0	0.829	28.0	LOS C	7.1	51.8	0.99	0.93	1.37	52.4
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.010	13.8	LOS B	0.0	0.3	0.78	0.62	0.78	52.8
31	T1	17	5.0	0.913	35.4	LOS D	6.3	46.2	1.00	1.13	1.86	36.1
32	R2	377	5.0	0.913	41.1	LOS D	6.3	46.2	1.00	1.13	1.86	37.9
Approach		398	5.0	0.913	40.6	LOS D	6.3	46.2	1.00	1.12	1.85	37.9
All Vehicles		1684	5.0	0.913	25.9	LOS C	7.1	51.8	0.85	0.89	1.18	49.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P5B	SouthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6	NorthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7	NorthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7B	NorthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8	SouthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8B	SouthWest Slip/Bypass Lane Crossing	5	7.2	LOS A	0.0	0.0	0.76	0.76

All Pedestrians	37	17.6	LOS B	0.86	0.86

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: - [2026_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	649	5.0	0.519	10.0	LOS B	5.4	39.1	0.46	0.75	0.46	59.3
22	T1	660	5.0	0.617	20.8	LOS C	8.7	63.3	0.92	0.78	0.92	59.6
23	R2	61	5.0	0.340	37.0	LOS D	1.8	13.2	0.97	0.75	0.97	41.1
Approach		1371	5.0	0.617	16.4	LOS B	8.7	63.3	0.71	0.76	0.71	58.3
NorthEast: Bells Lane												
24	L2	25	5.0	0.030	9.4	LOS A	0.2	1.8	0.44	0.65	0.44	55.8
25	T1	24	5.0	0.128	28.2	LOS C	0.7	5.0	0.94	0.67	0.94	41.1
26	R2	5	5.0	0.029	33.2	LOS C	0.1	1.1	0.92	0.64	0.92	41.2
Approach		55	5.0	0.128	20.0	LOS B	0.7	5.0	0.71	0.66	0.71	46.8
NorthWest: Moss Vale Road												
27	L2	5	5.0	0.005	11.3	LOS B	0.0	0.4	0.41	0.64	0.41	58.1
28	T1	665	5.0	0.622	20.8	LOS C	8.8	64.0	0.92	0.78	0.92	59.5
29	R2	118	5.0	0.657	39.1	LOS D	3.7	27.1	1.00	0.82	1.16	40.1
Approach		788	5.0	0.657	23.5	LOS C	8.8	64.0	0.93	0.79	0.96	55.5
SouthWest: Far North Connector Road												
30	L2	6	5.0	0.016	16.7	LOS B	0.1	0.7	0.81	0.64	0.81	50.7
31	T1	20	5.0	0.634	30.0	LOS C	4.1	30.0	1.00	0.83	1.11	38.3
32	R2	246	5.0	0.634	35.7	LOS D	4.1	30.0	1.00	0.83	1.11	40.2
Approach		273	5.0	0.634	34.8	LOS C	4.1	30.0	0.99	0.83	1.10	40.3
All Vehicles		2486	5.0	0.657	20.7	LOS C	8.8	64.0	0.81	0.78	0.83	54.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	10.2	LOS B	0.0	0.0	0.80	0.80

All Pedestrians	37	22.3	LOS C	0.89	0.89

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: - [2031_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	365	5.0	0.291	9.5	LOS A	2.6	18.7	0.33	0.71	0.33	59.8
22	T1	312	5.0	0.361	25.1	LOS C	4.6	33.6	0.88	0.72	0.88	55.6
23	R2	136	5.0	0.663	42.8	LOS D	4.9	35.5	1.00	0.83	1.12	38.5
Approach		813	5.0	0.663	21.1	LOS C	4.9	35.5	0.66	0.73	0.68	53.3
NorthEast: Bells Lane												
24	L2	281	5.0	0.355	13.0	LOS B	5.0	36.9	0.63	0.75	0.63	52.9
25	T1	83	5.0	0.514	35.7	LOS D	2.9	21.5	1.00	0.76	1.01	37.9
26	R2	8	5.0	0.055	39.0	LOS D	0.3	2.0	0.94	0.66	0.94	38.6
Approach		373	5.0	0.514	18.7	LOS B	5.0	36.9	0.72	0.75	0.72	48.2
NorthWest: Moss Vale Road												
27	L2	8	5.0	0.009	11.6	LOS B	0.1	0.6	0.40	0.65	0.40	57.9
28	T1	571	5.0	0.661	27.8	LOS C	9.3	67.9	0.96	0.82	1.00	53.4
29	R2	62	5.0	0.303	40.2	LOS D	2.1	15.1	0.96	0.75	0.96	39.6
Approach		641	5.0	0.661	28.8	LOS C	9.3	67.9	0.95	0.81	0.99	51.7
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.007	14.4	LOS B	0.1	0.4	0.67	0.61	0.67	52.4
31	T1	58	5.0	0.656	27.9	LOS C	8.9	64.8	0.96	0.84	1.00	39.3
32	R2	483	5.0	0.656	33.5	LOS C	8.9	64.8	0.96	0.84	1.00	41.3
Approach		545	5.0	0.656	32.8	LOS C	8.9	64.8	0.96	0.84	1.00	41.1
All Vehicles		2372	5.0	0.663	25.5	LOS C	9.3	67.9	0.82	0.78	0.84	48.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P5B	SouthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6	NorthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7	NorthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7B	NorthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8	SouthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8B	SouthWest Slip/Bypass Lane Crossing	5	13.2	LOS B	0.0	0.0	0.83	0.83

All Pedestrians	37	27.0	LOS C	0.90	0.90

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: - [2031_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	624	5.0	0.512	10.3	LOS B	5.5	40.4	0.48	0.75	0.48	59.0
22	T1	543	5.0	0.539	21.0	LOS C	7.0	51.4	0.91	0.76	0.91	59.4
23	R2	23	5.0	0.129	36.0	LOS D	0.7	4.8	0.94	0.70	0.94	41.5
Approach		1191	5.0	0.539	15.7	LOS B	7.0	51.4	0.68	0.76	0.68	58.7
NorthEast: Bells Lane												
24	L2	115	5.0	0.133	9.4	LOS A	1.2	8.7	0.47	0.68	0.47	55.8
25	T1	68	5.0	0.362	29.3	LOS C	2.0	14.7	0.97	0.73	0.97	40.6
26	R2	8	5.0	0.047	33.4	LOS C	0.2	1.7	0.93	0.66	0.93	41.1
Approach		192	5.0	0.362	17.5	LOS B	2.0	14.7	0.67	0.70	0.67	48.5
NorthWest: Moss Vale Road												
27	L2	8	5.0	0.009	11.5	LOS B	0.1	0.6	0.43	0.65	0.43	58.0
28	T1	602	5.0	0.598	21.4	LOS C	8.0	58.1	0.92	0.78	0.92	59.0
29	R2	106	5.0	0.593	38.4	LOS D	3.3	24.0	1.00	0.80	1.09	40.4
Approach		717	5.0	0.598	23.8	LOS C	8.0	58.1	0.93	0.78	0.94	55.2
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.013	16.1	LOS B	0.1	0.6	0.79	0.63	0.79	51.2
31	T1	61	5.0	0.583	28.4	LOS C	4.2	30.9	0.99	0.81	1.03	39.6
32	R2	221	5.0	0.583	34.1	LOS C	4.2	30.9	0.99	0.81	1.03	41.2
Approach		287	5.0	0.583	32.6	LOS C	4.2	30.9	0.98	0.81	1.03	41.0
All Vehicles		2386	5.0	0.598	20.3	LOS C	8.0	58.1	0.79	0.76	0.80	53.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	10.2	LOS B	0.0	0.0	0.80	0.80

All Pedestrians	37	22.3	LOS C	0.89	0.89

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: - [2031_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	345	5.0	0.281	9.3	LOS A	2.0	14.3	0.34	0.71	0.34	60.0
22	T1	298	5.0	0.394	23.4	LOS C	4.0	28.9	0.91	0.73	0.91	57.1
23	R2	132	5.0	0.734	40.2	LOS D	4.3	31.0	1.00	0.86	1.26	39.6
Approach		775	5.0	0.734	20.0	LOS B	4.3	31.0	0.67	0.74	0.72	54.2
NorthEast: Bells Lane												
24	L2	266	5.0	0.322	11.5	LOS B	3.8	27.8	0.61	0.74	0.61	54.0
25	T1	75	5.0	0.396	29.4	LOS C	2.2	16.2	0.98	0.74	0.98	40.6
26	R2	8	5.0	0.047	33.4	LOS C	0.2	1.7	0.93	0.66	0.93	41.1
Approach		349	5.0	0.396	15.9	LOS B	3.8	27.8	0.69	0.74	0.69	50.1
NorthWest: Moss Vale Road												
27	L2	8	5.0	0.009	11.5	LOS B	0.1	0.6	0.43	0.65	0.43	58.0
28	T1	538	5.0	0.712	26.7	LOS C	8.0	58.6	0.99	0.87	1.11	54.3
29	R2	57	5.0	0.317	36.9	LOS D	1.7	12.2	0.97	0.74	0.97	41.1
Approach		603	5.0	0.712	27.4	LOS C	8.0	58.6	0.98	0.85	1.09	52.8
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.008	14.0	LOS B	0.1	0.4	0.72	0.62	0.72	52.6
31	T1	53	5.0	0.708	26.7	LOS C	7.7	56.0	0.98	0.89	1.11	39.8
32	R2	458	5.0	0.708	32.4	LOS C	7.7	56.0	0.98	0.88	1.11	41.8
Approach		515	5.0	0.708	31.7	LOS C	7.7	56.0	0.98	0.88	1.11	41.6
All Vehicles		2242	5.0	0.734	24.0	LOS C	8.0	58.6	0.83	0.80	0.90	49.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	10.2	LOS B	0.0	0.0	0.80	0.80

All Pedestrians	37	22.3	LOS C	0.89	0.89

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: - [2031_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	642	5.0	0.545	10.4	LOS B	5.9	43.4	0.50	0.76	0.50	58.9
22	T1	597	5.0	0.729	26.3	LOS C	8.9	65.2	0.98	0.88	1.12	54.6
23	R2	237	5.0	0.792	38.5	LOS D	7.7	55.9	1.00	0.91	1.29	40.4
Approach		1476	5.0	0.792	21.3	LOS C	8.9	65.2	0.78	0.83	0.88	53.3
NorthEast: Bells Lane												
24	L2	131	5.0	0.144	11.1	LOS B	1.6	12.0	0.54	0.70	0.54	54.4
25	T1	80	5.0	0.424	29.5	LOS C	2.4	17.4	0.98	0.75	0.98	40.5
26	R2	8	5.0	0.047	33.4	LOS C	0.2	1.7	0.93	0.66	0.93	41.1
Approach		219	5.0	0.424	18.7	LOS B	2.4	17.4	0.71	0.71	0.71	47.8
NorthWest: Moss Vale Road												
27	L2	8	5.0	0.010	13.1	LOS B	0.1	0.7	0.52	0.65	0.52	56.6
28	T1	706	5.0	0.863	32.8	LOS C	12.2	89.2	1.00	1.00	1.40	49.8
29	R2	116	5.0	0.387	33.0	LOS C	3.2	23.3	0.93	0.78	0.93	43.0
Approach		831	5.0	0.863	32.7	LOS C	12.2	89.2	0.99	0.96	1.32	48.8
SouthWest: Far North Connector Road												
30	L2	6	5.0	0.012	14.5	LOS B	0.1	0.6	0.74	0.63	0.74	52.3
31	T1	75	5.0	0.799	33.2	LOS C	5.6	41.2	1.00	0.95	1.36	37.7
32	R2	263	5.0	0.799	38.9	LOS D	5.6	41.2	1.00	0.95	1.36	39.1
Approach		344	5.0	0.799	37.2	LOS D	5.6	41.2	1.00	0.94	1.35	38.9
All Vehicles		2869	5.0	0.863	26.3	LOS C	12.2	89.2	0.86	0.87	1.05	49.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	9.7	LOS A	0.0	0.0	0.80	0.80

All Pedestrians	37	22.2	LOS C	0.89	0.89

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: - [2036_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	314	5.0	0.260	9.5	LOS A	1.9	14.1	0.35	0.71	0.35	59.8
22	T1	314	5.0	0.453	24.7	LOS C	4.3	31.3	0.94	0.75	0.94	56.0
23	R2	149	5.0	0.714	38.9	LOS D	4.7	34.6	1.00	0.86	1.21	40.2
Approach		777	5.0	0.714	21.3	LOS C	4.7	34.6	0.71	0.75	0.75	53.4
NorthEast: Bells Lane												
24	L2	431	5.0	0.509	13.1	LOS B	7.5	55.0	0.73	0.79	0.73	52.8
25	T1	135	5.0	0.713	32.0	LOS C	4.3	31.4	1.00	0.87	1.22	39.4
26	R2	11	5.0	0.059	33.5	LOS C	0.3	2.2	0.93	0.67	0.93	41.0
Approach		576	5.0	0.713	17.9	LOS B	7.5	55.0	0.80	0.81	0.85	48.6
NorthWest: Moss Vale Road												
27	L2	11	5.0	0.012	12.0	LOS B	0.1	0.8	0.47	0.65	0.47	57.6
28	T1	498	5.0	0.719	27.7	LOS C	7.5	55.0	0.99	0.87	1.14	53.5
29	R2	9	5.0	0.045	34.2	LOS C	0.3	1.9	0.91	0.67	0.91	42.4
Approach		518	5.0	0.719	27.5	LOS C	7.5	55.0	0.98	0.86	1.12	53.4
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.009	13.6	LOS B	0.1	0.4	0.70	0.62	0.70	53.0
31	T1	85	5.0	0.803	29.8	LOS C	9.4	68.8	1.00	0.97	1.27	38.7
32	R2	495	5.0	0.803	35.5	LOS D	9.4	68.8	1.00	0.96	1.27	40.4
Approach		585	5.0	0.803	34.4	LOS C	9.4	68.8	1.00	0.96	1.27	40.3
All Vehicles		2456	5.0	0.803	24.9	LOS C	9.4	68.8	0.86	0.84	0.98	48.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	10.0	LOS B	0.0	0.0	0.80	0.80

All Pedestrians	37	22.3	LOS C	0.89	0.89

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: - [2036_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	652	5.0	0.558	10.4	LOS B	6.1	44.7	0.51	0.76	0.51	58.9
22	T1	529	5.0	0.701	26.5	LOS C	7.8	57.3	0.98	0.86	1.10	54.5
23	R2	289	5.0	0.881	43.5	LOS D	10.4	75.8	1.00	0.99	1.51	38.3
Approach		1471	5.0	0.881	22.7	LOS C	10.4	75.8	0.78	0.84	0.92	51.9
NorthEast: Bells Lane												
24	L2	136	5.0	0.143	10.2	LOS B	1.6	11.4	0.50	0.69	0.50	55.1
25	T1	91	5.0	0.479	29.8	LOS C	2.7	19.8	0.99	0.76	0.99	40.4
26	R2	11	5.0	0.059	33.5	LOS C	0.3	2.2	0.93	0.67	0.93	41.0
Approach		237	5.0	0.479	18.7	LOS B	2.7	19.8	0.71	0.71	0.71	47.7
NorthWest: Moss Vale Road												
27	L2	11	5.0	0.013	13.6	LOS B	0.1	0.9	0.53	0.66	0.53	56.2
28	T1	601	5.0	0.796	29.3	LOS C	9.6	70.0	1.00	0.93	1.25	52.3
29	R2	107	5.0	0.327	31.7	LOS C	2.9	20.9	0.91	0.77	0.91	43.6
Approach		719	5.0	0.796	29.5	LOS C	9.6	70.0	0.98	0.90	1.19	50.8
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.010	14.0	LOS B	0.1	0.5	0.72	0.62	0.72	52.7
31	T1	93	5.0	0.781	32.6	LOS C	5.5	40.1	1.00	0.93	1.32	38.1
32	R2	239	5.0	0.781	38.4	LOS D	5.5	40.1	1.00	0.93	1.33	39.3
Approach		337	5.0	0.781	36.4	LOS D	5.5	40.1	1.00	0.92	1.31	39.1
All Vehicles		2763	5.0	0.881	25.8	LOS C	10.4	75.8	0.85	0.86	1.02	49.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane Crossing	5	9.6	LOS A	0.0	0.0	0.80	0.80

All Pedestrians	37	22.2	LOS C	0.89	0.89

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: - [2036_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	318	5.0	0.250	9.3	LOS A	2.1	15.7	0.28	0.70	0.28	60.0
22	T1	289	5.0	0.383	30.7	LOS C	5.0	36.7	0.91	0.73	0.91	51.3
23	R2	149	5.0	0.556	43.3	LOS D	5.7	41.4	0.97	0.80	0.97	38.4
Approach		757	5.0	0.556	24.2	LOS C	5.7	41.4	0.66	0.73	0.66	51.0
NorthEast: Bells Lane												
24	L2	412	5.0	0.477	14.3	LOS B	9.6	70.2	0.70	0.79	0.70	51.9
25	T1	118	5.0	0.555	38.3	LOS D	4.6	33.7	0.99	0.78	1.00	36.9
26	R2	11	5.0	0.052	40.9	LOS D	0.4	2.8	0.92	0.67	0.92	37.9
Approach		540	5.0	0.555	20.1	LOS C	9.6	70.2	0.77	0.79	0.77	47.4
NorthWest: Moss Vale Road												
27	L2	11	5.0	0.011	12.4	LOS B	0.1	0.9	0.41	0.65	0.41	57.2
28	T1	488	5.0	0.647	33.0	LOS C	9.1	66.6	0.97	0.82	1.00	49.7
29	R2	8	5.0	0.031	39.5	LOS D	0.3	2.1	0.88	0.67	0.88	39.9
Approach		507	5.0	0.647	32.7	LOS C	9.1	66.6	0.96	0.81	0.98	49.6
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.006	14.0	LOS B	0.1	0.4	0.63	0.61	0.63	52.7
31	T1	78	5.0	0.654	30.8	LOS C	10.3	75.0	0.96	0.83	0.98	38.3
32	R2	482	5.0	0.654	36.4	LOS D	10.3	75.0	0.96	0.84	0.98	40.0
Approach		564	5.0	0.654	35.5	LOS D	10.3	75.0	0.95	0.83	0.97	39.8
All Vehicles		2368	5.0	0.654	27.8	LOS C	10.3	75.0	0.82	0.79	0.83	46.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P5B	SouthEast Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P6	NorthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7	NorthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7B	NorthWest Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8	SouthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8B	SouthWest Slip/Bypass Lane Crossing	5	15.1	LOS B	0.0	0.0	0.85	0.85

All Pedestrians	37	31.5	LOS D	0.91	0.91

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: - [2036_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	578	5.0	0.492	10.8	LOS B	6.4	46.5	0.48	0.75	0.48	58.5
22	T1	605	5.0	0.660	27.0	LOS C	9.7	71.1	0.96	0.82	0.99	54.1
23	R2	301	5.0	0.839	44.0	LOS D	11.6	84.9	1.00	0.94	1.32	38.1
Approach		1484	5.0	0.839	24.1	LOS C	11.6	84.9	0.78	0.82	0.85	51.3
NorthEast: Bells Lane												
24	L2	159	5.0	0.177	11.8	LOS B	2.4	17.4	0.53	0.70	0.53	53.8
25	T1	109	5.0	0.676	37.2	LOS D	4.0	29.4	1.00	0.84	1.17	37.4
26	R2	11	5.0	0.068	39.1	LOS D	0.3	2.6	0.95	0.67	0.95	38.6
Approach		279	5.0	0.676	22.8	LOS C	4.0	29.4	0.73	0.76	0.80	45.3
NorthWest: Moss Vale Road												
27	L2	11	5.0	0.013	14.3	LOS B	0.1	1.0	0.53	0.66	0.53	55.7
28	T1	712	5.0	0.776	30.4	LOS C	12.6	91.6	0.99	0.91	1.15	51.5
29	R2	126	5.0	0.352	34.6	LOS C	3.9	28.1	0.90	0.78	0.90	42.2
Approach		848	5.0	0.776	30.8	LOS C	12.6	91.6	0.97	0.89	1.10	49.9
SouthWest: Far North Connector Road												
30	L2	7	5.0	0.013	14.8	LOS B	0.1	0.8	0.69	0.63	0.69	52.1
31	T1	112	5.0	0.842	39.4	LOS D	7.8	57.0	1.00	0.99	1.40	35.6
32	R2	282	5.0	0.842	45.2	LOS D	7.8	57.0	1.00	0.99	1.41	36.7
Approach		401	5.0	0.842	43.0	LOS D	7.8	57.0	0.99	0.98	1.39	36.6
All Vehicles		3013	5.0	0.842	28.4	LOS C	12.6	91.6	0.86	0.85	0.99	47.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P5B	SouthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6	NorthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7	NorthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7B	NorthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8	SouthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8B	SouthWest Slip/Bypass Lane Crossing	5	12.1	LOS B	0.0	0.0	0.83	0.83

All Pedestrians	37	26.8	LOS C	0.90	0.90

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: - [2041_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 90 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	288	5.0	0.256	10.6	LOS B	3.1	23.0	0.35	0.71	0.35	58.8
22	T1	328	5.0	0.559	39.2	LOS D	6.9	50.5	0.97	0.79	0.97	45.8
23	R2	285	5.0	0.842	53.3	LOS D	13.8	101.1	1.00	0.92	1.27	34.7
Approach		902	5.0	0.842	34.5	LOS C	13.8	101.1	0.78	0.81	0.87	44.5
NorthEast: Bells Lane												
24	L2	605	5.0	0.631	19.0	LOS B	14.7	107.5	0.75	0.89	0.93	48.7
25	T1	260	5.0	0.832	45.9	LOS D	12.5	91.1	1.00	0.98	1.26	34.3
26	R2	7	5.0	0.025	39.7	LOS D	0.3	2.0	0.86	0.66	0.86	38.4
Approach		873	5.0	0.832	27.2	LOS C	14.7	107.5	0.83	0.91	1.03	43.2
NorthWest: Moss Vale Road												
27	L2	18	5.0	0.021	14.1	LOS B	0.3	1.9	0.49	0.67	0.49	55.8
28	T1	449	5.0	0.765	43.3	LOS D	10.3	75.1	1.00	0.89	1.16	43.6
29	R2	6	5.0	0.019	39.7	LOS D	0.2	1.7	0.84	0.66	0.84	39.8
Approach		474	5.0	0.765	42.2	LOS D	10.3	75.1	0.98	0.88	1.13	43.9
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.007	14.1	LOS B	0.1	0.5	0.61	0.62	0.61	52.6
31	T1	174	5.0	0.771	39.0	LOS D	14.0	102.0	1.00	0.92	1.12	35.8
32	R2	447	5.0	0.771	44.7	LOS D	14.0	102.0	1.00	0.91	1.12	36.8
Approach		626	5.0	0.771	42.9	LOS D	14.0	102.0	0.99	0.91	1.12	36.6
All Vehicles		2875	5.0	0.842	35.4	LOS D	14.7	107.5	0.87	0.87	1.01	42.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P5B	SouthEast Slip/Bypass Lane Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P6	NorthEast Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P7	NorthWest Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P7B	NorthWest Slip/Bypass Lane Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P8	SouthWest Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P8B	SouthWest Slip/Bypass Lane Crossing	5	16.9	LOS B	0.0	0.0	0.87	0.87

All Pedestrians	37	36.0	LOS D	0.92	0.92

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: - [2041_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	544	5.0	0.504	11.5	LOS B	7.3	53.3	0.48	0.76	0.48	58.0
22	T1	500	5.0	0.882	46.4	LOS D	11.5	83.9	1.00	0.99	1.44	42.0
23	R2	434	5.0	0.921	56.5	LOS E	21.8	159.2	1.00	1.01	1.46	33.7
Approach		1478	5.0	0.921	36.5	LOS D	21.8	159.2	0.81	0.91	1.09	43.3
NorthEast: Bells Lane												
24	L2	338	5.0	0.332	12.8	LOS B	6.2	45.6	0.56	0.73	0.56	53.1
25	T1	204	5.0	0.865	45.9	LOS D	9.2	67.2	1.00	1.01	1.42	34.3
26	R2	19	5.0	0.085	40.1	LOS D	0.7	4.9	0.91	0.69	0.91	38.2
Approach		561	5.0	0.865	25.8	LOS C	9.2	67.2	0.73	0.83	0.89	43.7
NorthWest: Moss Vale Road												
27	L2	8	5.0	0.012	16.8	LOS B	0.1	1.0	0.61	0.66	0.61	53.6
28	T1	497	5.0	0.877	45.9	LOS D	11.3	82.7	1.00	0.98	1.42	42.3
29	R2	95	5.0	0.201	32.8	LOS C	2.9	21.3	0.82	0.76	0.82	43.1
Approach		600	5.0	0.877	43.4	LOS D	11.3	82.7	0.97	0.94	1.31	42.5
SouthWest: Far North Connector Road												
30	L2	6	5.0	0.008	12.8	LOS B	0.1	0.5	0.59	0.62	0.59	53.6
31	T1	194	5.0	0.883	46.1	LOS D	12.2	89.4	1.00	1.05	1.43	33.8
32	R2	329	5.0	0.883	51.9	LOS D	12.2	89.4	1.00	1.03	1.43	34.3
Approach		529	5.0	0.883	49.3	LOS D	12.2	89.4	1.00	1.03	1.42	34.3
All Vehicles		3168	5.0	0.921	38.1	LOS D	21.8	159.2	0.86	0.92	1.15	41.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P5B	SouthEast Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P6	NorthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7	NorthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7B	NorthWest Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8	SouthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8B	SouthWest Slip/Bypass Lane Crossing	5	14.6	LOS B	0.0	0.0	0.85	0.85

All Pedestrians	37	31.4	LOS D	0.91	0.91

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: - [2041_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	326	5.0	0.295	10.8	LOS B	3.5	25.4	0.39	0.72	0.39	58.6
22	T1	273	5.0	0.481	35.0	LOS C	5.1	37.1	0.96	0.77	0.96	48.4
23	R2	295	5.0	0.822	47.0	LOS D	12.6	91.6	1.00	0.92	1.24	36.9
Approach		894	5.0	0.822	30.1	LOS C	12.6	91.6	0.76	0.80	0.85	46.6
NorthEast: Bells Lane												
24	L2	566	5.0	0.585	16.8	LOS B	12.0	87.8	0.72	0.85	0.86	50.2
25	T1	226	5.0	0.799	40.7	LOS D	9.6	69.7	1.00	0.94	1.24	36.1
26	R2	7	5.0	0.027	37.4	LOS D	0.2	1.8	0.88	0.66	0.88	39.3
Approach		800	5.0	0.799	23.7	LOS C	12.0	87.8	0.80	0.88	0.97	45.1
NorthWest: Moss Vale Road												
27	L2	17	5.0	0.021	14.4	LOS B	0.2	1.7	0.52	0.67	0.52	55.6
28	T1	457	5.0	0.806	41.0	LOS D	9.7	70.8	1.00	0.92	1.25	44.8
29	R2	53	5.0	0.147	36.7	LOS D	1.7	12.6	0.86	0.74	0.86	41.2
Approach		526	5.0	0.806	39.7	LOS D	9.7	70.8	0.97	0.89	1.19	44.7
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.006	13.4	LOS B	0.0	0.4	0.62	0.61	0.62	53.1
31	T1	159	5.0	0.825	39.4	LOS D	12.9	94.2	1.00	0.98	1.25	35.6
32	R2	440	5.0	0.825	45.1	LOS D	12.9	94.2	1.00	0.96	1.25	36.7
Approach		603	5.0	0.825	43.4	LOS D	12.9	94.2	1.00	0.96	1.24	36.5
All Vehicles		2823	5.0	0.825	32.9	LOS C	12.9	94.2	0.86	0.87	1.03	43.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P5B	SouthEast Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P6	NorthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7	NorthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7B	NorthWest Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8	SouthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8B	SouthWest Slip/Bypass Lane Crossing	5	14.5	LOS B	0.0	0.0	0.85	0.85

All Pedestrians	37	31.4	LOS D	0.91	0.91

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: - [2041_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 110 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	544	5.0	0.511	13.2	LOS B	10.9	79.5	0.49	0.76	0.49	56.4
22	T1	551	5.0	0.891	60.8	LOS E	17.0	123.8	1.00	0.99	1.34	36.1
23	R2	414	5.0	0.846	55.9	LOS E	23.5	171.6	1.00	0.92	1.17	33.9
Approach		1508	5.0	0.891	42.3	LOS D	23.5	171.6	0.81	0.89	0.98	40.7
NorthEast: Bells Lane												
24	L2	367	5.0	0.370	18.1	LOS B	10.1	73.8	0.60	0.78	0.68	49.3
25	T1	238	5.0	0.897	62.7	LOS E	14.7	107.6	1.00	1.05	1.38	29.7
26	R2	24	5.0	0.093	50.1	LOS D	1.1	8.3	0.90	0.71	0.90	34.6
Approach		629	5.0	0.897	36.2	LOS D	14.7	107.6	0.76	0.88	0.95	38.9
NorthWest: Moss Vale Road												
27	L2	11	5.0	0.015	18.3	LOS B	0.2	1.6	0.57	0.67	0.57	52.5
28	T1	539	5.0	0.872	58.4	LOS E	16.2	118.2	1.00	0.97	1.29	36.9
29	R2	120	5.0	0.245	41.3	LOS D	5.0	36.7	0.82	0.78	0.82	39.2
Approach		669	5.0	0.872	54.7	LOS D	16.2	118.2	0.96	0.93	1.20	37.5
SouthWest: Far North Connector Road												
30	L2	7	5.0	0.009	13.8	LOS B	0.1	0.8	0.55	0.62	0.55	52.8
31	T1	228	5.0	0.898	59.7	LOS E	20.5	149.5	1.00	1.06	1.32	30.0
32	R2	423	5.0	0.898	65.7	LOS E	20.5	149.5	1.00	1.01	1.33	30.4
Approach		659	5.0	0.898	63.0	LOS E	20.5	149.5	0.99	1.03	1.32	30.4
All Vehicles		3466	5.0	0.898	47.5	LOS D	23.5	171.6	0.87	0.92	1.08	37.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P5B	SouthEast Slip/Bypass Lane Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P6	NorthEast Full Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P7	NorthWest Full Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P7B	NorthWest Slip/Bypass Lane Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P8	SouthWest Full Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P8B	SouthWest Slip/Bypass Lane Crossing	5	21.9	LOS C	0.0	0.0	0.89	0.89

All Pedestrians	37	45.3	LOS E	0.94	0.94

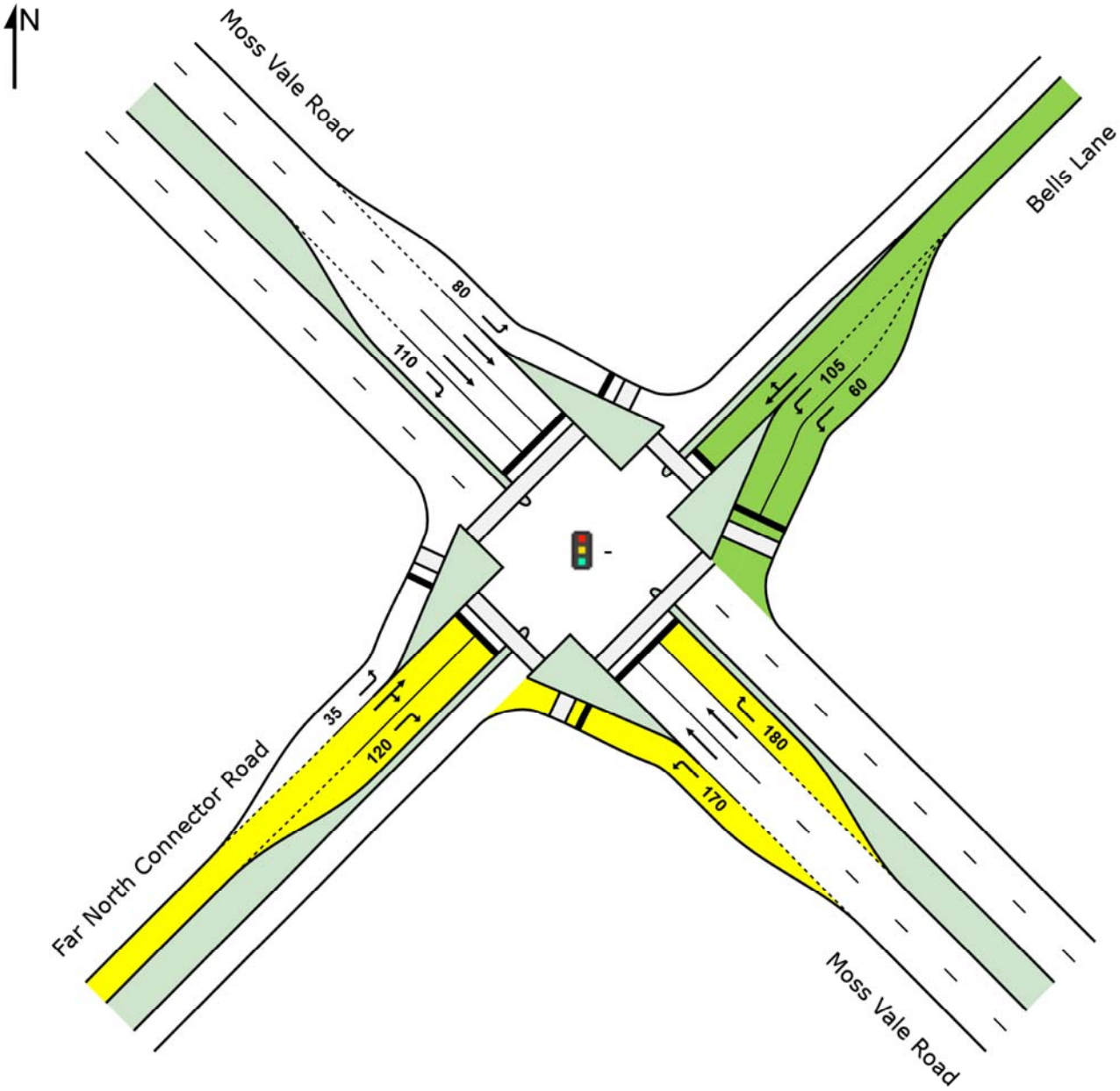
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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SITE LAYOUT

Site: - [2021_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated



PHASING SUMMARY

Site: - [2021_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

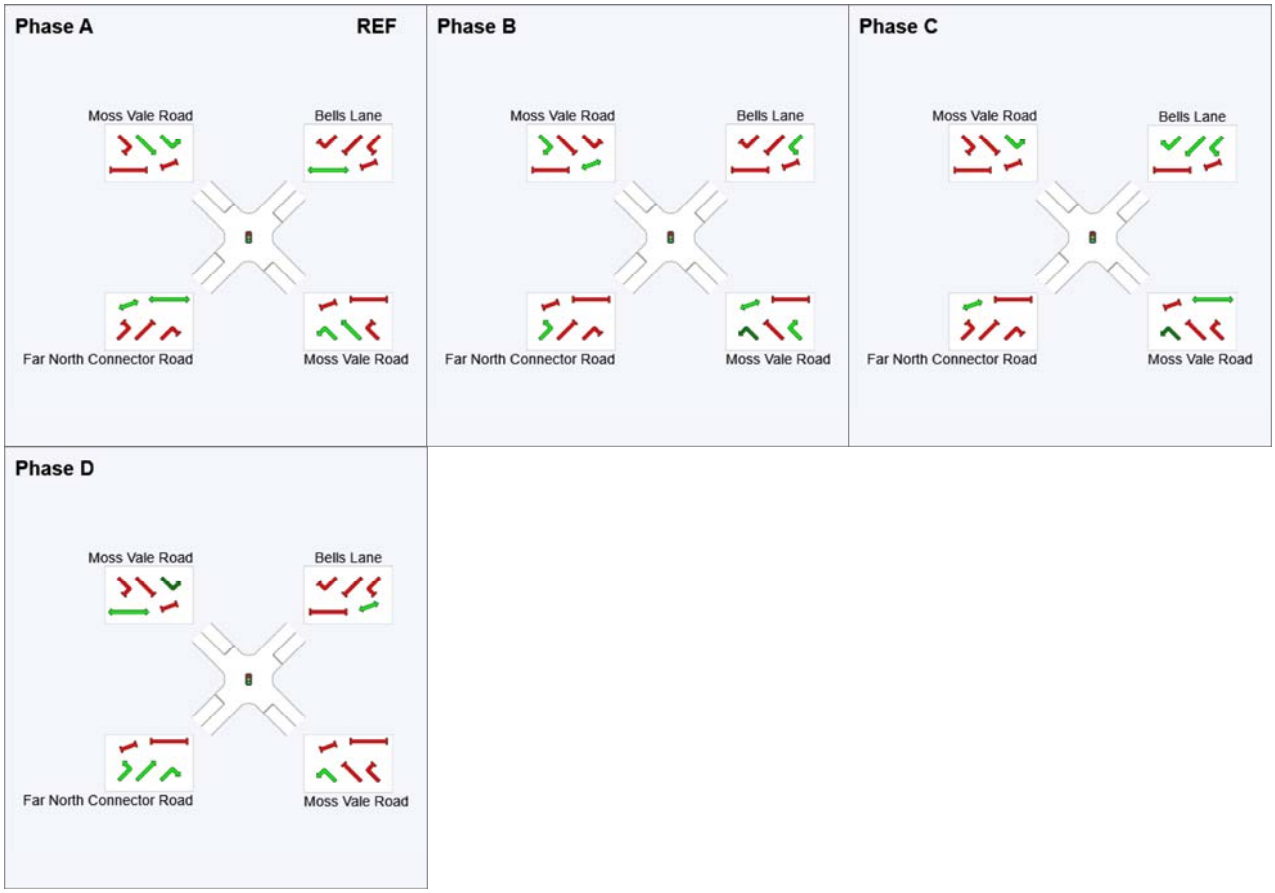
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Sequence1
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	14	26	38
Green Time (sec)	8	6	6	6
Phase Time (sec)	14	12	12	12
Phase Split	28%	24%	24%	24%

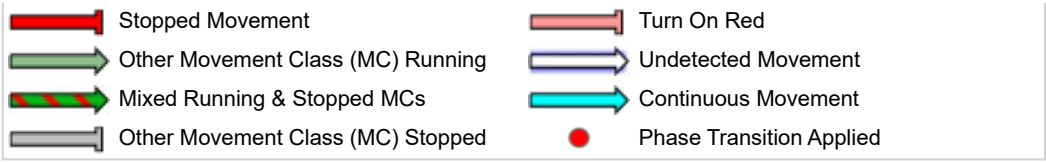
See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency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

Output Phase Sequence



REF: Reference Phase
VAR: Variable Phase





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MOVEMENT SUMMARY

Site: - [2021_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	254	5.0	0.204	9.1	LOS A	1.0	7.6	0.32	0.70	0.32	60.0
22	T1	266	5.0	0.441	21.8	LOS C	3.1	22.9	0.95	0.75	0.95	58.6
23	R2	2	5.0	0.010	29.4	LOS C	0.0	0.3	0.90	0.62	0.90	44.9
Approach		522	5.0	0.441	15.7	LOS B	3.1	22.9	0.64	0.72	0.64	59.2
NorthEast: Bells Lane												
24	L2	5	5.0	0.004	16.6	LOS B	0.0	0.3	0.66	0.61	0.66	50.8
25	T1	9	5.0	0.056	22.2	LOS C	0.3	2.1	0.91	0.63	0.91	43.3
26	R2	3	5.0	0.056	27.8	LOS C	0.3	2.1	0.91	0.63	0.91	46.1
Approach		18	5.0	0.056	21.5	LOS C	0.3	2.1	0.84	0.63	0.84	45.8
NorthWest: Moss Vale Road												
27	L2	3	5.0	0.004	12.0	LOS B	0.0	0.2	0.49	0.63	0.49	57.5
28	T1	356	5.0	0.589	22.7	LOS C	4.4	31.8	0.97	0.80	1.02	57.7
29	R2	44	5.0	0.205	30.7	LOS C	1.0	7.7	0.94	0.73	0.94	44.2
Approach		403	5.0	0.589	23.5	LOS C	4.4	31.8	0.97	0.79	1.01	55.8
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.010	13.8	LOS B	0.0	0.3	0.78	0.62	0.78	52.8
31	T1	8	5.0	0.574	24.7	LOS C	3.2	23.0	0.99	0.81	1.06	40.3
32	R2	239	5.0	0.574	30.4	LOS C	3.2	23.0	0.99	0.81	1.06	42.6
Approach		252	5.0	0.574	29.9	LOS C	3.2	23.0	0.98	0.80	1.05	42.7
All Vehicles		1195	5.0	0.589	21.4	LOS C	4.4	31.8	0.83	0.76	0.86	53.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P5B	SouthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6	NorthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6B	NorthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7	NorthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7B	NorthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8	SouthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8B	SouthWest Slip/Bypass Lane	5	7.2	LOS A	0.0	0.0	0.76	0.76

Crossing					
All Pedestrians	42	17.8	LOS B	0.87	0.87

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: - [2021_AADT PM -Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	364	5.0	0.299	9.4	LOS A	1.9	13.5	0.38	0.71	0.38	59.8
22	T1	425	5.0	0.704	24.2	LOS C	5.5	40.1	1.00	0.86	1.17	56.4
23	R2	4	5.0	0.020	29.6	LOS C	0.1	0.7	0.90	0.64	0.90	44.8
Approach		794	5.0	0.704	17.5	LOS B	5.5	40.1	0.71	0.79	0.81	57.8
NorthEast: Bells Lane												
24	L2	2	5.0	0.002	16.6	LOS B	0.0	0.1	0.65	0.58	0.65	50.8
25	T1	12	5.0	0.066	22.2	LOS C	0.3	2.5	0.91	0.64	0.91	43.4
26	R2	3	5.0	0.066	27.9	LOS C	0.3	2.5	0.91	0.64	0.91	46.2
Approach		17	5.0	0.066	22.6	LOS C	0.3	2.5	0.88	0.63	0.88	44.7
NorthWest: Moss Vale Road												
27	L2	3	5.0	0.004	12.0	LOS B	0.0	0.2	0.49	0.63	0.49	57.5
28	T1	354	5.0	0.585	22.7	LOS C	4.3	31.6	0.97	0.80	1.02	57.8
29	R2	76	5.0	0.352	31.3	LOS C	1.8	13.5	0.96	0.76	0.96	43.8
Approach		433	5.0	0.585	24.1	LOS C	4.3	31.6	0.97	0.79	1.00	54.7
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.010	13.8	LOS B	0.0	0.3	0.78	0.62	0.78	52.8
31	T1	9	5.0	0.542	24.5	LOS C	3.0	21.5	0.98	0.79	1.02	40.4
32	R2	224	5.0	0.542	30.1	LOS C	3.0	21.5	0.98	0.79	1.02	42.7
Approach		238	5.0	0.542	29.6	LOS C	3.0	21.5	0.98	0.79	1.02	42.8
All Vehicles		1481	5.0	0.704	21.4	LOS C	5.5	40.1	0.83	0.79	0.90	53.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P5B	SouthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6	NorthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6B	NorthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7	NorthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7B	NorthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8	SouthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8B	SouthWest Slip/Bypass Lane	5	7.2	LOS A	0.0	0.0	0.76	0.76

Crossing					
All Pedestrians	42	17.8	LOS B	0.87	0.87

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: - [2021_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	234	5.0	0.187	9.1	LOS A	0.9	6.9	0.32	0.69	0.32	60.1
22	T1	248	5.0	0.411	21.7	LOS C	2.9	21.2	0.94	0.74	0.94	58.7
23	R2	2	5.0	0.010	29.4	LOS C	0.0	0.3	0.90	0.62	0.90	44.9
Approach		484	5.0	0.411	15.6	LOS B	2.9	21.2	0.64	0.72	0.64	59.3
NorthEast: Bells Lane												
24	L2	4	5.0	0.003	16.6	LOS B	0.0	0.2	0.66	0.60	0.66	50.8
25	T1	8	5.0	0.052	22.1	LOS C	0.3	1.9	0.91	0.63	0.91	43.3
26	R2	3	5.0	0.052	27.8	LOS C	0.3	1.9	0.91	0.63	0.91	46.1
Approach		16	5.0	0.052	21.8	LOS C	0.3	1.9	0.84	0.62	0.84	45.6
NorthWest: Moss Vale Road												
27	L2	3	5.0	0.004	12.0	LOS B	0.0	0.2	0.49	0.63	0.49	57.5
28	T1	334	5.0	0.552	22.4	LOS C	4.0	29.4	0.97	0.78	0.98	58.0
29	R2	43	5.0	0.201	30.7	LOS C	1.0	7.5	0.94	0.73	0.94	44.2
Approach		380	5.0	0.552	23.2	LOS C	4.0	29.4	0.96	0.77	0.97	56.0
SouthWest: Far North Connector Road												
30	L2	3	5.0	0.007	13.8	LOS B	0.0	0.2	0.78	0.61	0.78	52.8
31	T1	7	5.0	0.537	24.4	LOS C	2.9	21.3	0.98	0.79	1.02	40.4
32	R2	224	5.0	0.537	30.1	LOS C	2.9	21.3	0.98	0.79	1.02	42.7
Approach		235	5.0	0.537	29.7	LOS C	2.9	21.3	0.98	0.79	1.02	42.8
All Vehicles		1115	5.0	0.552	21.3	LOS C	4.0	29.4	0.82	0.75	0.84	53.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P5B	SouthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6	NorthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6B	NorthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7	NorthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7B	NorthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8	SouthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8B	SouthWest Slip/Bypass Lane	5	7.2	LOS A	0.0	0.0	0.76	0.76

Crossing					
All Pedestrians	42	17.8	LOS B	0.87	0.87

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: - [2021_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2021 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	502	5.0	0.394	9.5	LOS A	3.2	23.6	0.38	0.72	0.38	59.8
22	T1	522	5.0	0.518	20.8	LOS C	6.7	49.1	0.90	0.75	0.90	59.5
23	R2	5	5.0	0.029	35.2	LOS D	0.1	1.1	0.92	0.65	0.92	41.9
Approach		1029	5.0	0.518	15.4	LOS B	6.7	49.1	0.65	0.74	0.65	59.5
NorthEast: Bells Lane												
24	L2	3	5.0	0.003	21.3	LOS C	0.0	0.2	0.72	0.60	0.72	47.7
25	T1	13	5.0	0.084	28.0	LOS C	0.4	3.2	0.94	0.65	0.94	40.7
26	R2	3	5.0	0.084	33.6	LOS C	0.4	3.2	0.94	0.65	0.94	43.2
Approach		19	5.0	0.084	27.8	LOS C	0.4	3.2	0.90	0.64	0.90	42.1
NorthWest: Moss Vale Road												
27	L2	3	5.0	0.003	11.3	LOS B	0.0	0.2	0.41	0.63	0.41	58.1
28	T1	473	5.0	0.469	20.5	LOS C	6.0	43.7	0.89	0.73	0.89	59.8
29	R2	96	5.0	0.534	37.9	LOS D	2.9	21.3	0.99	0.78	1.02	40.6
Approach		572	5.0	0.534	23.4	LOS C	6.0	43.7	0.90	0.74	0.91	55.4
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.010	16.0	LOS B	0.1	0.4	0.79	0.62	0.79	51.2
31	T1	11	5.0	0.494	27.8	LOS C	3.5	25.2	0.97	0.78	0.97	39.0
32	R2	226	5.0	0.494	33.4	LOS C	3.5	25.2	0.97	0.78	0.97	41.2
Approach		241	5.0	0.494	32.9	LOS C	3.5	25.2	0.97	0.78	0.97	41.2
All Vehicles		1861	5.0	0.534	20.2	LOS C	6.7	49.1	0.77	0.74	0.77	54.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	10.2	LOS B	0.0	0.0	0.80	0.80

Crossing					
All Pedestrians	42	22.5	LOS C	0.89	0.89

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: - [2026_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	325	5.0	0.254	9.1	LOS A	1.6	11.7	0.31	0.70	0.31	60.1
22	T1	322	5.0	0.394	22.5	LOS C	4.2	30.7	0.90	0.73	0.90	57.9
23	R2	42	5.0	0.235	36.5	LOS D	1.2	8.9	0.96	0.73	0.96	41.3
Approach		689	5.0	0.394	17.1	LOS B	4.2	30.7	0.62	0.71	0.62	57.5
NorthEast: Bells Lane												
24	L2	61	5.0	0.057	21.9	LOS C	0.6	4.7	0.74	0.69	0.74	47.3
25	T1	23	5.0	0.152	28.4	LOS C	0.8	5.9	0.94	0.68	0.94	40.6
26	R2	5	5.0	0.152	34.0	LOS C	0.8	5.9	0.94	0.68	0.94	43.0
Approach		89	5.0	0.152	24.3	LOS C	0.8	5.9	0.80	0.69	0.80	45.1
NorthWest: Moss Vale Road												
27	L2	5	5.0	0.005	11.3	LOS B	0.0	0.4	0.41	0.64	0.41	58.1
28	T1	536	5.0	0.655	24.7	LOS C	7.6	55.7	0.97	0.82	1.02	56.0
29	R2	59	5.0	0.329	37.0	LOS D	1.7	12.7	0.97	0.75	0.97	41.1
Approach		600	5.0	0.655	25.8	LOS C	7.6	55.7	0.96	0.81	1.01	54.1
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.010	14.5	LOS B	0.1	0.5	0.74	0.62	0.74	52.3
31	T1	19	5.0	0.645	26.4	LOS C	6.2	45.4	0.98	0.85	1.05	39.6
32	R2	406	5.0	0.645	32.1	LOS C	6.2	45.4	0.98	0.85	1.05	41.8
Approach		431	5.0	0.645	31.6	LOS C	6.2	45.4	0.97	0.84	1.04	41.8
All Vehicles		1809	5.0	0.655	23.8	LOS C	7.6	55.7	0.83	0.78	0.86	51.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	10.2	LOS B	0.0	0.0	0.80	0.80

Crossing					
All Pedestrians	42	22.5	LOS C	0.89	0.89

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: - [2026_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	526	5.0	0.416	9.5	LOS A	3.5	25.5	0.39	0.73	0.39	59.7
22	T1	572	5.0	0.534	20.2	LOS C	7.3	53.2	0.89	0.75	0.89	60.2
23	R2	55	5.0	0.305	36.9	LOS D	1.6	11.7	0.96	0.74	0.96	41.1
Approach		1153	5.0	0.534	16.1	LOS B	7.3	53.2	0.67	0.74	0.67	58.7
NorthEast: Bells Lane												
24	L2	22	5.0	0.021	21.6	LOS C	0.2	1.7	0.73	0.65	0.73	47.5
25	T1	21	5.0	0.141	28.3	LOS C	0.8	5.5	0.94	0.68	0.94	40.6
26	R2	5	5.0	0.141	33.9	LOS C	0.8	5.5	0.94	0.68	0.94	43.0
Approach		48	5.0	0.141	25.9	LOS C	0.8	5.5	0.84	0.67	0.84	43.7
NorthWest: Moss Vale Road												
27	L2	5	5.0	0.005	11.3	LOS B	0.0	0.4	0.41	0.64	0.41	58.1
28	T1	559	5.0	0.522	20.1	LOS C	7.1	51.8	0.89	0.75	0.89	60.2
29	R2	105	5.0	0.587	38.3	LOS D	3.2	23.7	1.00	0.80	1.08	40.5
Approach		669	5.0	0.587	22.9	LOS C	7.1	51.8	0.90	0.75	0.92	55.9
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.014	16.6	LOS B	0.1	0.6	0.80	0.63	0.80	50.8
31	T1	17	5.0	0.526	29.0	LOS C	3.3	24.1	0.98	0.78	0.99	38.7
32	R2	204	5.0	0.526	34.7	LOS C	3.3	24.1	0.98	0.78	0.99	40.7
Approach		226	5.0	0.526	33.8	LOS C	3.3	24.1	0.98	0.78	0.99	40.7
All Vehicles		2097	5.0	0.587	20.4	LOS C	7.3	53.2	0.78	0.75	0.79	54.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	10.2	LOS B	0.0	0.0	0.80	0.80

Crossing					
All Pedestrians	42	22.5	LOS C	0.89	0.89

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: - [2026_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	302	5.0	0.246	9.1	LOS A	1.3	9.4	0.34	0.70	0.34	60.0
22	T1	304	5.0	0.503	22.1	LOS C	3.6	26.5	0.96	0.76	0.96	58.3
23	R2	40	5.0	0.186	30.6	LOS C	0.9	6.9	0.93	0.73	0.93	44.2
Approach		646	5.0	0.503	16.6	LOS B	3.6	26.5	0.67	0.73	0.67	57.9
NorthEast: Bells Lane												
24	L2	56	5.0	0.043	17.0	LOS B	0.4	3.3	0.67	0.67	0.67	50.5
25	T1	20	5.0	0.113	22.5	LOS C	0.6	4.3	0.92	0.66	0.92	43.3
26	R2	5	5.0	0.113	28.2	LOS C	0.6	4.3	0.92	0.66	0.92	46.1
Approach		81	5.0	0.113	19.1	LOS B	0.6	4.3	0.75	0.67	0.75	48.2
NorthWest: Moss Vale Road												
27	L2	5	5.0	0.006	12.0	LOS B	0.0	0.4	0.49	0.64	0.49	57.5
28	T1	501	5.0	0.829	27.9	LOS C	7.1	51.8	1.00	0.95	1.42	53.4
29	R2	53	5.0	0.245	30.9	LOS C	1.3	9.2	0.94	0.74	0.94	44.1
Approach		559	5.0	0.829	28.0	LOS C	7.1	51.8	0.99	0.93	1.37	52.4
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.010	13.8	LOS B	0.0	0.3	0.78	0.62	0.78	52.8
31	T1	17	5.0	0.913	35.4	LOS D	6.3	46.2	1.00	1.13	1.86	36.1
32	R2	377	5.0	0.913	41.1	LOS D	6.3	46.2	1.00	1.13	1.86	37.9
Approach		398	5.0	0.913	40.6	LOS D	6.3	46.2	1.00	1.12	1.85	37.9
All Vehicles		1684	5.0	0.913	26.2	LOS C	7.1	51.8	0.86	0.89	1.18	49.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P5B	SouthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6	NorthEast Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P6B	NorthEast Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7	NorthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P7B	NorthWest Slip/Bypass Lane Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8	SouthWest Full Crossing	5	19.4	LOS B	0.0	0.0	0.88	0.88
P8B	SouthWest Slip/Bypass Lane	5	7.2	LOS A	0.0	0.0	0.76	0.76

Crossing					
All Pedestrians	42	17.8	LOS B	0.87	0.87

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: - [2026_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2026 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	649	5.0	0.519	10.0	LOS B	5.4	39.1	0.46	0.75	0.46	59.3
22	T1	660	5.0	0.617	20.8	LOS C	8.7	63.3	0.92	0.78	0.92	59.6
23	R2	61	5.0	0.340	37.0	LOS D	1.8	13.2	0.97	0.75	0.97	41.1
Approach		1371	5.0	0.617	16.4	LOS B	8.7	63.3	0.71	0.76	0.71	58.3
NorthEast: Bells Lane												
24	L2	25	5.0	0.023	21.7	LOS C	0.3	1.9	0.73	0.66	0.73	47.5
25	T1	24	5.0	0.158	28.4	LOS C	0.8	6.2	0.95	0.68	0.95	40.6
26	R2	5	5.0	0.158	34.0	LOS C	0.8	6.2	0.95	0.68	0.95	43.0
Approach		55	5.0	0.158	25.8	LOS C	0.8	6.2	0.85	0.67	0.85	43.7
NorthWest: Moss Vale Road												
27	L2	5	5.0	0.005	11.3	LOS B	0.0	0.4	0.41	0.64	0.41	58.1
28	T1	665	5.0	0.622	20.8	LOS C	8.8	64.0	0.92	0.78	0.92	59.5
29	R2	118	5.0	0.657	39.1	LOS D	3.7	27.1	1.00	0.82	1.16	40.1
Approach		788	5.0	0.657	23.5	LOS C	8.8	64.0	0.93	0.79	0.96	55.5
SouthWest: Far North Connector Road												
30	L2	6	5.0	0.016	16.7	LOS B	0.1	0.7	0.81	0.64	0.81	50.7
31	T1	20	5.0	0.634	30.0	LOS C	4.1	30.0	1.00	0.83	1.11	38.3
32	R2	246	5.0	0.634	35.7	LOS D	4.1	30.0	1.00	0.83	1.11	40.2
Approach		273	5.0	0.634	34.8	LOS C	4.1	30.0	0.99	0.83	1.10	40.3
All Vehicles		2486	5.0	0.657	20.9	LOS C	8.8	64.0	0.81	0.78	0.83	54.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	10.2	LOS B	0.0	0.0	0.80	0.80

Crossing					
All Pedestrians	42	22.5	LOS C	0.89	0.89

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: - [2031_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	365	5.0	0.291	9.5	LOS A	2.6	18.7	0.33	0.71	0.33	59.8
22	T1	312	5.0	0.361	25.1	LOS C	4.6	33.6	0.88	0.72	0.88	55.6
23	R2	136	5.0	0.663	42.8	LOS D	4.9	35.5	1.00	0.83	1.12	38.5
Approach		813	5.0	0.663	21.1	LOS C	4.9	35.5	0.66	0.73	0.68	53.3
NorthEast: Bells Lane												
24	L2	281	5.0	0.274	26.9	LOS C	3.8	27.7	0.82	0.76	0.82	44.4
25	T1	83	5.0	0.568	36.1	LOS D	3.3	23.9	1.00	0.79	1.06	37.6
26	R2	8	5.0	0.568	41.7	LOS D	3.3	23.9	1.00	0.79	1.06	39.7
Approach		373	5.0	0.568	29.3	LOS C	3.8	27.7	0.86	0.77	0.87	42.6
NorthWest: Moss Vale Road												
27	L2	8	5.0	0.009	11.6	LOS B	0.1	0.6	0.40	0.65	0.40	57.9
28	T1	571	5.0	0.661	27.8	LOS C	9.3	67.9	0.96	0.82	1.00	53.4
29	R2	62	5.0	0.303	40.2	LOS D	2.1	15.1	0.96	0.75	0.96	39.6
Approach		641	5.0	0.661	28.8	LOS C	9.3	67.9	0.95	0.81	0.99	51.7
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.007	14.4	LOS B	0.1	0.4	0.67	0.61	0.67	52.4
31	T1	58	5.0	0.656	27.9	LOS C	8.9	64.8	0.96	0.84	1.00	39.3
32	R2	483	5.0	0.656	33.5	LOS C	8.9	64.8	0.96	0.84	1.00	41.3
Approach		545	5.0	0.656	32.8	LOS C	8.9	64.8	0.96	0.84	1.00	41.1
All Vehicles		2372	5.0	0.663	27.2	LOS C	9.3	67.9	0.84	0.78	0.87	47.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P5B	SouthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6	NorthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6B	NorthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7	NorthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7B	NorthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8	SouthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8B	SouthWest Slip/Bypass Lane	5	13.2	LOS B	0.0	0.0	0.83	0.83

Crossing					
All Pedestrians	42	27.3	LOS C	0.90	0.90

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: - [2031_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	624	5.0	0.523	10.3	LOS B	5.6	40.8	0.49	0.76	0.49	59.0
22	T1	543	5.0	0.664	24.9	LOS C	7.8	56.8	0.97	0.83	1.03	55.8
23	R2	233	5.0	0.708	35.3	LOS D	7.0	51.3	0.99	0.87	1.13	41.9
Approach		1400	5.0	0.708	20.1	LOS C	7.8	56.8	0.76	0.80	0.80	54.1
NorthEast: Bells Lane												
24	L2	115	5.0	0.083	18.4	LOS B	1.1	7.9	0.67	0.69	0.67	49.5
25	T1	68	5.0	0.409	29.5	LOS C	2.3	16.7	0.98	0.74	0.98	40.2
26	R2	8	5.0	0.409	35.1	LOS D	2.3	16.7	0.98	0.74	0.98	42.6
Approach		192	5.0	0.409	23.1	LOS C	2.3	16.7	0.79	0.71	0.79	45.5
NorthWest: Moss Vale Road												
27	L2	8	5.0	0.010	13.4	LOS B	0.1	0.7	0.52	0.65	0.52	56.3
28	T1	602	5.0	0.736	26.5	LOS C	9.1	66.1	0.99	0.88	1.13	54.5
29	R2	106	5.0	0.323	31.7	LOS C	2.8	20.7	0.91	0.77	0.91	43.6
Approach		717	5.0	0.736	27.1	LOS C	9.1	66.1	0.97	0.86	1.09	52.6
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.010	14.4	LOS B	0.1	0.5	0.74	0.63	0.74	52.3
31	T1	61	5.0	0.778	33.4	LOS C	4.7	34.2	1.00	0.92	1.34	37.6
32	R2	221	5.0	0.778	39.1	LOS D	4.7	34.2	1.00	0.92	1.35	39.0
Approach		287	5.0	0.778	37.5	LOS D	4.7	34.2	1.00	0.91	1.33	38.8
All Vehicles		2596	5.0	0.778	24.2	LOS C	9.1	66.1	0.84	0.83	0.94	50.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	9.6	LOS A	0.0	0.0	0.80	0.80

Crossing					
All Pedestrians	42	22.5	LOS C	0.89	0.89

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: - [2031_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	345	5.0	0.281	9.5	LOS A	2.2	15.8	0.36	0.71	0.36	59.8
22	T1	298	5.0	0.394	23.4	LOS C	4.0	28.9	0.91	0.73	0.91	57.1
23	R2	132	5.0	0.734	40.2	LOS D	4.3	31.0	1.00	0.86	1.26	39.6
Approach		775	5.0	0.734	20.1	LOS C	4.3	31.0	0.68	0.74	0.72	54.1
NorthEast: Bells Lane												
24	L2	266	5.0	0.248	23.2	LOS C	3.0	22.1	0.80	0.75	0.80	46.6
25	T1	75	5.0	0.443	29.6	LOS C	2.5	18.1	0.98	0.75	0.98	40.2
26	R2	8	5.0	0.443	35.3	LOS D	2.5	18.1	0.98	0.75	0.98	42.6
Approach		349	5.0	0.443	24.8	LOS C	3.0	22.1	0.84	0.75	0.84	44.9
NorthWest: Moss Vale Road												
27	L2	8	5.0	0.009	11.5	LOS B	0.1	0.6	0.43	0.65	0.43	58.0
28	T1	538	5.0	0.712	26.7	LOS C	8.0	58.6	0.99	0.87	1.11	54.3
29	R2	57	5.0	0.317	36.9	LOS D	1.7	12.2	0.97	0.74	0.97	41.1
Approach		603	5.0	0.712	27.4	LOS C	8.0	58.6	0.98	0.85	1.09	52.8
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.008	14.0	LOS B	0.1	0.4	0.72	0.62	0.72	52.6
31	T1	53	5.0	0.708	26.7	LOS C	7.7	56.0	0.98	0.89	1.11	39.8
32	R2	458	5.0	0.708	32.4	LOS C	7.7	56.0	0.98	0.88	1.11	41.8
Approach		515	5.0	0.708	31.7	LOS C	7.7	56.0	0.98	0.88	1.11	41.6
All Vehicles		2242	5.0	0.734	25.5	LOS C	8.0	58.6	0.85	0.81	0.93	48.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	10.2	LOS B	0.0	0.0	0.80	0.80

Crossing					
All Pedestrians	42	22.5	LOS C	0.89	0.89

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: - [2031_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2031 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	642	5.0	0.546	10.4	LOS B	5.9	43.4	0.50	0.76	0.50	58.9
22	T1	597	5.0	0.729	26.3	LOS C	8.9	65.2	0.98	0.88	1.12	54.6
23	R2	237	5.0	0.792	38.5	LOS D	7.7	55.9	1.00	0.91	1.29	40.4
Approach		1476	5.0	0.792	21.3	LOS C	8.9	65.2	0.78	0.83	0.88	53.3
NorthEast: Bells Lane												
24	L2	131	5.0	0.099	19.2	LOS B	1.3	9.3	0.69	0.70	0.69	49.0
25	T1	80	5.0	0.471	29.7	LOS C	2.6	19.3	0.98	0.76	0.98	40.2
26	R2	8	5.0	0.471	35.4	LOS D	2.6	19.3	0.98	0.76	0.98	42.6
Approach		219	5.0	0.471	23.7	LOS C	2.6	19.3	0.81	0.72	0.81	45.1
NorthWest: Moss Vale Road												
27	L2	8	5.0	0.010	13.1	LOS B	0.1	0.7	0.52	0.65	0.52	56.6
28	T1	706	5.0	0.863	32.8	LOS C	12.2	89.2	1.00	1.00	1.40	49.8
29	R2	116	5.0	0.387	33.0	LOS C	3.2	23.3	0.93	0.78	0.93	43.0
Approach		831	5.0	0.863	32.7	LOS C	12.2	89.2	0.99	0.96	1.32	48.8
SouthWest: Far North Connector Road												
30	L2	6	5.0	0.012	14.5	LOS B	0.1	0.6	0.74	0.63	0.74	52.3
31	T1	75	5.0	0.799	33.2	LOS C	5.6	41.2	1.00	0.95	1.36	37.7
32	R2	263	5.0	0.799	38.9	LOS D	5.6	41.2	1.00	0.95	1.36	39.1
Approach		344	5.0	0.799	37.2	LOS D	5.6	41.2	1.00	0.94	1.35	38.9
All Vehicles		2869	5.0	0.863	26.7	LOS C	12.2	89.2	0.87	0.87	1.06	49.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	9.7	LOS A	0.0	0.0	0.80	0.80

Crossing					
All Pedestrians	42	22.5	LOS C	0.89	0.89

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: - [2036_AADT AM -Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	314	5.0	0.261	9.5	LOS A	1.9	14.1	0.35	0.71	0.35	59.8
22	T1	314	5.0	0.498	25.8	LOS C	4.4	32.2	0.95	0.76	0.95	55.1
23	R2	149	5.0	0.714	38.9	LOS D	4.7	34.6	1.00	0.86	1.21	40.2
Approach		777	5.0	0.714	21.8	LOS C	4.7	34.6	0.72	0.76	0.76	53.0
NorthEast: Bells Lane												
24	L2	431	5.0	0.379	23.3	LOS C	5.0	36.7	0.82	0.78	0.82	46.5
25	T1	135	5.0	0.772	33.2	LOS C	4.8	34.7	1.00	0.91	1.32	38.8
26	R2	11	5.0	0.772	38.8	LOS D	4.8	34.7	1.00	0.91	1.32	41.0
Approach		576	5.0	0.772	25.9	LOS C	5.0	36.7	0.87	0.81	0.95	44.3
NorthWest: Moss Vale Road												
27	L2	11	5.0	0.012	12.0	LOS B	0.1	0.8	0.47	0.65	0.47	57.6
28	T1	498	5.0	0.791	30.6	LOS C	8.0	58.4	1.00	0.92	1.27	51.4
29	R2	9	5.0	0.045	34.2	LOS C	0.3	1.9	0.91	0.67	0.91	42.4
Approach		518	5.0	0.791	30.3	LOS C	8.0	58.4	0.99	0.91	1.25	51.3
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.009	13.1	LOS B	0.1	0.4	0.69	0.62	0.69	53.3
31	T1	85	5.0	0.741	26.8	LOS C	8.9	64.6	0.99	0.91	1.14	40.0
32	R2	495	5.0	0.741	32.4	LOS C	8.9	64.6	0.99	0.91	1.15	41.8
Approach		585	5.0	0.741	31.4	LOS C	8.9	64.6	0.99	0.91	1.14	41.6
All Vehicles		2456	5.0	0.791	26.8	LOS C	8.9	64.6	0.87	0.84	1.00	47.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	10.0	LOS B	0.0	0.0	0.80	0.80

Crossing					
All Pedestrians	42	22.5	LOS C	0.89	0.89

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: - [2036_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	652	5.0	0.559	10.4	LOS B	6.1	44.7	0.51	0.76	0.51	58.9
22	T1	529	5.0	0.701	26.5	LOS C	7.8	57.3	0.98	0.86	1.10	54.5
23	R2	289	5.0	0.881	43.5	LOS D	10.4	75.8	1.00	0.99	1.51	38.3
Approach		1471	5.0	0.881	22.7	LOS C	10.4	75.8	0.78	0.84	0.92	51.9
NorthEast: Bells Lane												
24	L2	136	5.0	0.099	18.5	LOS B	1.3	9.4	0.67	0.70	0.67	49.5
25	T1	91	5.0	0.538	30.1	LOS C	3.1	22.4	0.99	0.78	1.02	40.0
26	R2	11	5.0	0.538	35.8	LOS D	3.1	22.4	0.99	0.78	1.02	42.4
Approach		237	5.0	0.538	23.7	LOS C	3.1	22.4	0.81	0.73	0.82	45.1
NorthWest: Moss Vale Road												
27	L2	11	5.0	0.013	13.6	LOS B	0.1	0.9	0.53	0.66	0.53	56.2
28	T1	601	5.0	0.796	29.3	LOS C	9.6	70.0	1.00	0.93	1.25	52.3
29	R2	107	5.0	0.327	31.7	LOS C	2.9	20.9	0.91	0.77	0.91	43.6
Approach		719	5.0	0.796	29.5	LOS C	9.6	70.0	0.98	0.90	1.19	50.8
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.010	14.0	LOS B	0.1	0.5	0.72	0.62	0.72	52.7
31	T1	93	5.0	0.781	32.6	LOS C	5.5	40.1	1.00	0.93	1.32	38.1
32	R2	239	5.0	0.781	38.4	LOS D	5.5	40.1	1.00	0.93	1.33	39.3
Approach		337	5.0	0.781	36.4	LOS D	5.5	40.1	1.00	0.92	1.31	39.1
All Vehicles		2763	5.0	0.881	26.2	LOS C	10.4	75.8	0.86	0.86	1.03	49.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P5B	SouthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6	NorthEast Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P6B	NorthEast Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7	NorthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P7B	NorthWest Slip/Bypass Lane Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8	SouthWest Full Crossing	5	24.3	LOS C	0.0	0.0	0.90	0.90
P8B	SouthWest Slip/Bypass Lane	5	9.6	LOS A	0.0	0.0	0.80	0.80

Crossing					
All Pedestrians	42	22.5	LOS C	0.89	0.89

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: - [2036_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	318	5.0	0.249	9.3	LOS A	2.1	15.7	0.28	0.70	0.28	60.0
22	T1	289	5.0	0.361	29.6	LOS C	4.9	36.1	0.90	0.72	0.90	52.0
23	R2	149	5.0	0.606	44.8	LOS D	5.8	42.5	0.99	0.81	1.02	37.8
Approach		757	5.0	0.606	24.1	LOS C	5.8	42.5	0.66	0.73	0.66	51.1
NorthEast: Bells Lane												
24	L2	412	5.0	0.353	28.1	LOS C	6.2	45.3	0.81	0.78	0.81	43.8
25	T1	118	5.0	0.607	38.9	LOS D	5.1	37.2	1.00	0.81	1.05	36.6
26	R2	11	5.0	0.607	44.5	LOS D	5.1	37.2	1.00	0.81	1.05	38.5
Approach		540	5.0	0.607	30.8	LOS C	6.2	45.3	0.85	0.79	0.86	41.9
NorthWest: Moss Vale Road												
27	L2	11	5.0	0.011	12.1	LOS B	0.1	0.9	0.40	0.65	0.40	57.5
28	T1	488	5.0	0.609	31.6	LOS C	8.9	64.9	0.96	0.80	0.96	50.6
29	R2	8	5.0	0.034	40.6	LOS D	0.3	2.1	0.89	0.67	0.89	39.5
Approach		507	5.0	0.609	31.3	LOS C	8.9	64.9	0.94	0.79	0.94	50.5
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.006	14.4	LOS B	0.1	0.4	0.64	0.61	0.64	52.4
31	T1	78	5.0	0.654	30.8	LOS C	10.3	75.0	0.96	0.83	0.98	38.3
32	R2	482	5.0	0.654	36.4	LOS D	10.3	75.0	0.96	0.84	0.98	40.0
Approach		564	5.0	0.654	35.5	LOS D	10.3	75.0	0.95	0.83	0.97	39.8
All Vehicles		2368	5.0	0.654	29.9	LOS C	10.3	75.0	0.83	0.78	0.84	45.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P5B	SouthEast Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P6	NorthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P6B	NorthEast Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7	NorthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7B	NorthWest Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8	SouthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8B	SouthWest Slip/Bypass Lane	5	15.3	LOS B	0.0	0.0	0.85	0.85

Crossing					
All Pedestrians	42	31.9	LOS D	0.92	0.92

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: - [2036_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2036 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	578	5.0	0.493	10.8	LOS B	6.4	46.5	0.48	0.75	0.48	58.5
22	T1	605	5.0	0.660	27.0	LOS C	9.7	71.1	0.96	0.82	0.99	54.1
23	R2	301	5.0	0.839	44.0	LOS D	11.6	84.9	1.00	0.94	1.32	38.1
Approach		1484	5.0	0.839	24.1	LOS C	11.6	84.9	0.78	0.82	0.85	51.3
NorthEast: Bells Lane												
24	L2	159	5.0	0.119	21.3	LOS C	1.8	13.1	0.69	0.71	0.69	47.7
25	T1	109	5.0	0.745	38.4	LOS D	4.5	32.9	1.00	0.88	1.26	36.7
26	R2	11	5.0	0.745	44.0	LOS D	4.5	32.9	1.00	0.88	1.26	38.7
Approach		279	5.0	0.745	28.9	LOS C	4.5	32.9	0.82	0.78	0.94	42.4
NorthWest: Moss Vale Road												
27	L2	11	5.0	0.013	14.3	LOS B	0.1	1.0	0.53	0.66	0.53	55.7
28	T1	712	5.0	0.776	30.4	LOS C	12.6	91.6	0.99	0.91	1.15	51.5
29	R2	126	5.0	0.352	34.6	LOS C	3.9	28.1	0.90	0.78	0.90	42.2
Approach		848	5.0	0.776	30.8	LOS C	12.6	91.6	0.97	0.89	1.10	49.9
SouthWest: Far North Connector Road												
30	L2	7	5.0	0.013	14.8	LOS B	0.1	0.8	0.69	0.63	0.69	52.1
31	T1	112	5.0	0.842	39.4	LOS D	7.8	57.0	1.00	0.99	1.40	35.6
32	R2	282	5.0	0.842	45.2	LOS D	7.8	57.0	1.00	0.99	1.41	36.7
Approach		401	5.0	0.842	43.0	LOS D	7.8	57.0	0.99	0.98	1.39	36.6
All Vehicles		3013	5.0	0.842	29.0	LOS C	12.6	91.6	0.87	0.86	1.00	47.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P5B	SouthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6	NorthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6B	NorthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7	NorthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7B	NorthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8	SouthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8B	SouthWest Slip/Bypass Lane	5	12.1	LOS B	0.0	0.0	0.83	0.83

Crossing					
All Pedestrians	42	27.1	LOS C	0.90	0.90

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: - [2041_AADT AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 AADT
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	288	5.0	0.261	10.4	LOS B	2.8	20.5	0.36	0.71	0.36	59.0
22	T1	328	5.0	0.632	37.3	LOS D	6.4	46.9	0.99	0.82	1.04	47.0
23	R2	285	5.0	0.848	49.6	LOS D	12.6	91.7	1.00	0.94	1.31	36.0
Approach		902	5.0	0.848	32.6	LOS C	12.6	91.7	0.79	0.82	0.91	45.5
NorthEast: Bells Lane												
24	L2	605	5.0	0.397	22.9	LOS C	8.2	59.9	0.74	0.77	0.74	46.7
25	T1	260	5.0	0.872	44.9	LOS D	12.1	88.5	1.00	1.04	1.39	34.6
26	R2	7	5.0	0.872	50.5	LOS D	12.1	88.5	1.00	1.04	1.39	36.4
Approach		873	5.0	0.872	29.7	LOS C	12.1	88.5	0.82	0.86	0.94	42.2
NorthWest: Moss Vale Road												
27	L2	18	5.0	0.022	14.0	LOS B	0.2	1.8	0.51	0.67	0.51	55.9
28	T1	449	5.0	0.865	45.4	LOS D	10.1	73.9	1.00	0.96	1.40	42.5
29	R2	6	5.0	0.019	36.4	LOS D	0.2	1.5	0.84	0.66	0.84	41.3
Approach		474	5.0	0.865	44.1	LOS D	10.1	73.9	0.98	0.95	1.36	42.9
SouthWest: Far North Connector Road												
30	L2	5	5.0	0.007	13.5	LOS B	0.1	0.5	0.62	0.62	0.62	53.1
31	T1	174	5.0	0.805	37.5	LOS D	13.1	95.3	1.00	0.96	1.20	36.3
32	R2	447	5.0	0.805	43.2	LOS D	13.1	95.3	1.00	0.94	1.20	37.4
Approach		626	5.0	0.805	41.4	LOS D	13.1	95.3	1.00	0.95	1.20	37.2
All Vehicles		2875	5.0	0.872	35.5	LOS D	13.1	95.3	0.88	0.88	1.06	42.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P5B	SouthEast Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P6	NorthEast Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P6B	NorthEast Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7	NorthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P7B	NorthWest Slip/Bypass Lane Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8	SouthWest Full Crossing	5	34.2	LOS D	0.0	0.0	0.93	0.93
P8B	SouthWest Slip/Bypass Lane	5	14.5	LOS B	0.0	0.0	0.85	0.85

Crossing					
All Pedestrians	42	31.8	LOS D	0.92	0.92

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: - [2041_AADT PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 AADT
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	544	5.0	0.499	11.8	LOS B	8.2	59.6	0.47	0.75	0.47	57.7
22	T1	500	5.0	0.851	47.9	LOS D	12.3	89.6	1.00	0.95	1.31	41.3
23	R2	434	5.0	0.871	51.2	LOS D	21.5	157.3	1.00	0.95	1.26	35.4
Approach		1478	5.0	0.871	35.6	LOS D	21.5	157.3	0.80	0.88	0.98	43.8
NorthEast: Bells Lane												
24	L2	338	5.0	0.197	20.1	LOS C	4.2	31.0	0.61	0.72	0.61	48.4
25	T1	204	5.0	0.890	52.9	LOS D	11.5	84.1	1.00	1.05	1.44	32.1
26	R2	19	5.0	0.890	58.6	LOS E	11.5	84.1	1.00	1.05	1.44	33.6
Approach		561	5.0	0.890	33.4	LOS C	11.5	84.1	0.77	0.85	0.94	40.3
NorthWest: Moss Vale Road												
27	L2	8	5.0	0.012	17.5	LOS B	0.2	1.1	0.59	0.66	0.59	53.1
28	T1	497	5.0	0.846	47.5	LOS D	12.1	88.5	1.00	0.95	1.30	41.5
29	R2	95	5.0	0.190	34.6	LOS C	3.2	23.3	0.80	0.76	0.80	42.2
Approach		600	5.0	0.846	45.1	LOS D	12.1	88.5	0.96	0.91	1.21	41.7
SouthWest: Far North Connector Road												
30	L2	6	5.0	0.008	13.1	LOS B	0.1	0.6	0.57	0.62	0.57	53.3
31	T1	194	5.0	0.862	48.3	LOS D	13.2	96.3	1.00	1.01	1.33	33.1
32	R2	329	5.0	0.862	54.2	LOS D	13.2	96.3	1.00	0.99	1.33	33.6
Approach		529	5.0	0.862	51.5	LOS D	13.2	96.3	0.99	0.99	1.32	33.6
All Vehicles		3168	5.0	0.890	39.7	LOS D	21.5	157.3	0.86	0.90	1.08	40.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P5B	SouthEast Slip/Bypass Lane Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P6	NorthEast Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P6B	NorthEast Slip/Bypass Lane Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P7	NorthWest Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P7B	NorthWest Slip/Bypass Lane Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P8	SouthWest Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93
P8B	SouthWest Slip/Bypass Lane	5	17.1	LOS B	0.0	0.0	0.87	0.87

Crossing					
All Pedestrians	42	36.4	LOS D	0.93	0.93

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: - [2041_100HH AM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 100HH
AM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	326	5.0	0.300	10.6	LOS B	3.1	22.5	0.40	0.72	0.40	58.8
22	T1	273	5.0	0.505	31.4	LOS C	4.5	33.1	0.97	0.77	0.97	50.8
23	R2	295	5.0	0.885	48.7	LOS D	12.2	88.9	1.00	0.98	1.46	36.3
Approach		894	5.0	0.885	29.5	LOS C	12.2	88.9	0.77	0.82	0.93	47.0
NorthEast: Bells Lane												
24	L2	566	5.0	0.381	21.2	LOS C	6.8	49.6	0.74	0.77	0.74	47.8
25	T1	226	5.0	0.868	40.5	LOS D	9.4	68.3	1.00	1.03	1.45	36.1
26	R2	7	5.0	0.868	46.1	LOS D	9.4	68.3	1.00	1.03	1.45	38.0
Approach		800	5.0	0.868	26.9	LOS C	9.4	68.3	0.82	0.85	0.95	43.7
NorthWest: Moss Vale Road												
27	L2	17	5.0	0.021	13.9	LOS B	0.2	1.6	0.54	0.67	0.54	56.0
28	T1	457	5.0	0.847	39.0	LOS D	8.9	65.2	1.00	0.95	1.39	46.0
29	R2	53	5.0	0.158	34.2	LOS C	1.6	11.4	0.87	0.74	0.87	42.4
Approach		526	5.0	0.847	37.7	LOS D	8.9	65.2	0.97	0.92	1.31	45.8
SouthWest: Far North Connector Road												
30	L2	4	5.0	0.006	13.2	LOS B	0.0	0.3	0.65	0.61	0.65	53.3
31	T1	159	5.0	0.888	41.2	LOS D	12.6	91.7	1.00	1.08	1.47	35.0
32	R2	440	5.0	0.888	47.0	LOS D	12.6	91.7	1.00	1.06	1.47	36.0
Approach		603	5.0	0.888	45.2	LOS D	12.6	91.7	1.00	1.06	1.46	35.8
All Vehicles		2823	5.0	0.888	33.6	LOS C	12.6	91.7	0.87	0.90	1.12	43.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P5B	SouthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6	NorthEast Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P6B	NorthEast Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7	NorthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P7B	NorthWest Slip/Bypass Lane Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8	SouthWest Full Crossing	5	29.3	LOS C	0.0	0.0	0.91	0.91
P8B	SouthWest Slip/Bypass Lane	5	12.0	LOS B	0.0	0.0	0.83	0.83

Crossing					
All Pedestrians	42	27.1	LOS C	0.90	0.90

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: - [2041_100HH PM - Diamond Overlap - Split]

Moss Vale Road / Far North Connector Road Proposed Signalised Intersection
2041 100HH
PM Peak Hour
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 110 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Moss Vale Road												
21	L2	544	5.0	0.511	13.2	LOS B	10.9	79.5	0.49	0.76	0.49	56.4
22	T1	551	5.0	0.891	60.8	LOS E	17.0	123.8	1.00	0.99	1.34	36.1
23	R2	414	5.0	0.875	60.1	LOS E	24.7	180.1	1.00	0.94	1.23	32.6
Approach		1508	5.0	0.891	43.5	LOS D	24.7	180.1	0.81	0.89	1.00	40.2
NorthEast: Bells Lane												
24	L2	367	5.0	0.217	23.8	LOS C	5.7	41.7	0.62	0.73	0.62	46.2
25	T1	238	5.0	0.902	63.2	LOS E	16.4	120.0	1.00	1.06	1.38	29.4
26	R2	24	5.0	0.902	68.8	LOS E	16.4	120.0	1.00	1.06	1.38	30.7
Approach		629	5.0	0.902	40.4	LOS D	16.4	120.0	0.78	0.87	0.94	37.4
NorthWest: Moss Vale Road												
27	L2	11	5.0	0.014	17.9	LOS B	0.2	1.6	0.56	0.67	0.56	52.8
28	T1	539	5.0	0.872	58.4	LOS E	16.2	118.2	1.00	0.97	1.29	36.9
29	R2	120	5.0	0.254	42.2	LOS D	5.1	37.2	0.83	0.78	0.83	38.8
Approach		669	5.0	0.872	54.9	LOS D	16.2	118.2	0.96	0.93	1.20	37.4
SouthWest: Far North Connector Road												
30	L2	7	5.0	0.009	14.1	LOS B	0.1	0.8	0.55	0.62	0.55	52.6
31	T1	228	5.0	0.898	59.7	LOS E	20.5	149.5	1.00	1.06	1.32	30.0
32	R2	423	5.0	0.898	65.7	LOS E	20.5	149.5	1.00	1.01	1.33	30.4
Approach		659	5.0	0.898	63.0	LOS E	20.5	149.5	1.00	1.03	1.32	30.4
All Vehicles		3466	5.0	0.902	48.8	LOS D	24.7	180.1	0.87	0.92	1.09	36.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P5B	SouthEast Slip/Bypass Lane Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P6	NorthEast Full Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P6B	NorthEast Slip/Bypass Lane Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P7	NorthWest Full Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P7B	NorthWest Slip/Bypass Lane Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P8	SouthWest Full Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95
P8B	SouthWest Slip/Bypass Lane	5	21.9	LOS C	0.0	0.0	0.89	0.89

Crossing					
All Pedestrians	42	45.8	LOS E	0.94	0.94

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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