



MCLAREN TRAFFIC ENGINEERING

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Transport Planning, Traffic Impact Assessments, Road Safety Audits, Expert Witness

6 December 2022

Reference: 220643.02FB

Capital Building Solutions
PO BOX 3351
Victoria Point West
Queensland 4165
Attention: Nathan Winter

TRAFFIC ADVICE FOR THE APPROVED CHILD CARE CENTRE AT 49 NORTH ROCKS ROAD, NORTH ROCKS

Dear Nathan,

Reference is made to your request to provide preliminary traffic advice for the proposed Child Care Centre at 49 North Rocks Road, North Rocks. This letter addresses the traffic impacts of the proposed child care centre with a reduced scale of 80 children until the end of 2024.

The proposed child care centre is approved to accommodate 99 children (under DA/158/2017), with the construction of the proposed roundabout at Speers Road & Jean Street expected to be completed.

It is understood that the roundabout may not be completed until the end of 2023 and as such a reduced intensity of development is proposed which does not necessitate the upgrade. Sensitivity testing of the intersection of Speers Road and North Rocks Road has been undertaken demonstrating that a reduced scale of 60 places would have no unacceptable impact on the intersection before the roundabout is constructed and operational. This traffic assessment is outlined below and has been undertaken consistent with the methodology underpinning the consent noting that this is required as the preferred treatment by condition 39 of the notice of determination.

1 TRAFFIC ASSESSMENT

The impact of the expected traffic generation levels associated with the subject proposal is discussed in the following sub-sections.

1.1 Existing Traffic Environment

Seven (7) day tube count surveys were conducted along North Rocks Road and Speers Street between Monday 13 November 2017 and Monday 20 November 2017. Subsequent to these counts and at the request of Council, a turning movement count was undertaken on Wednesday 30 November 2022 at the intersection of Speers Road and North Rocks Road to provide updated volumes. The results of this survey are provided in **Annexure A** and have been used for the purpose of this traffic impact assessment.

1.2 Traffic Generation

Traffic generation rates applicable to child care centre developments are provided in the *RTA Guide to Traffic Generating Developments (2002)* and recent supplements as adopted by Transport for NSW (TfNSW) and are as follows:

3.11.3 Child care centres

Long-day care

7.00-9.00am	0.8 peak vehicle trips per child
2.30-4.00pm	0.3 peak vehicle trips per child
4.00-6.00pm	0.7 peak vehicle trips per child

The resulting AM and PM peak hourly traffic generation is summarised in **Table 1**.

TABLE 1: ESTIMATED TRAFFIC GENERATION

Use	Scale	Peak	Generation Rate	Trips ⁽¹⁾
Traffic Generation – Pre 2024				
Child Care Centre	60 Children	AM	0.8 per child	48 (24 in, 24 out)
		PM	0.7 per child	42 (21 in, 21 out)

Note:

(1) 50% inbound and 50% outbound split assumed for the AM and PM peak periods.

As shown above, the proposed 60-place child care centre will generate **48** vehicle trips (24 inbound, 24 outbound) in the AM peak period and **42** vehicle trips (21 in, 21 out) in the PM peak period.

1.3 Traffic Assignment

The road network, traffic surveys and locations of residential areas surrounding the site have been assessed and the following traffic assignment has been assumed for all traffic to and from the site:

- AM peak period:
 - 50% from North Rocks Road (east);
 - 50% from North Rocks Road (west);
 - 30% to North Rocks Road (east);
 - 70% to North Rocks Road (west).
- PM peak period:
 - 30% from North Rocks Road (east);
 - 70% from North Rocks Road (west);
 - 50% to North Rocks Road (east);
 - 50% to North Rocks Road (west).

1.4 Traffic Impact

A traffic assessment of the above scenario has been undertaken using SIDRA INTERSECTION 9.0 to assess the intersections performance. The traffic assessment considers the year-to-year background growth of traffic (compounding at a rate of 2.0% p.a.) from 2022 to 2024 in addition to the traffic generated by the future development. The results of this assessment are shown in **Table 2**. The complete SIDRA INTERSECTION 9.0 results are reproduced in **Annexure B**.

TABLE 2: INTERSECTION PERFORMANCE (SIDRA INTERSECTION 9.0)

Intersection	Peak Hour	Degree of Saturation ⁽¹⁾	Average Delay ⁽²⁾ (sec/veh)	Level of Service ⁽³⁾⁽⁴⁾	Control Type	Worst Movement	95th Percentile Queue
EXISTING PERFORMANCE							
Speers Road / North Rocks Road	AM	0.50	1 (Worst: 43.8)	NA (Worst: D)	Give Way	RT from Speers Road	0.8 veh (6.1m) Speers Road
	PM	0.38	1 (Worst: 20.3)	NA (Worst: B)		RT from Speers Road	0.6 veh (4.4m) North Rocks Road
FUTURE PERFORMANCE (60 Places, 2024)							
Speers Road / North Rocks Road	AM	0.54	2.3 (Worst: 56.5)	NA (Worst: D)	Give Way	RT from Speers Road	1.8 veh (13.1m) Speers Road
	PM	0.40	1.5 (Worst: 22.1)	NA (Worst: B)		RT from Speers Road	0.8 veh (6.2m) North Rocks Road

Notes:

- (1) The Degree of Saturation is the ratio of demand to capacity for the most disadvantaged movement.
- (2) The average delay is the delay experienced on average by all vehicles. The value in brackets represents the delay to the most disadvantaged movement.
- (3) The Level of Service is a qualitative measure of performance describing operational conditions. There are six levels of service, designated from A to F, with A representing the best operational condition and level of service F the worst. The LoS of the intersection is shown in bold, and the LoS of the most disadvantaged movement is shown in brackets.
- (4) No overall Level of Service is provided for Give Way and Stop controlled intersections as the low delays associated with the dominant movements skew the average delay of the intersection. The Level of Service of the worst approach is an indicator of the operation of the intersection, with a worse Level of Service corresponding to long delays and reduced safety outcomes for that approach.

As shown, under the proposed scenario, the intersection of Speers Road / North Rocks Road performs at a Level of Service “D”. *RTA Guide to Traffic Generating Developments – Table 4.2: Level of Service Criteria for Intersections* states that a Level of Service “D” represents an intersection operating at near capacity and that an accident study is required.

Further reference is made to *TfNSW Crash and Casualty Statistics* which indicates that there has only been one (1) accident at the intersection of Speers Road / North Rocks Road in the past five (5) years which is very infrequent, suggesting that the intersection does not have a high risk of accidents.

From the above, the intersection of Speers Road / North Rocks Road operates at a satisfactory Level of Service "D", with a very unlikely risk of accident, particularly given that the intersection is proposed to operate under these conditions for a short time only. As such, a 60-place child care centre is fully supportable in terms of traffic impacts in the intervening period until the roundabout is constructed.

Please contact the undersigned on (02) 9521 7199 should you require further information or assistance.

Yours faithfully,

McLaren Traffic Engineering



Tom Steal

Senior Traffic Engineer

B.E (Civil) MIEAust

Accredited Level 2 Road Safety Auditor



**ANNEXURE A: SURVEY RESULTS
(1 SHEET)**

TRANS TRAFFIC SURVEY

TURNING MOVEMENT SURVEY

Intersection of N Rocks Rd and Speers Rd, North Rocks

GPS -33.790059, 151.003813

Date: Wed 30/11/22

Weather: Fine

Suburban: North Rocks

Customer: McLaren

North: Speers Rd

East: N Rocks Rd

South: N/A

West: N Rocks Rd

Survey AM: 7:00 AM-10:00 AM

Period PM: 2:30 PM-6:30 PM

Traffic AM: 7:45 AM-8:45 AM

Peak PM: 3:00 PM-4:00 PM

All Vehicles

Time		North Approach Speers Rd			East Approach N Rocks Rd			West Approach N Rocks Rd			Hourly Total	
Period Start	Period End	U	R	L	U	R	WB	U	EB	L	Hour	Peak
7:00	7:15	0	9	6	0	3	146	0	133	4	1378	
7:15	7:30	0	5	3	0	2	172	0	141	4	1493	
7:30	7:45	0	6	8	0	1	189	0	155	0	1581	
7:45	8:00	0	3	3	0	1	231	0	150	3	1655	Peak
8:00	8:15	0	5	2	0	2	232	0	173	2	1610	
8:15	8:30	0	5	12	0	0	213	0	179	6	1527	
8:30	8:45	0	8	6	0	3	212	0	198	6	1377	
8:45	9:00	0	5	5	0	0	175	0	157	4	1203	
9:00	9:15	0	1	4	0	1	174	0	152	1	1101	
9:15	9:30	0	3	1	0	1	136	0	114	10		
9:30	9:45	0	3	3	0	2	121	0	128	2		
9:45	10:00	1	4	1	0	0	108	0	124	6		
14:30	14:45	0	12	7	0	2	163	0	134	4	1254	
14:45	15:00	0	3	3	0	0	129	0	154	6	1316	
15:00	15:15	0	7	10	0	10	156	0	137	8	1335	Peak
15:15	15:30	0	2	3	0	4	160	0	132	8	1316	
15:30	15:45	0	7	7	0	7	189	0	167	7	1309	
15:45	16:00	0	5	4	0	2	124	0	174	5	1263	
16:00	16:15	0	1	1	0	3	172	0	126	6	1247	
16:15	16:30	0	3	2	0	3	133	1	153	7	1241	
16:30	16:45	0	8	3	0	4	121	0	196	6	1223	
16:45	17:00	0	4	2	0	5	123	0	159	5	1190	
17:00	17:15	0	5	1	0	6	131	0	154	6	1191	
17:15	17:30	0	2	4	0	2	100	0	173	3	1210	
17:30	17:45	0	7	5	0	2	114	0	173	4	1173	
17:45	18:00	0	2	0	0	6	139	0	151	1		
18:00	18:15	0	4	0	0	3	155	0	154	6		
18:15	18:30	0	5	0	0	1	130	0	108	3		

Peak Time		North Approach Speers Rd			East Approach N Rocks Rd			West Approach N Rocks Rd			Peak total
Period Start	Period End	U	R	L	U	R	WB	U	EB	L	
7:45	8:45	0	21	23	0	6	888	0	700	17	1655
15:00	16:00	0	21	24	0	23	629	0	610	28	1335

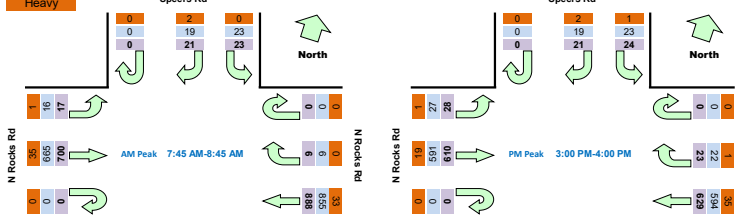
Note: Site sketch is for illustrating traffic flows. Direction is indicative only, drawing is not to scale and not an exact streets configuration.

Graphic

Total

Light

Heavy



Light Vehicles

Time		North Approach Speers Rd			East Approach N Rocks Rd			West Approach N Rocks Rd		
Period Start	Period End	U	R	L	U	R	WB	U	EB	L
7:00	7:15	0	8	6	0	3	140	0	124	4
7:15	7:30	0	5	3	0	2	164	0	130	4
7:30	7:45	0	6	8	0	1	182	0	142	0
7:45	8:00	0	3	3	0	1	224	0	143	3
8:00	8:15	0	5	2	0	2	221	0	163	2
8:15	8:30	0	5	12	0	0	205	0	172	5
8:30	8:45	0	6	6	0	3	205	0	187	6
8:45	9:00	0	5	5	0	0	169	0	145	4
9:00	9:15	0	1	4	0	1	162	0	142	1
9:15	9:30	0	3	1	0	1	127	0	109	10
9:30	9:45	0	3	3	0	2	115	0	116	2
9:45	10:00	0	4	1	0	0	100	0	114	5
14:30	14:45	0	12	7	0	2	157	0	130	4
14:45	15:00	0	3	3	0	0	116	0	144	6
15:00	15:15	0	6	10	0	9	150	0	132	7
15:15	15:30	0	2	2	0	4	154	0	128	8
15:30	15:45	0	7	7	0	7	176	0	163	7
15:45	16:00	0	4	4	0	2	114	0	168	5
16:00	16:15	0	1	1	0	3	170	0	123	5
16:15	16:30	0	3	2	0	3	123	1	148	7
16:30	16:45	0	8	3	0	4	116	0	192	6
16:45	17:00	0	4	2	0	5	119	0	156	5
17:00	17:15	0	5	1	0	6	126	0	153	6
17:15	17:30	0	2	4	0	2	99	0	171	3
17:30	17:45	0	7	5	0	2	108	0	169	4
17:45	18:00	0	2	0	0	6	134	0	149	1
18:00	18:15	0	4	0	0	3	152	0	152	6
18:15	18:30	0	5	0	0	1	126	0	107	3

Peak Time		North Approach Speers Rd			East Approach N Rocks Rd			West Approach N Rocks Rd			Peak total
Period Start	Period End	U	R	L	U	R	WB	U	EB	L	
7:45	8:45	0	19	23	0	6	855	0	665	16	1584
15:00	16:00	0	19	23	0	22	594	0	591	27	1276

Heavy Vehicles

Time		North Approach Speers Rd			East Approach N Rocks Rd			West Approach N Rocks Rd		
Period Start	Period End	U	R	L	U	R	WB	U	EB	L
7:00	7:15	0	1	0	0	0	6	0	9	0
7:15	7:30	0	0	0	0	0	8	0	11	0
7:30	7:45	0	0	0	0	0	7	0	13	0
7:45	8:00	0	0	0	0	0	7	0	7	0
8:00	8:15	0	0	0	0	0	11	0	10	0
8:15	8:30	0	0	0	0	0	8	0	7	1
8:30	8:45	0	2	0	0	0	7	0	11	0
8:45	9:00	0	0	0	0	0	6	0	12	0
9:00	9:15	0	0	0	0	0	12	0	10	0
9:15	9:30	0	0	0	0	0	9	0	5	0
9:30	9:45	0	0	0	0	0	6	0	12	0
9:45	10:00	1	0	0	0	0	8	0	10	1
14:30	14:45	0	0	0	0	0	6	0	4	0
14:45	15:00	0	0	0	0	0	13	0	10	0
15:00	15:15	0	1	0	0	1	6	0	5	1
15:15	15:30	0	0	1	0	0	6	0	4	0
15:30	15:45	0	0	0	0	0	13	0	4	0
15:45	16:00	0	1	0	0	0	10	0	6	0
16:00	16:15	0	0	0	0	0	2	0	3	1
16:15	16:30	0	0	0	0	0	10	0	5	0
16:30	16:45	0	0	0	0	0	5	0	4	0
16:45	17:00	0	0	0	0	0	4	0	3	0
17:00	17:15	0	0	0	0	0	5	0	1	0
17:15	17:30	0	0	0	0	0	1	0	2	0
17:30	17:45	0	0	0	0	0	6	0	4	0
17:45	18:00	0	0	0	0	0	5	0	2	0
18:00	18:15	0	0	0	0	0	3	0	2	0
18:15	18:30	0	0	0	0	0	4	0	1	0

Peak Time		North Approach Speers Rd			East Approach N Rocks Rd			West Approach N Rocks Rd			Peak total
Period Start	Period End	U	R	L	U	R	WB	U	EB	L	
7:45	8:45	0	2	0	0	0	33	0	35	1	71
15:00	16:00	0	2	1	0	1	35	0	19	1	59



**ANNEXURE B: SIDRA INTERSECTION 9.0 RESULTS
(4 SHEETS)**

MOVEMENT SUMMARY

▼ Site: 101 [EX AM Peak North Rocks Road / Speers Road - Import (Site Folder: Existing)]

Existing Traffic Flows
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: North Rocks Road (S)														
1	L2	17	1	18	5.9	0.400	5.7	LOS A	0.0	0.0	0.00	0.01	0.00	57.7
2	T1	700	35	737	5.0	0.400	0.1	LOS A	0.0	0.0	0.00	0.01	0.00	59.6
Approach		717	36	755	5.0	0.400	0.3	NA	0.0	0.0	0.00	0.01	0.00	59.5
North: North Rocks Road (N)														
8	T1	888	33	935	3.7	0.500	0.1	LOS A	0.2	1.7	0.02	0.00	0.04	59.8
9	R2	6	0	6	0.0	0.500	13.9	LOS A	0.2	1.7	0.02	0.00	0.04	53.2
Approach		894	33	941	3.7	0.500	0.2	NA	0.2	1.7	0.02	0.00	0.04	59.7
West: Speers Road (W)														
10	L2	24	1	25	4.2	0.275	11.1	LOS A	0.8	6.1	0.87	0.97	0.98	38.3
12	R2	21	2	22	9.5	0.275	43.8	LOS D	0.8	6.1	0.87	0.97	0.98	37.9
Approach		45	3	47	6.7	0.275	26.3	LOS B	0.8	6.1	0.87	0.97	0.98	38.1
All Vehicles		1656	72	1743	4.3	0.500	1.0	NA	0.8	6.1	0.04	0.03	0.05	58.7

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.
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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
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 [EX PM Peak North Rocks Road / Speers Road - Import (Site Folder: Existing)]

Existing Traffic Flows

Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: North Rocks Road (S)														
1	L2	28	1	29	3.6	0.352	5.7	LOS A	0.0	0.0	0.00	0.03	0.00	57.8
2	T1	610	19	642	3.1	0.352	0.1	LOS A	0.0	0.0	0.00	0.03	0.00	59.5
Approach		638	20	672	3.1	0.352	0.4	NA	0.0	0.0	0.00	0.03	0.00	59.5
North: North Rocks Road (N)														
8	T1	629	35	662	5.6	0.382	0.4	LOS A	0.6	4.4	0.09	0.02	0.12	59.2
9	R2	23	1	24	4.3	0.382	11.1	LOS A	0.6	4.4	0.09	0.02	0.12	52.7
Approach		652	36	686	5.5	0.382	0.8	NA	0.6	4.4	0.09	0.02	0.12	58.9
West: Speers Road (W)														
10	L2	24	1	25	4.2	0.136	7.7	LOS A	0.4	3.1	0.73	0.86	0.73	44.3
12	R2	21	2	22	9.5	0.136	20.3	LOS B	0.4	3.1	0.73	0.86	0.73	43.7
Approach		45	3	47	6.7	0.136	13.6	LOS A	0.4	3.1	0.73	0.86	0.73	44.0
All Vehicles		1335	59	1405	4.4	0.382	1.0	NA	0.6	4.4	0.07	0.05	0.08	58.5

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.
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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
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 [EX AM Peak North Rocks Road / Speers Road - Import - Copy - Copy (Site Folder: Existing Plus Development (2024))]

Existing Traffic Flows
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis (Final Year): Results for 6 years

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: North Rocks Road (S)														
1	L2	19	1	33	3.2	0.416	5.7	LOS A	0.0	0.0	0.00	0.02	0.00	57.7
2	T1	700	35	752	5.0	0.416	0.2	LOS A	0.0	0.0	0.00	0.02	0.00	59.5
Approach		719	36	784	4.9	0.416	0.4	NA	0.0	0.0	0.00	0.02	0.00	59.4
North: North Rocks Road (N)														
8	T1	888	33	953	3.7	0.531	0.5	LOS A	0.8	6.1	0.09	0.01	0.13	59.2
9	R2	8	0	21	0.0	0.531	15.0	LOS B	0.8	6.1	0.09	0.01	0.13	55.8
Approach		896	33	974	3.6	0.531	0.8	NA	0.8	6.1	0.09	0.01	0.13	59.1
West: Speers Road (W)														
10	L2	25	1	34	3.1	0.537	20.3	LOS B	1.8	13.1	0.92	1.07	1.28	34.2
12	R2	24	2	43	4.9	0.537	56.5	LOS D ¹¹	1.8	13.1	0.92	1.07	1.28	34.0
Approach		49	3	77	4.1	0.537	40.4	LOS C	1.8	13.1	0.92	1.07	1.28	34.1
All Vehicles		1664	72	1836	4.2	0.537	2.3	NA	1.8	13.1	0.08	0.06	0.12	57.4

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.
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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

¹¹ Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

MOVEMENT SUMMARY

▼ Site: 101 [EX PM Peak North Rocks Road / Speers Road - Import - Copy - Copy (Site Folder: Existing Plus Development (2024))]

Existing Traffic Flows

Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis (Final Year): Results for 6 years

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: North Rocks Road (S)														
1	L2	30	1	48	2.2	0.369	5.7	LOS A	0.0	0.0	0.00	0.04	0.00	57.7
2	T1	610	19	655	3.1	0.369	0.1	LOS A	0.0	0.0	0.00	0.04	0.00	59.4
Approach		640	20	702	3.1	0.369	0.5	NA	0.0	0.0	0.00	0.04	0.00	59.3
North: North Rocks Road (N)														
8	T1	629	35	675	5.6	0.400	0.6	LOS A	0.8	6.2	0.12	0.03	0.16	58.9
9	R2	24	1	32	3.3	0.400	11.6	LOS A	0.8	6.2	0.12	0.03	0.16	53.6
Approach		653	36	707	5.5	0.400	1.1	NA	0.8	6.2	0.12	0.03	0.16	58.6
West: Speers Road (W)														
10	L2	26	1	38	2.8	0.219	8.6	LOS A	0.7	5.1	0.76	0.91	0.81	44.8
12	R2	23	2	35	6.0	0.219	22.1	LOS B	0.7	5.1	0.76	0.91	0.81	44.3
Approach		49	3	73	4.3	0.219	15.1	LOS B	0.7	5.1	0.76	0.91	0.81	44.6
All Vehicles		1342	59	1483	4.3	0.400	1.5	NA	0.8	6.2	0.09	0.08	0.12	58.0

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.
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.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.