

Our Ref: 20488

25 February 2021

Eldeso Group
c/o MODE
Level 5, 111-117 Devonshire Street
SURRY HILLS NSW 2010

Attention: Mr Paul Oreshkin

Dear Paul,

**RE: 215-235 O'RIORDAN STREET AND 1-3 EWAN STREET, MASCOT
ADDENDUM TRAFFIC IMPACT ASSESSMENT REPORT**

As requested, please find herein The Transport Planning Partnership (TTPP) traffic impact assessment for the above proposed development addressing issues raised in previous submissions.

Background

A Planning Proposal has been lodged with Bayside Council (Council) seeking to amend the FSR control to enable redevelopment of the site at 215-235 O'Riordan Street and 1-3 Ewan Street, Mascot.

The concept scheme for the site includes the following:

- 11-storey commercial building including offices, health services facilities comprising medical consulting suites and treatment rooms, specialised retail units, and car parking facility
- 12-storey hotel building including hotel rooms, serviced apartments, entertainment/conference facilities, and restaurant/café
- basement parking (3.5 levels) ancillary to proposed development

A summary of traffic report and review revisions undertaken for the proposed development is presented below:

- Traffic and Parking Assessment Report (Varga, 12 December 2018)
- Review Letter (Bitzios, 6 February 2019)

- Revised Traffic and Parking Assessment Report (Varga, 12 April 2020)
- Peer Review (Bitzios, 29 May 2020)
- Addendum Traffic Report (Varga, 9 July 2020)
- Peer Review (Bitzios, 28 October 2020)

TTPP has prepared this addendum traffic and parking report to address Bitzios' peer review comments.

Development Proposal

The development proposal seeks approval to accommodate a mixed-use building comprising an 11-storey commercial building and a 12-storey hotel building.

The commercial building includes offices, health services facilities and retail units whilst the hotel building consists of hotel rooms, serviced apartments, entertainment/ conference facilities, and restaurant/café.

On-site parking is also to be provided on the ground floor and across four basement levels. In addition, a porte cochere is proposed off the site frontage along O'Riordan Street.

The latest proposed development yield is presented in Table 1.

Table 1: Proposed Development Yield

Land Use	Size
Office	15,040 m ² GFA
Medical Centre	6,257 m ² GFA 88 consulting suites/ treatment rooms
Retail	2,250 m ² GFA
Hotel	112 rooms
Serviced apartments	77 rooms
Hotel Banquet Hall	1,293 m ² GFA
Hotel Café	116 m ² GFA
Restaurant	1,293 m ² GFA

Development Traffic Generation

Potential vehicle trip generation of the proposed development has been estimated using the rates stipulated in Transport for NSW *Guide to Traffic Generating Developments Updated Traffic Surveys* (Technical Direction TDT 2013-04a) and relevant studies.

It is noted that trip generation assumptions for retail and hotel ancillary facilities (i.e. banquet hall and restaurant/ café) have been adopted from Varga's method in their *Traffic and Parking Assessment Report*.

Office

The following trip rates from TfNSW TDT 2013-04a have been adopted to estimate the future trip generation of office use:

- AM peak hour: 1.6 vehicle trips per 100 m² GFA
- PM peak hour: 1.2 vehicle trips per 100 m² GFA

Medical Centre

TfNSW provides traffic generation rates for medical centre developments in their *Trip Generation Survey – Medical Centres Analysis Report 2015* (Medical Centres report). This document supersedes the *Guide to Traffic Generating Developments* which was published in 2002 as it provides more recent trip generation analysis of medical centres. The study includes survey data of 14 medical centres in the Greater Metropolitan Sydney area, and six medical centres in the Regional NSW areas.

The additional trip generation of the proposed medical centre use has been estimated based on the average trip rates of the Sydney survey sites contained within Medical Centres report.

It is noted that the Medical Centres report includes trip rates based on number of rooms, number of doctors, number of staff and per gross floor area. Since information regarding number of doctors and staff is not available at this stage, only the following trip rates have been considered:

- based on area:
 - AM peak hour: 4.0 vehicle trips per 100 m² GFA
 - PM peak hour: 4.6 vehicle trips per 100 m² GFA
- based on number of consulting rooms:
 - AM peak hour: 2.1 vehicle trips per room
 - AM peak hour: 2.4 vehicle trips per room

The rates which yielded higher trip estimate have been considered for a conservative assessment.

Retail

Rates applied for office use have been adopted for the retail component, similar to Varga's method in their *Traffic and Parking Assessment Report*.

Hotel and Serviced Apartments

TfNSW *Guide to Traffic Generating Developments* and *TDT 2013-04a* do not stipulate trip generation rates for hotel developments. As such, the future trip generation of the proposed hotel use has been estimated using the rates adopted in *Traffic Impact Assessment* (Traffix, July 2018) prepared for the proposed modifications to the existing Holiday Inn Sydney Airport at 19 Bourke Road, Mascot.

Holiday Inn Sydney Airport hotel is located about 400 m from the subject site and is assumed to have similar characteristics as the proposed hotel development. As such, the method used in estimating the trip generation associated with Holiday Inn Sydney Airport modifications is considered to be also applicable to the proposed subject development.

Traffix had undertaken traffic count surveys on the existing Holiday Inn site on Tuesday, 10 April 2018 to estimate the trip generation of the site at that time. The following trip generation rates have been obtained from the survey:

- AM peak hour: 0.273 vehicle trips per room
- PM peak hour: 0.345 vehicle trips per room

Hotel Banquet Hall

This component will be operated by the hotel and may be used by hotel guests or external visitors. Use of the hall is not expected to coincide with typical morning and evening peak hours of the external road network. Peak usage of banquet halls usually occurs during lunch time or later in the evenings, predominantly at weekends.

Hotel Restaurant/ Café

The restaurant/ café use is anticipated to cater for the hotel and serviced apartments guests and will not generate any additional traffic activity.

The estimated trip generation of the proposed development is summarised in Table 2.

Table 2: Development Trip Generation

Land Use	Size	Trip Generation Rate (veh/hr)		Trip Generation Estimate (veh/hr)	
		AM Peak	PM Peak	AM Peak	PM Peak
Office	15,040 m ²	1.6 per 100 m ² GFA	1.2 per 100 m ² GFA	241	180
Medical Centre	6,257 m ² 88 consulting rooms	4.0 per 100 m ² GFA 2.1 per room	4.6 per 100 m ² GFA 2.4 per room	250* 185	288* 185
Retail	2,250 m ²	1.6 per 100 m ² GFA	1.2 per 100 m ² GFA	36	27
Hotel/ Serviced Apartments	189 rooms	0.273 per room	0.345 per room	52	65
Total				579	561

*higher trip estimate has been considered

Based on Table 2, the proposed development is anticipated to generate 579 vehicle trips and 561 vehicle trips during the morning and evening peak periods, respectively.

Porte Cochere Use

The proposed porte cochere will be located along O'Riordan Street frontage. Trips generated by the hotel/serviced apartment are distributed between porte cochere users (i.e. car/taxi and coach drop-offs) and staff/visitors who will park on site.

According to 19 Bourke Road TIA report, coach drop-offs are about 17.3% and 11.5% of total hotel trips in the morning and evening peak, respectively.

In addition, TPP has commissioned a survey on the existing Lumiere/Frasers Suites in Sydney CBD which was used for the traffic assessment of a proposed hotel development at 4-6 Bligh Street Sydney. The survey was undertaken on a 24-hour period at the existing drop-off zone along the frontage of the site. Results of the survey indicate that the existing hotel generated about 0.11 pick-up/drop-off movements per hotel room/serviced apartment.

The above rates have been used to estimate the drop-off movements that will be generated by the hotel/serviced apartment. The remaining hotel trips are assumed to be staff/visitors who will park on site.

Table 3: Porte Cochere Use

Hotel Trips	Trip Generation Rate (veh/hr)		Trip Generation Estimate (veh/hr)	
	AM Peak	PM Peak	AM Peak	PM Peak
Taxi Drop-off	0.11 per room	0.11 per room	32	27
Coach Drop-off	17.3% of total trips	11.5% of total trips	9	7
Taxi Drop-off	Remaining Trips from Table 2		21	11
Total*			52	65

*total trips based on Table 2

Traffic Distribution

Directional Split

The following directional splits have been adopted. The directional split of hotel use is based on the Holiday Inn hotel survey results presented in the 19 Bourke Road, Mascot traffic report.

- Office:
 - AM peak hour: 90% inbound, 10% outbound
 - PM peak hour: 10% inbound, 90% outbound
- Medical Centre:
 - AM peak hour: 50% inbound, 50% outbound
 - PM peak hour: 50% inbound, 50% outbound
- Retail:
 - AM peak hour: 50% inbound, 50% outbound
 - PM peak hour: 50% inbound, 50% outbound
- Hotel/ Serviced Apartments:
 - AM peak hour: 58% inbound, 42% outbound
 - PM peak hour: 46% inbound, 54% outbound

Table 4: Directional Split

Land Use	Directional Split – AM Peak (%)		Directional Split – PM Peak (%)		AM Peak Vehicle Trips		PM Peak Vehicle Trips	
	Inbound (%)	Outbound (%)	Inbound (%)	Outbound (%)	Inbound	Outbound	Inbound	Outbound
Office	90%	10%	10%	90%	217	24	18	162
Medical Centre	50%	50%	50%	50%	125	125	144	144
Retail	50%	50%	50%	50%	18	18	14	14
Hotel/ Serviced Apartments	58%	42%	46%	54%	30	22	30	35
Total					390	189	205	355

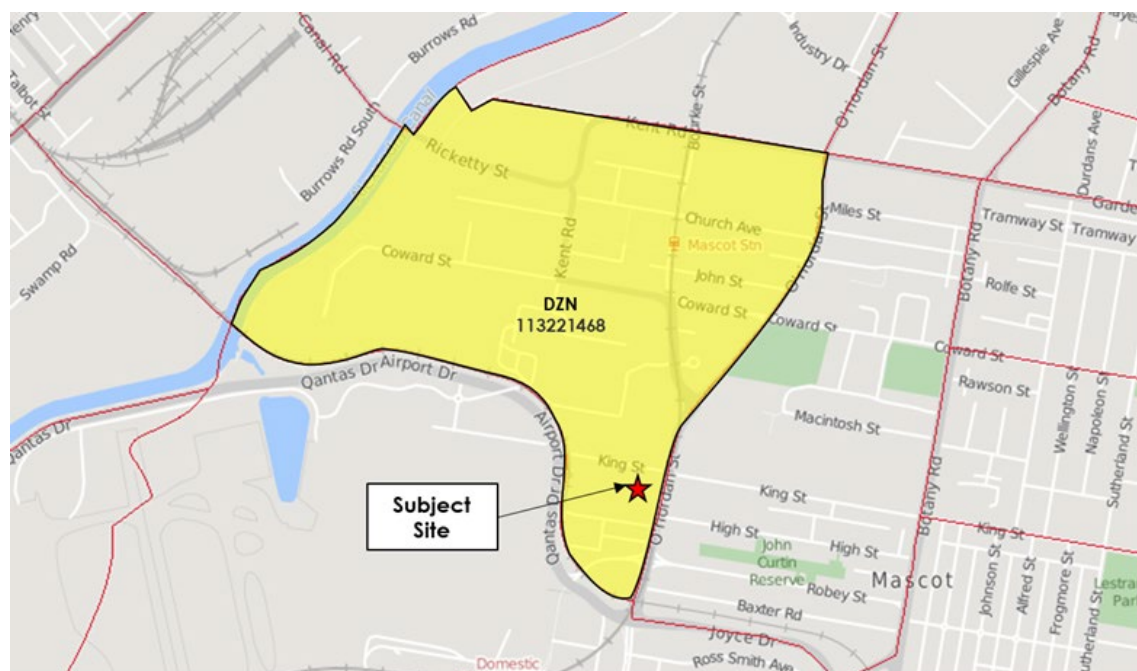
Trip Distribution to Surrounding Road Network

The estimated development trips have been distributed to the external road network based on the following assumptions:

Office

Office trips will predominantly be generated by staff. As such, trip distribution of office trips has been estimated based on ABS 2016 Census Data. Place of Work data of employees working within Destination Zone 113221468 who drive to work has been gathered to determine their place of residence by SA3 level. On some larger SA3 areas located close to the subject site (e.g. Mascot-Eastlakes, Coogee, Botany etc), place of residence by SA2 and SA1 levels has been obtained to get more accurate trip distribution.

Figure 1: Selected Destination Zone



The resulting place of residence data has been assessed to determine the likely routes of employees to/from the site.

Medical Centre and Retail

It is anticipated that medical centre and retail trips will predominantly be generated by visitors. It is assumed that visitors would come from different directions. Therefore, trips generated by medical centre and retail are distributed based on directional proportions of existing traffic.

Hotel/ Serviced Apartment:

On-site parking users

It is assumed that hotel and serviced apartment trips which will not be using porte-cochere would use the on-site parking facility. Similar to assumptions made for medical centre and retail trips and hotel/ serviced apartments, trips are anticipated to generate from different directions. As such, trips associated with hotel/ serviced apartment that would utilise the on-site parking facility are distributed based on directional proportions of existing traffic.

Porte-cochere users

It is noted that O'Riordan Street has a central median which limits access to porte-cochere as left-in, left-out only. As such, all inbound trips to porte-cochere will all be coming from the south via O'Riordan Street-Robey Street intersection. All outbound trips will be northbound from the site and will be distributed to O'Riordan Street, Bourke Road and King Street based on proportions of existing traffic.

All inbound and outbound routes are distributed in four key source/destination points as shown in Figure 2.

Figure 2: Trip Distribution



Table 5: Trip Distribution – AM Peak

Origin / Destination	Inbound Split (%)			Outbound Split (%)			Inbound Trips				Outbound Trips			
	Office	Medical Centre+ Retail+ Hotel/ Serviced Apartment (On-site parking)	Hotel/ Serviced Apartment Drop-off (Coach/Taxi)	Office	Medical Centre+ Retail+ Hotel/ Serviced Apartment (On-site parking)	Hotel/ Serviced Apartment Drop-off (Coach/Taxi)	Office	Medical Centre+ Retail+ Hotel/ Serviced Apartment (On-site parking)	Hotel/ Serviced Apartment Drop-off (Coach/Taxi)	Total	Office	Medical Centre+ Retail+ Hotel/ Serviced Apartment (On-site parking)	Hotel/ Serviced Apartment Drop-off (Coach/Taxi)	Total
A	4%	13%	0%	42%	19%	29%	8	19	0	27	10	28	5	43
B	1%	21%	0%	22%	43%	66%	3	32	0	34	5	63	11	80
C	15%	3%	0%	36%	4%	5%	32	4	0	36	9	5	1	15
D	80%	64%	100%	0%	35%	0%	174	95	24	292	0	52	0	52
Total	100%	100%	100%	100%	100%	100%	217	149	24	390	24	148	17	189

Table 6: Trip Distribution – PM Peak

Origin / Destination	Inbound Split (%)			Outbound Split (%)			Inbound Trips				Outbound Trips			
	Office	Medical Centre+ Retail+ Hotel/ Serviced Apartment (On-site parking)	Hotel/ Serviced Apartment Drop-off (Coach/Taxi)	Office	Medical Centre+ Retail+ Hotel/ Serviced Apartment (On-site parking)	Hotel/ Serviced Apartment Drop-off (Coach/Taxi)	Office	Medical Centre+ Retail+ Hotel/ Serviced Apartment (On-site parking)	Hotel/ Serviced Apartment Drop-off (Coach/Taxi)	Total	Office	Medical Centre+ Retail+ Hotel/ Serviced Apartment (On-site parking)	Hotel/ Serviced Apartment Drop-off (Coach/Taxi)	Total
A	4%	18%	0%	42%	15%	33%	1	32	0	32	68	26	6	100
B	1%	39%	0%	22%	28%	61%	0	66	0	67	36	48	11	95
C	15%	1%	0%	36%	4%	7%	3	2	0	4	58	6	1	66
D	80%	42%	100%	0%	53%	0%	14	72	16	102	0	93	0	94
Total	100%	100%	100%	100%	100%	100%	18	172	16	205	162	174	19	355

Other Developments

Surrounding Approved Developments

Council has requested a cumulative assessment of the impact of traffic generated by the proposed development as well as other approved, under assessment and recently constructed developments within the vicinity (i.e. completed after October 2018 traffic surveys). The following developments have been considered including the projects indicated by Council:

- 342 King Street and 5-11 Ewan Street – mixed use development including hotel and commercial offices
- 19 Bourke Road – hotel development
- 10 Sarah Street – hotel development
- 289-293 King Street – car park facility (under assessment)
- 237 O'Riordan Street – service station (under assessment)

Trip generation estimates of the above projects have been sourced from traffic reports that accompanied the development applications.

Table 7: Trip Generation Estimate of Other Developments

Site	AM Peak		PM Peak	
	In	Out	In	Out
342 King Street/5-11 Ewan Street				
Hotel + auditorium	55	40	41	48
Office	133	15	10	94
19 Bourke Road	32	24	32	38
10 Sarah St	15	11	8	9
289 King Street	22	8	8	18
237 O'Riordan Street	11	11	21	21

Trips associated with 237 O'Riordan Street have been distributed as per the *Traffic Impact Assessment Report (24 July 2020)*. It is noted that the traffic flow diagram presented in the TIA report only shows the section between Ewan Street and Sarah Street. As such, the estimated trips are further distributed in the network based on existing traffic proportions.

Meanwhile, trips associated with other developments have been distributed based on existing traffic proportions and likely routes to/from the sites.

The modelled peak hour traffic volumes are presented in Figure 3 and Figure 4.

Figure 3: AM Peak Traffic Volumes

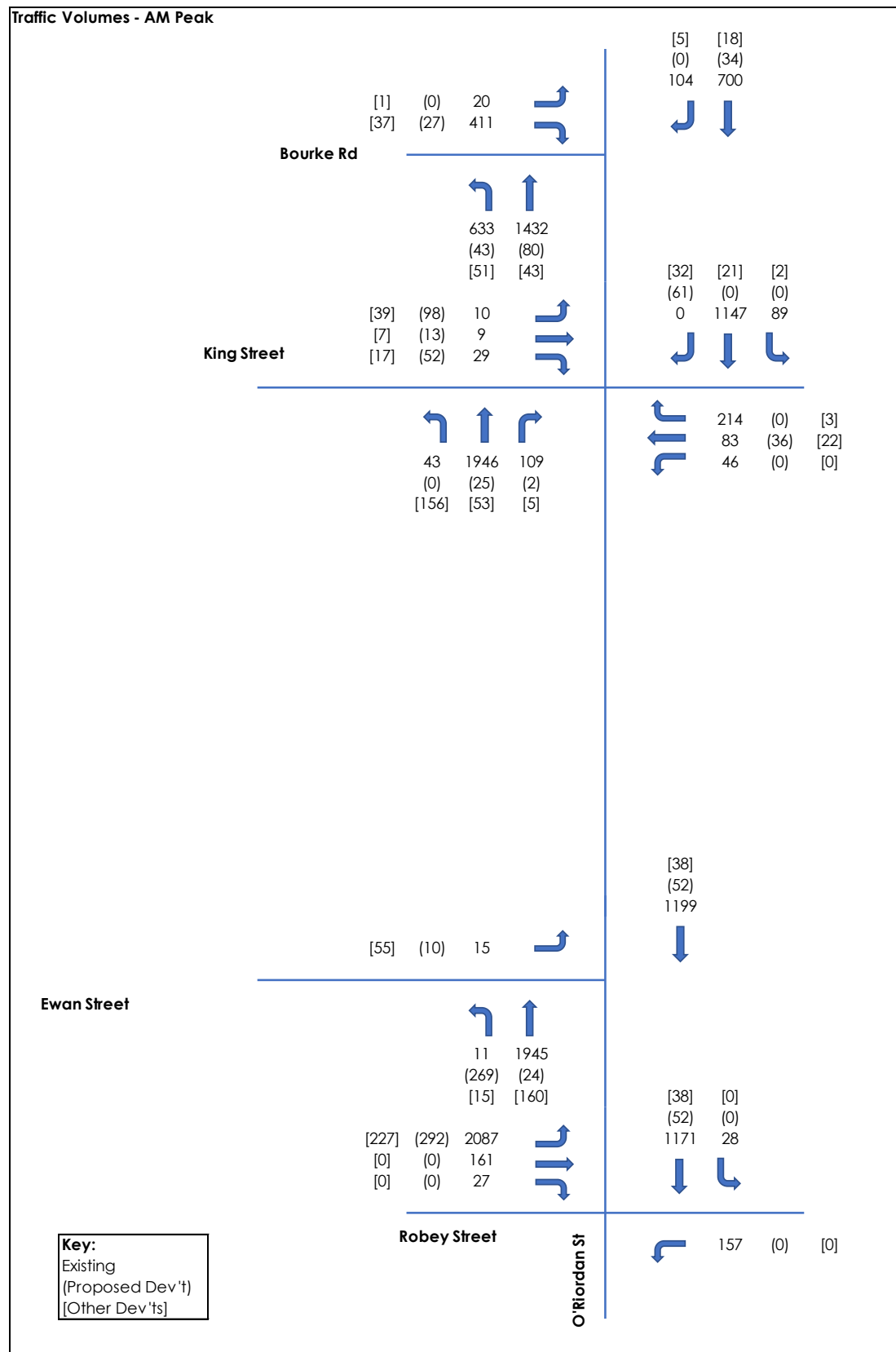
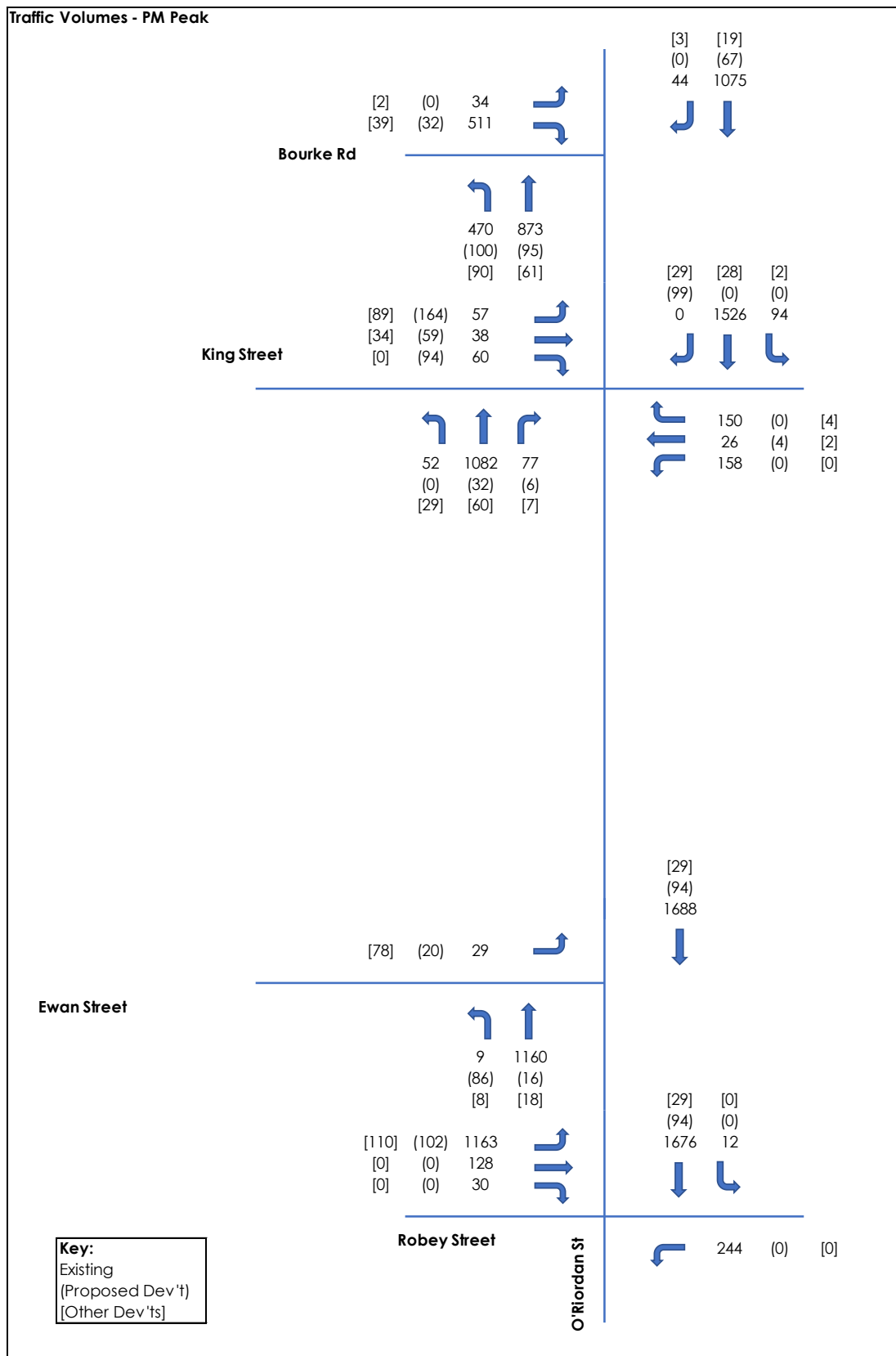


Figure 4: PM Peak Traffic Volumes



Sydney Gateway Road Project

Sydney Gateway Road Project (Project) is one of the NSW and Australian governments' major investments in the transport network to support the growth of Sydney Airport and Port Botany strategic centres. The Project comprises new direct high capacity road connections linking the Sydney motorway network at St Peters interchange with Sydney Airport's terminal.

The Project is anticipated to attract traffic away from local and state roads within the study area which will result in lower traffic volumes when compared what is predicted without the project in years 2026 and 2036. A higher proportion of traffic would use WestConnex and the Project to access Sydney Airport as demonstrated by reduced traffic growth forecast on subject roads including O'Riordan Street and Botany Road.

Based on the traffic volume forecast presented in the Project Environmental Impact Assessment (EIS), the Project would result to a reduction to daily traffic by 30%-31% on O'Riordan Street and 26%-28% on Botany Road.

Traffic Assessment

A network capacity analysis has been undertaken using SIDRA Intersection 9 modelling software to ascertain the intersection performance of the key intersections surrounding the site.

Transport for NSW uses the performance measure Level of Service (LoS) to establish the efficiency of an intersection under given prevailing traffic conditions.

LoS is directly related to the delays experienced by traffic traversing the intersection. Level of service indicators range from A (indicating good intersection operation) to F (indicating over-saturated conditions with long delays and queues). LoS D is the long-term desirable level of service.

At signalised intersections, the average delay is the volume weighted average of all movements. For roundabouts and priority (give way and stop sign) controlled intersections, the average delay relates to the worst movement.

Table 8 shows the criteria that SIDRA Intersection adopts in assessing the LoS.

Table 8: TfNSW LoS Criteria

Level of Service (LoS)	Average Delay per vehicle (secs/veh)	Traffic Signals, Roundabout	Give Way & Stop Sign
A	Less than 14	Good operation	Good operation
B	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
C	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Near capacity	Near capacity, accident study required
E	57 to 70	At <u>capacity</u> : at signals incidents would cause excessive delays. Roundabouts require other control mode	At capacity, requires other control mode.
F	Greater than 70	Unsatisfactory, requires additional capacity	Unsatisfactory, requires other control mode or major treatment

Existing Base Model

It is observed that the previous SIDRA models used in Varga's assessment utilised optimised cycle time and showed no evidence on how the existing model was calibrated. It is also noted that some phasing arrangements and intersection layouts used in Varga's existing base models were not representative of what were actually on site as the survey was conducted while construction was on going along O'Riordan Street.

As such, TPPP has developed a new existing base model using phase times obtained from TfNSW SCATS history files on the surveyed peak periods (i.e. 23 October 2018 7:15am-8:15am and 3:30pm-4:30pm) and traffic control signal plans that are in operation during the survey. However, it is noted that morning phase times at intersection of O'Riordan Street-Bourke Road were not recorded by the TfNSW SCATS system on the surveyed date, so the phase times obtained on the following day have been used.

Since there are no available information on the queueing observed during the survey periods, the existing model has been calibrated such that the results are comparable with traffic assessment results of other approved developments and the typical traffic conditions shown in Google Maps during peak periods.

Traffic Modelling Scenarios

The following scenarios have been considered to assess the potential traffic impact of the proposed development on the surrounding road network:

- Existing Base Case – this scenario included baseline traffic with no development traffic
- Future Base Case – this scenario included baseline traffic with additional trips associated with other developments
- Future Base with Development – this scenario included baseline traffic with the additional trips associated with the proposed development and other developments

As previously mentioned, intersection layout and phasing arrangements that are in place during the survey period have been adopted in the existing base model. For the future scenarios, the current layout and phasing of subject intersections have been adopted (i.e. post-upgrade of O'Riordan Street).

Since there are some significant changes in the road layout and phasing arrangements between the existing scenario (October 2018) and future scenario (i.e. post-upgrade of O'Riordan Street), a site observation has been undertaken in February 2020 to record current signal timings. The observed phase times have been adopted in the future modelling scenarios.

Modelling Results

Traffic modelling results are summarised in Table 9 and Table 10.

Table 9: AM Peak Intersection Performance

Intersection	Control	Existing Base			Future Base (with other developments)			Future Base + Proposed Development		
		Delay (s)	LoS	95 th %tile Queue (m)	Delay (s)	LoS	95 th %tile Queue (m)	Delay (s)	LoS	95 th %tile Queue (m)
O'Riordan St-Bourke Rd	Signals	16	B	150	17	B	153	17	B	144
O'Riordan St-King St	Signals	16	B	217	45	D	418	87	F	662
O'Riordan St-Ewan St	Priority	13	A	1	8	A	3	7	A	3
O'Riordan St-Robey St	Signals	19	B	386	10	A	72	10	A	87

Note: Future modelling scenarios incorporated current road layout and phasing arrangements (i.e. post-upgrade of O'Riordan Street) however, survey data pre-dates the road upgrades

Table 10: PM Peak Intersection Performance

Intersection	Control	Existing Base			Future Base (with other developments)			Future Base + Proposed Development		
		Delay (s)	LoS	95 th %tile Queue (m)	Delay (s)	LoS	95 th %tile Queue (m)	Delay (s)	LoS	95 th %tile Queue (m)
O'Riordan St-Bourke Rd	Signals	32	C	199	29	C	218	36	C	271
O'Riordan St-King St	Signals	21	B	250	35	C	208	183	F	611
O'Riordan St-Ewan St	Priority	8	A	1	7	A	29	6	A	34
O'Riordan St-Robey St	Signals	14	A	108	14	A	122	14	A	122

Note: Future modelling scenarios incorporated current road layout and phasing arrangements (i.e. post-upgrade of O'Riordan Street) however, survey data pre-dates the road upgrades

The above results indicate that the key intersections currently operate generally satisfactorily with LoS C or better during peak periods.

The future scenarios indicate that the intersection of O'Riordan Street-King Street would be nearing capacity with a LoS D in the morning peak period. The addition of development traffic appears from the subject site to further put pressure on this intersection with the model

presenting a LoS F. However, this scenario is not considered to truly reflect the future operation of this intersection.

During the 2020 site observations, the study intersections appear to be operating under capacity. The recent road upgrades on O’Riordan Street have likely been undertaken to accommodate future development growth, therefore the observed signal phasing does not reflect the future phasing arrangements that the intersections have been planned for. Notably, the Traffic Signal Plans for the study intersections indicate that the intersections accommodate around 6 or more signal phasing variations. On this basis, the SCATS system would alter its phasing arrangement as traffic volumes change over time.

As such, the model was rerun, enabling SIDRA Intersection to choose the signal phases (as is already permitted in the current Traffic Signal Plan). However, the current cycle time of 130 seconds for all intersections has been maintained.

The updated modelling results with an improved calibration of the traffic signal timing is shown in Table 11.

Table 11: Future Intersection Performance with Proposed Mitigation Measures

Intersection	Control	Future Base + Proposed Development + Upgrade AM Peak			Future Base + Proposed Development + Upgrade PM Peak		
		Delay (s)	LoS	95 th %tile Queue (m)	Delay (s)	LoS	95 th %tile Queue (m)
O’Riordan St-Bourke Rd	Signals	21	B	210	20	B	138
O’Riordan St-King St	Signals	33	C	201	34	C	216
O’Riordan St-Ewan St	Priority	7	A	3	6	A	4
O’Riordan St-Robey St	Signals	14	A	137	11	A	52

The revised model indicates that the O’Riordan Street-King Street intersection would operate at a LoS C in both peak periods, post development of the site.

The proposed reallocation of phase times is acceptable since the cumulative additional development traffic would result to significant changes in proportion of traffic flows. Additionally, it is a realistic result as it reflects how the SCATS system operates with intersection cycle/phase times varying throughout the day and over time, with changing traffic flows.

Table 12 and Table 13 present the proposed changes to phasing arrangements.

Table 12: Proposed Phase Times Reallocation – AM Peak

Without Mitigation

With Mitigation

O’Riordan Street-Bourke Road

Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	0	86	101
Green Time (sec)	80	9	24
Phase Time (sec)	86	14	30
Phase Split	66%	11%	23%

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

Output Phase Sequence

No change

O’Riordan Street-King Street

Phase Timing Summary

Phase	A	D	E	E2
Phase Change Time (sec)	130	78	112	123
Green Time (sec)	77	27	5	3
Phase Time (sec)	83	33	9	6
Phase Split	64%	25%	7%	4%

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

Output Phase Sequence

Phase Timing Summary

Phase	A	B	D	E
Phase Change Time (sec)	129	44	55	104
Green Time (sec)	48	6	42	10
Phase Time (sec)	54	12	48	16
Phase Split	42%	8%	37%	12%

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

Output Phase Sequence

O’Riordan Street-Robey Street

Phase Timing Summary

Phase	A	B	D
Phase Change Time (sec)	93	106	68
Green Time (sec)	9	91	19
Phase Time (sec)	10	97	23
Phase Split	8%	75%	18%

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

Output Phase Sequence

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	81	97	35	58
Green Time (sec)	10	62	15	19
Phase Time (sec)	16	68	21	25
Phase Split	12%	52%	16%	19%

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

Output Phase Sequence

Table 13: Proposed Phase Times Reallocation – PM Peak

Without Mitigation

With Mitigation

O’Riordan Street-Bourke Road

Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	0	88	103
Green Time (sec)	82	9	22
Phase Time (sec)	88	14	28
Phase Split	68%	11%	22%

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

Output Phase Sequence

Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	0	66	80
Green Time (sec)	60	8	44
Phase Time (sec)	66	14	50
Phase Split	51%	11%	38%

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

Output Phase Sequence

O’Riordan Street-King Street

Phase Timing Summary

Phase	A	D	E
Phase Change Time (sec)	14	101	1
Green Time (sec)	81	24	7
Phase Time (sec)	87	30	13
Phase Split	67%	23%	10%

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

Output Phase Sequence

Phase Timing Summary

Phase	A	B	D	E
Phase Change Time (sec)	14	67	79	138
Green Time (sec)	47	6	43	16
Phase Time (sec)	53	12	49	16
Phase Split	41%	9%	38%	12%

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

Output Phase Sequence

O’Riordan Street-Robey Street

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	31	43	85	89
Green Time (sec)	6	40	8	59
Phase Time (sec)	6	46	11	65
Phase Split	6%	35%	8%	50%

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

Output Phase Sequence

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	31	47	113	4
Green Time (sec)	10	60	15	21
Phase Time (sec)	16	68	21	27
Phase Split	12%	51%	16%	21%

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

Output Phase Sequence

It is considered that the proposed rearrangement of signal phasing and timing (in accordance with the existing Traffic Signal Control Plans) would mitigate future delays at O'Riordan Street and King Street.

Notwithstanding this, Sydney Gateway Road Project would result in a reduction in daily traffic by 30%-31% on O'Riordan Street and 26%-28% on Botany Road. This would ease pressure on the main roads and further justify the reallocation of signal timing from the main road to the side roads, to accommodate development traffic.

Summary and Conclusion

This addendum traffic report has been prepared to provide response to comments raised by Bitzios and Council on previous submissions.

Table 14 provides a summary of responses to peer review comments.

Table 14: Peer Review Comments

Key Issues	Response	Report Reference
6 February 2019		
The traffic assessment has not considered the impact of the proposal in combination with other developments in the area. A development of this size should require the assessment of the cumulative traffic impacts and consider future traffic volumes.	Traffic generation estimate of other known developments has been included	Page 11
The traffic generated by the development should be assessed in further detail, as the hotel and medical developments may produce significantly higher volumes than assumed.	Trip generation estimate has been updated using updated rates from TfNSW's surveys on medical centres and Traffix's survey of Holiday Inn Sydney Airport	Page 3 to 4
Directional splits of incoming and outgoing traffic in the AM and PM peaks should be considered when estimating distribution of development traffic.	Inbound and outbound split assumptions have been updated to suit each development use	Page 6
28 October 2020		
Provision of the existing Holiday Inn traffic surveys that support the traffic generation rate adopted	Further details on Traffix's Holiday Inn survey have been included	Page 4
Further clarification of the adopted Medical Centre trip generation rate adopted	Further details on adopted trip rates for medical centre us have been included	Page 3
Further clarification of the traffic distribution assumptions, including rectification of flow diagrams, in/out splits, and how the JTW data was interpreted/used in the final trip distribution adopted.	Trip distribution assumptions have been refined including in/out split and directional splits	Page 6 and 7
The current Future PP + Other Developments scenario is showing that King Street will operate above the Maximum Practical Degree of Saturation. Per RMS's Traffic Modelling Guidelines, this should be ameliorated via the proposal of some mitigating measure or otherwise appropriately justified through the provision of further information in relation to forecast background traffic reductions on O'Riordan Street associated with the Sydney Gateway Project and resultant SIDRA modelling outputs.	Intersection performance has been analysed based on Level of Service in relation to intersection delay which is being used by Transport for NSW as performance measure Level of Service (LoS). Mitigation measures have been proposed to achieve satisfactory performance.	Page 16

We trust the above is to your satisfaction. Should you have any queries regarding the above or require further information, please do not hesitate to contact the undersigned on 8437 7800.

Yours sincerely,



Ken Hollyoak
Director

Attachment One

SIDRA Results

USER REPORT FOR NETWORK SITE

All Movement Classes

 Project: 20488sid-210222

Template: Default Site User Report

 Site: 101 [O'Riordan St-Bourke Rd-Ex AM (Site Folder: Ex AM)]

 Network: 1 [Ex AM (Network Folder: General)]

O'Riordan St-Bourke Rd-Ex AM

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network Site User-Given Phase Times)

Timings based on settings in the Network Timing dialog

Phase Times specified by the user

Phase Sequence: TCS 1696 (Construction)

Reference Phase: Phase A

Input Phase Sequence: A, B, C

Output Phase Sequence: A, B, C

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: O'Riordan Street														
1	L2	666	5.8	664	5.9	0.440	7.1	LOS A	5.1	37.2	0.13	0.58	0.13	51.2
2	T1	1507	1.0	1503	1.0	* 0.607	9.0	LOS A	21.2	149.6	0.41	0.37	0.41	49.4
Approach		2174	2.5	2168 ^N ₁	2.5	0.607	8.4	LOS A	21.2	149.6	0.32	0.44	0.32	49.9
North: O'Riordan Street														
8	T1	737	2.9	737	2.9	0.258	5.4	LOS A	7.1	51.3	0.34	0.30	0.34	51.1
9	R2	109	1.0	109	1.0	* 0.437	27.4	LOS B	5.1	35.9	0.77	0.80	0.77	40.6
Approach		846	2.6	846	2.6	0.437	8.3	LOS A	7.1	51.3	0.39	0.36	0.39	48.2
West: Bourke Road														
10	L2	21	10.0	21	10.0	0.799	66.6	LOS E	14.7	111.7	1.00	0.93	1.15	28.4
12	R2	433	10.2	433	10.2	* 0.799	67.2	LOS E	14.7	112.0	1.00	0.91	1.15	19.0
Approach		454	10.2	454	10.2	0.799	67.1	LOS E	14.7	112.0	1.00	0.91	1.15	19.6
All Vehicles		3474	3.5	3468 ^N ₁	3.5	0.799	16.1	LOS B	21.2	149.6	0.43	0.48	0.45	42.4

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.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Site: 102 [O'Riordan St-King St-Ex AM (Site Folder: Ex AM)]

Network: 1 [Ex AM (Network Folder: General)]

O'Riordan St-King St-Ex AM

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network Site User-Given Phase Times)

Timings based on settings in the Network Timing dialog

Phase Times specified by the user

Phase Sequence: TCS 158 (Construction)

Reference Phase: Phase A

Input Phase Sequence: A, C

Output Phase Sequence: A, C

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: O'Riordan Street														
1	L2	45	0.0	45	0.0	* 0.800	8.8	LOS A	15.8	113.6	0.26	0.27	0.26	46.1
2	T1	2048	3.1	2048	3.1	0.800	3.1	LOS A	15.8	113.6	0.25	0.24	0.25	44.0
3	R2	115	0.9	115	0.9	0.474	16.1	LOS B	2.6	18.4	0.37	0.68	0.37	37.8
Approach		2208	3.0	2208	3.0	0.800	3.9	LOS A	15.8	113.6	0.26	0.27	0.26	42.8
East: King Street														
4	L2	48	2.2	48	2.2	0.138	51.5	LOS D	2.6	18.2	0.87	0.73	0.87	20.9
5	T1	87	0.0	87	0.0	* 1.029	122.6	LOS F	30.8	217.3	1.00	1.27	1.75	15.0
6	R2	225	1.4	225	1.4	1.029	127.2	LOS F	30.8	217.3	1.00	1.27	1.75	11.3
Approach		361	1.2	361	1.2	1.029	115.9	LOS F	30.8	217.3	0.98	1.19	1.63	13.0
North: O'Riordan Street														
7	L2	94	3.4	94	3.4	0.502	13.5	LOS A	14.1	103.6	0.38	0.40	0.38	43.7
8	T1	1207	5.7	1207	5.7	0.502	7.9	LOS A	14.2	103.9	0.38	0.37	0.38	35.2
Approach		1301	5.5	1301	5.5	0.502	8.3	LOS A	14.2	103.9	0.38	0.37	0.38	36.7
West: King Street														
10	L2	11	10.0	11	10.0	0.028	47.5	LOS D	0.5	4.0	0.82	0.67	0.82	14.2
11	T1	9	0.0	9	0.0	0.145	48.3	LOS D	2.1	15.0	0.87	0.71	0.87	25.7
12	R2	31	0.0	31	0.0	0.145	52.9	LOS D	2.1	15.0	0.87	0.71	0.87	13.4
Approach		51	2.1	51	2.1	0.145	50.9	LOS D	2.1	15.0	0.86	0.70	0.86	16.8
All Vehicles		3921	3.6	3921	3.6	1.029	16.3	LOS B	30.8	217.3	0.37	0.39	0.43	26.8

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.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Site: 103 [O'Riordan St-Ewan St-Ex AM (Site Folder: Ex AM)]

Network: 1 [Ex AM (Network Folder: General)]

O'Riordan St-Ewan St-Ex AM
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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 %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist m				km/h
South: O'Riordan Street														
1	L2	12	0.0	12	0.0	0.537	5.0	LOS A	0.0	0.0	0.00	0.01	0.00	54.6
2	T1	2047	2.6	2047	2.6	0.537	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.2
Approach		2059	2.6	2059	2.6	0.537	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.1
North: O'Riordan Street														
8	T1	1262	5.1	1262	5.1	0.395	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
Approach		1262	5.1	1262	5.1	0.395	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.7
West: Ewan Street														
10	L2	16	0.0	16	0.0	0.039	12.8	LOS A	0.1	1.0	0.71	0.83	0.71	29.0
Approach		16	0.0	16	0.0	0.039	12.8	LOS A	0.1	1.0	0.71	0.83	0.71	29.0
All Vehicles		3337	3.5	3337	3.5	0.537	0.1	NA	0.1	1.0	0.00	0.01	0.00	58.7

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.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Site: 104 [O'Riordan St-Robey St-Ex AM (Site Folder: Ex AM)]

Network: 1 [Ex AM (Network Folder: General)]

O'Riordan St-Robey St-Ex AM

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network Site User-Given Phase Times)

Timings based on settings in the Network Timing dialog

Phase Times specified by the user

Phase Sequence: TCS 591 (Construction)

Reference Phase: Phase A

Input Phase Sequence: A, B, C

Output Phase Sequence: A, B, C

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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 %	[Total HV] veh/h	%	v/c	sec		[Veh. veh	Dist] m				km/h
East: Robey Street														
4	L2	165	0.6	165	0.6	0.447	54.2	LOS D	9.3	65.4	0.93	0.80	0.93	30.6
Approach		165	0.6	165	0.6	0.447	54.2	LOS D	9.3	65.4	0.93	0.80	0.93	30.6
North: O'Riordan Street														
7	L2	29	0.0	29	0.0	0.326	13.4	LOS A	11.2	81.6	0.48	0.45	0.48	43.2
8	T1	1233	5.2	1233	5.2	0.326	9.1	LOS A	11.9	86.8	0.49	0.44	0.49	41.1
Approach		1262	5.1	1262	5.1	0.326	9.2	LOS A	11.9	86.8	0.49	0.44	0.49	41.2
West: Robey Street														
10	L2	2197	2.7	2197	2.7	* 0.871	20.0	LOS B	53.9	386.4	0.75	0.85	0.76	36.9
11	T1	169	0.6	169	0.6	0.410	47.6	LOS D	9.2	64.6	0.90	0.76	0.90	33.9
12	R2	28	0.0	28	0.0	0.130	58.7	LOS E	1.6	11.2	0.90	0.73	0.90	28.6
Approach		2395	2.5	2395	2.5	0.871	22.4	LOS B	53.9	386.4	0.76	0.84	0.77	36.2
All Vehicles		3822	3.3	3822	3.3	0.871	19.4	LOS B	53.9	386.4	0.68	0.70	0.69	37.1

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.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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Organisation: TTPP - THE TRANSPORT PLANNING PARTNERSHIP | Licence: NETWORK / 1PC | Created: Tuesday, 23 February 2021 10:38:17 AM

Project: X:\20488 215-235 O'Riordan St, Mascot\07 Modelling Files\Model\20488sid-210222.sip9

USER REPORT FOR NETWORK SITE

All Movement Classes

 Project: 20488sid-210222

Template: Default Site User Report

 Site: 101 [O'Riordan St-Bourke Rd-Ex PM (Site Folder: Ex PM)]

 Network: 2 [Ex PM (Network Folder: General)]

O'Riordan St-Bourke Rd-Ex PM
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network Site User-Given Phase Times)

Timings based on settings in the Network Timing dialog
Phase Times specified by the user
Phase Sequence: TCS 1696 (Construction)
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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 %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: O'Riordan Street														
1	L2	495	9.8	495	9.8	0.337	8.0	LOS A	6.6	49.9	0.23	0.61	0.23	50.2
2	T1	919	2.4	919	2.4	0.420	16.4	LOS B	15.7	111.8	0.57	0.51	0.57	43.1
Approach		1414	5.0	1414	5.0	0.420	13.4	LOS A	15.7	111.8	0.45	0.55	0.45	45.4
North: O'Riordan Street														
8	T1	1132	1.7	1132	1.7	* 0.660	12.9	LOS A	21.7	154.4	0.62	0.57	0.62	42.4
9	R2	46	4.5	46	4.5	0.129	21.8	LOS B	1.5	10.8	0.57	0.71	0.57	43.1
Approach		1178	1.8	1178	1.8	0.660	13.2	LOS A	21.7	154.4	0.62	0.58	0.62	42.5
West: Bourke Road														
10	L2	36	11.8	36	11.8	1.017	111.7	LOS F	26.4	196.7	1.00	1.14	1.72	19.0
12	R2	538	7.0	538	7.0	* 1.017	118.8	LOS F	26.8	199.2	1.00	1.16	1.73	11.7
Approach		574	7.3	574	7.3	1.017	118.4	LOS F	26.8	199.2	1.00	1.16	1.73	12.2
All Vehicles		3165	4.2	3165	4.2	1.017	32.4	LOS C	26.8	199.2	0.62	0.67	0.75	31.0

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.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Site: 102 [O'Riordan St-King St-Ex PM (Site Folder: Ex PM)]

Network: 2 [Ex PM (Network Folder: General)]

O'Riordan St-King St-Ex PM

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network Site User-Given Phase Times)

Timings based on settings in the Network Timing dialog

Phase Times specified by the user

Phase Sequence: TCS 158 (Construction)

Reference Phase: Phase A

Input Phase Sequence: A, B, C

Output Phase Sequence: A, B, C

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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] %	[Total veh/h	HV] %	v/c	sec		[Veh. veh	Dist] m				km/h
South: O'Riordan Street														
1	L2	55	0.0	55	0.0	0.465	13.8	LOS A	16.5	120.2	0.46	0.45	0.46	39.3
2	T1	1139	5.3	1139	5.3	0.465	8.1	LOS A	16.5	120.2	0.45	0.42	0.45	31.0
3	R2	81	0.0	81	0.0	* 0.404	32.6	LOS C	3.3	23.0	0.66	0.75	0.66	29.9
Approach		1275	4.7	1275	4.7	0.465	9.9	LOS A	16.5	120.2	0.47	0.45	0.47	31.4
East: King Street														
4	L2	166	1.3	166	1.3	0.317	43.8	LOS D	8.3	58.5	0.83	0.78	0.83	22.9
5	T1	27	0.0	27	0.0	0.821	63.2	LOS E	12.4	87.9	1.00	0.94	1.22	22.5
6	R2	158	1.3	158	1.3	* 0.821	67.8	LOS E	12.4	87.9	1.00	0.94	1.22	17.8
Approach		352	1.2	352	1.2	0.821	56.1	LOS D	12.4	87.9	0.92	0.86	1.04	20.3
North: O'Riordan Street														
7	L2	99	1.1	99	1.1	* 0.721	23.0	LOS B	33.3	239.7	0.69	0.66	0.69	37.6
8	T1	1606	3.5	1606	3.5	0.721	17.6	LOS B	34.7	250.0	0.70	0.65	0.70	23.7
Approach		1705	3.4	1705	3.4	0.721	17.9	LOS B	34.7	250.0	0.70	0.65	0.70	25.4
West: King Street														
10	L2	60	3.5	60	3.5	0.166	51.0	LOS D	3.2	22.8	0.87	0.74	0.87	13.5
11	T1	40	0.0	40	0.0	0.397	51.3	LOS D	5.9	41.2	0.93	0.77	0.93	25.2
12	R2	63	0.0	63	0.0	0.397	55.9	LOS D	5.9	41.2	0.93	0.77	0.93	13.0
Approach		163	1.3	163	1.3	0.397	53.0	LOS D	5.9	41.2	0.90	0.76	0.90	17.2
All Vehicles		3495	3.6	3495	3.6	0.821	20.5	LOS B	34.7	250.0	0.64	0.60	0.66	24.5

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.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

 **Site: 103 [O'Riordan St-Ewan St-Ex PM (Site Folder: Ex PM)]**

 **Network: 2 [Ex PM (Network Folder: General)]**

O'Riordan St-Ewan St-Ex PM
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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 %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: O'Riordan Street														
1	L2	9	0.0	9	0.0	0.324	5.0	LOS A	0.0	0.0	0.00	0.01	0.00	54.7
2	T1	1221	4.3	1221	4.3	0.324	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.3
Approach		1231	4.3	1231	4.3	0.324	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.2
North: O'Riordan Street														
8	T1	1777	3.0	1777	3.0	0.516	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.5
Approach		1777	3.0	1777	3.0	0.516	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.5
West: Ewan Street														
10	L2	31	0.0	31	0.0	0.042	7.8	LOS A	0.2	1.2	0.53	0.67	0.53	34.7
Approach		31	0.0	31	0.0	0.042	7.8	LOS A	0.2	1.2	0.53	0.67	0.53	34.7
All Vehicles		3038	3.5	3038	3.5	0.516	0.1	NA	0.2	1.2	0.01	0.01	0.01	58.6

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.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Site: 104 [O'Riordan St-Robey St-Ex PM (Site Folder: Ex PM)]

Network: 2 [Ex PM (Network Folder: General)]

O'Riordan St-Robey St-Ex PM

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network Site User-Given Phase Times)

Timings based on settings in the Network Timing dialog

Phase Times specified by the user

Phase Sequence: TCS 591 (Construction)

Reference Phase: Phase A

Input Phase Sequence: A, B, C

Output Phase Sequence: A, B, C

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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] %	[Total HV] veh/h	%				[Veh. veh	Dist] m				
East: Robey Street														
4	L2	257	0.0	257	0.0	* 0.642	55.0	LOS D	15.0	104.8	0.97	0.83	0.97	30.4
Approach		257	0.0	257	0.0	0.642	55.0	LOS D	15.0	104.8	0.97	0.83	0.97	30.4
North: O'Riordan Street														
7	L2	13	0.0	13	0.0	0.463	12.8	LOS A	12.3	88.4	0.36	0.34	0.36	43.7
8	T1	1764	3.0	1764	3.0	* 0.463	6.2	LOS A	12.3	88.4	0.29	0.27	0.29	43.6
Approach		1777	3.0	1777	3.0	0.463	6.3	LOS A	12.3	88.4	0.29	0.27	0.29	43.6
West: Robey Street														
10	L2	1224	5.7	1224	5.7	0.460	12.4	LOS A	14.7	107.6	0.42	0.69	0.42	43.3
11	T1	135	0.0	135	0.0	0.290	44.7	LOS D	7.0	48.9	0.86	0.73	0.86	34.6
12	R2	32	0.0	32	0.0	0.184	63.4	LOS E	1.9	13.1	0.94	0.73	0.94	27.6
Approach		1391	5.0	1391	5.0	0.460	16.7	LOS B	14.7	107.6	0.47	0.69	0.47	40.5
All Vehicles		3424	3.6	3424	3.6	0.642	14.1	LOS A	15.0	107.6	0.41	0.48	0.41	40.0

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.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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Project: X:\20488 215-235 O'Riordan St, Mascot\07 Modelling Files\Model\20488sid-210222.sip9

USER REPORT FOR NETWORK SITE

All Movement Classes

 Project: 20488sid-210222

Template: Default Site User Report

 Site: 101 [O'Riordan St-Bourke Rd-FB AM (Site Folder: FB AM)]

 Network: 3 [FB AM (Network Folder: General)]

O'Riordan St-Bourke Rd-FB AM

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network Site User-Given Phase Times)

Timings based on settings in the Network Timing dialog

Phase Times specified by the user

Phase Sequence: TCS 1696

Reference Phase: Phase A

Input Phase Sequence: A, B, C

Output Phase Sequence: A, B, C

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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 %	[Total veh/h	HV %				[Veh. veh	Dist m				
South: O'Riordan Street														
1	L2	720	5.4	703	5.5	0.232	7.3	LOS A	2.9	21.6	0.15	0.58	0.15	51.0
2	T1	1553	0.9	1515	1.0	* 0.635	6.9	LOS A	21.6	152.7	0.31	0.29	0.31	51.5
Approach		2273	2.4	2218 ^N ₁	2.4	0.635	7.0	LOS A	21.6	152.7	0.26	0.38	0.26	51.3
North: O'Riordan Street														
8	T1	756	2.8	756	2.8	0.180	5.7	LOS A	4.8	34.5	0.33	0.29	0.33	50.7
9	R2	115	0.9	115	0.9	* 0.898	83.7	LOS F	8.3	58.8	1.00	0.97	1.46	25.0
Approach		871	2.5	871	2.5	0.898	16.0	LOS B	8.3	58.8	0.42	0.38	0.48	41.0
West: Bourke Road														
10	L2	22	9.5	22	9.5	0.758	62.6	LOS E	15.3	115.8	1.00	0.91	1.08	29.4
12	R2	472	9.4	472	9.4	* 0.758	62.9	LOS E	15.4	116.6	1.00	0.89	1.08	20.0
Approach		494	9.4	494	9.4	0.758	62.9	LOS E	15.4	116.6	1.00	0.89	1.08	20.5
All Vehicles		3637	3.4	3582 ^N ₁	3.4	0.898	16.9	LOS B	21.6	152.7	0.40	0.45	0.43	41.8

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.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Site: 102 [O'Riordan St-King St-FB AM (Site Folder: FB AM)]

Network: 3 [FB AM (Network Folder: General)]

O'Riordan St-King St-FB AM

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network Site User-Given Phase Times)

Timings based on settings in the Network Timing dialog

Phase Times specified by the user

Phase Sequence: TCS 158

Reference Phase: Phase A

Input Phase Sequence: A, D, E, E2

Output Phase Sequence: A, D, E, E2

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: O'Riordan Street														
1	L2	209	0.0	209	0.0	* 0.668	19.5	LOS B	26.4	188.2	0.58	0.60	0.58	33.2
2	T1	2104	3.1	2104	3.1	0.668	13.3	LOS A	26.4	188.2	0.55	0.53	0.55	23.7
3	R2	120	0.9	120	0.9	0.704	70.9	LOS F	7.9	55.8	1.00	0.82	1.08	20.2
Approach		2434	2.7	2434	2.7	0.704	16.7	LOS B	26.4	189.2	0.58	0.55	0.58	24.2
East: King Street														
4	L2	48	2.2	48	2.2	0.082	37.0	LOS C	2.1	15.0	0.73	0.70	0.73	25.0
5	T1	111	0.0	111	0.0	* 1.327	358.5	LOS F	59.3	418.3	1.00	2.05	2.97	6.4
6	R2	228	1.4	228	1.4	1.327	363.1	LOS F	59.3	418.3	1.00	2.05	2.97	4.5
Approach		387	1.1	387	1.1	1.327	321.0	LOS F	59.3	418.3	0.97	1.88	2.69	5.7
North: O'Riordan Street														
7	L2	96	3.3	96	3.3	0.399	19.8	LOS B	12.4	90.8	0.49	0.50	0.49	39.1
8	T1	1229	5.6	1229	5.6	0.399	14.9	LOS B	15.9	116.8	0.57	0.52	0.57	26.1
9	R2	34	0.0	34	0.0	* 0.472	72.2	LOS F	2.2	15.3	0.98	0.72	0.98	16.0
Approach		1359	5.3	1359	5.3	0.472	16.6	LOS B	15.9	116.8	0.57	0.53	0.57	27.1
West: King Street														
10	L2	52	2.0	52	2.0	0.096	40.2	LOS C	2.4	16.8	0.76	0.71	0.76	15.9
11	T1	17	0.0	17	0.0	0.259	51.5	LOS D	3.7	25.7	0.91	0.74	0.91	25.1
12	R2	48	0.0	48	0.0	0.259	56.0	LOS D	3.7	25.7	0.91	0.74	0.91	13.0
Approach		117	0.9	117	0.9	0.259	48.4	LOS D	3.7	25.7	0.84	0.73	0.84	16.7
All Vehicles		4297	3.3	4297	3.3	1.327	45.0	LOS D	59.3	418.3	0.62	0.67	0.78	14.3

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.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Site: 103 [O'Riordan St-Ewan St-FB AM (Site Folder: FB AM)]

Network: 3 [FB AM (Network Folder: General)]

O'Riordan St-Ewan St-FB AM
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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 %	[Total veh/h	HV %				[Veh. veh	Dist m				
South: O'Riordan Street														
1	L2	27	0.0	27	0.0	0.550	5.0	LOS A	0.0	0.0	0.00	0.02	0.00	54.1
2	T1	2216	2.4	2216	2.4	0.550	0.1	LOS A	0.0	0.0	0.00	0.01	0.00	58.6
Approach		2243	2.3	2243	2.3	0.550	0.1	NA	0.0	0.0	0.00	0.01	0.00	58.4
North: O'Riordan Street														
8	T1	1302	4.9	1302	4.9	0.230	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach		1302	4.9	1302	4.9	0.230	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
West: Ewan Street														
10	L2	74	0.0	74	0.0	0.167	8.4	LOS A	0.4	3.0	0.56	0.75	0.56	33.9
Approach		74	0.0	74	0.0	0.167	8.4	LOS A	0.4	3.0	0.56	0.75	0.56	33.9
All Vehicles		3619	3.2	3619	3.2	0.550	0.3	NA	0.4	3.0	0.01	0.02	0.01	57.2

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.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Site: 104 [O'Riordan St-Robey St-FB AM (Site Folder: FB AM)]

Network: 3 [FB AM (Network Folder: General)]

O'Riordan St-Robey St-FB AM

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network Site User-Given Phase Times)

Timings based on settings in the Network Timing dialog

Phase Times specified by the user

Phase Sequence: TCS 591

Reference Phase: Phase A

Input Phase Sequence: A, B, D

Output Phase Sequence: A, B, D

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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] %	[Total HV] veh/h	%				[Veh. veh	Dist] m				
East: Robey Street														
4	L2	165	0.6	165	0.6	0.342	61.1	LOS E	4.9	34.3	0.95	0.77	0.95	29.2
Approach		165	0.6	165	0.6	0.342	61.1	LOS E	4.9	34.3	0.95	0.77	0.95	29.2
North: O'Riordan Street														
7	L2	29	0.0	29	0.0	0.020	7.3	LOS A	0.3	2.0	0.17	0.54	0.17	44.4
8	T1	1273	5.0	1273	5.0	0.217	2.7	LOS A	3.8	27.9	0.17	0.15	0.17	47.1
Approach		1302	4.9	1302	4.9	0.217	2.8	LOS A	3.8	27.9	0.17	0.16	0.17	47.0
West: Robey Street														
10	L2	2436	2.5	2436	2.5	* 0.499	7.1	LOS A	9.7	69.5	0.21	0.61	0.21	49.2
11	T1	169	0.6	169	0.6	0.632	58.3	LOS E	10.3	72.2	0.99	0.81	0.99	31.4
12	R2	28	0.0	28	0.0	0.170	64.2	LOS E	1.7	11.8	0.94	0.73	0.94	27.4
Approach		2634	2.3	2634	2.3	0.632	11.0	LOS A	10.3	72.2	0.27	0.63	0.27	45.0
All Vehicles		4101	3.1	4101	3.1	0.632	10.4	LOS A	10.3	72.2	0.26	0.48	0.26	43.7

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.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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Project: X:\20488 215-235 O'Riordan St, Mascot\07 Modelling Files\Model\20488sid-210222.sip9

USER REPORT FOR NETWORK SITE

All Movement Classes

 Project: 20488sid-210222

Template: Default Site User Report

 Site: 101 [O'Riordan St-Bourke Rd-FB PM (Site Folder: FB PM)]

 Network: 4 [FB PM (Network Folder: General)]

O'Riordan St-Bourke Rd-FB PM

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network Site User-Given Phase Times)

Timings based on settings in the Network Timing dialog

Phase Times specified by the user

Phase Sequence: TCS 1696

Reference Phase: Phase A

Input Phase Sequence: A, B, C

Output Phase Sequence: A, B, C

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: O'Riordan Street														
1	L2	589	8.2	578	8.3	0.195	7.1	LOS A	2.4	18.2	0.15	0.58	0.15	51.1
2	T1	983	2.2	963	2.3	* 0.397	9.6	LOS A	11.5	82.0	0.38	0.34	0.38	48.8
Approach		1573	4.5	1541 ^N ₁	4.5	0.397	8.6	LOS A	11.5	82.0	0.29	0.43	0.29	49.7
North: O'Riordan Street														
8	T1	1152	1.6	1152	1.6	0.270	5.5	LOS A	7.6	54.1	0.34	0.30	0.34	51.0
9	R2	49	4.3	49	4.3	* 0.396	71.1	LOS F	3.2	22.9	0.99	0.75	0.99	27.3
Approach		1201	1.8	1201	1.8	0.396	8.2	LOS A	7.6	54.1	0.37	0.32	0.37	47.7
West: Bourke Road														
10	L2	38	11.1	38	11.1	1.027	116.1	LOS F	27.3	202.7	1.00	1.15	1.74	19.0
12	R2	579	6.5	579	6.5	* 1.027	121.1	LOS F	29.4	217.5	1.00	1.17	1.74	11.7
Approach		617	6.8	617	6.8	1.027	120.8	LOS F	29.4	217.5	1.00	1.17	1.74	12.2
All Vehicles		3391	3.9	3359 ^N ₁	4.0	1.027	29.1	LOS C	29.4	217.5	0.45	0.52	0.58	32.7

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.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Site: 102 [O'Riordan St-King St-FB PM (Site Folder: FB PM)]

Network: 4 [FB PM (Network Folder: General)]

O'Riordan St-King St-FB PM

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network Site User-Given Phase Times)

Timings based on settings in the Network Timing dialog

Phase Times specified by the user

Phase Sequence: TCS 158

Reference Phase: Phase A

Input Phase Sequence: A, D, E

Output Phase Sequence: A, D, E

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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 %	[Total veh/h	HV %				[Veh. veh	Dist] m				
						v/c	sec							km/h
South: O'Riordan Street														
1	L2	85	0.0	85	0.0	0.366	18.1	LOS B	12.9	93.4	0.53	0.52	0.53	34.6
2	T1	1202	5.0	1202	5.0	0.366	12.6	LOS A	13.1	95.3	0.53	0.48	0.53	24.6
3	R2	88	0.0	88	0.0	* 0.884	83.5	LOS F	6.4	44.6	1.00	0.95	1.46	18.2
Approach		1376	4.4	1376	4.4	0.884	17.5	LOS B	13.1	95.3	0.56	0.52	0.59	23.7
East: King Street														
4	L2	166	1.3	166	1.3	0.346	46.5	LOS D	8.6	60.6	0.86	0.78	0.86	22.2
5	T1	28	0.0	28	0.0	* 1.241	287.2	LOS F	29.4	207.8	1.00	1.77	2.71	7.7
6	R2	162	1.3	162	1.3	1.241	291.8	LOS F	29.4	207.8	1.00	1.77	2.71	5.5
Approach		357	1.2	357	1.2	1.241	177.1	LOS F	29.4	207.8	0.93	1.31	1.85	8.7
North: O'Riordan Street														
7	L2	101	1.0	100	1.0	* 0.492	18.4	LOS B	16.4	117.9	0.49	0.50	0.49	40.2
8	T1	1636	3.5	1623	3.4	0.492	16.4	LOS B	24.3	175.3	0.66	0.61	0.66	24.7
9	R2	31	0.0	30	0.0	0.303	68.8	LOS E	1.9	13.1	0.95	0.71	0.95	16.5
Approach		1767	3.3	1753 ^N ₁	3.2	0.492	17.4	LOS B	24.3	175.3	0.66	0.61	0.66	26.0
West: King Street														
10	L2	154	1.4	154	1.4	0.294	43.5	LOS D	7.6	53.7	0.83	0.77	0.83	15.1
11	T1	76	0.0	76	0.0	0.632	59.0	LOS E	8.6	60.4	0.99	0.82	1.01	23.8
12	R2	63	0.0	63	0.0	0.632	63.6	LOS E	8.6	60.4	0.99	0.82	1.01	12.0
Approach		293	0.7	293	0.7	0.632	51.8	LOS D	8.6	60.4	0.91	0.79	0.91	17.7
All Vehicles		3793	3.3	3778 ^N ₁	3.3	1.241	35.2	LOS C	29.4	207.8	0.67	0.66	0.76	17.6

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.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Site: 103 [O'Riordan St-Ewan St-FB PM (Site Folder: FB PM)]

Network: 4 [FB PM (Network Folder: General)]

O'Riordan St-Ewan St-FB PM
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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 %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: O'Riordan Street														
1	L2	18	0.0	18	0.0	0.221	5.0	LOS A	0.0	0.0	0.00	0.03	0.00	54.4
2	T1	1240	4.2	1240	4.2	0.221	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	59.1
Approach		1258	4.2	1258	4.2	0.221	0.1	NA	0.0	0.0	0.00	0.01	0.00	58.8
North: O'Riordan Street														
8	T1	1807	3.0	1795	2.9	0.382	0.0	LOS A	4.1	29.3	0.00	0.00	0.00	59.7
Approach		1807	3.0	1795 ^N ₁	2.9	0.382	0.0	NA	4.1	29.3	0.00	0.00	0.00	59.7
West: Ewan Street														
10	L2	113	0.0	113	0.0	0.122	6.6	LOS A	0.5	3.7	0.45	0.62	0.45	36.5
Approach		113	0.0	113	0.0	0.122	6.6	LOS A	0.5	3.7	0.45	0.62	0.45	36.5
All Vehicles		3178	3.3	3165 ^N ₁	3.4	0.382	0.3	NA	4.1	29.3	0.02	0.03	0.02	56.9

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.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

^{N1} Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Site: 104 [O'Riordan St-Robey St-FB PM (Site Folder: FB PM)]

Network: 4 [FB PM (Network Folder: General)]

O'Riordan St-Robey St-FB PM

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network Site User-Given Phase Times)

Timings based on settings in the Network Timing dialog

Phase Times specified by the user

Phase Sequence: TCS 591

Reference Phase: Phase A

Input Phase Sequence: A, B, C, D

Output Phase Sequence: A, B, C, D

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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] %	[Total HV] veh/h	%				[Veh. veh	Dist] m				
East: Robey Street														
4	L2	257	0.0	257	0.0	* 0.152	26.5	LOS B	4.7	32.8	0.62	0.71	0.62	38.0
Approach		257	0.0	257	0.0	0.152	26.5	LOS B	4.7	32.8	0.62	0.71	0.62	38.0
North: O'Riordan Street														
7	L2	13	0.0	13	0.0	0.018	22.4	LOS B	0.3	2.3	0.43	0.59	0.43	35.9
8	T1	1795	3.0	1783	3.0	* 0.697	16.8	LOS B	17.1	122.4	0.56	0.50	0.56	35.9
Approach		1807	3.0	1795 ^N ₁	2.9	0.697	16.8	LOS B	17.1	122.4	0.56	0.50	0.56	35.9
West: Robey Street														
10	L2	1340	5.2	1340	5.2	0.280	6.7	LOS A	3.9	28.9	0.15	0.58	0.15	49.6
11	T1	135	0.0	135	0.0	0.128	16.9	LOS B	4.1	28.9	0.53	0.53	0.53	44.6
12	R2	32	0.0	32	0.0	* 0.056	24.1	LOS B	1.1	7.5	0.58	0.69	0.58	39.4
Approach		1506	4.6	1506	4.6	0.280	8.0	LOS A	4.1	28.9	0.20	0.58	0.20	48.2
All Vehicles		3571	3.4	3558 ^N ₁	3.5	0.697	13.8	LOS A	17.1	122.4	0.41	0.55	0.41	40.3

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.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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10:40:13 AM

Project: X:\20488 215-235 O'Riordan St, Mascot\07 Modelling Files\Model\20488sid-210222.sip9

USER REPORT FOR NETWORK SITE

All Movement Classes

 Project: 20488sid-210222

Template: Default Site User Report

 Site: 101 [O'Riordan St-Bourke Rd-FB+Dev AM (Site Folder: FB+Dev AM)]

 Network: 5 [FB+Dev AM (Network Folder: General)]

O'Riordan St-Bourke Rd-FB+Dev AM

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network Site User-Given Phase Times)

Timings based on settings in the Network Timing dialog

Phase Times specified by the user

Phase Sequence: TCS 1696

Reference Phase: Phase A

Input Phase Sequence: A, B, C

Output Phase Sequence: A, B, C

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: O'Riordan Street														
1	L2	765	5.2	735	5.3	0.243	7.7	LOS A	4.4	32.1	0.21	0.60	0.21	50.6
2	T1	1637	1.0	1571	1.1	* 0.659	6.0	LOS A	20.3	143.5	0.30	0.27	0.30	52.4
Approach		2402	2.4	2306 ^N ₁	2.4	0.659	6.6	LOS A	20.3	143.5	0.27	0.38	0.27	51.8
North: O'Riordan Street														
8	T1	792	2.7	792	2.7	0.188	5.7	LOS A	5.1	36.4	0.33	0.29	0.33	50.7
9	R2	115	0.9	115	0.9	* 0.898	83.7	LOS F	8.3	58.8	1.00	0.97	1.46	25.0
Approach		906	2.4	906	2.4	0.898	15.6	LOS B	8.3	58.8	0.42	0.38	0.48	41.3
West: Bourke Road														
10	L2	22	9.5	22	9.5	0.800	65.1	LOS E	16.8	126.4	1.00	0.93	1.13	28.8
12	R2	500	8.8	500	8.8	* 0.800	65.3	LOS E	16.8	126.6	1.00	0.91	1.13	19.5
Approach		522	8.9	522	8.9	0.800	65.3	LOS E	16.8	126.6	1.00	0.92	1.13	20.0
All Vehicles		3831	3.3	3734 ^N ₁	3.4	0.898	17.0	LOS B	20.3	143.5	0.41	0.45	0.44	41.7

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.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

**Site: 102 [O'Riordan St-King St-FB+Dev AM
(Site Folder: FB+Dev AM)]**

**Network: 5 [FB+Dev AM (Network Folder:
General)]**

O'Riordan St-King St-FB+Dev AM

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network Site User-Given Phase Times)

Timings based on settings in the Network Timing dialog

Phase Times specified by the user

Phase Sequence: TCS 158

Reference Phase: Phase A

Input Phase Sequence: A, D, E, E2

Output Phase Sequence: A, D, E, E2

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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 %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: O'Riordan Street														
1	L2	209	0.0	209	0.0	* 0.677	19.8	LOS B	27.2	194.0	0.59	0.61	0.59	33.0
2	T1	2131	3.2	2131	3.2	0.677	13.4	LOS A	27.2	194.0	0.56	0.53	0.56	23.6
3	R2	122	0.9	122	0.9	0.717	74.0	LOS F	8.0	56.8	1.00	0.82	1.06	19.7
Approach		2462	2.8	2462	2.8	0.717	17.0	LOS B	27.2	194.0	0.59	0.55	0.59	24.0
East: King Street														
4	L2	48	2.2	48	2.2	0.082	37.0	LOS C	2.1	15.0	0.73	0.70	0.73	25.0
5	T1	148	0.0	148	0.0	* 1.768	743.4	LOS F	93.9	661.8	1.00	2.85	4.17	3.3
6	R2	228	1.4	228	1.4	1.768	748.0	LOS F	93.9	661.8	1.00	2.85	4.17	2.3
Approach		425	1.0	425	1.0	1.768	665.4	LOS F	93.9	661.8	0.97	2.60	3.78	3.0
North: O'Riordan Street														
7	L2	96	3.3	96	3.3	0.399	19.4	LOS B	12.1	88.7	0.48	0.50	0.48	39.4
8	T1	1229	5.6	1229	5.6	0.399	14.6	LOS B	14.7	108.1	0.55	0.51	0.55	26.3
9	R2	99	0.0	99	0.0	* 1.385	404.1	LOS F	18.2	127.2	1.00	1.46	3.02	3.5
Approach		1424	5.0	1424	5.0	1.385	42.0	LOS C	18.2	127.2	0.58	0.57	0.72	15.1
West: King Street														
10	L2	155	0.7	155	0.7	0.286	42.6	LOS D	7.5	53.1	0.82	0.77	0.82	15.3
11	T1	31	0.0	31	0.0	0.619	58.2	LOS E	8.2	57.3	0.99	0.81	1.00	23.6
12	R2	102	0.0	102	0.0	0.619	62.7	LOS E	8.2	57.3	0.99	0.81	1.00	11.9
Approach		287	0.4	287	0.4	0.619	51.4	LOS D	8.2	57.3	0.90	0.79	0.90	15.4
All Vehicles		4599	3.2	4599	3.2	1.768	86.8	LOS F	93.9	661.8	0.64	0.76	0.94	8.7

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.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Site: 103 [O'Riordan St-Ewan St-FB+Dev AM
(Site Folder: FB+Dev AM)]

Network: 5 [FB+Dev AM (Network Folder:
General)]

O'Riordan St-Ewan St-FB+Dev AM
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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 %	[Total veh/h	HV %				[Veh. veh	Dist m				
South: O'Riordan Street														
1	L2	311	0.0	311	0.0	0.622	5.0	LOS A	0.0	0.0	0.00	0.22	0.00	50.0
2	T1	2240	2.6	2240	2.6	0.622	0.1	LOS A	0.0	0.0	0.00	0.05	0.00	54.5
Approach		2551	2.3	2551	2.3	0.622	0.7	NA	0.0	0.0	0.00	0.07	0.00	52.9
North: O'Riordan Street														
8	T1	1357	4.7	1357	4.7	0.239	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach		1357	4.7	1357	4.7	0.239	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
West: Ewan Street														
10	L2	84	0.0	84	0.0	0.172	7.3	LOS A	0.4	3.0	0.50	0.69	0.50	35.4
Approach		84	0.0	84	0.0	0.172	7.3	LOS A	0.4	3.0	0.50	0.69	0.50	35.4
All Vehicles		3992	3.1	3992	3.1	0.622	0.6	NA	0.4	3.0	0.01	0.06	0.01	54.3

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.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Site: 104 [O'Riordan St-Robey St-FB+Dev AM
(Site Folder: FB+Dev AM)]**

**Network: 5 [FB+Dev AM (Network Folder:
General)]**

O'Riordan St-Robey St-FB+Dev AM

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network Site User-Given Phase Times)

Timings based on settings in the Network Timing dialog

Phase Times specified by the user

Phase Sequence: TCS 591

Reference Phase: Phase A

Input Phase Sequence: A, B, D

Output Phase Sequence: A, B, D

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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] %	[Total HV] veh/h	%				[Veh. veh	Dist] m				
East: Robey Street														
4	L2	165	0.6	165	0.6	0.342	61.1	LOS E	4.9	34.3	0.95	0.77	0.95	29.2
Approach		165	0.6	165	0.6	0.342	61.1	LOS E	4.9	34.3	0.95	0.77	0.95	29.2
North: O'Riordan Street														
7	L2	29	0.0	29	0.0	0.020	7.3	LOS A	0.3	2.1	0.17	0.54	0.17	44.4
8	T1	1327	4.8	1327	4.8	0.226	2.6	LOS A	4.0	29.5	0.16	0.14	0.16	47.1
Approach		1357	4.7	1357	4.7	0.226	2.7	LOS A	4.0	29.5	0.16	0.15	0.16	47.1
West: Robey Street														
10	L2	2743	2.4	2743	2.4	* 0.561	7.2	LOS A	12.2	87.1	0.24	0.62	0.24	49.0
11	T1	169	0.6	169	0.6	0.632	58.3	LOS E	10.3	72.2	0.99	0.81	0.99	31.4
12	R2	28	0.0	28	0.0	0.170	64.2	LOS E	1.7	11.8	0.94	0.73	0.94	27.4
Approach		2941	2.3	2941	2.3	0.632	10.7	LOS A	12.2	87.1	0.29	0.64	0.29	45.3
All Vehicles		4463	2.9	4463	2.9	0.632	10.1	LOS A	12.2	87.1	0.27	0.49	0.27	44.0

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.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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Project: X:\20488 215-235 O'Riordan St, Mascot\07 Modelling Files\Model\20488sid-210222.sip9

USER REPORT FOR NETWORK SITE

All Movement Classes

 Project: 20488sid-210222

Template: Default Site User Report

 Site: 101 [O'Riordan St-Bourke Rd-FB+Dev PM (Site Folder: FB+Dev PM)]

 Network: 6 [FB+Dev PM (Network Folder: General)]

O'Riordan St-Bourke Rd-FB+Dev PM

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network Site User-Given Phase Times)

Timings based on settings in the Network Timing dialog

Phase Times specified by the user

Phase Sequence: TCS 1696

Reference Phase: Phase A

Input Phase Sequence: A, B, C

Output Phase Sequence: A, B, C

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: O'Riordan Street														
1	L2	696	7.1	656	7.4	0.220	6.9	LOS A	2.2	16.0	0.11	0.57	0.11	51.3
2	T1	1084	2.2	1020	2.3	* 0.421	8.3	LOS A	10.9	78.2	0.34	0.30	0.34	50.1
Approach		1780	4.1	1676 ^N ₁	4.3	0.421	7.8	LOS A	10.9	78.2	0.25	0.41	0.25	50.5
North: O'Riordan Street														
8	T1	1226	1.5	1226	1.5	0.288	5.6	LOS A	8.3	58.8	0.35	0.31	0.35	50.8
9	R2	49	4.3	49	4.3	* 0.396	71.1	LOS F	3.2	22.9	0.99	0.75	0.99	27.3
Approach		1276	1.7	1276	1.7	0.396	8.1	LOS A	8.3	58.8	0.37	0.33	0.37	47.8
West: Bourke Road														
10	L2	38	11.1	38	11.1	1.087	157.5	LOS F	33.8	250.4	1.00	1.26	1.99	15.5
12	R2	614	6.2	614	6.2	* 1.087	161.9	LOS F	36.8	271.3	1.00	1.28	1.99	9.2
Approach		652	6.5	652	6.5	1.087	161.6	LOS F	36.8	271.3	1.00	1.28	1.99	9.6
All Vehicles		3707	3.7	3603 ^N ₁	3.8	1.087	35.7	LOS C	36.8	271.3	0.43	0.54	0.61	29.7

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.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

**Site: 102 [O'Riordan St-King St-FB+Dev PM
(Site Folder: FB+Dev PM)]**

**Network: 6 [FB+Dev PM (Network Folder:
General)]**

O'Riordan St-King St-FB+Dev PM

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network Site User-Given Phase Times)

Timings based on settings in the Network Timing dialog

Phase Times specified by the user

Phase Sequence: TCS 158

Reference Phase: Phase A

Input Phase Sequence: A, D, E

Output Phase Sequence: A, D, E

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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 %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: O'Riordan Street														
1	L2	85	0.0	85	0.0	0.377	18.3	LOS B	13.4	97.3	0.53	0.53	0.53	34.5
2	T1	1235	5.9	1235	5.9	0.377	12.7	LOS A	13.5	99.3	0.53	0.49	0.53	24.4
3	R2	96	0.0	96	0.0	0.958	95.3	LOS F	7.5	52.5	1.00	1.04	1.67	16.7
Approach		1416	5.1	1416	5.1	0.958	18.6	LOS B	13.5	99.3	0.56	0.53	0.61	22.9
East: King Street														
4	L2	166	1.3	166	1.3	0.346	46.5	LOS D	8.6	60.6	0.86	0.78	0.86	22.2
5	T1	34	0.0	34	0.0	* 2.795	1650.7	LOS F	65.3	461.4	1.00	2.62	5.57	1.6
6	R2	162	1.3	162	1.3	2.795	1655.3	LOS F	65.3	461.4	1.00	2.62	5.57	1.1
Approach		362	1.2	362	1.2	2.795	915.9	LOS F	65.3	461.4	0.94	1.77	3.41	2.0
North: O'Riordan Street														
7	L2	101	1.0	99	1.0	* 0.505	18.2	LOS B	16.7	119.9	0.49	0.49	0.49	40.3
8	T1	1636	3.5	1597	3.4	0.505	15.9	LOS B	24.9	179.1	0.65	0.60	0.65	25.2
9	R2	134	0.0	131	0.0	* 1.307	335.0	LOS F	21.5	150.8	1.00	1.47	2.72	4.2
Approach		1871	3.1	1827 ^N ₁	3.0	1.307	38.8	LOS C	24.9	179.1	0.66	0.65	0.79	15.7
West: King Street														
10	L2	325	0.6	325	0.6	0.618	48.1	LOS D	17.9	126.2	0.93	0.84	0.93	14.0
11	T1	138	0.0	138	0.0	2.175	1101.1	LOS F	87.2	610.7	1.00	2.88	4.88	2.3
12	R2	162	0.0	162	0.0	2.175	1105.6	LOS F	87.2	610.7	1.00	2.88	4.88	0.8
Approach		625	0.3	625	0.3	2.175	554.5	LOS F	87.2	610.7	0.96	1.82	2.82	2.3
All Vehicles		4274	3.2	4230 ^N ₁	3.2	2.795	183.4	LOS F	87.2	610.7	0.70	0.88	1.25	4.7

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.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Site: 103 [O'Riordan St-Ewan St-FB+Dev PM
(Site Folder: FB+Dev PM)]

Network: 6 [FB+Dev PM (Network Folder:
General)]

O'Riordan St-Ewan St-FB+Dev PM
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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 %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: O'Riordan Street														
1	L2	108	0.0	108	0.0	0.240	5.0	LOS A	0.0	0.0	0.00	0.14	0.00	51.9
2	T1	1256	4.4	1256	4.4	0.240	0.0	LOS A	0.0	0.0	0.00	0.04	0.00	56.2
Approach		1364	4.1	1364	4.1	0.240	0.4	NA	0.0	0.0	0.00	0.05	0.00	55.1
North: O'Riordan Street														
8	T1	1905	2.8	1784	2.9	0.379	0.0	LOS A	4.7	34.0	0.00	0.00	0.00	59.7
Approach		1905	2.8	1784 ^N ₁	2.9	0.379	0.0	NA	4.7	34.0	0.00	0.00	0.00	59.7
West: Ewan Street														
10	L2	134	0.0	134	0.0	0.137	6.2	LOS A	0.6	4.2	0.42	0.60	0.42	36.9
Approach		134	0.0	134	0.0	0.137	6.2	LOS A	0.6	4.2	0.42	0.60	0.42	36.9
All Vehicles		3403	3.2	3282 ^N ₁	3.3	0.379	0.4	NA	4.7	34.0	0.02	0.04	0.02	55.6

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.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

^{N1} Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

**Site: 104 [O'Riordan St-Robey St-FB+Dev PM
(Site Folder: FB+Dev PM)]**

**Network: 6 [FB+Dev PM (Network Folder:
General)]**

O'Riordan St-Robey St-FB+Dev PM

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network Site User-Given Phase Times)

Timings based on settings in the Network Timing dialog

Phase Times specified by the user

Phase Sequence: TCS 591

Reference Phase: Phase A

Input Phase Sequence: A, B, C, D

Output Phase Sequence: A, B, C, D

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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 %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
East: Robey Street														
4	L2	257	0.0	257	0.0	* 0.152	26.5	LOS B	4.7	32.8	0.62	0.71	0.62	38.0
Approach		257	0.0	257	0.0	0.152	26.5	LOS B	4.7	32.8	0.62	0.71	0.62	38.0
North: O'Riordan Street														
7	L2	13	0.0	12	0.0	0.017	23.2	LOS B	0.3	2.2	0.45	0.59	0.45	35.5
8	T1	1893	2.8	1774	2.9	* 0.700	17.2	LOS B	17.1	122.4	0.57	0.50	0.57	35.6
Approach		1905	2.8	1786 ^N ₁	2.9	0.700	17.3	LOS B	17.1	122.4	0.57	0.50	0.57	35.6
West: Robey Street														
10	L2	1448	5.0	1448	5.0	0.302	6.7	LOS A	4.4	32.0	0.16	0.59	0.16	49.6
11	T1	135	0.0	135	0.0	0.128	16.9	LOS B	4.1	28.9	0.53	0.53	0.53	44.6
12	R2	32	0.0	32	0.0	* 0.056	24.1	LOS B	1.1	7.5	0.58	0.69	0.58	39.4
Approach		1615	4.5	1615	4.5	0.302	7.9	LOS A	4.4	32.0	0.20	0.58	0.20	48.3
All Vehicles		3777	3.3	3657 ^N ₁	3.5	0.700	13.8	LOS A	17.1	122.4	0.41	0.55	0.41	40.3

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.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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10:42:05 AM

Project: X:\20488 215-235 O'Riordan St, Mascot\07 Modelling Files\Model\20488sid-210222.sip9

USER REPORT FOR NETWORK SITE

All Movement Classes

 Project: 20488sid-210222

Template: Default Site User Report

 Site: 101 [O'Riordan St-Bourke Rd-FB+Dev +Up AM (Site Folder: FB+Dev+Up AM)]

 Network: 9 [FB+Dev+Up AM (Network Folder: General)]

O'Riordan St-Bourke Rd-FB+Dev AM

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network Site User-Given Phase Times)

Timings based on settings in the Network Timing dialog

Phase Times specified by the user

Phase Sequence: TCS 1696

Reference Phase: Phase A

Input Phase Sequence: A, B, C

Output Phase Sequence: A, B, C

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: O'Riordan Street														
1	L2	765	5.2	765	5.2	0.253	7.0	LOS A	2.8	20.2	0.13	0.57	0.13	51.2
2	T1	1637	1.0	1637	1.0	* 0.687	14.1	LOS A	29.8	210.3	0.58	0.54	0.58	44.9
Approach		2402	2.4	2402	2.4	0.687	11.9	LOS A	29.8	210.3	0.44	0.55	0.44	46.7
North: O'Riordan Street														
8	T1	792	2.7	792	2.7	0.208	5.8	LOS A	5.7	40.8	0.34	0.29	0.34	50.5
9	R2	115	0.9	115	0.9	* 0.898	83.7	LOS F	8.3	58.8	1.00	0.97	1.46	25.0
Approach		906	2.4	906	2.4	0.898	15.7	LOS B	8.3	58.8	0.42	0.38	0.48	41.2
West: Bourke Road														
10	L2	22	9.5	22	9.5	0.851	73.2	LOS F	16.8	126.5	1.00	0.98	1.23	27.1
12	R2	500	8.8	500	8.8	* 0.851	71.2	LOS F	18.7	141.1	1.00	0.96	1.22	18.3
Approach		522	8.9	522	8.9	0.851	71.3	LOS F	18.7	141.1	1.00	0.96	1.22	18.8
All Vehicles		3831	3.3	3831	3.3	0.898	20.9	LOS B	29.8	210.3	0.51	0.56	0.55	39.0

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.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Site: 102 [O'Riordan St-King St-FB+Dev+Up AM (Site Folder: FB+Dev+Up AM)]

Network: 9 [FB+Dev+Up AM (Network Folder: General)]

O'Riordan St-King St-FB+Dev AM

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)

Timings based on settings in the Network Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: TCS 158

Reference Phase: Phase A

Input Phase Sequence: A, B*, C*, D, E, E1*, E2*

Output Phase Sequence: A, B*, D, E

(* Variable Phase)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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 %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
South: O'Riordan Street														
1	L2	85	0.0	85	0.0	* 0.689	39.3	LOS C	22.6	164.7	0.82	0.74	0.82	22.8
2	T1	1235	5.9	1235	5.9	0.689	33.1	LOS C	22.6	164.7	0.81	0.72	0.81	12.7
3	R2	96	0.0	96	0.0	* 0.671	76.1	LOS F	6.4	44.6	1.00	0.80	1.04	19.3
Approach		1416	5.1	1416	5.1	0.689	36.4	LOS C	22.6	164.7	0.82	0.73	0.83	14.6
East: King Street														
4	L2	166	1.3	166	1.3	0.214	29.8	LOS C	6.6	46.6	0.67	0.73	0.67	27.8
5	T1	34	0.0	34	0.0	0.644	45.5	LOS D	11.0	78.1	0.93	0.82	0.93	26.4
6	R2	162	1.3	162	1.3	0.644	50.0	LOS D	11.0	78.1	0.93	0.82	0.93	21.6
Approach		362	1.2	362	1.2	0.644	40.3	LOS C	11.0	78.1	0.81	0.78	0.81	24.6
North: O'Riordan Street														
7	L2	101	1.0	101	1.0	0.694	35.0	LOS C	28.0	201.4	0.80	0.74	0.80	31.7
8	T1	1636	3.5	1636	3.5	0.694	27.3	LOS B	28.0	201.4	0.76	0.69	0.76	17.8
9	R2	134	0.0	134	0.0	* 0.585	36.8	LOS C	4.7	32.7	1.00	0.79	1.00	24.7
Approach		1871	3.1	1871	3.1	0.694	28.4	LOS B	28.0	201.4	0.78	0.70	0.78	19.9
West: King Street														
10	L2	325	0.6	325	0.6	0.327	22.3	LOS B	11.3	79.8	0.60	0.73	0.60	22.8
11	T1	138	0.0	138	0.0	* 0.701	45.4	LOS D	17.2	120.7	0.95	0.84	0.96	26.8
12	R2	162	0.0	162	0.0	0.701	49.9	LOS D	17.2	120.7	0.95	0.84	0.96	14.4
Approach		625	0.3	625	0.3	0.701	34.6	LOS C	17.2	120.7	0.77	0.78	0.77	21.9
All Vehicles		4274	3.2	4274	3.2	0.701	33.0	LOS C	28.0	201.4	0.79	0.73	0.80	19.2

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.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Site: 103 [O'Riordan St-Ewan St-FB+Dev+Up AM (Site Folder: FB+Dev+Up AM)]

Network: 9 [FB+Dev+Up AM (Network Folder: General)]

O'Riordan St-Ewan St-FB+Dev AM
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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 %	[Total veh/h	HV %				[Veh. veh	Dist m				
South: O'Riordan Street														
1	L2	311	0.0	311	0.0	0.491	5.0	LOS A	0.0	0.0	0.00	0.22	0.00	50.4
2	T1	2240	2.6	2240	2.6	0.491	0.0	LOS A	0.0	0.0	0.00	0.05	0.00	54.9
Approach		2551	2.3	2551	2.3	0.491	0.6	NA	0.0	0.0	0.00	0.07	0.00	53.3
North: O'Riordan Street														
8	T1	1357	4.7	1357	4.7	0.272	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach		1357	4.7	1357	4.7	0.272	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.8
West: Ewan Street														
10	L2	84	0.0	84	0.0	0.122	7.4	LOS A	0.4	3.0	0.51	0.68	0.51	35.3
Approach		84	0.0	84	0.0	0.122	7.4	LOS A	0.4	3.0	0.51	0.68	0.51	35.3
All Vehicles		3992	3.1	3992	3.1	0.491	0.6	NA	0.4	3.0	0.01	0.06	0.01	54.4

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.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Site: 104 [O'Riordan St-Robey St-FB+Dev+Up AM (Site Folder: FB+Dev+Up AM)]

Network: 9 [FB+Dev+Up AM (Network Folder: General)]

O'Riordan St-Robey St-FB+Dev AM

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)

Timings based on settings in the Network Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: TCS 591

Reference Phase: Phase A

Input Phase Sequence: A, B, C*, D

Output Phase Sequence: A, B, C*, D

(* Variable Phase)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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 %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist m				km/h
East: Robey Street														
4	L2	165	0.6	165	0.6	0.306	58.8	LOS E	4.8	33.5	0.94	0.77	0.94	29.6
Approach		165	0.6	165	0.6	0.306	58.8	LOS E	4.8	33.5	0.94	0.77	0.94	29.6
North: O'Riordan Street														
7	L2	29	0.0	29	0.0	0.026	17.1	LOS B	0.9	6.3	0.52	0.63	0.52	38.5
8	T1	1327	4.8	1327	4.8	0.304	14.0	LOS A	12.1	88.5	0.56	0.49	0.56	37.7
Approach		1357	4.7	1357	4.7	0.304	14.0	LOS A	12.1	88.5	0.56	0.49	0.56	37.7
West: Robey Street														
10	L2	2743	2.4	2743	2.4	* 0.603	9.6	LOS A	19.2	137.0	0.37	0.68	0.37	46.2
11	T1	169	0.6	169	0.6	0.297	37.7	LOS C	8.1	56.9	0.80	0.70	0.80	36.8
12	R2	28	0.0	28	0.0	0.086	43.6	LOS D	1.3	9.4	0.84	0.71	0.84	32.5
Approach		2941	2.3	2941	2.3	0.603	11.5	LOS A	19.2	137.0	0.40	0.68	0.40	44.5
All Vehicles		4463	2.9	4463	2.9	0.603	14.0	LOS A	19.2	137.0	0.47	0.63	0.47	40.8

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.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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Project: X:\20488 215-235 O'Riordan St, Mascot\07 Modelling Files\Model\20488sid-210222.sip9

USER REPORT FOR NETWORK SITE

All Movement Classes

 Project: 20488sid-210222

Template: Default Site User Report

 Site: 101 [O'Riordan St-Bourke Rd-FB+Dev +Up PM (Site Folder: FB+Dev+Up PM)]

 Network: 10 [FB+Dev+Up PM (Network Folder: General)]

O'Riordan St-Bourke Rd-FB+Dev PM

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)

Timings based on settings in the Network Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: TCS 1696

Reference Phase: Phase A

Input Phase Sequence: A, B, C

Output Phase Sequence: A, B, C

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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 %	[Total veh/h	HV %				[Veh. veh	Dist m				
South: O'Riordan Street														
1	L2	696	7.1	696	7.1	0.233	7.0	LOS A	2.4	17.9	0.12	0.57	0.12	51.2
2	T1	1084	2.2	1084	2.2	* 0.611	14.0	LOS A	19.4	138.2	0.47	0.42	0.47	45.0
Approach		1780	4.1	1780	4.1	0.611	11.3	LOS A	19.4	138.2	0.34	0.48	0.34	47.2
North: O'Riordan Street														
8	T1	1226	1.5	1226	1.5	0.413	16.6	LOS B	15.2	108.2	0.60	0.53	0.60	39.1
9	R2	49	4.3	49	4.3	* 0.446	72.7	LOS F	3.2	23.3	1.00	0.75	1.00	27.0
Approach		1276	1.7	1276	1.7	0.446	18.8	LOS B	15.2	108.2	0.62	0.54	0.62	37.8
West: Bourke Road														
10	L2	38	11.1	38	11.1	0.608	43.6	LOS D	15.2	112.9	0.88	0.86	0.88	34.6
12	R2	614	6.2	614	6.2	* 0.608	43.9	LOS D	18.5	136.6	0.89	0.85	0.89	25.0
Approach		652	6.5	652	6.5	0.608	43.9	LOS D	18.5	136.6	0.89	0.85	0.89	25.8
All Vehicles		3707	3.7	3707	3.7	0.611	19.6	LOS B	19.4	138.2	0.53	0.57	0.53	39.2

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.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Site: 102 [O'Riordan St-King St-FB+Dev+Up PM (Site Folder: FB+Dev+Up PM)]

Network: 10 [FB+Dev+Up PM (Network Folder: General)]

O'Riordan St-King St-FB+Dev PM

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)

Timings based on settings in the Network Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: TCS 158

Reference Phase: Phase A

Input Phase Sequence: A, B, D, E

Output Phase Sequence: A, B, D, E

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
						v/c	sec							km/h
South: O'Riordan Street														
1	L2	85	0.0	85	0.0	* 0.676	45.3	LOS D	25.4	184.8	0.96	0.85	0.96	20.8
2	T1	1235	5.9	1235	5.9	0.676	40.4	LOS C	26.2	192.6	0.96	0.85	0.96	10.8
3	R2	96	0.0	96	0.0	* 0.671	72.5	LOS F	6.3	44.0	1.00	0.82	1.09	19.9
Approach		1416	5.1	1416	5.1	0.676	42.9	LOS D	26.2	192.6	0.96	0.84	0.97	12.9
East: King Street														
4	L2	166	1.3	166	1.3	0.210	29.1	LOS C	6.5	46.0	0.66	0.73	0.66	28.0
5	T1	34	0.0	34	0.0	0.512	42.7	LOS D	10.5	74.1	0.89	0.80	0.89	27.1
6	R2	162	1.3	162	1.3	0.512	47.3	LOS D	10.5	74.1	0.89	0.80	0.89	22.3
Approach		362	1.2	362	1.2	0.512	38.5	LOS C	10.5	74.1	0.79	0.77	0.79	25.2
North: O'Riordan Street														
7	L2	101	1.0	101	1.0	0.705	21.4	LOS B	21.7	155.7	0.62	0.60	0.62	38.3
8	T1	1636	3.5	1636	3.5	0.705	25.2	LOS B	30.0	215.9	0.76	0.70	0.76	18.8
9	R2	134	0.0	134	0.0	* 0.585	39.0	LOS C	4.7	32.7	1.00	0.79	1.00	23.9
Approach		1871	3.1	1871	3.1	0.705	26.0	LOS B	30.0	215.9	0.77	0.70	0.77	21.1
West: King Street														
10	L2	325	0.6	325	0.6	0.322	21.7	LOS B	11.1	78.4	0.59	0.73	0.59	23.2
11	T1	138	0.0	138	0.0	* 0.683	44.1	LOS D	17.0	118.8	0.94	0.83	0.94	27.1
12	R2	162	0.0	162	0.0	0.683	48.7	LOS D	17.0	118.8	0.94	0.83	0.94	14.7
Approach		625	0.3	625	0.3	0.683	33.7	LOS C	17.0	118.8	0.76	0.78	0.76	22.2
All Vehicles		4274	3.2	4274	3.2	0.705	33.8	LOS C	30.0	215.9	0.83	0.76	0.84	18.9

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.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Site: 103 [O'Riordan St-Ewan St-FB+Dev+Up PM (Site Folder: FB+Dev+Up PM)]

Network: 10 [FB+Dev+Up PM (Network Folder: General)]

O'Riordan St-Ewan St-FB+Dev PM

Site Category: (None)

Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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 %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: O'Riordan Street														
1	L2	108	0.0	108	0.0	0.347	5.0	LOS A	0.0	0.0	0.00	0.14	0.00	51.9
2	T1	1256	4.4	1256	4.4	0.347	0.0	LOS A	0.0	0.0	0.00	0.04	0.00	56.0
Approach		1364	4.1	1364	4.1	0.347	0.4	NA	0.0	0.0	0.00	0.05	0.00	54.9
North: O'Riordan Street														
8	T1	1905	2.8	1905	2.8	0.332	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach		1905	2.8	1905	2.8	0.332	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.8
West: Ewan Street														
10	L2	134	0.0	134	0.0	0.211	6.3	LOS A	0.6	4.3	0.43	0.62	0.43	36.8
Approach		134	0.0	134	0.0	0.211	6.3	LOS A	0.6	4.3	0.43	0.62	0.43	36.8
All Vehicles		3403	3.2	3403	3.2	0.347	0.4	NA	0.6	4.3	0.02	0.04	0.02	55.7

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.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Site: 104 [O'Riordan St-Robey St-FB+Dev PM
(Site Folder: FB+Dev+Up PM)]

Network: 10 [FB+Dev+Up PM (Network
Folder: General)]

O'Riordan St-Robey St-FB+Dev PM

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)

Timings based on settings in the Network Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: TCS 591 (Optimised)

Reference Phase: Phase A

Input Phase Sequence: A, B, C*, D

Output Phase Sequence: A, B, C*, D

(* Variable Phase)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL 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 %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: Robey Street														
4	L2	257	0.0	257	0.0	* 0.428	58.2	LOS E	7.5	52.2	0.95	0.79	0.95	29.7
Approach		257	0.0	257	0.0	0.428	58.2	LOS E	7.5	52.2	0.95	0.79	0.95	29.7
North: O'Riordan Street														
7	L2	13	0.0	13	0.0	0.012	7.6	LOS A	0.1	0.6	0.11	0.52	0.11	44.2
8	T1	1893	2.8	1893	2.8	* 0.423	4.5	LOS A	6.3	45.4	0.19	0.17	0.19	45.2
Approach		1905	2.8	1905	2.8	0.423	4.5	LOS A	6.3	45.4	0.19	0.17	0.19	45.2
West: Robey Street														
10	L2	1448	5.0	1448	5.0	0.324	8.3	LOS A	6.9	50.4	0.25	0.62	0.25	47.6
11	T1	135	0.0	135	0.0	0.214	35.4	LOS C	6.1	43.0	0.77	0.67	0.77	37.5
12	R2	32	0.0	32	0.0	* 0.100	42.4	LOS C	1.5	10.3	0.85	0.72	0.85	32.8
Approach		1615	4.5	1615	4.5	0.324	11.3	LOS A	6.9	50.4	0.31	0.63	0.31	44.9
All Vehicles		3777	3.3	3777	3.3	0.428	11.1	LOS A	7.5	52.2	0.29	0.41	0.29	42.3

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.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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